DEPARTMENT OF ENVIRONMENTAL SERVICES

CITY AND COUNTY OF HONOLULU

REFUSE DIVISION

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IN REPLY REFER TO:

RECEIVED
MAY 13 P1:20

May 12, 2009

MAY 23

Ms. Katherine Kealoha
Office of Environmental Quality Control
235 South Beretania Street, Suite 702
Honolulu, Hawaii 96813

Dear Ms. Kealoha:

Subject: Final Environmental Impact Statement for the H-POWER Expansion Project, TMK 9-1-026-030, -033 and -034, Kapolei, Oahu

We respectfully request publication of the Final Environmental Impact Statement (FEIS) in the May 23, 2009, OEQC Environmental Notice. Attached please find the following items:

One pdf and two (2) hard copies of the Final EIS
Completed OEQC Publication Form
Completed FEIS Distribution Cover Letter to the participants
Completed FEIS Distribution List

If you have any questions regarding the FEIS, please call Mr. Stephen Langham at (808) 682-1359.

Sincerely,

Stephen Langham, P.E.
Energy Recovery Administrator, H-POWER

Attachment

FINAL

Environmental Impact Statement (FEIS) H-POWER Expansion Project Kapolei, Oahu, Hawaii

Submitted to: Department of Environmental Services
City and County of Honolulu
1000 Uluohia Street, Suite 308
Kapolei, Hawaii 96707

Submitted by: The City and County of Honolulu

Prepared by: Covanta Honolulu Resource Recovery Venture
and AMEC Earth & Environmental, Inc.

May 2009

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NOTES ON FORMAT USED TO DEPICT REVISIONS

The following notation has been used to depict substantive differences between this document and the Draft Environmental Impact Statement:

- Insertions are noted by a double underline;
- Deletions are noted with a ~~strike through~~.

All changes, whether insertions or deletions are indicated by a vertical line in the outside margin of the changed page. In order to maintain legibility, formatting changes (such as revised headers and footers), updates to the table of contents with new page numbers and cross-references, changes to the publication date, revisions to the title page to reflect the fact that the document is a “Final” EIS, rather than a “Draft” EIS, and other non-substantive changes are not marked.

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ACRONYMS AND ABBREVIATIONS

APC	Air Pollution Control
APE	Area of Potential Effect
BACT	Best Available Control Technology
BAMRS	Bottom Ash Metal Recovery System
Bgs	below ground surface
BMP	Best Management Practice
CHRRV	Covanta Honolulu Resource Recovery Venture
CO	Carbon Monoxide
CRM	Cultural Resource Management
CSP	Covered Source Permit
CWRM	Commission on Water Resource Management
CZM	Coastal Zone Management
CZMP	Coastal Zone Management Program
DLNR	Department of Land and Natural Resources
DOH	Department of Health
DP	Development Plan
DPP	Department of Planning and Permitting
EIS	Environmental Impact Statement
EISPN	Environmental Impact Statement Preparation Notice
EfW	Energy from Waste
ERC	Environmental Report Card
Expansion	H-POWER Expansion Project
FAA	Federal Aviation Administration
FBC	Fluidized Bed Combustion
FEMA	Federal Emergency Management Area
FIRM	Flood Insurance Rate Map
GCP	Good Combustion Practices
GHG	Greenhouse Gas
GO	General Obligation
HAR	Hawaii Administrative Rules
HAPs	Hazardous Air Pollutants
HBMP	Hawaii Biodiversity and Mapping Program
HCl	Hydrogen Chloride
HDOH	Hawaii Department of Health
HECO	Hawaii Electric Company
HELCO	Hawaii Electric Light Company
HES	Hawaii Energy Strategy
HIOSH	Hawaii Division of Occupational Safety and Health (HIOSH)
HNL	Honolulu International Airport
H-POWER	Honolulu Program of Waste Energy Recovery
HRS	Hawaii Revised Statutes
IGR	Internal Gas Recirculation
ISWMP	Integrated Solid Waste Management Plan
JCIP	James Campbell Industrial Park
LOS	Level of Services
LUO	Land Use Ordinance
MACT	Maximum Achievable Control Technology
MBT	Mechanical-Biological-Treatment
MCR	Maximum Continuous Rating

MECO	Maui Electric Company
MSW	Municipal Solid Waste
MWC	Municipal Waste Combustor
n/a	not applicable
NAAQS	National Ambient Air Quality Standards
NEL	Noise Exposure Levels
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NO_x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
NSR	New Source Review
NWS	National Weather Services
OECD	Organization for Economic Cooperation and Development
OEQC	Office of Environmental Quality Control
OHA	Office of Hawaiian Affairs
OSHA	Occupational Safety and Health Administration
OSWM	Office of Solid Waste Management
PCPI	Per Capita Personal Income
PCSI	Pacific Consultant Services Inc.
PSD	Prevention of Significant Deterioration
PTWC	Pacific Tsunami Warning Center
RDF	Refused Derived Fuel
RPS	Renewable Portfolio Standard
SAAQS	State Ambient Air Quality Standards
SDA	Spray Dryer Absorber
SHPD	State Historic Preservation Division
SIA	Significant Impact Area
SIL	Significant Impact Level
SMA	Special Management Area
SNCR	Selective Non-catalytic Reduction
SO_2	Sulfur Dioxide
SOW	Scope of Work
SSC	Submerged Scrapper Conveyor
SWPCP	Storm Water Pollution Control Plan
TLV	Time Limited Value
TPD	Tons Per Day
TPY	Tons Per Year
TPI	Total Personal Income
TSP	Total Suspended Particulates
TWA	Time Weighted Average
UBC	Uniform Building Code
UIC	Underground Injection Control
USBEA	United States Bureau of Economic Analysis
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VLN^{TM}	Very Low NO_x

EXECUTIVE SUMMARY

The City and County of Honolulu (City) and Covanta Honolulu Resource Recovery Venture (CHRRV) are proposing an Expansion of the existing Honolulu Program of Waste Energy Recovery facility (H-POWER or the Facility) located at the James Campbell Industrial Park (JCIP) in Kapolei (Expansion Project). H-POWER has been in operation for over 18 years, providing a reliable, cost effective solid waste solution and source of renewable electric power to the City and County of Honolulu. Over that time period, H-POWER has converted over 10 million tons of refuse into over 5,000 million kilowatt-hours of electric power and saved the importation of over 10 million barrels of oil.

The proposed Expansion consists of the addition to the Facility of a third combustor unit. The new unit will be a 900 ton per day (TPD) Mass Burn waterwall municipal waste combustor (MWC), its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER facility. It includes modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu. The Expansion does not include any changes to the two existing Refuse Derived Fuel (RDF) combustors.

The Expansion is needed to address the solid waste disposal needs of the island of O‘ahu by increasing the disposal capacity from 610,000 tons to 910,000 tons of Municipal Solid Waste (MSW) per year. As a result of the additional waste disposal capacity, the City will benefit from increased energy production and recovered metals recycling and reductions in the landfilling of municipal solid waste in Honolulu. While the Expansion and increased recycling will not eliminate the need for landfill disposal of MSW, it will extend the life of the Waimanalo Gulch Sanitary Landfill and reduce the capacity needs of landfills yet to be developed.

The Expansion Project will fully comply with federal, state and local permits and programs designed for the protection and stewardship of Hawaii’s environmental resources. Following the completion of the permitting process, construction is expected to commence in the second half of 2009 with commercial operation planned for the second half of 2012.

ES-1.0 DESCRIPTION OF PROPOSED ACTION

The following sections provide a discussion of the objectives, nature and extent of the Expansion, including a description of proposed facility operations and components.

ES-1.1 MSW Receiving, Storage and Processing

The existing MSW receiving and storage areas will not be impacted by the proposed Expansion Project. The existing MSW storage area can hold approximately three days of MSW. A completely separate tipping floor and refuse pit for the Expansion facility is proposed. MSW processing activities at the Facility will also not be altered by the proposed Expansion. MSW will continue to be shredded and sorted using the existing systems to supply the two existing units (Unit 1 and Unit 2) with RDF. The Expansion (Unit 3) is proposed to be a Mass Burn facility greatly reducing the processes performed on the MSW prior to combustion. The existing RDF storage area and the refuse pit for the Expansion will allow for three days of storage.

ES-1.2 Combustion Process

In order to deliver the MSW to the new combustor, a new tipping floor and refuse pit will be constructed. From the refuse pit, all refuse will be transferred by overhead crane to the feed hopper and feed chute of the waterwall furnace. Refuse will be metered out onto the surface of the Martin stoker from the bottom of the feed chute by hydraulic feed rams. In the furnace, a ram type volumetric feeder will move the waste onto the stoker grate. Above the grate and integrated with the waterwall furnace will be the steam boiler, designed specifically for solid waste combustion.

The proprietary reverse-reciprocating action of the stoker grate agitates the fuel bed continuously in a manner which causes refuse burning from the bottom of the refuse bed, resulting in a burnout of better than 98 percent of all combustible matter. Unlike conventional stoker designs, the moving grate bars will push upward at 30 to 50 strokes per hour against the natural gravitational downward movement of the refuse. This stoker action will agitate the burning refuse to form an even depth of fuel bed. Burning refuse will be pushed back underneath the freshly fed refuse to achieve continuous drying, volatilization, ignition, and combustion.

This series of equipment is designed to extract enough heat to generate the desired steam rate while keeping the flue gas temperature in a range that is appropriate for long-term operation. The system is also designed to maintain combustion temperatures of 1,800 F for two seconds. The boiler design will incorporate state-of-the-art features including combustion air distribution and control, location and sizing of heating surfaces and appropriate cleaning methods during operations.

ES-1.3 Air Pollution Control

The Expansion is designed to include state-of-the-art pollution control equipment. Flue gas from the combustion of MSW will be processed by five different post combustion air pollution control processes.

The sequence of control systems includes:

- Very Low NOx (VLN)™ system, good combustion control and furnace operating practices to control carbon monoxide (CO), nitrogen oxides (NOx), and dioxin/furan formation;

- Selective non-catalytic reduction system (SNCR) for NOx control;

- Powdered activated carbon injection for control of mercury;

- Semi-dry alkaline (lime) scrubber to control sulfur dioxide (SO_2), sulfuric acid mist, MWC acid gases (SO_2 and hydrogen chloride (HCl)), fluorides, as Hydrogen Fluoride; and

- Fabric filter to control particulate matter (total suspended particulates, particulate matter 10 microns or less (PM10), and particulate matter of 2.5 microns or less)) and particulate bound-SO_2, metals, sulfuric acid, fluorides, and MWC acid gases and organics.

The air pollution control processes for the new Unit will require use and storage of ammonia. Aqueous ammonia will be stored in a new tank (sufficient to hold a minimum of seven days of supply at normal consumption rate), to be located within a concrete containment to control spills. A truck unloading pad sized to hold the volume of the delivery truck will also be provided.

ES-1.4 Ash Handling

There are two internal ash streams generated through the combustion of MSW: bottom ash and fly ash. The stoker will be furnished with a proprietary Martin ash discharger, which will receive the burned-out material as it falls over the clinker roller and cool it in a quench bath. A hydraulically driven ram will push the ash up an inclined draining/drying chute. In the chute, excess water from the ash will drain back into the quench bath.

Bottom ash containing enough moisture to prevent dusting (15 to 25 percent by weight), will then fall to a vibrating conveyor. The conveyor will feed the ash to a grizzly scalper to remove large materials from the ash before it is transferred by an enclosed inclined belt conveyor to the ash loadout building. A feed conveyor will direct the ash from the trommel to a magnetic drum which separates the ferrous metal from the ash. The ash is then discharged onto a spreader feeder and past an eddy current separator to remove non-ferrous material.

The fly ash handling system will collect fly ash from the second/third pass hoppers, the superheater hoppers, the economizer hoppers, and the air pollution control systems. It will then be combined with the bottom ash in the ash loadout building. Ash will be conveyed to the fly ash silo, situated next to the ash loadout building. It will then be conveyed to a pugmill for wetting and conditioning.~~ combined with the bottom ash in the ash loadout building as it is loaded into the trailers.~~

ES-1.5 Energy Production

The high pressure, superheated steam generated in the new boiler will be supplied via the main steam piping header to a new turbine generator, where electricity will be produced for delivery to Hawaii Electric Company (HECO) and for in-house use.

Based on operating data from 2001-2006, the current annual average net electrical production (exported) is approximately 313 million kWh and comprises a significant portion of HECO’s and Honolulu’s renewable energy portfolio. According to HECO (2008) [Website; Renewable Energy for Our Customers], the renewable electricity generated by H-POWER comprised 32% of the total renewable energy portfolio in 2007. The Expansion will yield an approximate 50% increase for a new total of approximately 520 million kWh net electrical production, and the Expansion will help Hawaii meet the state’s planned goals for increased production of renewable energy.

ES-1.6 Materials Recovery/Recycling

The Facility has two different process steps to recover ferrous metal and non-ferrous components and to enable recycling. The first step metals are separated from the ash after combustion via a magnetic drum which separates the ferrous metal from the ash. This system is designed for a greater than 80 percent recovery of ferrous metal. In the second step, the ash is then discharged onto a spreader feeder and past an eddy current separator to remove non-ferrous material. Increased output is anticipated due to the increased processing and combustion of MSW and the reductions in landfilling of waste.

ES-1.7 Temporary Construction Elements

Temporary construction, vehicle parking, and equipment laydown areas will be required during the Expansion Project. Parking will be in an area owned by the City that is adjacent to the facility but separate from plant personnel parking. It will have a separate entrance and exit. The area will have a vehicle capacity of approximately 150 vehicles and security provisions. This area will also be used for materials storage, construction activity, staging and fabrication work. Construction vehicle and equipment movement between the facility and this temporary storage site will require the existing process steam line between AES and the Chevron refinery to be modified. Construction is anticipated over a 34-month period with the peak construction months projected to occur at month 13 with the highest truck deliveries (240 truck trips, 90 personnel) and month 22 with the highest personnel trips (165 personnel, 120 truck deliveries).

ES-2.0 SIGNIFICANT BENEFICIAL AND ADVERSE IMPACTS

The Expansion is proposed to be co-located at the H-POWER site to minimize potential impact to the natural environment that might otherwise result from selection of an alternative site. By selecting the H-POWER site, the Expansion will utilize many of the existing facilities. The parcels selected for temporary use during construction have previously been disturbed, are adjacent to H-POWER, and are currently owned by the City and County of Honolulu.

The following is a brief summary of the potential impacts to the natural environment:

- Geology and Soils – Impacts, both temporary and permanent, are to previously disturbed areas.
- Climate and Air Quality – Emissions will result, but the Expansion will be in compliance with applicable regulatory standards that consider potential cumulative effects and will utilize air pollution control equipment to mitigate potential impacts.
- Groundwater Resources/Hydrology – Additional water use and re-injection of cooling waters will be required, existing permit thresholds will be modified, and existing infrastructure will be utilized.

- Biological Resources – Existing resources will be safeguarded and will be buffered during the temporary construction period. Biologists will be on-call should the potential for impact to even transient, protected species arise.

The following is a brief summary of the potential impacts to the human environment:

- Archaeology, Historic, and Cultural Resources – No impacts are anticipated. Mitigation is proposed should resources be encountered.

- Roadways and Traffic – Temporary impacts are expected as well as a minor impact from operational levels. However no significant permanent impacts to roadway levels-of-service are projected.

- Noise – Temporary and permanent noise impacts are projected, but no significant impacts are estimated due to the existing industrial nature of the site and its surroundings.

- Visual Resources – There will be the temporary presence of construction equipment, but viewsheds from potentially sensitive areas are estimated to experience minimal permanent visual impacts.

- Socioeconomics – It is estimated that there will be a temporary boost to the area economy during construction, but not enough to impact schools, housing, or cause other cumulative effects. The permanent increase of employment will be small in the overall economy and negligible with respect to potential impacts.

- Solid Waste – Substantial improvement in the City and County of Honolulu's ability to dispose of solid waste while minimizing landfill disposal is anticipated. The Expansion will reduce the impact of landfill disposal of MSW.

- Energy – There will be an increased supply and reliability of a renewable source of electricity.

- Human Health – Emissions will result, but the Expansion will be in compliance with applicable regulatory standards and will utilize air pollution control equipment to mitigate potential impacts.

ES-3.0 PROPOSED MITIGATION MEASURES

The vast majority of potential impacts can and will be fully mitigated. This will be accomplished through the use of proper planning (avoidance or minimization in design stages), construction mitigation, and compliance with the rules and regulatory policies that are in place to govern such impacts and to ensure protection of the natural and human environment. The proposed mitigation measures identified for the natural environment include:

- Geology and Soils – Both the H-POWER site and the proposed construction laydown area were selected in part because it has been previously disturbed, thus minimizing impact to soils and geology. Construction laydown was planned to avoid areas with potentially “intact” sinkhole characteristics.

- Climate and Air Quality – The Expansion will be in compliance with applicable regulatory standards that consider potential cumulative effects and will utilize air pollution control equipment to mitigate potential impacts.

- Groundwater Resources/Hydrology – Additional water supply and discharge demands will be in compliance by modifying existing permit thresholds and the required additional water will be able to utilize existing infrastructure.

- Biological Resources – Existing resources will be safeguarded and will be buffered during the temporary construction period. Furthermore, biologists will be on-call should the potential for impact to even transient, protected species arise.

The proposed mitigation measures identified for the human environment include:

- Archaeology, Historic, and Cultural Resources – No impacts are anticipated, but monitors will be on-call should areas of resource potential be identified. Should any significant cultural deposits or human skeletal remains be encountered, work shall stop in the immediate vicinity, and the State Historic Preservation Division will be contacted. Applicable regulatory guidelines will be adhered to in the event resources are encountered.
- Roadways and Traffic – A variety of construction mitigation measures are currently under consideration including worker car-pooling, temporary traffic control officers during construction, worker shuttles from remote locations and construction shift adjustments.
- Visual Resources – The facility design ensures that new structures are no higher than current structures and the building façades will be designed to blend with the existing H-POWER facility materials, color, and so as to minimize perceptible changes in views of the facility.
- Human Health – Emissions will result, but the Expansion will be in compliance with appropriate regulatory standards and will utilize air pollution control equipment to mitigate potential impacts.

ES-4.0 ALTERNATIVES CONSIDERED

Alternatives to the proposed project were evaluated by comparing them to the criteria or requirements the City established in procurements related to its waste management system. The criteria and requirements are summarized in the alternatives discussion in this EIS and are detailed in Appendix F. In addition to the appendix material, the analysis relied on extensive evaluations of alternative technologies completed by the City of New York[1] and Los Angeles County[2].

The following alternatives to the proposed project were evaluated:

- No Project – H–POWER Unit #3 would not be built, with no alternative technology available.

- Delayed Project – The action on H–POWER Unit #3 would be delayed. The Delayed Project and No Action alternatives have the same effect, and the Delayed Project action could increase the cost of the Expansion.

- Transshipment – O‘ahu’s MSW would be baled and transported to a mainland landfill for disposal. Even with this alternative, not all MSW can be transshipped.

- Alternative Technologies – Technologies other than H–POWER Unit #3 that could reduce the amount of material requiring disposal and generate electricity or another beneficial reuse product would be used. Alternative technologies that were considered include:

  1. Thermal and non-thermal technologies; and

  2. Enhanced recycling.

ES-4.1 No Project/Delayed Project Alternative

Under this alternative, Unit #3 of H–POWER would not be constructed or construction would be delayed. The existing plant could continue to operate providing energy recovery, recycling and disposal reduction.

Under this alternative, the City would continue to send the MSW that would be converted to energy at H–POWER Unit #3 to the Waimanalo Gulch Sanitary Landfill. The landfill currently receives ash, RDF processing residue, and non-processibles waste from H–POWER. It is also the disposal site for MSW that exceeds the capacity at H–POWER.

The environmental benefits of the Expansion do not occur with the *No Project* alternative and are postponed with the *Delayed Project* alternative. The positive energy impacts are also not realized or delayed. There are likely increases in cost of the project with the *Delayed Project* alternative. Taken together, the negative impacts of not building the project or delaying it are greater than building the project.

The disadvantages to the No Project Alternative and use of the Waimanalo Gulch Sanitary Landfill rather than expanding H–POWER are that doing so is wasting land resources. It also precludes the benefit of the energy generation and fuel conservation by using H–POWER rather

[1] Evaluation of New and Emerging Solid Waste Management Technologies, September 2004, New York City Economic Development Corporation and New York City Department of Sanitation
[2] Los Angeles County Conversion Technology Evaluation Report, Phase II, October 2007.

than importing oil to produce the electricity. The Expansion of H–POWER reduces disposal thereby reducing the traffic to the landfill, which relieves traffic on Farrington Highway.

Reducing landfill disposal is one of the goals of the project. Continued use of the Waimanalo Gulch Sanitary Landfill to dispose of the 900 TPD of MSW that the H-POWER Expansion would treat does not accomplish that goal.

ES-4.2 Transshipment

The transshipment of waste would involve securely shrink wrapping the MSW, shipping it to the mainland, and disposing of it at a mainland landfill. On January 22, 2008 the City advised potential bidders that it would entertain proposals for transshipping waste as an interim measure for several years before the proposed Expansion is completed. The City received three offers.[3] The companies proposed sending O‘ahu's waste to the Roosevelt Sanitary Landfill in Washington State or to a landfill in Idaho.

The vendors will have to comply with requirements for the handling and storage established by the federal government, with state regulations for handling and processing the MSW, and with local land use permitting requirements. One of the potential transshipment vendors has approved federal Compliance Orders for the Hawaii and mainland operations and a permit for the transfer station to shrink wrap and transfer the waste.

The City would also need to consider the effects of transshipment on H-POWER in the long term. With the shipment of O‘ahu's waste off-island, waste disposed in H-POWER may be reduced and revenue from the energy sold would diminish.

The City's review of the transshipment bids has been delayed due to a protest to the bid submitted by Hawaiian Waste Systems, one of the bidders. The other two bidders question Hawaiian Waste Systems' bid which was half the cost of their proposals.[4] A statutorily-mandated stay on the award of the bid is in effect while the City reviews the protests. The issue remains unresolved. [5]

Transshipment does offer the City a short term alternative for reducing the material being sent to the local landfill. The Expansion of H-POWER offers long term benefits of energy production and reduction in disposal not offered by transshipment.

In addition transshipment produces much greater greenhouse gas emissions than taking the waste to H–POWER. H–POWER results in a reduction in island-wide greenhouse gas emissions (or negative emissions) of 38,883 metric tons of CO_2 equivalent compared to *positive* emissions from transshipment of 44,978 metric tons per year of CO_2 equivalent. See Appendix F for additional references and calculations.

[3] Laurie Au. "City Reviews Bids to Ship O'ahu Trash." Star Bulletin on the Web Vol. 13, Issue 171. 19 June 2008. (23 July 2008) http://starbulletin.com/2008/06/19/news/story08.html.
[4] Peter Boylan. "Firm Claims City Pressured on Bids to Ship Trash." Honolulu Advertiser on the Web 11 July 2008. (23 July 2008)
[5] Peter Boylan. "Waste Shipment Contract Delayed by Bid Protest." Honolulu Advertiser on the Web 31 October 2008.

ES-4.3 Alternative Technologies

Alternative technologies were considered for the H-POWER Expansion. The alternative technologies fall into several categories:

- Thermal: These processes use heat to reduce the waste to energy or a fuel that can be used to produce energy and may produce recyclables. Pyrolysis, plasma arc gasification, and Energy from Waste (EfW) are examples of thermal processes.

- Non-thermal: These processes produce a material, such as compost, that is sold and may also have an energy output. Digestion and hydrolysis are two examples of non-thermal technology.

- Enhanced Recycling: Rather than combusting the waste, such as at H–POWER, this alternative would institute additional recycling programs to remove the materials from the waste stream.

The City's criteria for alternative technologies to be considered were detailed in a request for bidders[6] and are summarized below:

- There exists at least one operational facility processing at least 500 TPD of MSW for at least the past two years.

- Such facility has been fully operational 85 percent of this time while meeting all performance and environmental compliance requirements.

- The facility, without major modification or equipment changes, would substantially represent the system proposed for Honolulu.

- The product produced at the facility has for the past two years been marketed and resulted in the beneficial reuse of energy.

- The process shall be commercially available with a proven design such that the proposed facility is not the first of its kind. The equipment proposed has operated successfully at least 85 percent of rated capacity. The equipment is regarded as being reliable and not subject to excessive maintenance, operational problems, or requires major re-designs.

- The ash slag and residue by products from the proposed facility have met all environmental requirements for either marketing or landfill disposal.

In Table ES-1, the alternative technologies are compared to the City's criteria for alternatives.

[6] City and County of Honolulu, Notice to Bidders, Project to Construct and Operate Alternative Energy Facility and/or H–POWER Facility. Competitive Sealed Proposals for Alternative Technology (CSP) NO. 037, 16 January 2007.

TABLE ES-1 COMPARISON OF COMPLIANCE OF ALTERNATIVE TECHNOLOGIES TO CITY'S CRITERIA

Technology	Criterion and Note #						
	1	2	3	4	5	6	7
	One Facility Operating for 2 Years	500 TPD	85% Capacity	85% of time	Products Marketed	Compliance	Residue
EfW	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Anaerobic Digestion	No	No	ND	ND	ND	ND	ND
Aerobic Digestion	No	Possibly	ND	ND	ND	ND	ND
Hydrolysis	No	No	ND	ND	ND	ND	ND
Plasma Arc	No	No	ND	ND	ND	ND	ND
Gasification/Pyrolysis	Yes	No	ND	ND	ND	ND	ND

ND — not determinable

The thermal technologies include EfW, which includes the RDF process used by H–POWER Units #1 and 2. It has been operating in the City since 1990 and has met all of the City's criteria. The proposed H–POWER Mass Burn Unit #3 is also an EfW technology. Both the RDF and Mass Burn processes meet the City's criteria.

Other thermal processes evaluated do not meet the City's criteria and were not considered further.

The non-thermal processes did not meet the City's criteria because they had not been processing 500 TPD for at least two years. Most produce a product, such as MSW compost, that needs to be marketed, and the market has not been proven on O'ahu.

Enhanced recycling meets the City's criteria and implementation has started on the island. However, it will not provide the reduction in landfill disposal offered by EfW. The City has characterized its EfW program as being "recycling to energy".

In Table ES-2, the other four non-technology based alternatives are compared to the Project based on the greenhouse gas emissions and need for imported oil.

TABLE ES-2 COMPARISON OF OTHER ALTERNATIVES WITH RESPECT TO PROPOSED PROJECT

Alternative	Criterion and Note #	
	1	2
	GHG Emissions	Imported Oil
No Project	Increased	Increased
Delayed Project	Increased	Increased
Enhanced Recycling	ND	Increased
Transshipment	Increased	Increased

Notes:

1. GHG Emissions refers to whether the greenhouse gas emissions would be increased (detrimental or negative effect) or decreased (beneficial or positive effect) with the alternative as compared to the Project.
2. Imported oil refers to whether the need to import oil for energy production would be increased (detrimental or negative effect) or decreased (beneficial or positive effect) with the alternative as compared to the Project.

Enhanced recycling is indicated as a "ND" for greenhouse gas emissions because the calculation depends on the truck trips and the GHG benefits from recycling the materials, and this information is not known.

ES-4.4 Conclusions

H–POWER Unit #3 offers the following benefits:

- Significant reduction in landfill disposal;
- Significant production of energy, offsetting the need to import oil;
- Long-term, proven, reliable, cost effective operation, meeting all the City's criteria; and
- Reduction of greenhouse gas emissions (more than landfilling locally) compared to increased global greenhouse gas emissions from transshipment.

The Expansion of H–POWER would be the most environmentally beneficial to the City.

ES-5.0 UNRESOLVED ISSUES

Review and analysis of the potential impacts and mitigation measures associated with the proposed Expansion indicates that the vast majority of potential impacts can and will be fully mitigated. Accordingly, there are no unresolved issues.

ES-6.0 COMPATIBILITY WITH LAND USE PLANS AND POLICIES

A wide variety of Land Use Plans and Policies were reviewed and evaluated to ensure that the proposed Expansion meets the goals and objectives as developed and implemented by federal, state and local guidance. These included:

- Federal Aviation Administration (FAA) guidelines regarding construction activities and air safety relative to nearby airports were reviewed and information relative to project plans and land use will be submitted to FAA for review within 30 days of the initiation of construction activities. In 2004, the FAA made a determination of "No Hazard to Air Navigation" based on an aeronautical study that revealed that structures (construction cranes) would not be a hazard to air navigation with appropriate marking/lighting. <u>However, to ensure that the Expansion is consistent with FAA requirements and to ensure safe and proper construction planning, CHRRV and the City and County of Honolulu shall submit an FAA Form 7460-1 30</u>

days prior to construction advising the FAA of the Expansion and requesting a determination.

- Federal Coastal Zone Consistency is implemented at the state level under the state Coastal Zone Management Program (CZMP). In 2004, it was determined that a CZM federal consistency review is not required for this project but the project may be subject to Special Management Area (SMA) requirements administered by the City and County of Honolulu Department of Planning and Permitting (DPP). The Department of Business, Economic Development & Tourism (DBEDT) determined in a 2008 letter that a CZM federal consistency review is not required for the proposed Expansion as the project does not involve federal agency activity, does not require any federal license or permit subject to CZM Program review, and will not be receiving federal funds. Confirmation from DPP received in 2009 indicated that the project was not within the SMA.

- SMA and Shoreline Setback Areas were reviewed by requesting available delineations from the DPP. The Expansion and construction laydown areas are outside of the mapped SMA and Shoreline Setback Areas.

- The Hawaii State Plan was enacted in 1978 to guide the long-range development of the State of Hawaii. The Expansion is consistent with the State Plan in that it is a prudent use of resources, recovering renewable energy while satisfying waste disposal needs in a proven and cost effective manner, and consistent with other state and county plans.

- The Hawaii State Energy Plan was updated in January 2000 and has objectives that include reliability/contingency planning and the increased use of renewable energy resources. The proposed Expansion's energy increases and increased reliability are fully consistent with the Energy Plan goals.

- Hawaii State Water Code requires that the Commission on Water Resources Management (CWRM) of the Department of Land and Natural Resources (DLNR) utilize comprehensive water resources planning in the regulation and management of water resources. The Expansion has complied with this goal in that it has received a permit ~~applied~~ to modify the existing H-POWER permit limits for water withdrawal from CWRM and applied for a permit for reinjection with the ~~as permitted through CWRM and~~ Hawaii Department of Health (HDOH) ~~respectively~~.

- The O‘ahu General Plan is “a comprehensive statement of objectives and policies which sets forth the long-range aspirations of O‘ahu's residents and the strategies of actions to achieve them”. The General Plan addresses eleven areas of concern. Of the eleven categories, the three that relate to the proposed Expansion are Transportation and Utilities, Energy, and Government Operations and Fiscal Management. The Expansion will provide safe, efficient and sensitive waste-disposal services and will recover resources (material and electricity) from solid waste. The Expansion will help to meet the needs of the people of O‘ahu for environmentally sound systems of waste disposal and will support the increased use of operational solid waste energy recovery utilizing proven sources of energy. The Expansion will also help to maintain City and County government services at the level necessary to be effective and will promote increased efficiency in the provision of government (waste disposal) services by the City and county of Honolulu.

- The ‘Ewa Development Plan (DP) is the development plan for one of the eight planning areas on O‘ahu. The latest version of ‘Ewa DP was released in 1997. A public review draft of the 2008 'Ewa DP is available for review. It will not be finalized until after the public commenting period ending in January 2009. The proposed Expansion is consistent with the industrial land use objectives of the ‘Ewa DP for the James Campbell Industrial Park and is consistent with the energy use objective for that region.

- The Hawaii Integrated Solid Waste Management Plan (ISWMP), last updated in October 2008, was developed to guide solid waste management activity. The 2008 Plan set forth as its primary objective to “design an integrated solid waste management system for the City was to maximize the recovery of solid waste through reuse, recycling, composting and energy conversion, in order to minimize the amount of waste that requires landfill disposal.” Expansion of H-POWER will significantly reduce material for landfill disposal, consistent with the “ultimate goal” of the City and County of Honolulu.

- The City and County of Honolulu Land Use Ordinance (LUO) regulates land use in a manner that will encourage orderly development in accordance with adopted land use policies and promote and protect public health, safety and welfare. The James Campbell Industrial Park, within which H-POWER is located, is defined as I-2 Intensive (Industrial). Under the LUO, the H-POWER facility is considered a “public use and structure” and is permitted in this district without a Conditional Use Permit. ~~Waste disposal and processing are allowed under a Conditional Use Permit. The Expansion will comply with the requirements of the Conditional Use Permit and will be consistent with the Specific Use Development Standards that are applicable.~~

The following table identifies the approvals and permits required prior to construction of the proposed Expansion. Each approval/permit is identified along with the approving agency. In addition to the approvals/permits listed in the table, the Expansion project has also been designed to ensure consistency with federal, state, and local plans, policies and controls, identified and discussed in greater detail in Chapter 7.0 of this EIS.

TABLE ES-3 REQUIRED APPROVALS AND PERMITS

Approving Agency/Authority	Approval/Permit
FEDERAL	
Federal Aviation Administration (FAA)	Notice of Construction
STATE	
Hawaii Department of Health (HDOH), Clean Air Branch	Covered Source/PSD Air Permit, Chapter 60.1 of Title 11 of HAR
HDOH, Clean Water Branch	Notice of General Permit Coverage NPDES Construction Stormwater Discharge Permit
HDOH, Clean Water Branch	NPDES General (operational) Stormwater Discharge Permit
HDOH, Indoor and Radiological Health Branch	Construction Noise Permit
HDOH, Safe Drinking Water Branch	UIC Permit Modification
HDOH, Solid and Hazardous Waste Branch	Solid Waste Management Permit
DLNR, Commission on Water Resource Management	Groundwater Use Permit Modification
DLNR, Commission on Water Resource Management	Well Construction / Pump Installation Permit
CITY	
City and County of Honolulu Department of Planning and Permitting (DPP)	Building Permit
~~City and County of Honolulu Department of Planning and Permitting (DPP)~~	~~Conditional Use Permit Modification~~
City and County of Honolulu Department of Planning and Permitting (DPP)	Grading Permit and Drainage Plan Approval
~~City Department of Environmental Services~~	~~Construction Dewatering Permit~~

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1.0 INTRODUCTION

The following introductory sections provide a description of the proposed Expansion of the H-POWER facility, including a description of H-POWER's surroundings, the background and need for the proposed action, as well as the purpose of this Environmental Impact Statement (EIS). Details regarding the timing of the project and related activities, as well as the project costs and sources of funding, are also provided.

1.1 Proposed Action

The H-POWER Expansion Project (Expansion) consists of the addition to the Facility of a third combustor unit. The third unit will be a 900 tons per day (TPD) Mass Burn waterwall municipal waste combustor (MWC), its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER facility. It includes modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu (City). The Expansion does not include any changes to the two existing Refuse Derived Fuel (RDF) combustors.

The proposed Expansion will increase the facility's waste disposal capacity, increase the energy and recyclable metals recovered annually, and reduce the need for landfilling of municipal solid waste in Honolulu. The environmental characteristics of the proposed Expansion will fully comply with federal, state, and local permits and programs designed for the protection and stewardship of Hawaii's environmental resources.

1.2 Purpose of Document and Parties Consulted

This EIS has been prepared by Covanta Honolulu Resource Recovery Venture (CHRRV), the operator of the facility, the City and County of Honolulu (City), and their environmental consultants and subcontractors to satisfy the requirements of Hawaii Revised Statutes (HRS) Chapter 343. The use of County lands and funds is the reason the City and County of Honolulu has determined that an EIS be prepared. An Environmental Impact Statement Preparation Notice (EISPN) was published in the Office of Environmental Quality Control (OEQC) Bulletin on August 8, 2008 in order to initiate the environmental review process, inform interested parties of the Expansion and seek public input on subject areas that should be addressed in this EIS. The EIS documents and analyzes the effects of the Expansion on the environment and proposes mitigation measures to prevent or reduce the Expansion's potential effects. This EIS also evaluates potential alternative methods, modes or designs of the proposed action.

As noted above, a key component of the EIS process is public participation. CHRRV and the City and County of Honolulu have therefore consulted with numerous state and federal agencies in formulating plans for addressing the County's solid waste disposal needs. In addition, a comprehensive community outreach program was undertaken to solicit, identify, and better understand and address the concerns of those who will be affected by the Expansion and to respond to those concerns directly and within the text of this EIS. The outreach program included an open house meeting and consultation letters and was designed to include residents, businesses and other stakeholders. The outreach efforts are described in Chapter 13 of this

EIS. The comments received, as well as the responses provided, are documented in Chapter 14.

1.3 Background/Historical Perspective

Prior to 1977, the City and State had conducted, commissioned or sponsored a number of studies over an approximate 12-year period in order to find a solution to what was then a growing solid waste problem. At that time, approximately 80 percent of O‘ahu’s refuse was disposed of at City-operated landfills, and space at these landfills was rapidly being used. In 1977, analysis of possible waste disposal solutions was conducted by MITRE Corporation. That analysis evaluated development of a solid waste resource recovery system (1983 Revised EIS) to address the solid waste issue. The City at that time embarked on a program to implement the recommendations contained in MITRE’s final report. In the summer of 1978, the City issued a Request for Proposals for what was then referred to as H-POWER – the Honolulu Program Of Waste Energy Recovery. In 1982, bidders were asked to submit bid prices. At that time it was hoped to award a contract by the end of December 1983 and to enter full-scale operation by January 1987. After a series of submittals and reviews, including environmental considerations, a final decision was reached, and in May of 1990 the H-POWER facility went into commercial operation at its current location in the James Campbell Industrial Park (JCIP).

The H-POWER facility has been operational for over 18 years, providing reliable service to the City. Over that time period, H-POWER has converted over 10 million tons of refuse into over 5,000 million kilowatt-hours of electric power and saved the importation of over 10 million barrels of oil. H-POWER, with the Expansion, will continue to provide reliable service, cost-effective solid waste solutions, and a critical source of renewable energy to the Island of O‘ahu. H-POWER generates approximately 5 percent of O‘ahu’s electricity from a renewable resource (as defined in HRS Sections 269-91 through 269-95), helping Hawai’i achieve its goal of becoming more energy self-sufficient by reducing dependence on imported fossil fuels.

1.4 Need for the Proposed Action

In 2008, the City and County is again facing the need to address solid waste issues on the island of O‘ahu. In fact, solid waste projections issued by the City and County of Honolulu in 2008 indicate that even with the Expansion of H-POWER and increased recycling, landfill disposal of Municipal Solid Waste (MSW) will still be required (Integrated Solid Waste Management Plan (ISWMP), CCH 2008a). The H-POWER Expansion is designed to offer increased efficiency and capacity at the existing H-POWER Facility in Kapolei, Hawaii. The Expansion is being developed to expand a competitively priced, environmentally sound and proven waste disposal technology on O‘ahu, thereby extending the life of the Waimanalo Gulch Sanitary Landfill and of landfills yet to be developed.

1.5 Timing of Action

The proposed Expansion will be evaluated by numerous State and Federal agencies that will review applications and this EIS. Upon completion of the EIS process and after the facility has secured all necessary permits and approvals, construction is expected to commence in the second half of 2009. There would be an approximately 34-month construction timeframe. Commercial operation of the Expansion is planned for 2012 after an approximate 3-month startup program.

1.6 Description of the Property

The H-POWER Expansion is proposed to occur on the existing H-POWER parcel. The site consists of 24.635 acres (1,073,100 ft^2) of industrially zoned and developed property situated within the JCIP in Kapolei. The parcel's Tax Map Key number is 9-1-026:030 (Parcel 30). Figure 1.6-1 depicts the site location and shows the major roadways in the vicinity of the existing H-POWER facility. Due to the site's existing industrial nature, there are no designated environmental site constraints on the parcel. Additional detailed information on the site is presented within this EIS.

Figure 1.6-2 depicts the parcels to be used temporarily for construction equipment laydown and construction parking. These parcels are situated immediately to the west of the H-POWER site and are also owned by the City and County of Honolulu. The Parcels are industrially zoned, previously disturbed, but currently undeveloped. The parcels Tax Map Key numbers are 9-1-026:033 and 9-1-026:034. Parcel 033 is 6.041 acres and Parcel 034 is 8.164 acres and both include portions of a fenced area which is a plant sanctuary that will not be utilized. The plant sanctuary is mapped, and the measures proposed to avoid impact to it are presented within applicable sections of this EIS. Only a portion of parcel 34, not inclusive of the drainage easement or the plant sanctuary, is expected to be used for construction laydown.

1.7 Surrounding Land Uses and Zoning

Figure 1.7-1 is an aerial photograph showing the existing industrial nature of the site, the adjacent parcels to be utilized during construction, and the surroundings within 1-mile of the H-POWER site. As can be seen from the aerial photograph, the surrounding land uses are predominantly industrial in nature. Figure 1.7-2 depicts occupied/leased lots neighboring H-POWER and Table 1.7-1 identifies each of them and their direction relative to H-POWER.

TABLE 1.7-1 OCCUPIED/LEASED LOTS WITHIN JCIP AND THEIR DIRECTION RELATIVE TO H-POWER

Direction Relative to H-POWER	Neighbor
South	AES coal-fired facility
South	Rock Mountain Prestress
East	Hawaiian Electric Company (HECO) Substation
North (roadway parcel)	Campbell Hawaii Investor, LLC
North	HECO (Utility)
West	Undeveloped but disturbed land owned by the City and County of Honolulu

The JCIP, and most of the area within 1 mile of the site, is zoned I-2 Intensive, as shown on Figure 1.7-3 Zoning. Under Chapter 21 – Land Use Ordinance (LUO), the H-POWER facility is considered a "public use and structure" and is permitted in this district. ~~waste disposal and~~

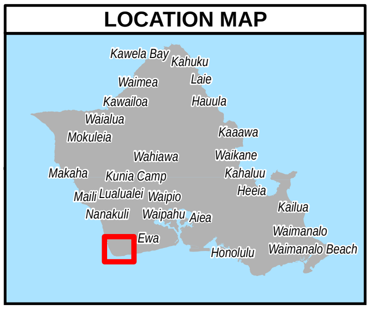
~~processing are allowed under a Conditional Use Permit – minor and The facility is subject to the Specific Use Development Standards identified in Article 5 of the Ordinance.~~

Although the H-POWER facility is an existing facility, alterations, additions, or modifications require ~~a~~ certain permits. H-POWER will comply with ~~the requirements of the Conditional Use Permit, as well as other~~ federal, state, and local permits and approvals. Each of the required permits and approvals is addressed in Chapter 3 of this EIS.

LEGEND

- H1 FREEWAY
- FARRINGTON HWY
- SITE BOUNDARY
- CONSTRUCTION LAYDOWN AREA
- CITY AREAS
- SCHOOL
- GOLF COURSE
- SHOPPING CENTER
- GOVERNMENT CENTER
- STATE LANDS
- PARK

LOCATION MAP



NOTES & SOURCES
MAP COORDINATES
UTM NAD83, ZONE 4N, UNITS METERS
BASEMAP DATA FROM ESRI, 2007

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

N

MILES
0 0.2 0.4 0.6 0.8 1

amec

SITE LOCATION MAP

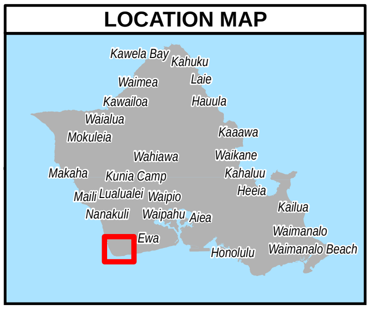
FIGURE 1.6-1

Figure 1.6-1 back side

LEGEND

- H-POWER
- CONSTRUCTION LAYDOWN AREA
- PLANT SANCTUARY

LOCATION MAP



NOTES & SOURCES
MAP COORDINATES
UTM NAD83, ZONE 4N, UNITS METERS
BASEMAP DATA FROM USGS, 2005

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

N

Feet
0 270 540

amec

CONSTRUCTION LAYDOWN AREA & PLANT SANCTUARY

FIGURE
1.6-2

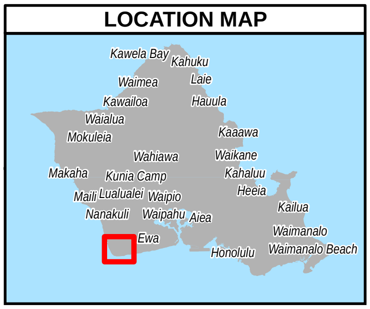
Figure 1.6-2 back side

LEGEND

SITE BOUNDARY

CONSTRUCTION LAYDOWN AREA

LOCATION MAP



NOTES & SOURCES
MAP COORDINATES
UTM NAD83, ZONE 4N, UNITS METERS
BASEMAP DATA FROM USGS, 2005

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

N

MILES
0 0.1 0.2 0.3 0.4 0.5

AERIAL PHOTO

FIGURE 1.7-1

Figure 1.7-1 back side

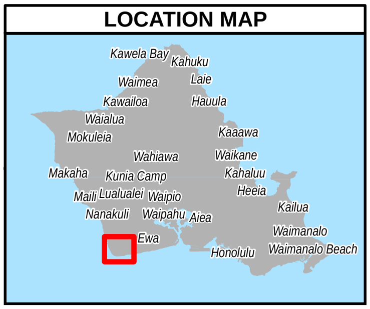
LEGEND

SITE BOUNDARY

CONSTRUCTION LAYDOWN AREA

NEIGHBORING PARCEL BOUNDARIES

LOCATION MAP



NOTES & SOURCES
MAP COORDINATES
UTM NAD83, ZONE 4N, UNITS METERS
BASEMAP DATA FROM USGS, 2005 &
CITY & COUNTY OF HONOLULU, 2008

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

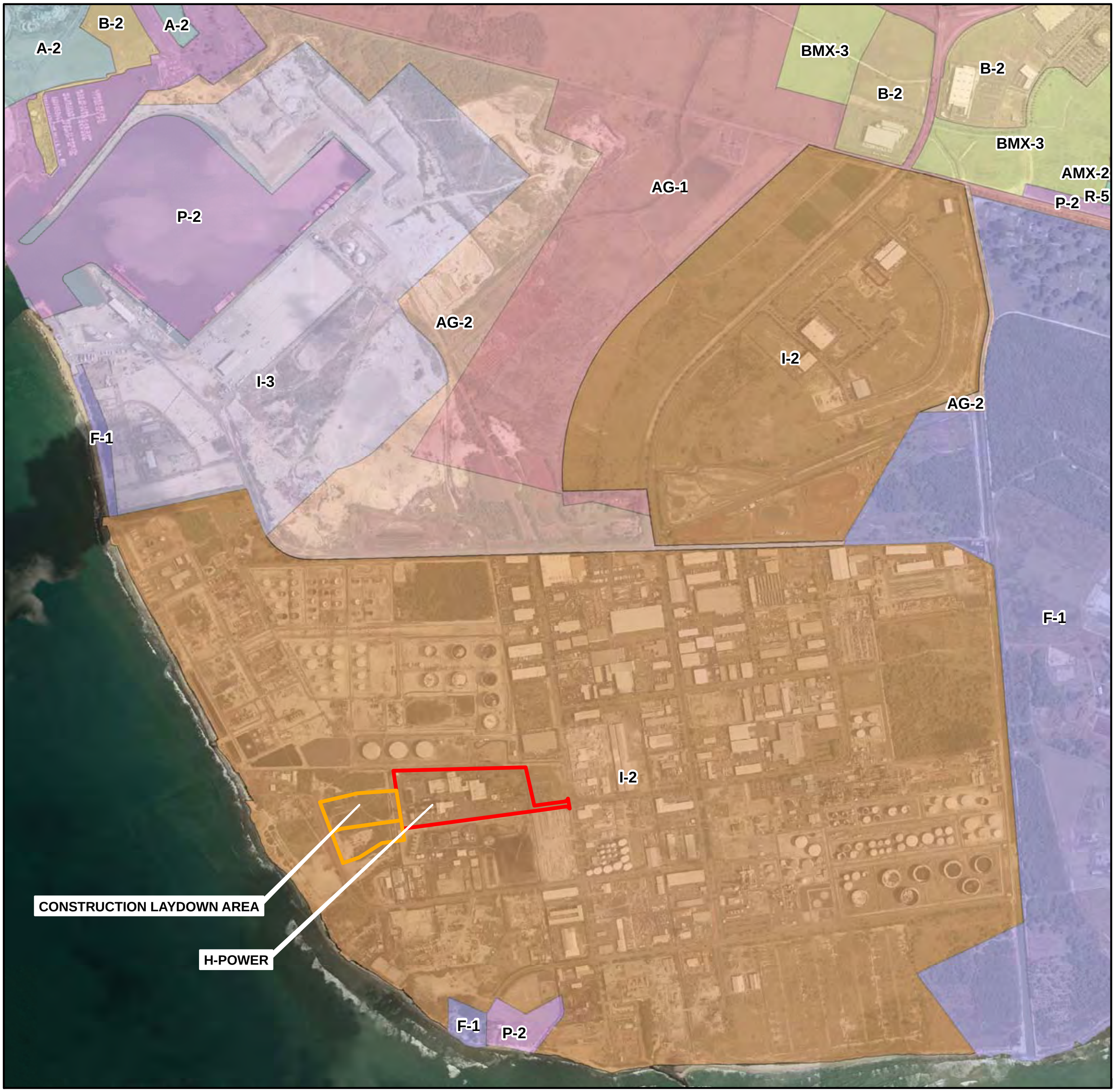
N

Feet
0 250 500

NEIGHBORING PARCELS

FIGURE
1.7-2

Figure 1.7-2 back side



LEGEND

SITE BOUNDARY

CONSTRUCTION LAYDOWN AREA

COUNTY OF HONOLULU ZONING

A-2 MEDIUM-DENSITY APARTMENT DISTRICT

AG-1 RESTRICTED AGRICULTURE DISTRICT

AG-2 GENERAL AGRICULTURE DISTRICT

AMX-2 MEDIUM-DENSITY APARTMENT MIXED USE DISTRICT

B-2 COMMUNITY BUSINESS DISTRICT

BMX-3 COMMUNITY BUSINESS MIXED USE DISTRICT

F-1 FEDERAL AND MILITARY PRESERVATION DISTRICT

I-2 INTENSIVE INDUSTRIAL DISTRICT

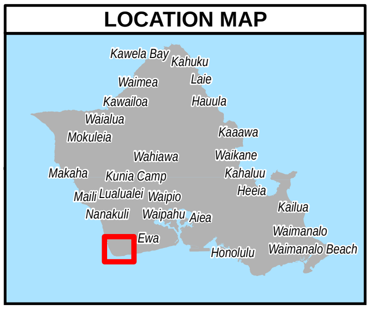
I-3 WATERFRONT INDUSTRIAL DISTRICT

P-2 GENERAL PRESERVATION DISTRICT

R-5 RESIDENTIAL DISTRICT

RESORT DISTRICT

LOCATION MAP



NOTES & SOURCES
MAP COORDINATES
UTM NAD83, ZONE 4N, UNITS METERS
BASEMAP DATA FROM USGS, 2005 &
CITY & COUNTY OF HONOLULU, 2008

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

N

MILES
0 0.25 0.5

amec

ZONING

FIGURE
1.7-3

Figure 1.7-3 back side

2.0 DESCRIPTION OF THE PROJECT

The following sections provide a discussion of the objectives, nature and extent of the Expansion, including a description and diagrams of proposed facility operations and components.

2.1 Project Objectives and Policies

In an effort to address ongoing concerns regarding the handling of solid waste in the City and County of Honolulu, the City analyzed and reviewed various technological, recycling, landfilling and transshipment solid waste disposal options. The result of these reviews was a City request to CHRRV to prepare a proposal for the installation of a third boiler at the H-POWER facility. CHRRV, in response, prepared a proposal to install a Mass Burn waterwall MWC, air pollution control equipment and other associated equipment to connect the new combustor to the existing plant. The City has issued further instructions to CHRRV to begin project planning and permitting activities. This EIS is a necessary component of the permitting effort and is designed to evaluate alternatives as well as the environmental impacts of the selected action.

The H-POWER Expansion is designed to offer increased efficiency and capacity at the existing H-POWER facility. The Expansion is being developed to expand a competitively priced, environmentally sound and proven waste disposal technology on O‘ahu, thereby minimizing the need to dispose of MSW in existing or future landfills. This is consistent with, and an integral part of, the City and County of Honolulu’s 2008 Integrated Solid Waste Management Plan’s (ISWMP’s) primary objective (CCH, 2008a). The 2008 ISWMP set forth as its primary objective to “design an integrated solid waste management system for the City was to maximize the recovery of solid waste through reuse, recycling, composting and energy conversion, in order to minimize the amount of waste that requires landfill disposal.” Expansion of H-POWER will significantly reduce material for landfill disposal, consistent with the “primary objective” of the City and County of Honolulu.

As noted above, the Expansion consists of the addition to the Facility of a 900 TPD Mass Burn waterwall MWC unit which will increase disposal capacity from approximately 610,000 tons to 910,000 tons of MSW per year. It includes modifications and additions to the existing waste feed system and ash handling and other utility systems necessary for the new equipment. A new turbine generator, in addition to the existing turbine generator, will be installed including a fuel feeding system, state-of-the-art reverse reciprocating grate, integrated furnace/boiler, and the most advanced air pollution control system used on these types of facilities in the country. The air pollution control system consists of a semi-dry scrubber, fabric filter baghouse, carbon injection system, selective non-catalytic reduction (SNCR) system in combination with Covanta’s proprietary control technology called Very Low NOx system (VLN®), and associated ash handling systems.

2.2 Process Flow Description

The following is an overview of the H-POWER facility operations once the Expansion is complete. Sections 2.2.1 through 2.2.10 provide a more detailed description of the various components of the Facility:

- MSW Receiving and Storage (see section 2.2.1)
- MSW Processing (see section 2.2.2)
- RDF Storage (see section 2.2.3)
- Combustion Process (see section 2.2.4)
- Furnace and Boiler (see section 2.2.5)
- Air Pollution Control (APC) Equipment (see section 2.2.6)
- Ash Handling (see section 2.2.7)
- Chemical Storage and Handling (see section 2.2.8)
- Energy Production and Distribution (see section 2.2.9)
- Materials Recovery/Recycling (see section 2.2.10)

A simplified process flow diagram of the proposed Expansion is presented in Figure 2.2-1. A site plan and elevation drawing of the proposed Expansion structural elements is provided in Figure 2.2-2 and Figure 2.2-3, respectively.

2.2.1 MSW Receiving and Storage

<u>Units 1 and 2</u>

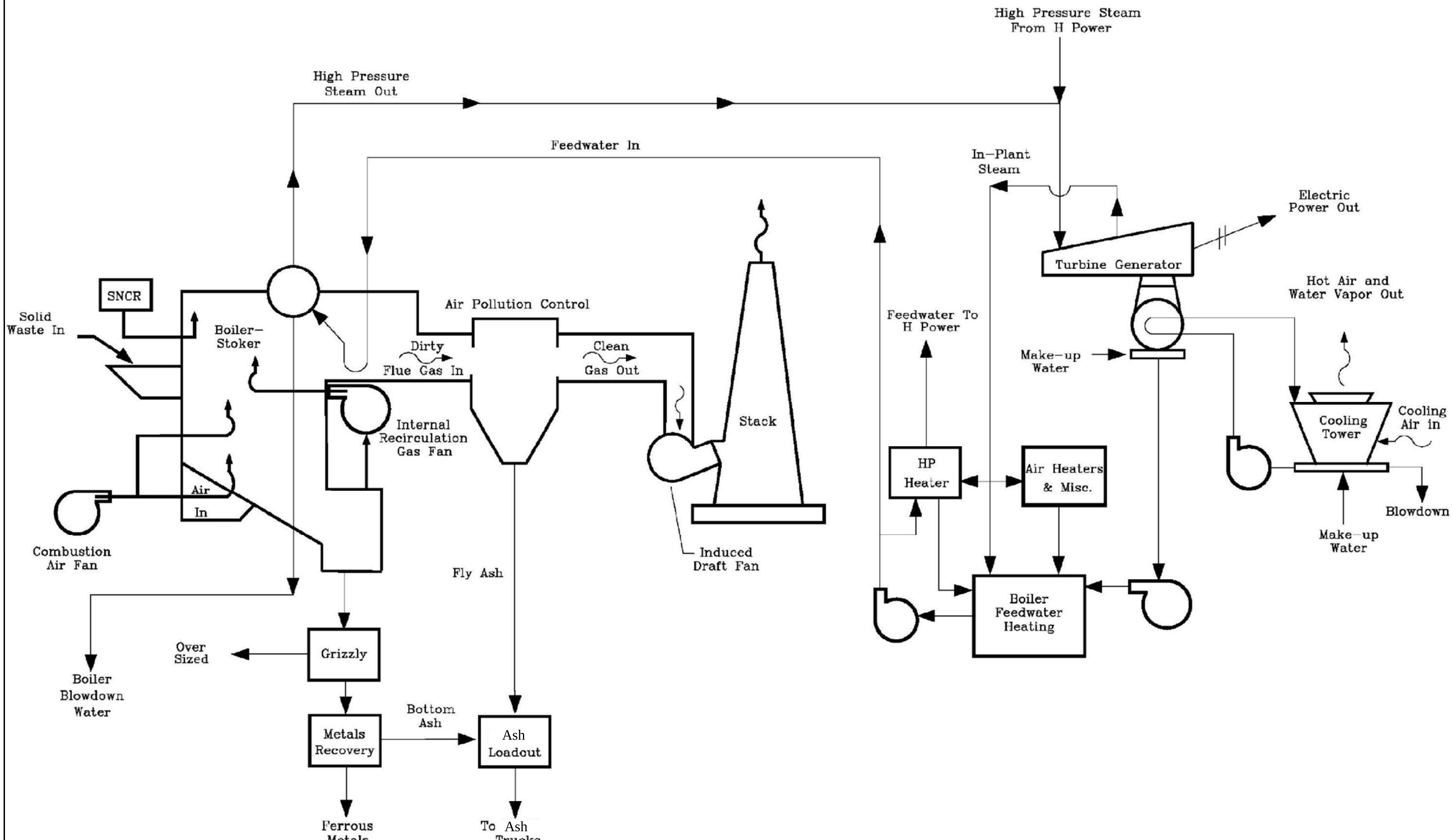
Acceptable MSW is delivered to the Facility by transfer trailer, packer trucks, City and County route collection vehicles, and private vehicles. All delivery vehicles are weighed into the Facility on a 60-ton, 70-foot capacity receiving scale located adjacent to the central scale house. A second scale of equal capacity is utilized for determining vehicle tare weights, as required, and for weighing recovered metals, RDF processing residue, and ash leaving the site. Waste delivered to the Facility is essentially limited to residential, institutional, commercial, military and light industrial solid waste or that fraction which might normally be handled efficiently at a municipal solid waste energy recovery facility.

All vehicles using the Facility are identified by vehicle license number. A computer database contains specific information required for billing purposes. The weighmaster inputs the vehicle identification which initiates the weighment and automatic billing systems. During a typical week approximately 15,000 tons of MSW is received at the facility.

From the central scale house, incoming trucks are currently directed to one of the two receiving locations in the Processing Plant. In general, route collection vehicles and packer trucks are directed to the tipping locations along the elevated dumping platform of the receiving and storage area. Transfer trailers are directed to the ground level dumping area. Typically a spotter directs trucks to the appropriate locations for tipping.

At the central scale house, the vehicles pass between two radiation detectors to monitor for radioactive materials. In the event the alarms are set off, the vehicle is moved to an area where exposure to personnel is minimized. The Hawaii State Department of Health (HDOH), Indoor and Radiological Health branch is notified after facility personnel verify the concentration of the material. The HDOH representative determines how to properly handle and dispose of this waste. At no time will CHRRV accept any radioactive waste for processing.

Simplified Process Flow Diagram

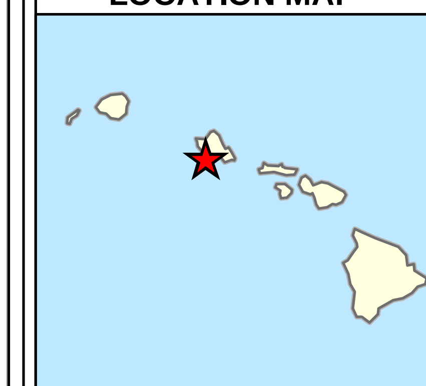


TITLE

SIMPLIFIED PROCESS FLOW DIAGRAM

H-POWER
KAPOLEI, OAHU, HAWAII

LOCATION MAP



NOTES & SOURCES

SOURCE: COVANTA ENERGY, 2008

AMEC EARTH AND ENVIRONMENTAL, INC.

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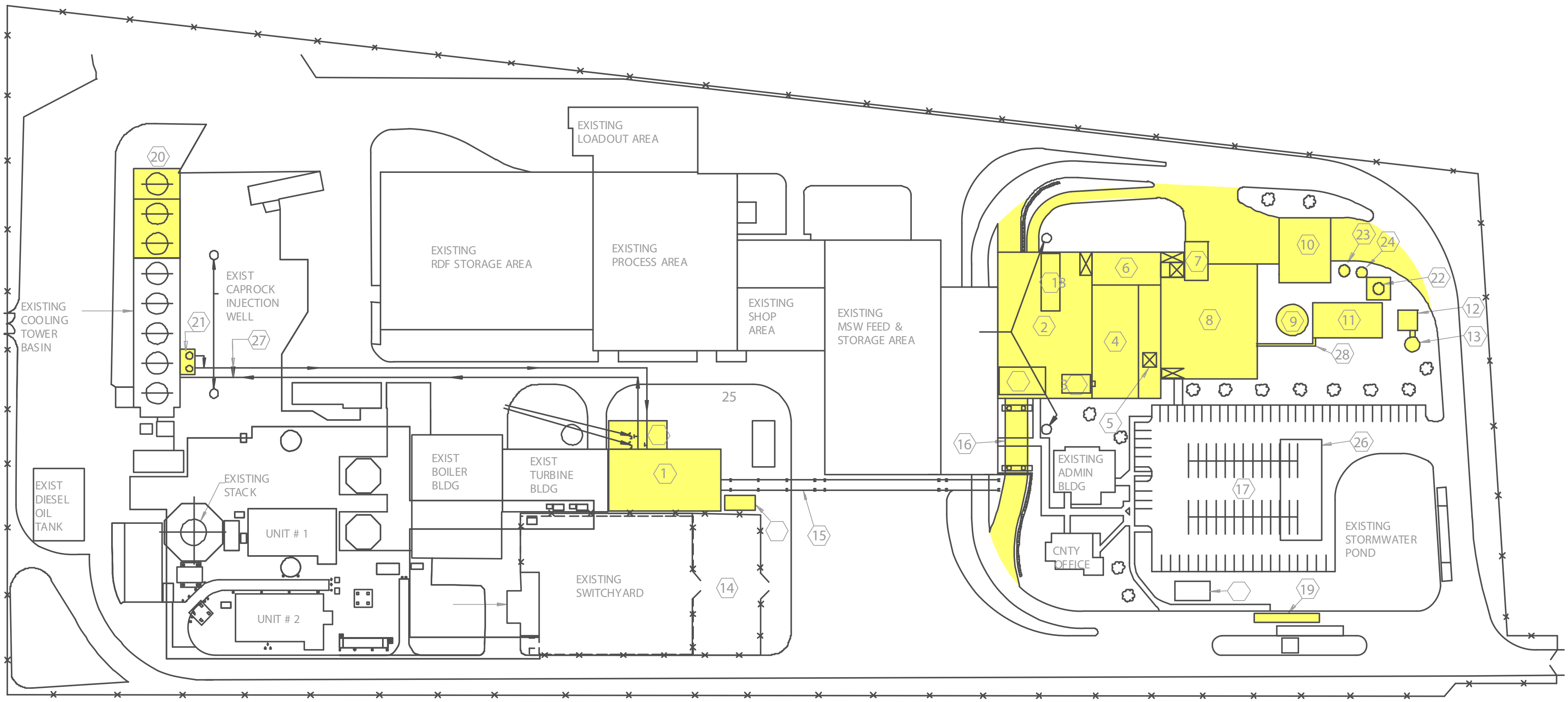
H:\H-Power\Oahu_HI\Task7\MXD\2-1.mxd
Sept 23, 2008 DWN: DJK CHKD: KMP

FIGURE **2.2-1**

Figure 2.2-1 back side



NOTE: Yellow highlight areas represent areas of the proposed expansion

LEGEND

1. NEW TURBINE GEN BLDG
2. NEW TIPPING FLOOR EXPANSION
3. NEW SHEDDER
4. NEW REFUSE PIT
5. NEW EQUIPMENT HATCH
6. NEW CRANE PULPIT AND ELECT ROOM
7. NEW GRIZZLY BLDG
8. NEW BOILER BLDG
9. NEW SDA
10, NEW ASH LOADOUT BLDG
11. NEW BAGHOUSE
12. NEW ID FAN
13. NEW STACK
14. NEW EXTENSION SWITCHYARD
15. NEW UTILITY RACK
16. NEW ELEVATED ROADWAY
17. EXPANDED PARKING LOT
18. NEW BALER
19. NEW INCOMING SCALE
20. NEW COOLING TOWER BASIN
21. NEW COOLING TOWER PUMP STRUCTURE
22. AQUEOUS AMMONIA TANK/CONTAINMENT
23. CARBON SILO
24. LIME SILO
25. DIESEL GENERATOR
26. NEW UNDERGROUND STORM WATER STORAGE (IF REQ'D)
27. NEW CW PIPING
28. NEW SCREEN WALL

N

FEET

0 100 200

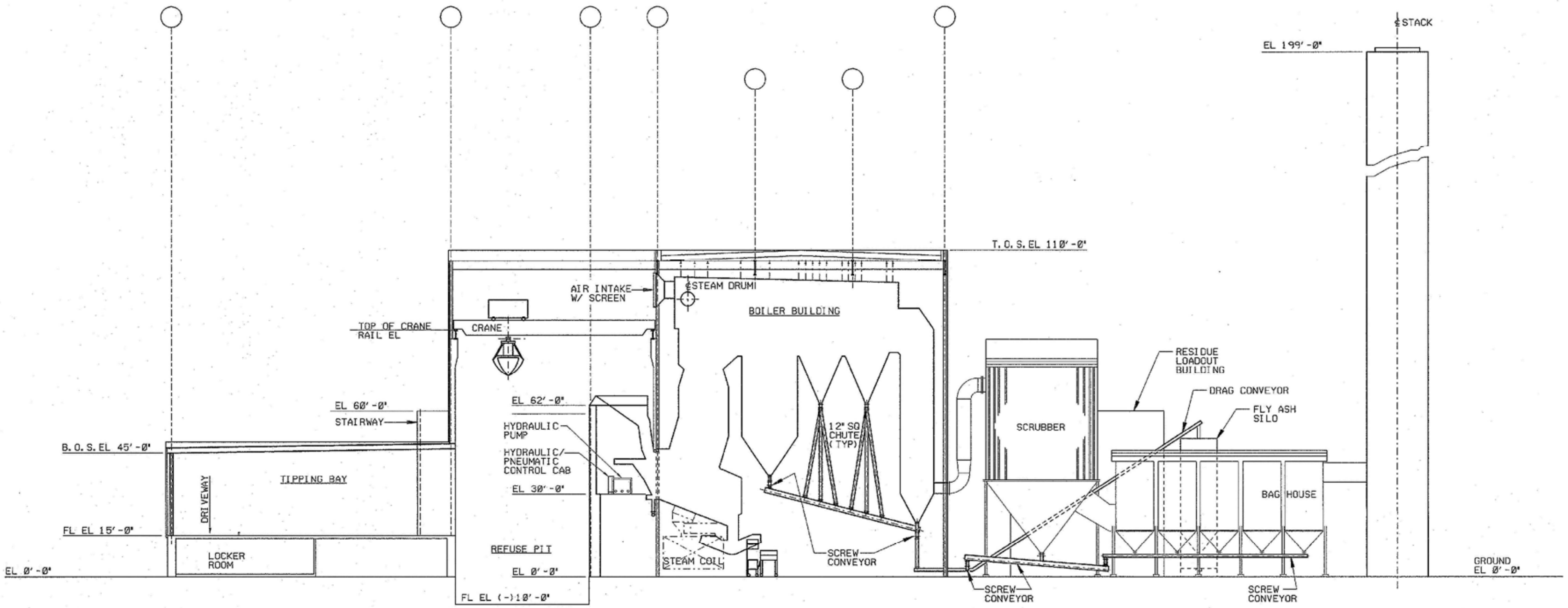
APPROXIMATE SCALE

amec

SITE PLAN OF THE PROPOSED EXPANSION

FIGURE 2.2-2

Figure 2.2-2 back side



SECTIONAL ELEVATION

GRAPHIC SCALE

0 10' 20' 40' 60'

1"=20.0'

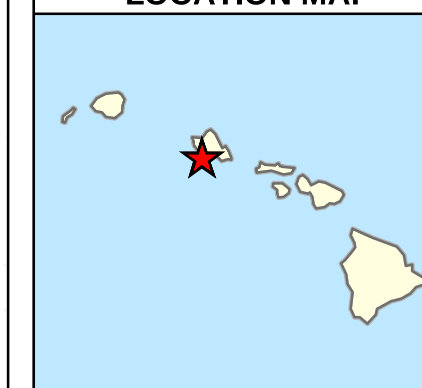
TITLE

ELEVATION DRAWING OF THE PROPOSED EXPANSION

COVANTA/H-POWER
KAPOLEI, OAHU, HAWAII

LEGEND

LOCATION MAP



NOTES & SOURCES

SOURCE: BURNS AND ROE, DRAWING M215_I_C

AMEC EARTH & ENVIRONMENTAL, INC.

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H:\H-Power\Oahu_HI\Task7\MXD\6-1.mxd
Sept 23, 2008 DWN: DJK CHKD: KMP

FIGURE 2.2-3

Figure 2.2-3 back side

Procedures to Prevent Unacceptable Waste from Entering the Facility

All arriving solid waste vehicles are weighed at an inbound scale. At these scales, a clearly visible notice is posted that Unacceptable and Hazardous Waste is prohibited, together with a clear warning of potential hauler bans and other legal penalties for violators.

Although all vehicles are subject to inspection, priority for manual screening will be given to:

- Those haulers known to serve industrial areas;
- Those haulers whose service areas are not well known;
- Front-end loaders and roll-off drop boxes; and
- Packer trucks with commercial pick-ups.

The screening procedures used at the facility include the following activities:

- Visual inspection of trucks by the RDF Tipping Floor Attendant and the Mass Burn Tipping Floor Attendant, for unusual looking loads;
- Routine visual inspection by tipping floor and mobile equipment personnel of material in the refuse vehicles during unloading;
- Visual inspection of the materials on the tipping floor and the pit of the Mass Burn Unit; and
- Selection of vehicles to be screened as part of the spot-check portion of the screening program outlined below is to be done both on a judgmental basis using criteria mentioned above, and on a random load basis.

The following is the definition of Unacceptable Waste:

> “Unacceptable Waste" includes large castings, transmissions, rear ends, springs, fenders or other major parts of automobiles, motorcycles, other vehicles or marine vessels, explosives, pathological or biological waste, hazardous chemicals, radioactive materials, large quantities of sulfur-containing materials, large tree branches or trunks, machinery (other than small household appliances), liquid wastes, dirt, concrete, other non-burnable construction materials or debris and regulated hazardous waste of all kinds, including but not limited to, cleaning fluids, crankcase oils, cutting oils, paints, acids and poisons or other materials including those regulated under Federal and State rules and regulations.

The following is the definition of Acceptable Waste:

> “Acceptable Waste" shall mean that garbage, trash, rubbish and refuse normally disposed of by and collection from residential, commercial, military, institutional and industrial establishments within the City, provided, however, that the term shall not include wastes in quantities and concentrations which require special handling in their collection and/or processing and disposal such as bulk items, junked automobiles, waste oil and other items of Unacceptable Waste as herein defined. Acceptable Waste may include leaves, twigs, grass and plant cuttings, branches or tree trunks not in excess of five feet long or larger than nine inches in diameter, paper, plastics, ferrous and non-ferrous metals, glass, discarded personal property such as bicycles and baby carriages and other constituents that normally appear in household refuse, and certain wastes which are difficult to process such as leather or automotive and small vehicular tires but which can be processed in small quantities when mixed with other Acceptable Waste provided large quantities of such wastes are not included within any truckload.

The Acceptable Waste is stockpiled in the storage areas as it is received and fed out of storage for processing. A large crawler-dozer stockpiles the Acceptable Waste. Front end loaders retrieve the waste for process feed. The receiving and storage areas are designed to hold approximately three days storage of Acceptable Municipal Solid Waste. White goods, discarded stoves, refrigerators and other appliances and bulky items that cannot be processed, are occasionally received with Acceptable Waste. These unacceptable items are retrieved and placed on the west wall of the MSW receiving room. These metal products are taken to the metal recycler for recycling. There are some non-MSW wastes that are destructed by direct injection for combustion at the facility. Typical non-MSW wastes include: contraband confiscated by the local law enforcement agencies, expired pharmaceutical supplies, and military classified documents. Nonprocessible wastes and items mixed with incoming Acceptable Waste that cannot be processed are pushed aside by loader operators and, when time permits, pushed to the bulky waste loadout area for transfer to a recycler or the landfill.

Unit 3 (Expansion Facility)

Similar to the process described above for Units 1 and 2, acceptable MSW for the Mass Burn unit will be delivered to the Facility by transfer trailer, packer trucks, City and County route collection vehicles, and private vehicles. All delivery vehicles will be weighed into the Facility on a new 60-ton, 70-foot capacity receiving scale located adjacent to the central scale house. A second scale of equal capacity is currently utilized for determining vehicle tare weights, as required, and for weighing recovered metals, RDF processing residue, and ash leaving the site. A fully furnished and equipped receiving weigh station with one additional sixty-foot (60') long truck scale will be included with the Expansion. Following the Expansion, MSW received at the facility will increase from 15,000 tons to approximately 21,000 tons of per week.

From the central scale house, incoming trucks will be directed to one of the three receiving locations. Route collection vehicles and packer trucks will be directed to the tipping locations along the elevated dumping platform of the receiving and storage area for RDF processing or the Mass Burn pit. Transfer trailers will be directed to the ground level dumping area or the Mass Burn Pit. Typically a spotter directs trucks to the appropriate locations for tipping.

At the central scale house, the vehicles pass between two radiation detectors to monitor for radioactive materials. In the event the alarms are set off, the vehicle is moved to an area where exposure to personnel is minimized. The Hawaii State Department of Health (HDOH), Indoor and Radiological Health branch is notified after facility personnel verify the concentration of the material. The HDOH representative determines how to properly handle and dispose of this waste. At no time will HRRV accept any radioactive waste for processing.

The Acceptable Waste stockpiled in the receiving pit for the new Unit 3 is retrieved by an overhead crane and fed into the Mass Burn Unit. The receiving and storage areas are designed to hold approximately three days of Acceptable Municipal Solid Waste. Any bulky waste received in the Unit 3 Mass Burn receiving area will be transferred to the bulky waste shredder in the Unit 3 Mass Burn receiving area. If not combustible, it will be transferred to the landfill.

2.2.2 MSW Processing

Units 1 and 2

Acceptable Waste is delivered by front end loader from the storage area to the conveyor. The front end loader loads the waste onto a high impact steel apron feed conveyor. The waste is metered by the feed conveyor onto an inclined conveyor which carries the waste onto a horizontal drag conveyor feeding the primary shredder. The picking station equipment operator stationed in the grapple control bunker at the horizontal drag conveyor inspects all waste being carried to the primary shredder. Oversized or nonprocessible items observed on the conveyor are removed for disposal.

The primary shredder performs coarse shredding as the first step in the processing line. It breaks open closed bags and boxes, exposes ferrous materials for subsequent recovery and breaks larger glass containers.

Following primary shredding, the coarsely shredded waste will be carried by an inclined belt conveyor to the magnetic separator. The equipment selected for the magnetic separation system consists of two electromagnetic drums. The secondary magnetic drum will take the separated ferrous metal away from the primary magnetic drum and direct it to the ferrous collection conveyor.

After passing the ferrous removal system, the waste enters the primary separation unit where the waste is divided into three streams:

1. A RDF process residue stream consisting of fine sand, glass, dirt, etc. This material is conveyed directly to the RDF process residue loadout area with no further processing.

2. A sized fraction consisting primarily of small combustible products together with some heavy particles of rock, bone, ceramic, glass, etc. This stream is directed to the inlet of the secondary separation units for further processing.

3. An oversized fraction consisting primarily of paper and plastic, which is conveyed to the secondary shredder for size reduction.

The secondary separation units are of proprietary Combustion Engineering, Inc. design and are similar to the primary units with essentially the same design features. The action of the unit breaks up and loosens entrapped combustible material which is separated from the noncombustible material. There are two streams that are generated from this process:

1. Combustible material that is conveyed to the RDF storage room as RDF; and
2. The noncombustible RDF residue that is conveyed to the RDF process line residue loadout area.

Unit 3 (Expansion Facility)

The Expansion proposes that, except when screening of waste is required, MSW will be bought in by trucks and dumped into the refuse storage pit. For loads that are screened, MSW will be dumped onto the tipping floor. After visual inspection a front end loader will push the Acceptable Waste into the refuse storage pit. Unacceptable waste will be removed.

All refuse will be transferred by overhead crane to the feed hopper and feed chute of the waterwall furnace. In the furnace, a ram type volumetric feeder will move the waste onto the stoker grade. Above the grate and integrated with the waterwall furnace will be the steam boiler, designed specifically for solid waste combustion. Flue gases from the boiler will be directed through air pollution control equipment for the removal of acid gases and particulate matter. Steam generated in the boilers will be delivered to a new turbine-generator to produce electricity for in-plant needs and for sale to HECO.

2.2.3 RDF/MSW Storage

The existing RDF Storage Area is presently designed for approximately three days of storage of RDF (4,000 to 4,500 tons of RDF) with existing operating conditions. The proposed Expansion facility is a Mass Burn facility which will not produce RDF from the MSW, and therefore will not need an additional RDF storage area. However, the proposed refuse pit will have a storage capacity for three days of MSW.

2.2.4 Combustion Process

Units 1 and 2

In the existing facility, RDF is recovered from storage for boiler feed by front end loaders. The front end loaders attempt to maintain a constant burden depth on horizontal steel pan conveyors located in the floor of the building. The horizontal conveyor discharges onto an inclined pan conveyor to MWC Unit 1 or 2. Control of the RDF feed metering and transport system is primarily from the power plant control area which provides speed control for the feed transport conveyors in the RDF storage area. The power plant control area start controls for the augers and feed transport conveyors are interlocked to require a simultaneous permissive signal from the process plant control area in order to allow startup of the metering and transport system.

The Facility incorporates two Combustion Engineering, Inc. VU-40 steam generators (boilers), each designed to burn RDF alone, RDF and diesel fuel in combination or diesel fuel only. The two boilers can fire the RDF produced from operation at the peak processing rate of 12,096 tons per week of RDF. This is approximately 36 tons per hour per boiler. Both boilers are operated during normal operation. The VU-40 boilers are designed with provision for a controlled flow of air from underneath the stoker grates to assist in complete burning of the material on the grate and to provide cooling of the grates themselves. In addition, an overfire air system distributes additional combustion air over the grate to complete the combustion requirements.

Unit 3 (Expansion Facility)

After being charged into the feed chute, the refuse will be metered out onto the surface of the Martin stoker from the bottom of the feed chute by hydraulic feed rams. The proprietary reverse-reciprocating action of the stoker grate agitates the fuel bed continuously in a manner which causes refuse burning from the bottom of the refuse bed, resulting in a burnout of better than 98 percent of all combustible matter.

The stoker grate will be inclined downward from the feed end toward the discharge end and will consist of alternating rows of fixed and moving grate bars. Unlike conventional stoker designs, the moving grate bars will push upward at 30 to 50 strokes per hour against the natural gravitational downward movement of the refuse. This stoker action will agitate the burning refuse to form an even depth of fuel bed. Burning refuse will be pushed back underneath the freshly fed refuse to achieve continuous drying, volatilization, ignition, and combustion.

As distinguished from typical stokers utilized for refuse combustion, the grate bars of the Martin stoker are machined on their sides to achieve intimate contact between adjacent bars. Combustion air admitted to installations utilizing this system show flame patterns wherein the completion of the combustion is maintained within the confines of the lower furnace (below the upper level of the refractory lined furnace portions) and away from the walls without stratification. Resulting carbon monoxide levels at the furnace outlet are 50 ppm or less in normal operation. Consistent with the low levels of carbon monoxides are the low levels of dioxin and furan emissions from Martin units.

The combustion air will be taken from the tipping floor and pit area and will be directed to the underfire and overfire air fan inlet. This will also maintain a negative pressure in the tipping floor to reduce odor and dust escaping to the ambient environment. To ensure maximum burnout of refuse with high moisture content, a steam-heated combustion air preheater will be located at the combustion air fan outlet. This heater will be capable of preheating incoming ambient air to 300 F when firing refuse having low heating value.

2.2.5 Furnace and Boiler

The Expansion will have a boiler furnace/combustion chamber similar to Units 1 and 2. Above the stoker grate will be the boiler furnace/combustion chamber, constructed of gas-tight, continuously welded waterwalls down to the grate surface. Figure 2.2-4, a typical boiler cross section, shows the relationship of the integrated furnace and boiler.

As mentioned above, the RDF/MSW feedrate and combustion air supply are maintained to assure complete combustion and compliance with all combustion-related permit requirements. The flue gas that results from the combustion process is extremely hot and carries the heat that is used to generate steam in the furnace water walls and downstream equipment. The sequence of equipment that provides for steam generation includes:

1. Furnace waterwalls;
2. Primary and secondary superheater;
3. Convection heat transfer surfaces;
4. Economizer; and
5. Air heater.

This series of equipment is designed to extract enough heat to generate the desired steam rate while keeping the flue gas temperature in a range that is appropriate for long-term operation. The boiler design will incorporate state-of-the-art features including combustion air distribution and control, location and sizing of heating surfaces and appropriate cleaning methods during operations. Soot blower sequencing will be completely programmable and set to maintain the most efficient boiler operations. The program can be changed if, during plant operation, it is found that certain sootblowers need to be operated more frequently to maintain boiler cleanliness.

2.2.6 Air Pollution Control Equipment

The Expansion is designed to include state-of-the-art pollution control equipment. The Expansion will fulfill both Maximum Achievable Control Technology (MACT) and Best Available Control Technology (BACT) emission control requirements that arise out of different portions of the federal Clean Air Act. MACT is a requirement under Title III of the Act for control of hazardous air pollutants and imposes emission limitations for major sources of hazardous air pollutants in specifically listed source categories. For the Municipal Waste Combustor industry, the MACT standards were combined with, and promulgated as part of, the New Source Performance Standards for the industry at 40 CFR 60, Subpart Eb. Subpart Eb imposes emission limitations for MWC metals (particulate matter, lead, cadmium, and mercury), MWC acid gases (SO2, HCl), dioxins/furans, NOx, and CO.

BACT is a requirement under Title I of the Act for the control of regulated pollutants. BACT is an emission limitation that is imposed through the federal and state Prevention of Significant Deterioration (PSD) permitting program for each regulated air pollutant that exceeds major source or major modification thresholds as a result of the project. BACT is defined as:

> *"an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard...."*

Flue gas from the new combustor will be treated by air pollution control technologies that have been designated by the USEPA as MACT. In addition, Unit 3 will be equipped with the Covanta Very Low NOx (VLN™) system, which is an integral component of all new Martin® stokers, and varies the combustion process over typical stokers in order to significantly reduce NOx emissions. Flue gas in the furnace will then be processed by a selective non-catalytic reduction (SNCR) system to further reduce nitrogen oxide emissions. From the boiler, the flue gases will be directed through specially designed air pollution control equipment for effective control and removal of municipal waste combustor acid gases and organics, particulate matter, mercury and other heavy metals and acid gases. The sequence of control systems include:

- VLN™ system, good combustion control and furnace operating practices to control carbon monoxide (CO), nitrogen oxides (NOx), and dioxin formation;
- Selective non-catalytic reduction system (SNCR) for NOx control;
- Powdered activated carbon injection for control of mercury;
- Semi-dry alkaline (lime) scrubber to control sulfur dioxide (SO_2), sulfuric acid mist, MWC acid gases (SO_2 and hydrogen chloride (HCl)), fluorides, as Hydrogen Fluoride; and

- Fabric filter to control particulate matter (total suspended particulates, particulate matter 10 microns or less (PM10), and particulate matter of 2.5 microns or less)) and particulate bound-SO_2, metals, sulfuric acid, fluorides, and MWC acid gases and organics.

Flue Gas Recirculation
The Covanta VLN™ system, a type of flue gas recirculation (FGR), is an integral component of all new Martin® stokers. It varies the combustion process offered in Martin® stokers as follows:

- Reduces the overall excess air rate from approximately 90 to 110 percent excess air to 50-55% excess air;
- Reduces the amount of secondary air and adds a tertiary gas stream at a higher elevation in the furnace; and
- Includes an internal gas recirculation system.

The combination of these process changes reduces the NOx generated in the furnace as well as increases the overall boiler efficiency.

The secondary or overfire air system consists of two rows of closely spaced overfire air nozzles, one row in the front wall above the stoker feeder ram(s) and the second row in the rear wall above the rear arch. The overfire air system will be designed to provide approximately 13 percent of the total combustion air for combustion above the stoker grate.

The internal gas recirculation (IGR) air system consists of a dedicated IGR air fan and four rows of closely spaced tertiary air nozzles, two rows in the front wall above the overfire air nozzles near the boiler's nose and two rows in the rear wall. The IGR system will be designed to provide approximately 26% percent of the total combustion air flow.

The overfire air and IGR nozzle design is such that complete penetration of the gas stream above the stoker is achieved for flame shaping and thorough burnout of combustion products including organics. Actual testing at Martin installations shows flame patterns wherein the completion of combustion is maintained within the confines of the furnace and away from the walls without stratification.

The combustion air will be taken from the tipping floor and pit area and directed to the combustion air fan inlet. The internal gas recirculation will be taken from above the stoker's clinker weir and directed to the IGR fan inlet. To ensure maximum burnout of refuse with low heating value and high moisture content, steam heated combustion air heaters will be located at the combustion air fan outlet to heat the incoming air to 200-300 °F.

Selective Non-Catalytic Reduction

A selective non-catalytic reduction (SNCR) system will be installed and designed to meet the NOx emission standard of New Source Performance Standards (NSPS), Subpart Eb and the BACT emission rate as determined by the BACT evaluation. The SNCR system will be designed for operation with the new Unit 3 at 110% of maximum continuous rating (MCR). Aqueous ammonia will be injected into the boiler to promote the conversion of NOx to nitrogen and water vapor. The quantity of aqueous ammonia injected will be automatically controlled to maintain a manually selected stack setpoint that is below the final permit emission limit.

Aqueous ammonia with a concentration of less then 20% by weight (19.2% proposed) will be used. Ammonia storage and handling will be designed on good engineering practices relative to other ammonia handling and storage facilities and other HDOH requirements. The aqueous ammonia system will consist of an ammonia storage tank, ammonia pumps, purge air blowers, and ammonia injection nozzles at the boiler. The ammonia storage tank will provide a minimum of seven-day supply of aqueous ammonia at the expected normal operation consumption rate. The ammonia storage tank will be located within a concrete containment to prevent any spills from spreading throughout the Facility site. A truck unloading pad sized to hold the volume of the delivery truck will also be provided.

Carbon Injection

A powdered activated carbon injection system will be designed to operate in conjunction with the spray dryer-baghouse system to control mercury emissions from the new unit. The activated carbon control system will be designed to inject powdered activated carbon into the flue gas upstream of the semi-dry scrubber where it will become well mixed to promote reduction of mercury. The carbon will be pneumatically conveyed to the flue gas duct. A new activated carbon storage silo will provide on-site storage of activated carbon. The amount of carbon, if any, to be injected to achieve the required level of control will be determined during initial start up and performance testing. If testing demonstrates that carbon is not needed to achieve compliance with mercury limits, the carbon injection system will be maintained but not necessarily operated on a continuous basis.

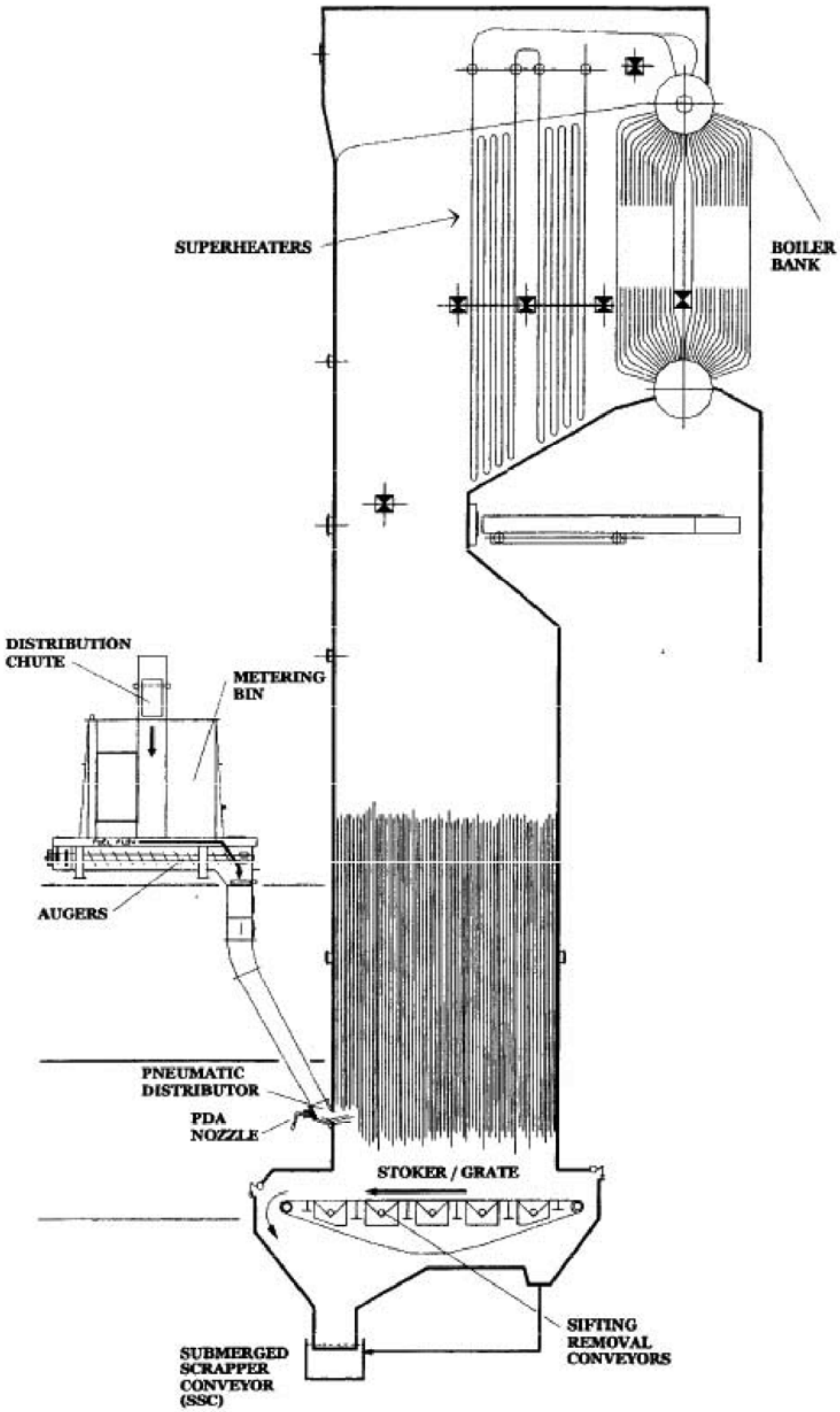
Spray Dryer Absorber

The air pollution control system will include a semi-dry scrubber (also known as a spray dryer absorber). The scrubber will use a lime slurry reagent and be designed to meet the NSPS Subpart Eb emission standards for SO_2 and HCl and the BACT emission limit for sulfuric acid mist and fluorides (as hydrogen fluoride).

The Expansion will include a new lime storage silo for lime and a new lime slurry preparation system to provide lime slurry for the new scrubber. Lime for the semi-dry scrubber system will be delivered by truck and stored in the new lime storage silo. Lime will be slaked and fed as a slurry to the atomizers of the new scrubber and injected as a fine mist of droplets into the flue gas. Acid gas removal performance will be controlled by adjusting the injection rate of lime slurry, which will be automatically adjusted in response to the flue gas SO_2 content. Scrubber outlet temperature will be controlled by adjusting the quantity of dilution water added to the slurry.

The flue gas will be ducted through a cylindrical vertical chamber where it will be intimately mixed with an atomized spray of lime slurry droplets. Dissolved lime provides the mechanism for removal of acid gases while evaporation of water reduces the flue gas temperature. The treated and cooled flue gas will then flow to a high efficiency pulse jet baghouse where the fly ash particulate, semi-dry scrubber reaction products, and unreacted lime will be collected and removed from the flue gas. The filter cake that accumulates on the fabric filter bags will also provide a substrate of unreacted lime carried over from the semi-dry scrubber, allowing additional reaction with acid gases and further reduction of acid gas emissions.

Dry product that falls into the hopper at the bottom of the semi-dry scrubber chamber will be removed by the fly ash conveying system associated with the baghouse system.



TYPICAL BOILER CROSS SECTION

FIGURE 2.2-4

Figure 2.2-4 back side

Fabric Filter Baghouses

Following the flue gas spray dryer absorber (SDA) system will be a multi-module fabric filter dust collector (baghouse) including a pulse jet bag cleaning system with controls, compartment isolation system and ash collecting hoppers with heaters. The baghouse will be designed to meet the emission limitations for particulates and opacity of USEPA NSPS, Subpart Eb as well as the BACT emission limits for PM10, PM2.5 and Municipal Waste Combustor (MWC) metals.

The baghouse will be installed with multiple compartments to allow bag cleaning with one module off line while maintaining system operation. The fabric filter unit will be designed for continuous operation at the specified conditions and for long bag life. The captured fly ash will be collected in hoppers and that will be connected to the ash handling system.

After leaving the air pollution control system and the induced draft fan, the flue gases will be discharged to the atmosphere through a round, single shell, 199 feet (60.7 m) high stack.

2.2.7 Ash Handling

The stoker will be furnished with a proprietary Martin ash discharger, which will receive the burned-out material as it falls over the clinker roller and cool it in a quench bath. The stoker will also include an automatic grate siftings removal system which will periodically (approximately every 30 minutes) sweep the undergrate plenums and convey the siftings to the ash discharger. No manual cleaning of the stoker undergrate plenums will be required

From the quench chamber, a hydraulically driven ram will push the ash up an inclined draining/drying chute. In the chute, excess water from the ash will drain back into the quench bath.

Ash containing enough moisture to prevent dusting (15 to 25 percent by weight), will then fall to a vibrating conveyor. The conveyor will feed a grizzly scalper to remove large materials from the ash before it is transferred by an enclosed inclined belt conveyor to the ash loadout building. A feed conveyor will direct the ash to a magnetic drum which separates the ferrous metal from the ash. The ash is then discharged onto a spreader feeder and past an eddy current separator to remove non-ferrous material. The bottom ash portion of the ash stream will be directed onto a distribution chute which deposits it in the loadout trailers. A distributing conveyor and chute system will deposit the ~~ash and~~ ferrous metals into trailers for disposal at the monofill at the Waimanalo Gulch Landfill.

The ash handling system will accommodate items equal in size to an item which can leave the ash discharger. Items larger than 10 inches will be separated at the grizzly scalper and transported to a covered rolloff via a front end loader. These bulky items will be removed at the scalper because the design of the ferrous separation system requires that the magnetic separator be located as close as possible to the residue stream in order to achieve the desired high ferrous recovery rate of 80 percent by weight of all magnetic ferrous contained in ash that contains at least 8 percent (by net weight) of magnetic ferrous materials greater than 1 inch in size in all dimensions but less than 10 inches. The non-ferrous recovery system is designed to remove the non-ferrous metals from the bottom ash stream. The system will consist of a rotary eddy current separator to recover the non-ferrous material and all necessary chute work and product distribution conveyors.

The fly ash handling system will collect fly ash from the second/third pass hoppers, the superheater hoppers, the economizer hoppers, and the air pollution control systems. Flap gates or rotary valves will be located below collection hoppers or between collection hopper screw conveyors and downstream transport screw conveyors to maintain the combustion system pressure boundary and prevent air infiltration. Ash will be conveyed to the fly ash silo, situated next to the ash loadout building. It will then be conveyed to a pugmill for wetting and conditioning. ~~and combined with the bottom ash in the ash loadout building as it is loaded into the trailers.~~

Ash from Unit 3 will consist of bottom ash and conditioned fly ash. From these ash streams, two types of ash will be produced, blended ash and bottom ash only. The blended ash will be made by mixing measured amounts of bottom ash and conditioned fly ash. The blended ash will pass through a sampling station before being loaded into disposal trucks. The excess bottom ash will also pass through a sampling station before being loaded into separate disposal trucks. The sampling plan will address the two ash products. Figure 2.2-5 shows an overview of the ash management plan.

Bottom ash sampling will be conducted from a transfer conveyor prior to dropping into the bottom ash truck. The sampling location will allow representative sampling without jeopardizing safety. Sampling will consist of representative grab samples collected at predetermined intervals, which will be used to form a representative composite sample.

Blended ash will be sampled in a similar manner so as to allow representative sampling without jeopardizing safety. The blended ash will be sampled from the conveyor leading from the mixing drum to the blended ash truck.

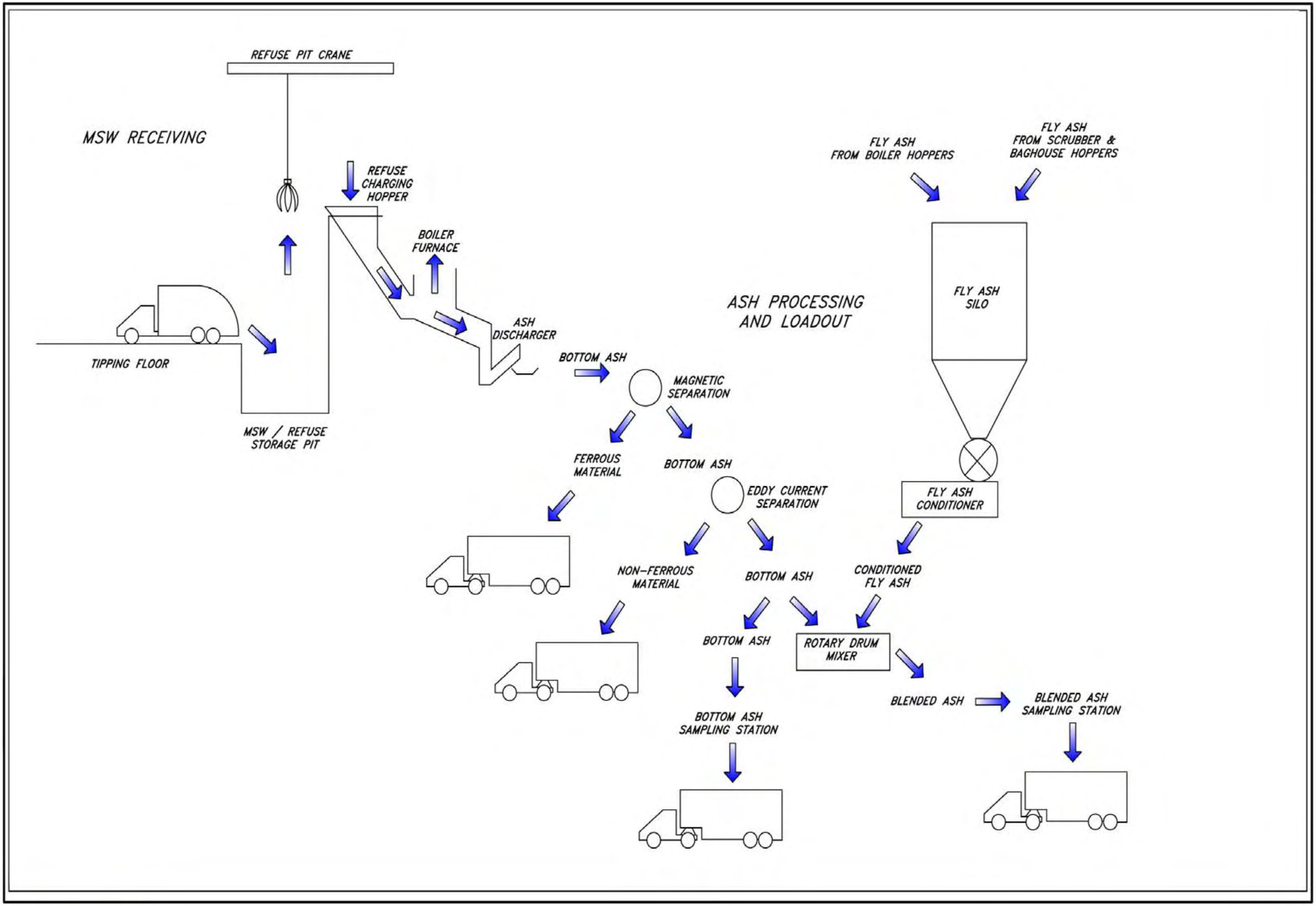
2.2.8 Chemical Storage and Handling

The air pollution control processes for the Expansion require the use and storage of three different chemicals, summarized in Table 2.2-1.

TABLE 2.2-1 CHEMICALS USED IN AIR POLLUTION CONTROL PROCESSES

APC Process	Chemical	Storage
SNCR	Aqueous ammonia	New 10,000 gallon tank
Semi-dry scrubber	Lime	Two new lime silos that are approximately 14 feet wide by 50 feet high
Mercury control system	Powder activated carbon	New storage silo that is approximately 12 feet wide by 50 feet high

Lime for the air pollution control system will be stored in two lime silos that are approximately 14 feet wide by 50 feet high. Truck access to the lime silo will be provided such that the combined horizontal and vertical run of fill pipe does not exceed 150 feet. The lime silos will have baghouses to control fugitive dust.



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ASH MANAGEMENT PLAN

FIGURE 2.2-5

Figure 2.2-5 – Back Side

Aqueous ammonia solution for the air pollution control system will be delivered to the facility in tank trucks carrying approximately 6,000 gallons to a tank with approximately 10,000 gallon capacity. The tank will include relief valve, vacuum breaker and instrumentation. The aqueous ammonia system will consist of an ammonia storage tank, ammonia pumps, purge air blowers, and ammonia injection nozzles at the boiler. The ammonia storage tank will provide a minimum of seven-day supply of aqueous ammonia at the expected normal operation consumption rate. The ammonia storage tank will be located within a concrete containment to prevent any spills from spreading throughout the Facility site. A truck unloading pad sized to hold the volume of the delivery truck will also be provided.

The ammonia storage tank installation will be in accordance with local and state requirements. The tank will be encircled by an above ground dike with capacity for the contents of the tank, plus the rainfall associated with a 25 year, 24 hour storm event and 6 inches of free board. The bottom will be sloped to a pump-out sump. The tank will be provided with a truck unloading area directly adjacent to the dike. Spill containment of the truck unloading area will be provided by means of a curbed area sloped to the in-ground dike. Trucks will be unloaded using truck mounted transfer pumps, and vapor displaced from the receiving tank will vent back to the truck to prevent the release of ammonia vapor during the unloading process.

Safety features of the ammonia storage area include two hard-piped eyewash and shower stations. One will be on the platform near the pumps and one will be at grade near the truck unloading area). Eyewash and showers stations will also be provided at the injection nozzle locations within ten seconds of each hazard at the same elevation as required by ANSI-358.1. Ammonia leak detectors will be provided to monitor potential ammonia vapor leaks. One leak detector with multiple sensors will be located to monitor the ammonia storage tank and ammonia pumps area. One (1) leak detector with multiple sensors will be located at the upper ammonia header level to monitor the sides of the new boiler. Both local and control room alarms will be provided.

Carbon for the air pollution control system will be stored in a common activated carbon storage silo that is approximately 12 feet wide by 50 feet high and is equipped with a baghouse to control fugitive dust. The injection train will include a blower, eductor, surge bin, gravimetric feeder, piping, wiring, process controls and other accessories needed for a complete, operational system. All activated carbon injection train equipment will be located in the skirted area of the carbon storage system.

2.2.9 Energy Production and Distribution

The high pressure, superheated steam generated in the new boiler will be supplied via the main steam piping header to a new turbine generator, where electricity will be produced for delivery to Hawaii Electric Company (HECO) and for in-house use.

The current annual average net electrical production (exported) is approximately 319,000 mWh. The Expansion will yield an approximate 50% percent increase for a new total of approximately 476,000 mWh net electrical production.

Table 2.2-2 provides an overview of the H-POWER's five-year average, 2002 through 2006, values (CCH, 2008a) with future projected average values after expansion.

TABLE 2.2-2 APPROXIMATE ANNUAL PROCESS VALUES

Operating Parameter	Approximate Annual Process Values		
	Average over last five years	**Post Expansion**	**Difference**
MSW Processed (tons)	610,000	910,000	300,000
Net Electrical (mWh)	319,000	520,000	201,000
Combined Ash (tons)	92,000	137,000	45,000
RDF Processing Residuals (tons)	90,000	90,000	0
Ferrous/Non-ferrous Metals (tons)	21,000	31,000	10,000

Source: ISWMP (CCH, 2008a)

These five-year average values enable the estimation of future operating conditions after completion of the Expansion, although the exact values may vary depending on waste stream characteristics. This long-term mass balance demonstrates that current operations are reducing the mass of material delivered to the landfill by approximately 70 percent while generating approximately 0.5 mWh/ton of MSW processed and that approximately 4 percent of the MSW is ferrous and non-ferrous components that are recycled.

2.2.10 Materials Recovery/Recycling

The existing Facility has two different process steps to recover ferrous metal components and to enable recycling. The first step is a magnetic separator that removes ferrous constituents from bulk MSW. This ferrous material is then conveyed to more refined ferrous recovery processes. The second step is a ferrous and non-ferrous recovery system that separates metals, a noncombustible component of MSW, from the bottom ash.

In the Expansion Facility, metals are separated from the ash via a feed conveyor which will direct the ash from the trommel to a magnetic drum which separates the ferrous metal from the ash. The ash is then discharged onto a spreader feeder and past an eddy current separator to remove non-ferrous material.

Table 2.2-3 identifies the tons of ferrous and non-ferrous material recovered for recycling for years 2004 to 2006.

2.2.10.1 Ferrous Metal Recovery

<u>Units 1 and 2</u>

In the existing facility, following primary shredding, the coarsely shredded waste will be carried by an inclined belt conveyor to the magnetic separator. The equipment selected for the magnetic separation system consists of two electromagnetic drums. The secondary magnetic drum will take the separated ferrous metal away from the primary magnetic drum and direct it to the ferrous collection conveyor. Each magnetic separator is capable of continuously processing an average of 100 tons per hour of coarsely shredded waste and separating in excess of 80 percent of the magnetic ferrous scrap in the Acceptable Municipal Solid Waste.

TABLE 2.2-3 FERROUS AND NON-FERROUS MATERIAL RECYCLED (TONS)

Year	Material	MSW Process	Bottom Ash	Total
2004	Ferrous	13,167	5,525	18,692
	Non-ferrous	---	1,847	1,847
	Total	13,167	7,372	20,539
2005	Ferrous	12,777	4,144	16,921
	Non-ferrous	---	1,652	1,652
	Total	12,777	5,796	18,573
2006	Ferrous	14,478	5,414	19,892
	Non-ferrous	---	2,034	2,034
	Total	14,478	7,448	21,926

Source: ISWMP (CCH, 2008a)

The ferrous collection conveyors transport the magnetically separated ferrous metal to the Enhanced Ferrous Metal recovery system which consists of a non-shreddable picking station, a vertical shaft Ferrous Metal Shredder, and an air classifier. Non-shreddable material is removed from the ferrous shredder feed conveyor at a manual picking station. This non-shredded metal material is loaded into a trailer and hauled to the appropriate metal recycling facility. The shreddable metal material is fed into a vertical shaft hammer mill and shredded to nugget size piece. Adhering paper and plastic material (fluff) are liberated during the shredding process and recovered in an air classifier. The fluff is loaded into a trailer which is subsequently discharged into the RDF storage area or returned to the MSW tip floor. The shredded metal is recovered by a rotating magnet drum, loaded via transport and shuttle conveyors into trailers and hauled to an appropriate metal recycling facility. The Enhanced Ferrous Metal Recovery system can be by-passed. The by-passed separated ferrous metal is loaded via transport and shuttle conveyors into trailers

<u>Unit 3 (Expansion Facility)</u>
In the Expansion facility, a feed conveyor will direct the ash from the trommel to a magnetic drum which separates the ferrous metal from the ash. Items larger than 10 inches will be separated at the grizzly scalper, because the design of the ferrous separation system requires that the magnetic separator be located as close as possible to the residue stream in order to achieve the desired high ferrous recovery rate of 80 percent by weight of all magnetic ferrous contained in ash which contains at least 8 percent (by net weight) of magnetic ferrous materials greater than 1 inch in size in all dimensions but less than 10 inches.

2.2.10.2 Bottom Ash Metal Recovery System

<u>Unit 1 and 2</u>
In the existing facility, each of the steam generators is equipped with a submerged scrapper conveyor (SSC) for management of bottom ash. As ash is discharged from the SSC, it falls onto the main transport belt conveyor. This conveyor transports ash from the boiler building to

either the Bottom Ash Metal Recovery System (BAMRS) or the ash tower where it is combined with fly ash and loaded into trailers.

The bottom ash in the BAMRS is conveyed through a magnet to remove the coarse ferrous materials, then through a finger screen separator to remove material greater than 4 inches (overs). These materials are collected in roll-off storage containers. The materials greater than 4 inches may be sent back to the tip floor if further size reduction is necessary. All of this recovered metal is recycled. The bottom ash is classified by size: (1) Material between 3/8" and 4" and (2) fine material (3/8" or less). The fine material will be conveyed back to the ash tower. The coarse material is further processed and fine ferrous and non-ferrous metals are removed. The coarse ash material (less metals) is conveyed with the fine material back to the ash tower where it is mixed with the fly ash.

Unit 3 (Expansion Facility)
In the Expansion facility, a feed conveyor will direct the ash to a magnetic drum which separates the ferrous metal from the ash. The ash is then discharged onto a spreader feeder and past an eddy current separator to remove non-ferrous material. The system will include all necessary chute work and product distribution conveyors.

2.2.10.3 Temporary Construction Phase Elements

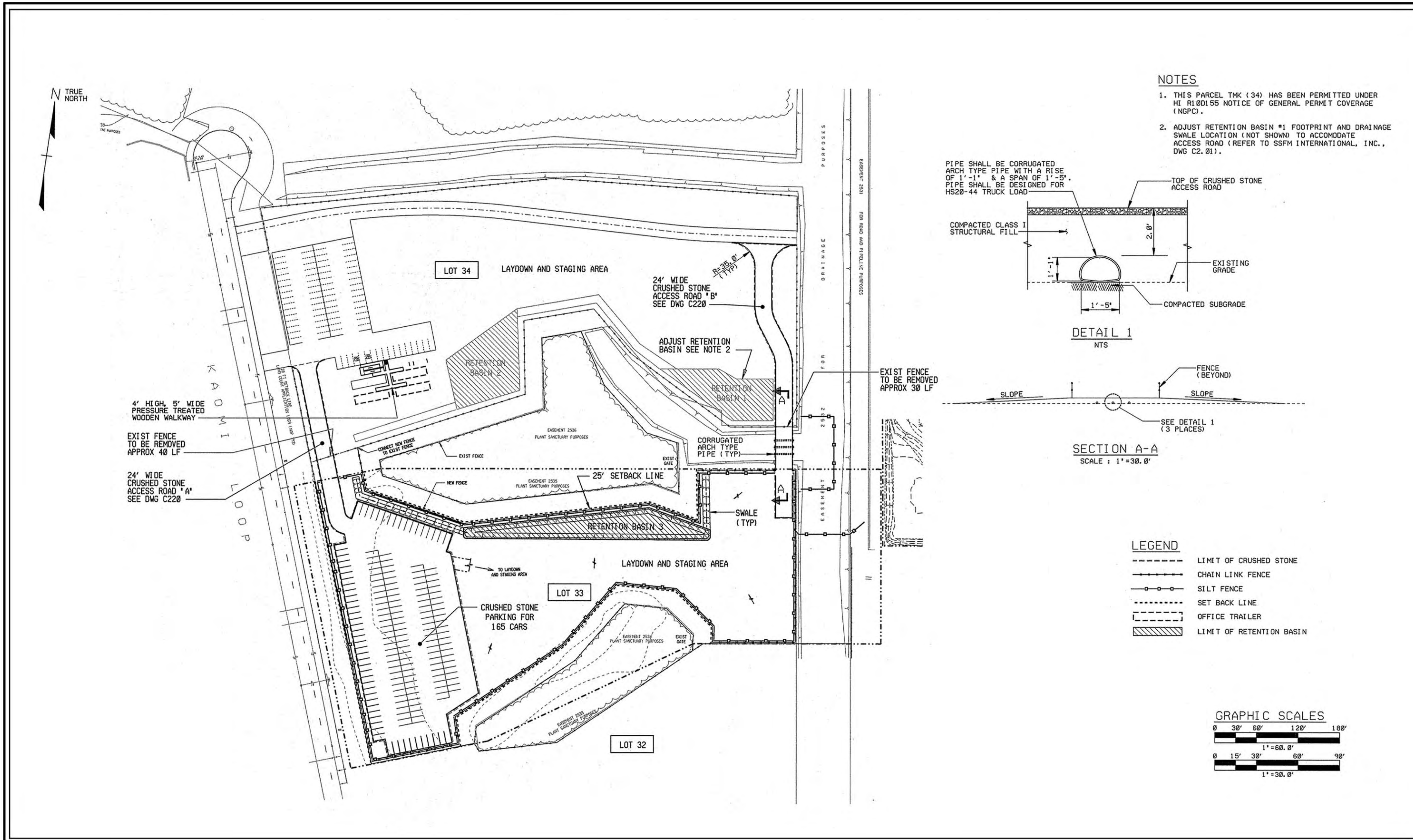
Temporary construction vehicle parking and equipment laydown areas will be required at the H-POWER site during the Expansion Project. Figure 2.3-1 provides a site plan depicting the areas to be used for temporary construction activities, as well as areas to be avoided. Table 2.3-1, Construction Matrix, provides a summary of the staffing and trucking trips on a monthly basis. As shown on Table 2.3-1, the highest construction activity month is anticipated to occur approximately between months 10 through 13 and 21 through 24 after project initiation. Months 10 through 13, have a higher number of trucking trips at approximately 240 truck deliveries (trips/month), while the expected staffing on site range between 69 and 90 personnel. During months 21 through 24, approximately 165 staff will be on site, and approximately 120 truck deliveries (trips/month) will be required to construct the facility.

2.2.10.4 Construction Parking

Parking will be in an area owned by the City that is adjacent to the facility but separate from plant personnel parking. It will have a separate entrance and exit. The area will have a vehicle capacity of approximately 200 vehicles and security provisions.

2.2.10.5 Equipment Laydown

An area owned by the City that is adjacent to the facility (Parcel 33 and portions of Parcel 34) will be used for materials storage, construction activity, staging and fabrication work. Construction vehicle and equipment movement between the facility and this temporary storage site will require the existing process steam line between AES and the Chevron refinery to be modified.



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CONSTRUCTION FACILITIES SITE PLAN

FIGURE 2.3-1

Figure 2.3-1 back side

TABLE 2.3-1 CONSTRUCTION STAFFING AND DELIVERY MATRIX

	Total	**Month**																													
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
Staffing																															
GC		30	30	30	30	30	30	40	40	50	50	50	50	50	40	40	35	30	30	30	20	20	20	20	15	15	15	5	5	5	5
Boiler															40	40	40	40	40	40	40	40	40	40	40	30	30	10			
APC																	20	20	20	20	30	30	30	30	30	30	15				
T/G																									15	15	15	15	15	15	
Mechanical														10	10	10	10	15	15	20	20	25	25	25	25	20	20	20	20	20	15
Electrical				2	2	2	2	2	4	4	4	4	10	15	20	20	20	25	25	25	30	30	30	30	25	25	25	25	20	15	10
Administrative/Management		5	5	5	10	10	10	10	10	10	15	15	15	15	15	15	20	20	20	20	20	20	20	20	15	15	15	15	25	10	10
Total		**35**	**35**	**37**	**42**	**42**	**42**	**52**	**54**	**64**	**69**	**69**	**75**	**90**	**125**	**125**	**145**	**150**	**150**	**155**	**160**	**165**	**165**	**165**	**165**	**150**	**135**	**90**	**85**	**65**	**40**
Trucking Trips per Month																															
Excavation and Backfill	240	80	80	80																											
Concrete	700							100	100	100	100	100	100	100																	
Boiler	560		80	80	80	80	80	80	80																						
APC	560										80	80	80	80	80	80	80														
Turbine Generator	120																						60	40	20						
General Deliveries	1800	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Total	3980	**140**	**220**	**220**	**140**	**140**	**140**	**240**	**240**	**160**	**240**	**240**	**240**	**240**	**140**	**140**	**140**	**60**	**60**	**60**	**60**	**60**	**120**	**100**	**80**	**60**	**60**	**60**	**60**	**60**	**60**

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3.0 REQUIRED APPROVALS AND PERMITS

This chapter describes the approvals and permits required prior to construction of the proposed Expansion. Each approval/permit is identified in Table 3.0-1 along with the approving agency and status.

TABLE 3.0-1 REQUIRED APPROVALS AND PERMITS

Approving Agency/Authority	Approval/Permit	Status
FEDERAL		
Federal Aviation Administration (FAA)	Notice of Construction	To Be Submitted
STATE		
Hawaii Department of Health (HDOH), Clean Air Branch	Covered Source/PSD Air Permit, Chapter 60.1 of Title 11 of HAR	Application Pending
HDOH, Clean Water Branch	Notice of General Permit Coverage NPDES Construction Stormwater Discharge Permit	To Be Submitted
HDOH, Clean Water Branch	NPDES General (operational) Stormwater Discharge Permit	To Be Submitted
HDOH, Indoor and Radiological Health Branch	Construction Noise Permit	To Be Submitted
HDOH, Safe Drinking Water Branch	UIC Permit Modification	Application Pending
HDOH, Solid and Hazardous Waste Branch	Solid Waste Management Permit	Application Pending
DLNR, Commission on Water Resource Management	Groundwater Use Permit Modification	Permit Granted
DLNR, Commission on Water Resource Management	Well Construction / Pump Installation Permit	To Be Submitted
CITY		
City and County of Honolulu Department of Planning and Permitting (DPP)	Building Permit	To Be Submitted
~~City and County of Honolulu Department of Planning and Permitting (DPP)~~	~~Conditional Use Permit Modification~~	~~To Be Submitted~~
City and County of Honolulu Department of Planning and Permitting (DPP)	Grading Permit and Drainage Plan Approval	To Be Submitted
~~City Department of Environmental Services~~	~~Construction Dewatering Permit~~	~~To Be Submitted~~

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4.0 ASSESSMENT OF THE EXISTING NATURAL ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATION MEASURES

This chapter describes the existing natural environment of the areas that would potentially be affected by the proposed H-POWER Expansion. These areas include the existing H-POWER site as well as the adjoining parcels proposed for temporary storage of construction equipment, pre-fabrication activities, and for construction parking and trailers. This discussion is organized by topic (e.g., geology and soils, climate and air quality, surface water, groundwater, and biological resources).

This chapter also assesses the environmental consequences of the Expansion. Within each topic, potential temporary and permanent impacts are described and evaluated and mitigation measures that would eliminate and/or reduce potential adverse impacts are identified.

4.1 Geology and Soils

This section discusses the existing geologic environment. Baseline conditions are presented in the context of prior site work that has impacted original conditions on both the site and the proposed laydown area. The potential impacts of the proposed Expansion are evaluated as well as the potential for geologic hazards that may be encountered.

4.1.1 Existing Conditions – Geology and Soils

The Hawaiian Islands are the exposed parts of the Hawaiian Ridge, a large volcanic mountain range extending northwestward across the central Pacific Ocean (USGS 1999). The island of O‘ahu is the eroded remnant of two volcanoes – the older Waianae Volcano in the west and the larger Koolau Volcano in the east. Clastic sedimentary deposits, which primarily are alluvium derived from erosion of the volcanic rocks, have accumulated on the flanks of the island. In some places, the clastic sediments are interbedded with coralline limestone that formed as reef deposits in shallow marine waters. O‘ahu has larger areas of sedimentary deposits than any other Hawaiian island and these deposits contain coralline limestone in coastal areas (USGS 1999).

The proposed H-POWER Expansion, including the adjacent construction laydown and parking areas, is situated within the JCIP in Kapolei, Hawaii. This area is underlain by the ‘Ewa Plain, which is an emerged coral-algae limestone reef formed during the Pleistocene period when the ocean level was at higher elevation (C.E. Maguire 1986). The ‘Ewa Plain extends from sea level at the coastline to approximately 3 to 5 miles inland. Figure 4.1-1, excerpted from a 1986 geotechnical report by C.E. Maguire, presents the extent of the emerged reef deposits on the island of O‘ahu and specifically in the project area. The following local and site-specific information is in large measure excerpted from that 1986 final geotechnical report conducted for the original H-POWER facility.

The local geology is typical of mid-Pacific volcanic islands in that the central volcanic core is surrounded and sometimes overlain by a coastal plain of interbedded marine sediments, alluvium, and coral reef formations. In the area of the H-POWER site, on the basis of a projected dip slope of 5 degrees from the volcanic formation, this overlying coastal plain is estimated to be 600 to 800 feet thick (C.E. Maguire 1986). The coral reef deposits on-site in 1986 (pre-construction of H-POWER) were typical of those found throughout the Barbers Point area. The surficial layer typically consists of corals, calcareous algae, cemented beach sand, and cemented mixtures of coralline sand, gravel and coral fragments often termed “coral rock”. This coral rock often contains cavities of various sizes and at various depths. The ground surface topography is termed “shallow karst” topography marked by small sink holes generally 0.5 to 3.0 feet in diameter and from approximately 3 to 10 feet deep, which have been dissolved out of the limestone by fresh rain water (C.E. Maguire 1986).

Soil throughout the area, and underlying both the H-POWER site and the laydown parcels, is classified as Coral Outcrop by the United States Department of Agriculture (USDA) Soil Conservation Service (USDA SCS 1965). This soils data is mapped on Figure 4.1-2.

4.1.1.1 H-POWER

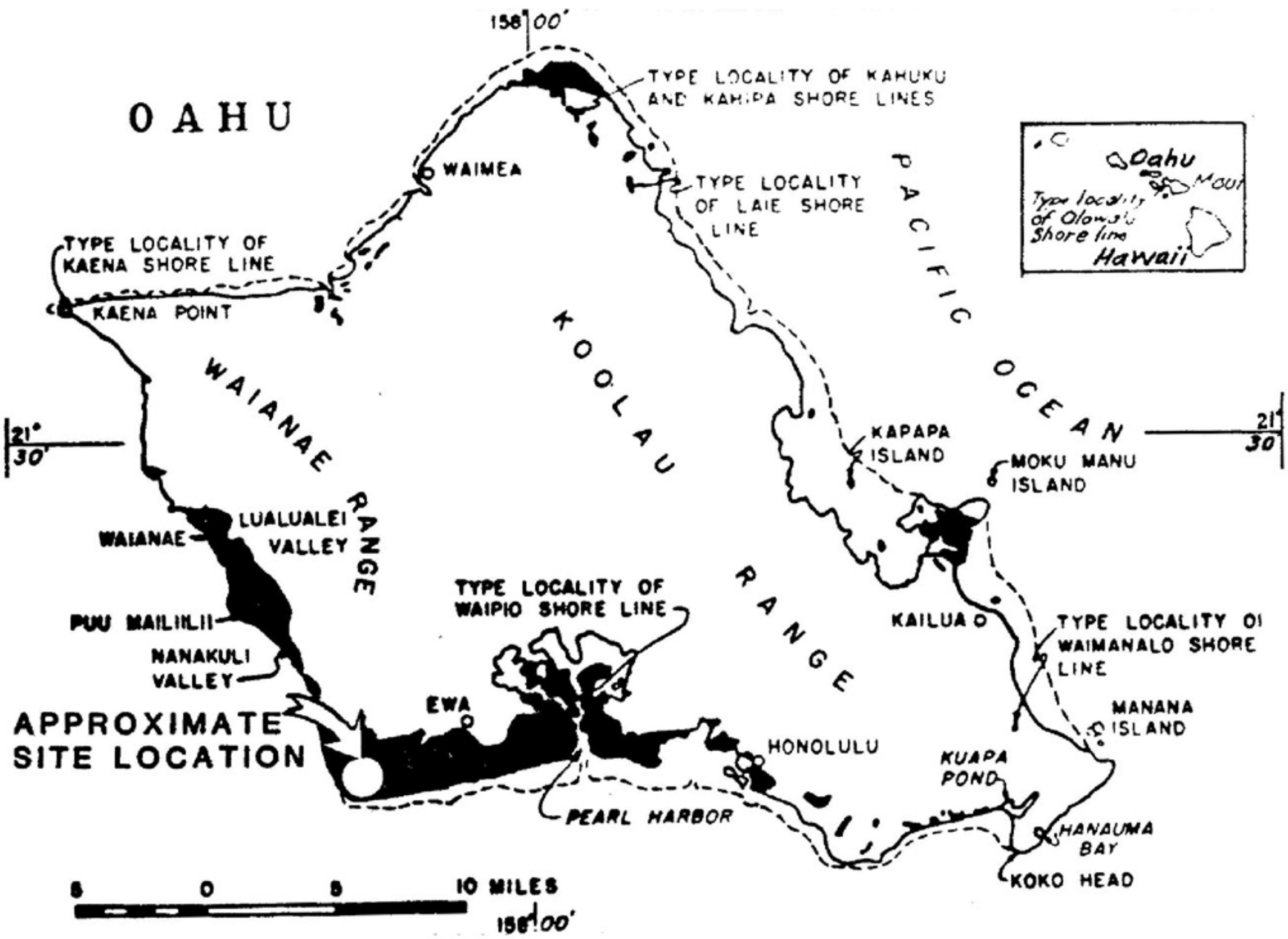
Prior to construction of the existing H-POWER facility, vegetation was cleared and grubbed in preparation for a proposed refinery project in 1969. Many of the site sinkholes in the area were loosely filled during the site clearing of 1969. In 1985 H-POWER was constructed in accordance with the site preparation and foundation recommendations developed by the geotechnical consultant, C.E. Maguire. Site preparation included initial site subgrade preparation, consisting of clearing, grubbing and stripping of soft silty organic topsoil from the site. Site preparation also consisted of repairing surface cavities and leveling the site. A systematic probing, breakdown and grouting of below surface voids proceeded where cavities were identified. General surface cavity repair was conducted. Proof rolling (with 100 ton vehicles) to detect cavities or weak areas was also conducted in roadways, important equipment areas and footing areas. In areas where excavation was required, heavy equipment was used, but blasting was not permitted due to possible damage to structures supporting coral rock. Thus extensive geologic excavation and the addition of structural fill and construction components have changed much of the native conditions once found on the H-POWER site and increased the site’s suitability for construction.

4.1.1.2 Construction Laydown Area (Tax Map Key number 9-1-026:033 and 034)

As noted above, soil throughout the area, and underlying the laydown parcels, is classified as Coral Outcrop by the USDA Soil Conservation Service (USDA SCS 1965). Field reconnaissance of the construction laydown parcels indicates that clearing and grubbing activities of unknown date have occurred but that the parcels are currently undeveloped and dominated by brushland with interspersed stands of low lying herbaceous plants. Where soils are exposed, in the tracks left by recreational vehicles and in cleared areas, they are comprised of a very shallow (0-6” bgs) silt with sand surface soil layer over coral outcrop bedrock. Field observations of surface soil indicated a chroma range from 3 to 4, and very little organic matter present in the soils. No mottles or gleying were observed in the soils.

4.1.2 Impacts and Mitigation

Though native geology and soils conditions are relatively similar throughout the H-POWER site and the adjacent construction laydown parcels, the construction impacts and mitigation measures



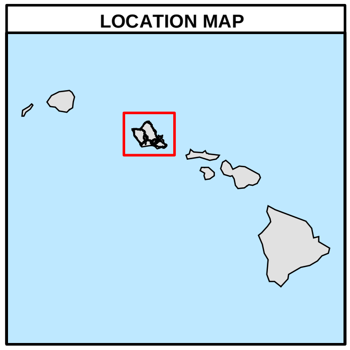
LEGEND

EMERGED REEFS [1]

FRINGING REEFS [1]

[1] FROM "GEOLOGY OF THE HAWAIIAN ISLANDS", STERNS, 1969

LOCATION MAP



H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

NOTES & SOURCES
MAP COORDINATES:
UTM NAD83, ZONE 4N, UNITS METERS

MAP SOURCE: HONOLULU RESOURCE RECOVERY VENTURE
CAMPBELL INDUSTRIAL PARK SITE
HONOLULU, HI
JANUARY, 1986
CE MAGUIRE, INC.

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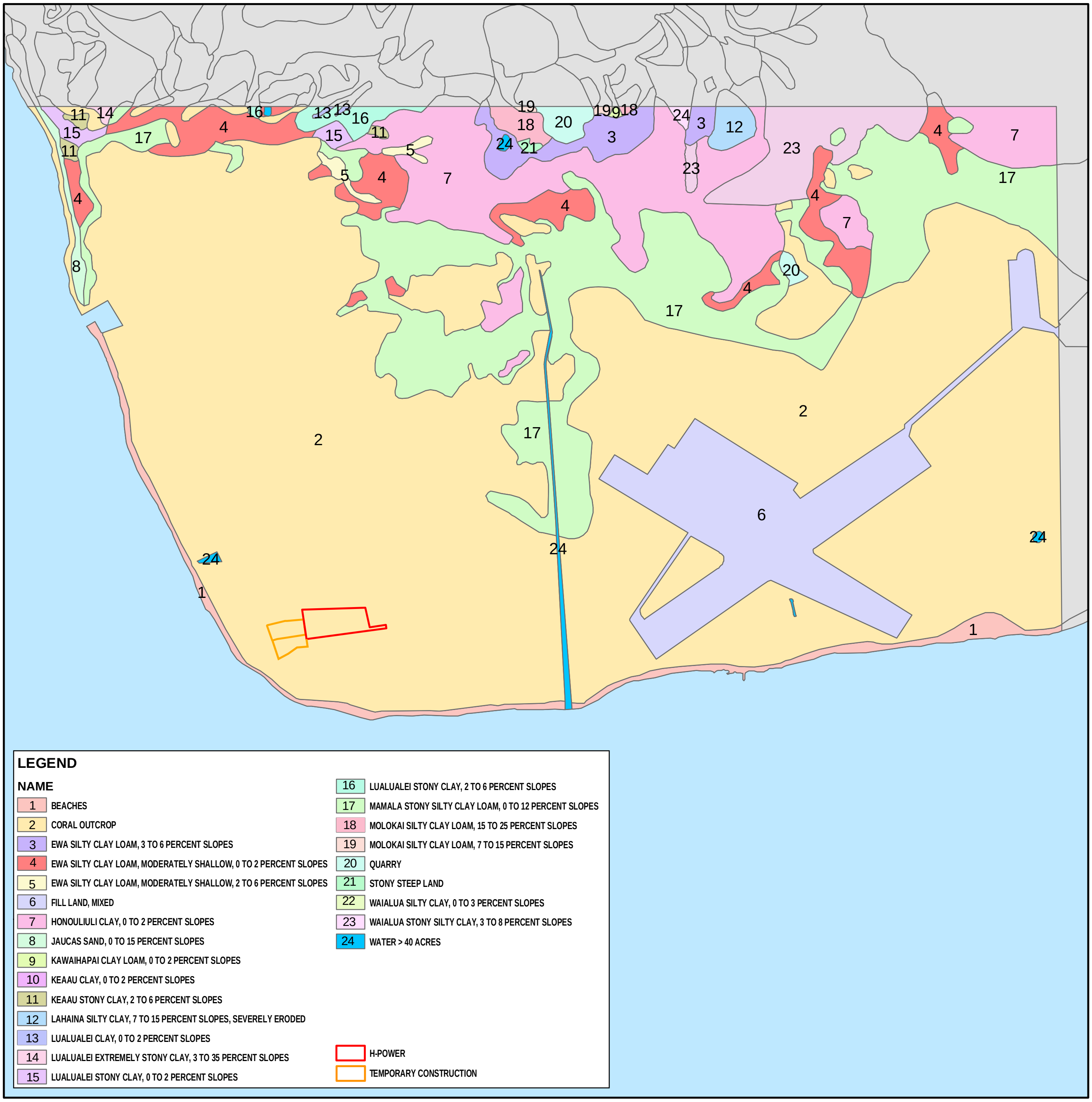
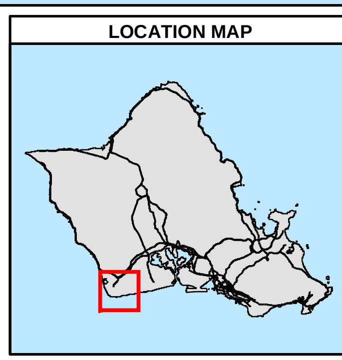
EMERGED AND FRINGING REEFS OF OAHU

FIGURE
4.1-1

H:/H-POWER/MXD_CURRENT/ENVIRONMENTAL/REEFS.MXD
H:/H-POWER/EXPORT/ENVIRONMENTAL/REEFS.PDF
MARCH 4, 2005 DWN: RLO CHKD:

Figure 4.1-1 back side





H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

NOTES & SOURCES
MAP COORDINATES:
UTM NAD83, ZONE 4N, UNITS METERS

SOILS: SOIL CONSERVATION SERVICE, 1996
DOWNLOADED FROM HAWAII DPP

0 2,500 FEET

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GENERALIZED SOILS

FIGURE 4.1-2

Figure 4.1-2 back side

for each area are anticipated to differ. This is due to the fact that proposed changes to H-POWER are permanent structural changes, whereas the laydown parcels are proposed to undergo temporary, predominantly non-structural impacts. The impacts and mitigation are addressed separately.

4.1.2.1 H-POWER Site

The proposed Expansion will require geotechnical excavation, similar to that already conducted at the site for the original H-POWER facility. On the basis of preliminary assessments made by potential contractors, reviewing the conceptual design, it is anticipated that some soils will be excavated and used as fill ~~removed from the site~~ and that some additional structural fill will be imported to complete preparation of the site prior to slab and footing construction and full construction of the Expansion. Total Excavation anticipated is 17,830 cyd., while total fill anticipated is 21,290 cyd. These impacts to site geology and soils will be permanent, but are required to ensure safe and secure foundations and structural integrity. Temporary storage of excavated soil and fill will occur on-site or at the adjacent laydown area.

Prior to excavation and stockpiling activities, one of the first steps in the construction process will be the installation of siltation barriers around the limit of work. The barriers will act as a boundary for the limit of work, minimizing intrusion into areas outside the construction footprint. In addition, the barriers will collect sediment that may be transported from the construction area and will prevent sediment from leaving the site or degrading the existing on-site stormwater collection system. The sedimentation barriers will remain in place throughout the construction effort. Routine inspections will be undertaken to ensure that their integrity is maintained, and to remove accumulated sediments following storm events.

Once site stabilization is completed, siltation barriers will be removed.

4.1.2.2 Construction Laydown Area (Tax Map Key Number 9-1-026:033 and 034)

As noted above, the parcels to be used on a temporary basis for construction parking and equipment laydown are in much the same condition that the H-POWER site was prior to construction of the facility in 1985. The parcels are representative of the local geology and soils conditions, and exhibits the same propensity for cavities of various sizes and at various depths. However, this parcel has been previously impacted by clearing and grubbing activities. In certain areas, the ground surface topography remains marked by small sinkholes generally 0.5 to 3.0 feet in diameter and estimated to be approximately 3 to 10 feet deep. However, because these parcels are proposed for temporary construction use only, geotechnical site preparation will be less involved than that proposed for the H-POWER site. Clearing, grubbing and grading will be needed, and since heavy equipment storage will be required, the laydown area will be proof rolled to ensure structural integrity. Limited grading will also be required to provide appropriate work and parking areas and to minimize potential stormwater runoff in work areas. Figure 2.3-1 (shown previously) depicts the design of the temporary laydown site and activities. Sufficient acreage exists to modify construction activities should constraints be encountered.

As noted above for the H-POWER site, prior to clearing and stockpiling activities, one of the first steps in the construction process will be the installation of siltation barriers around the limit of work. The barriers will act as a boundary for the limit of work, minimizing intrusion into areas outside the construction footprint and collecting sediment that may be transported from the construction area. In addition, because the laydown parcel contain a fenced area with protected species, this area is excluded from the zone of impact and will be surrounded by siltation barriers around the perimeter. In order to ensure that runoff from construction areas poses no detrimental effect upon this fenced resource, the siltation barriers will be arranged to include a 25-foot buffer area surrounding the enclosure. Once construction activities are completed, the site will be stabilized, and the siltation barriers will be removed. The fencing currently in place will be retained during construction and upon completion of the Expansion. Drought tolerant native or indigenous species that are common to the area will be utilized to revegetate the laydown areas once construction is completed.

4.1.3 Geologic Hazards

This Section identifies and analyzes the potential geologic hazards within O'ahu and more specifically, the JCIP. There are four potential geologic hazards in this region that are evaluated below:

- Subsidence, Settlement and Karst
- Seismic Ground Shaking (earthquake)
- Volcanic Activity
- Tsunami

Subsidence and Settlement

As noted in Section 4.1.1, Existing Conditions- Geology and Soils, the principal geologic hazard in the region of both the H-POWER site and the construction laydown area consists of the "shallow karst" topography of this region. Karst topography is a landscape shaped by the dissolution of a layer or layers of soluble bedrock, usually carbonate rock such as limestone. It is marked by small sink holes generally 0.5 to 3.0 feet in diameter and from approximately 3 to 10 feet deep, which have been dissolved out of the limestone by fresh rain water. Though previously cleared and grubbed, this shallow karst topography requires special construction measures to ensure the stability of foundations and to increase the load bearing capacity of the local soils. Due to the karst topography, all footing excavations must be probed to detect the presence of possible voids beneath the footings and, if found, the voids shall either be 1) filled with grout or 2) opened, cleaned of debris and backfilled with properly compacted fill to ensure the stability of the foundations.

Seismic Ground Shaking

The entire island of O'ahu is considered to be in Earthquake Hazard Zone 2A of the Uniform Building Code (UBC) seismic provisions (USGS 2001). This corresponds to a value of 0.075g to 0.15g, where g is gravitational force. The UBC seismic provisions contain six seismic zones, ranging from 0 (no chance of severe earthquake occurrence in a 50-year interval) to 4 (10 percent chance of severe earthquake occurrence in a 50-year interval).

The H-POWER Expansion will be constructed in accordance with the construction standards and seismic provisions of the UBC for Hazard Zone 2A.

<u>Volcanic Activity</u>
The island of O'ahu was formed by two volcanoes, the Waianae Range on the west side of the island and the Koolau Range on the east. Both of these volcanoes are now extinct. The Waianae Range is approximately 2.95 to 3.8 million years old and the Koolau Range is approximately 1.8 to 2.7 million years old (Keinle and Wood 1990). However, there has been volcanic activity on the island of O'ahu since these two volcanoes have gone extinct. The Honolulu Volcanic Series consisted of over 30 separate eruptions ranging from approximately 850,000 to 32,000 years ago (Abbott et. al. 1983). Although there has not been any volcanic activity on the island of O'ahu for over 30,000 years, there is a very slight possibility of future volcanic activity on O'ahu.

<u>Tsunami</u>

As quoted from the Honolulu City and County, Department of Emergency Management web site:

> Tsunamis, or seismic sea waves, potentially the most catastrophic of all ocean waves, are generated by tectonic displacement – for example, volcanism, landslides or earthquakes – of the sea floor, which in turn cause a sudden displacement of the water above and the formation of a small group of water waves having wavelength equal to the water depth (up to several thousand meters) at the point of origin. These waves can travel rapidly outward for thousands of kilometers while retaining substantial energy. Their speed-characteristic of gravity waves in shallow water and thus equal to the square root of gD, where g is the gravitational constant and D is the depth – is generally about 500 km/h (300mph), and their periods range from 5 to 60 minutes. In the open ocean their amplitude is usually less than 1 m (3.3 ft); thus tsunamis often go unnoticed by ships at sea. In very shallow water, however, they undergo the same type of increase in amplitude as swell approaching a beach. The resultant waves can be devastating to low-lying coastal areas; the 37-m (120-ft) waves from the 1883 Krakatoa eruption, for example, killed 36,000 people.

The characteristics of tsunamis as they approach shore are greatly affected by wave refraction over the local bathymetry. Tsunami-producing earthquakes usually exceed 6.5 on the Richter scale, and most tsunamis occur in the Pacific Ocean because of the seismic activity around its perimeter. A tsunami warning system for the Pacific Ocean has been established; it consists of strategically placed seismic stations and a communications network (CCH Department of Emergency Management 2008)

Figure 4.1-3, Tsunami Evacuation Zones, depicts the O'ahu evacuation zone identified for the Expansion area in the event of Tsunami. The evacuation zones, shown on The Department of Emergency Management's Tsunami Evacuation Map for Kahe Point to 'Ewa Beach, include the majority of the H-POWER site and all of the construction laydown area., The Department of Emergency Management also notes that steel and/or concrete buildings of six or more stories in height should provide adequate protection if people move to the third floor or above. The H-POWER facility, though industrial, is of comparable height and scale and so may offer protection should no warning be available. However, in the event of advance warning issued by the Pacific Tsunami Warning Center (PTWC), Emergency Broadcast System or Civil Defense Sirens, H-POWER construction and/or operational staff will immediately begin shut down operations at the plant and evacuate to the designated Public Shelter Refuge Area, the Makakilo Elementary School or other identified location at a safe elevation. Facility Emergency

Response Plans currently address this issue and all temporary construction personnel will be instructed on Emergency Response Procedures prior to initiating construction activities.

4.2 Climate and Air Quality

Section 4.2.1 discusses the existing climate and air quality of O‘ahu. Section 4.2.2 discusses the potential impacts of the proposed Expansion. Mitigation measures, such as emission control technologies are also evaluated.

4.2.1 Baseline Climate and Air Quality

Wind Direction and Speed

From October 1, 1992 through September 30, 1993 a meteorological tower within JCIP gathered the hourly weather data at several levels. Figure 4.2-1 illustrates the windrose generated from the data collected during this period. Figure 4.2-1 illustrates that the prevailing wind is dominated by the northeasterly trade winds. In addition, these data also show that the average wind speed is approximately 3.78 m/s at 10 meters.

Rainfall

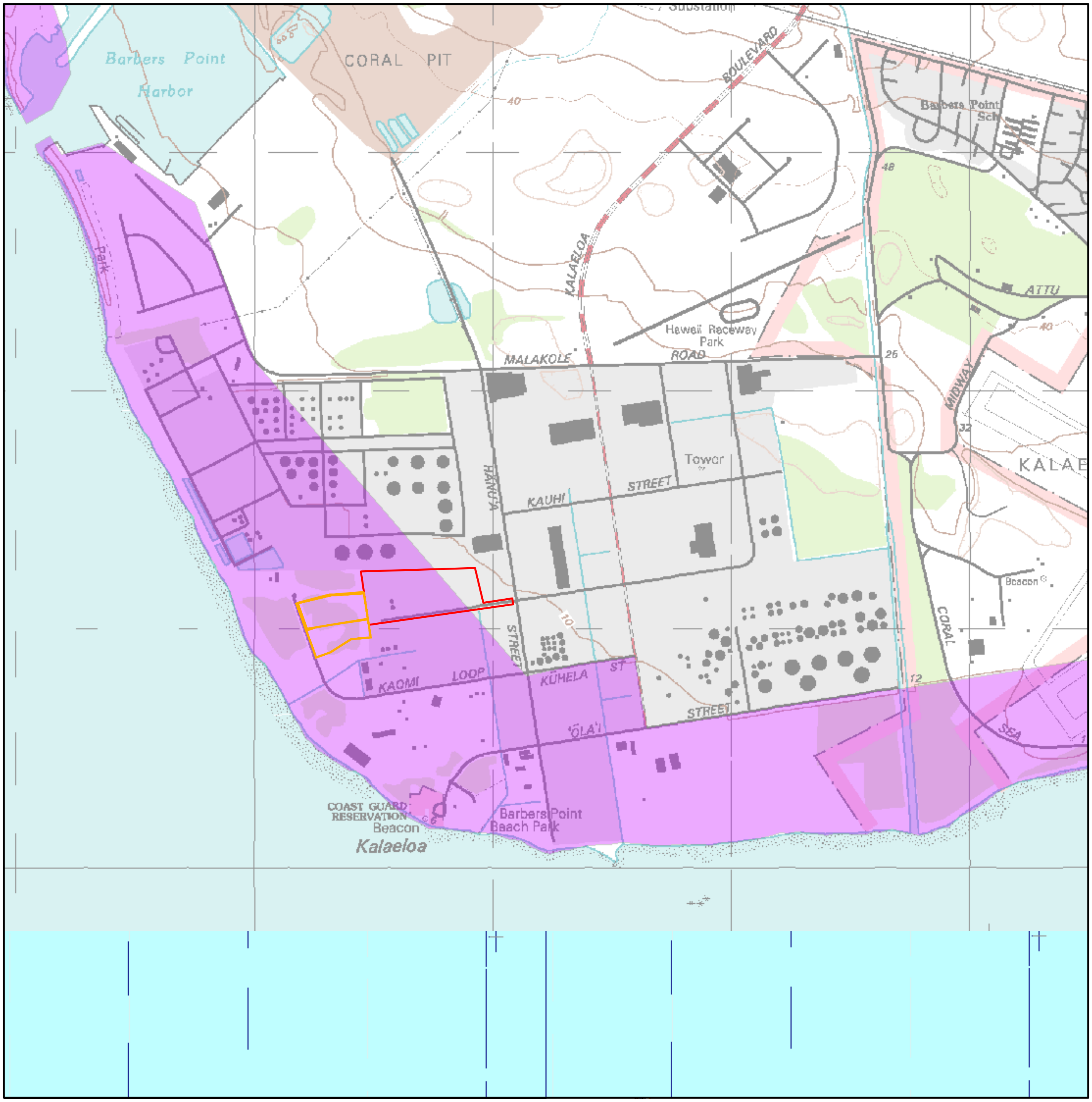
The rainfall recorded at the JCIP meteorological tower from October 1, 1992 through September 30, 1993 was 13.5 inches. The average rainfall recorded at the Honolulu NWS station over the 30-year period from 1971-2000 is 18.29 inches.

Temperature

The mean monthly temperature recorded at the JCIP station between October 1992 and September 1993 ranged from 70.16 degrees Fahrenheit to 78.3 degrees Fahrenheit, with an average of 74.6 degrees Fahrenheit. This compares well with the average monthly temperature recorded at the Honolulu NWS station between the 30-year period from 1961-1990, which is 77.2 degrees Fahrenheit.

Air Quality

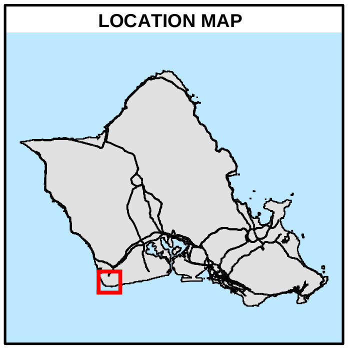
The area in the vicinity of JCIP is in attainment with the National Ambient Air Quality Standards (NAAQS) and the State Ambient Air Quality Standards (SAAQS) for the criteria air pollutants. Table 4.2-1 summarizes the maximum measured ambient air concentrations of criteria pollutants on O‘ahu ambient air monitoring stations in 2006. Table 4.2-1 shows that, in general, the air quality on O‘ahu is excellent.



LEGEND

- CONSTRUCTION LAYDOWN AREA
- H-POWER SITE BOUNDARY
- TSUNAMI EVACUATION ZONE

LOCATION MAP



NOTES & SOURCES
MAP COORDINATES:
UTM NAD83, ZONE 4N, UNITS METERS
TOPOGRAPHIC MAP SOURCE: USGS, 2000
TSUNAMI EVACUATION DATA:
PACIFIC DISASTER CENTER (PDC), 1998
DOWNLOADED FROM HAWAII STATEWIDE
GIS PROGRAM (2008)
URL: http://hawaii.gov/dbedt/gis/

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96862

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0 1,800
FEET

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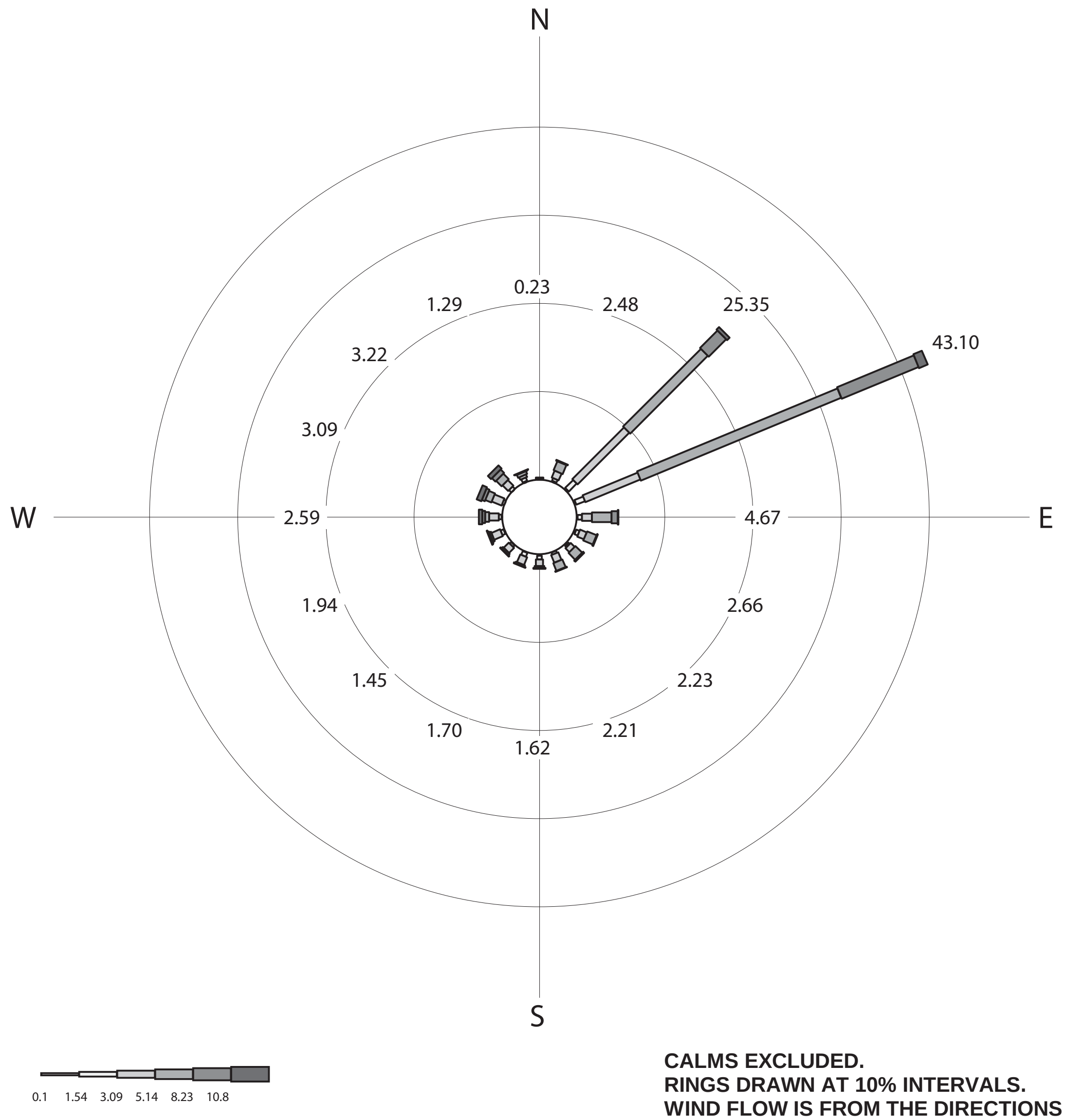
TSUNAMI EVACUATION ZONES

FIGURE
4.1-3

Figure 4.1-3 back side



WIND SPEED (METERS PER SECOND)

CALMS EXCLUDED.
RINGS DRAWN AT 10% INTERVALS.
WIND FLOW IS FROM THE DIRECTIONS SHOWN.
0.17% OF OBSERVATIONS WERE MISSING.

PERCENT OCCURRENCE: WIND SPEED (METERS PER SECOND)
LOWER BOUND OF CATEGORY

DIR	0.1	1.54	3.09	5.14	8.23	10.8
N	0.00	0.09	0.14	0.00	0.00	0.00
NNE	0.14	0.31	0.83	1.10	0.10	0.00
NE	0.16	1.26	8.30	12.46	2.80	0.38
ENE	0.17	1.07	6.74	24.60	9.44	1.07
E	0.07	0.49	1.14	2.21	0.70	0.06
ESE	0.19	0.38	0.82	1.15	0.11	0.00
SE	0.15	0.21	0.65	1.06	0.16	0.00
SSE	0.05	0.24	0.91	0.94	0.08	0.00

TOTAL OBS = 8759 MISSING OBS = 15

PERCENT OCCURRENCE: WIND SPEED (METERS PER SECOND)
LOWER BOUND OF CATEGORY

DIR	0.1	1.54	3.09	5.14	8.23	10.8
S	0.15	0.41	0.75	0.21	0.10	0.00
SSW	0.06	0.45	0.96	0.14	0.10	0.00
SW	0.06	0.25	0.82	0.22	0.10	0.00
WSW	0.09	0.37	1.05	0.22	0.11	0.10
W	0.06	0.32	1.08	0.45	0.31	0.38
WNW	0.02	0.24	1.21	0.73	0.34	0.55
NW	0.02	0.40	0.87	0.89	0.51	0.53
NNW	0.14	0.38	0.32	0.37	0.03	0.06

CALM OBS = 0

amec

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FIGURE
4.2-1

Figure 4.2-1 back side

4.2.2 Impacts and Mitigation

The following presents an overview of the ambient air quality analysis requirements associated with the H-POWER Expansion and estimates of regulated air pollutants to be emitted from the new MWC unit. A complete air permit application was prepared and submitted to Hawaii Department of Health (HDOH) on October 24, 2008 for review and approval.

TABLE 4.2-1 AIR QUALITY DATA – O'AHU 2006

Pollutant	Averaging Period	Maximum Concentration (ug/m^3)	Lesser of NAAQS/ SAAQS (ug/m^3)	% of Standard	HDOH Monitoring Station
SO_2	3-Hr	62	1,300	5%	Makaiwa
SO_2	24-Hr	17	365	5%	Makaiwa
SO_2	Annual	5	80	6%	Kapolei
PM_{10}	24-Hr	59	150	39%	Kapolei
PM_{10}	Annual(1)	16	50	32%	Kapolei
$PM_{2.5}$	24-Hr	9	35	26%	Kapolei(2)
$PM_{2.5}$	Annual	4	15	27%	Kapolei
NO_2	Annual	9	70	13%	Kapolei
CO	1-Hr	1596	5,000	32%	Kapolei
CO	8-Hr	1183	10,000	12%	Kapolei
O_3	8Hr	83	157	53%	Sand Island
Lead	quarterly	NA (3)	1.5(4)	NA	NA

(1) The annual NAAQS has been revoked by USEPA.
(2) Maximum 24-hr concentration was flagged by HDOH as being elevated due to New Year's fireworks. Second highest value is shown.
(3) Ambient air monitoring for lead in Hawaii was discontinued in October 1997 with USEPA approval.
(4) USEPA signed the final rule to lower the lead NAAQS to 0.15 ug/m3 on a rolling 3-month basis on October 15, 2008. However, the final rule is not effective until 60 days after publication in the Federal Register.

4.2.2.1 New Source Review (NSR) Permitting

The federal New Source Review program was established to prevent degradation of air quality in regions of the country that are in attainment with the ambient air quality standards and to assist areas that are not in attainment with ambient air quality standards to attain the standards. The State of Hawaii is currently in attainment or unclassifiable for all criteria pollutants. Therefore, Prevention of Significant Deterioration (PSD) permits are required for major sources or major modifications. A modification to an existing PSD major source is deemed a major modification subject to PSD review if it results in a significant increase in emissions of any regulated pollutant.

The H-POWER facility is classified as a major source because it is a municipal waste combustor capable of charging more than 50 tons per day of MSW and it has the potential to emit more than 100 tons per year of at least one regulated pollutant. Construction of Unit 3 at the H-POWER facility constitutes a major modification to an existing major source because potential emissions of a number of regulated pollutants from the addition of the new Mass Burn unit exceed PSD significance levels. Therefore, addition of Unit 3 constitutes a major modification that is subject to PSD review. Units 1 and 2 will not be affected by this project, therefore Units 1 and 2 are not subject to further PSD review at this time.

The HDOH has been delegated authority by the USEPA to issue major source air permits in Hawaii. The HDOH has established a class of permit termed “Covered Source Permits” issued under Subchapter 5 of HAR §11-60.1 for major sources, sources subject to standards under Section 111 of the Clean Air Act, sources subject to emissions standards for hazardous air pollutants under Section 112 of the Clean Air Act, and any source subject to Prevention of Signification Deterioration (PSD) requirements. Covered Source Permits serve as both construction and operating (Clean Air Act Title V) permits for Covered Sources. As an existing major source, the H-POWER facility operates under a Covered Source Permit (CSP No. 0255-01-C).

Modifications to existing Covered Source Permits (CSPs) are classified as either minor modifications or significant modifications. As described above, and according to HDOH regulations, the facility will require a major modification to the existing Covered Source Permit under Subchapter 5 of HAR §11-60.1, and the application for major modification must also include all of the information required under Subchapter 7 of HAR §11-60.1 (Prevention of Signification Deterioration Review).

The revised Covered Source Permit will provide construction approval for the new third unit and incorporate PSD required terms and conditions, e.g., application of best available control technology (BACT), for the new unit into the existing CSP.

In addition, as a new large MWC, the third unit is subject to federal New Source Performance Standard (NSPS) requirements under 40 CFR Part 60 subpart Eb, which include the application of Maximum Achievable Control Technology (MACT) standards for Hazardous Air Pollutants (HAPs). The air pollution control equipment that will be installed with the new unit will enable compliance with the MACT requirements. The revised Covered Source Permit will incorporate the MACT requirements for the new unit into the existing CSP.

4.2.2.2 Air Emissions Information

Table 4.2-2 presents estimated emissions of PSD-regulated air pollutants for the new unit. The table also identifies which air pollutants exceed their respective PSD significant emission increase threshold.

It is important to recognize, as noted on Table 4.2-2, that certain pollutants covered by HDOH's air pollution control regulation as defined under section 11-60.1-1 do not have specific significant net emission increase values. These air contaminants are pollutants that are subject to regulation pursuant to the Clean Air Act (CAA). More specifically, as it conforms to the adoption of HDOH's PSD regulations, these pollutants are those air contaminants regulated under the CAA prior to passage of the 1990 amendments. The PSD significant net emission increase threshold for any of these pollutants is "any emission rate".

Table 4.2-3 presents the Eb MACT emission standards for new MWC units. H-POWER will meet these MACT standards with the modern air pollution control systems that will be installed for the third unit.

4.2.2.3 Mitigation

Under HAR, section 11-60.1-140, a major modification shall apply BACT for each pollutant that results in a significant net emission increase. A detailed BACT analysis has been completed and is presented in the Covered Source air permit application that was submitted to HDOH.

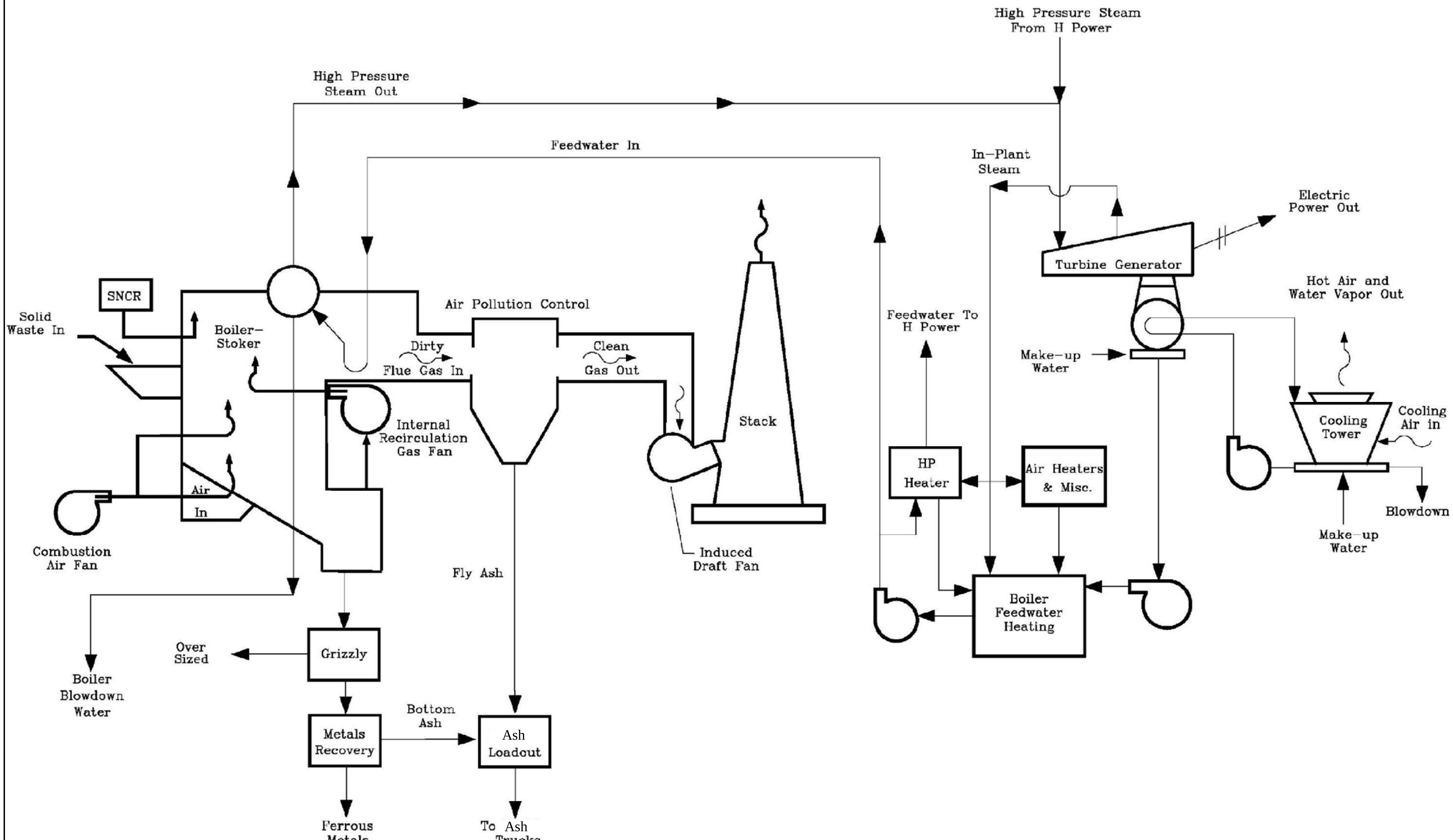
The following provides a brief description of the air pollution control devices that will be installed and operated with the new unit and a summary of the BACT determinations for the PSD air pollutants that will be emitted from the new unit. These control devices also represent the application of MACT. Figure 4.2-2 presents a process flow diagram depicting the air pollution control equipment and flue gas handling system.

TABLE 4.2-2 COMPARISON OF TOTAL PROJECT POTENTIAL EMISSIONS TO HDOH PSD SIGNIFICANT NET EMISSION INCREASE THRESHOLDS

Potential Air Pollutant Emitted	Estimated Potential Emissions (tpy)	PSD Significance Level (tpy)	PSD Applicable?
Carbon monoxide	212.7	100	YES
Nitrogen oxides	314.6	40	YES
Sulfur dioxide	126.4	40	YES
Particulate Matter (PM)[(1)]	33.0[(2)]	25	YES
Particulate Matter < 10 microns (PM10)[(1)]	59.5[(2)]	15	YES
Particulate Matter < 2.5 microns (PM2.5)[(1)]	54.8[(2)]	10	YES
Ozone (as VOCs)	12.2	40	NO
Lead	0.26	0.6	NO
Fluorides	5.3	3	YES
Sulfuric acid mist	37.2	7	YES
Total reduced sulfur compounds (including H_2S)	NA[(3)]	10	NO
Chlorofluorocarbons 11, 12, 112, 114, 115	NA[(3)]	Any emission rate[(4)]	NO
Halons 1211, 1301, 2402	NA[(3)]	Any emission rate[(4)]	NO
Municipal Waste Combustor (MWC) Acid Gases [(5)]	195.8	40	YES
MWC Metals[(6)]	21.9	15	YES
MWC Organics (dioxins and furans)	2.38E-05	3.50E-06	YES

Notes:
(1) PM includes filterable particulate matter only; PM10 and PM2.5 include filterable + condensable.
(2) Total emissions for the Expansion including MWC and ancillary sources.
(3) Air pollutant not expected to be emitted from H-POWER therefore not applicable (NA).
(4) See text in this Section for discussion of pollutants covered by “any emission rate” threshold.
(5) MWC Acid Gases include sulfur dioxide and hydrogen chloride.
(6) According to 40CFR 52.21(b)(23), PSD applicability for MWC Metals is determined based on particulate matter.

Simplified Process Flow Diagram

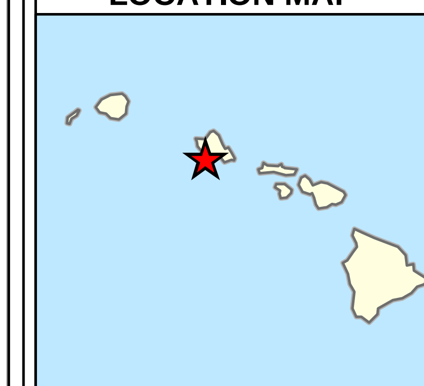


TITLE

PROCESS FLOW AND AIR POLLUTION CONTROL SYSTEM DIAGRAM

H-POWER
KAPOLEI, OAHU, HAWAII

LOCATION MAP



NOTES & SOURCES

SOURCE: COVANTA ENERGY, 2008

AMEC EARTH AND ENVIRONMENTAL, INC.

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Sept 23, 2008 DWN: DJK CHKD: KMP

FIGURE **4.2-2**

Figure 4.2-2 back side

TABLE 4.2-3 SUBPART EB MACT EMISSION LIMITS FOR MASS BURN UNITS

AIR POLLUTANT/PARAMETER	Eb EMISSION LIMITS FOR MASS BURN UNITS(1)	UNITS	BACT(2)
Carbon monoxide	100	ppmdv	Same as Eb
Nitrogen oxides	180 – first year; 150 – thereafter	ppmdv	90 (annual) 110 (24 hr)
Sulfur dioxide	30 or 80% reduction(4)	ppmdv	44 (3-hr) (3) 26 (24-hr) 26 (annual) or 80% reduction(4)
Particulate matter(5)	20	mg/dscm	12
Lead	0.14	mg/dscm	Same as Eb
Cadmium	0.010	mg/dscm	Same as Eb
Mercury	0.05 or 85% reduction(4)	mg/dscm	0.028 or 85% reduction(4)
Hydrogen chloride	25 or 95% reduction(4)	ppmdv	Same as Eb
Dioxins and furans	13	ng/dscm	Same as Eb
Opacity	10	percent	NA

(1) All values corrected to 7% O_2.

(2) The best available control technology (BACT) analysis has determined that these pollutants have a more stringent emission limit than MACT.

(3) The 3-hr SO_2 block average concentration of 44 ppmdv @ 7% O_2 results in a maximum modeled concentration of 90% of the 3-hr SIL for SO_2.

(4) Achieve numerical value or percent reduction whichever is less stringent.

(5) Measured by USEPAMethod 5.

The sequence of air pollution control systems include:

- Good combustion control and furnace operating practices to control carbon monoxide (CO) and dioxin formation;
- VLN™ system and selective non-catalytic reduction system (SNCR) for NO_x control;
- Powdered activated carbon injection for control of mercury;
- Semi-dry alkaline (lime) scrubber to control sulfur dioxide (SO_2), sulfuric acid mist, fluorides, MWC acid gases (SO_2 and hydrogen chloride (HCl)), and
- Fabric filter to control particulate matter (total suspended particulates, particulate matter 10 microns or less (PM10), and particulate matter of 2.5 microns or less)) and particulate bound-SO_2, metals, sulfuric acid, and MWC Acid Gases and Organics.

Table 4.2-4 lists the expected removal efficiencies of the various control systems for the target air pollutant.

TABLE 4.2-4 EXPECTED REMOVAL EFFICIENCY OF CONTROL SYSTEMS

Pollutant	Control System[1]	Expected Removal Efficiency (%)
Carbon monoxide	GCP	NA[2]
Nitrogen oxides	VLN™, SNCR	74
Sulfur dioxide	DS, FF	80
Total suspended particulates (TSP), MWC Metals	FF	99
Particulate Matter < 10 microns (PM10)	FF	99
Mercury	CI,DS,FF	>85
Sulfuric acid mist	DS,FF	80
Fluorides	DS,FF	80
MWC Acid Gases	DS,FF	>95[3]
MWC Organics (dioxins and furans)	GCP,DS,FF	> 95

(1) Air pollution control equipment key:
VLN™= Very low NOx system design
GCP = Good Combustion Practice
FF = Fabric Filter (baghouse)
SNCR = Selective Non-catalytic Reduction
DS = Semi-dry Scrubber
CI = Carbon Injection

(2) Not available; control inherent to furnace design and operation.

(3) HCl is used to establish an estimated removal efficiency

It is important to recognize that the air pollution control (APC) system to be installed with the new Unit 3 represents the highest level of control identified by USEPA during its rulemaking of the New Source Performance Standards for new MWCs. This APC train of GCP, SNCR, CI, DS, and FF was established as the MACT floor for new MWCs as the most stringent level of emission control achieved in practice by the best controlled similar MWCs.

Table 4.2-5 below presents the results of the BACT determination. It is important to note that the BACT analysis determined that some pollutants have a more stringent emission limit than MACT.

TABLE 4.2-5 RESULTS OF BACT DETERMINATION FOR NEW UNIT AT H-POWER

PSD Pollutant	BACT/MACT Emission Limit	BACT/MACT Method of Control
Carbon monoxide	100 ppmdv, at 7% O_2 as a four hour block average	Good Combustion Practices (GCP)
Nitrogen oxides	110 ppmdv, at 7% O_2 as a 24 hour block average 90 ppmdv, at 7% O_2 as an annual average	GCP and SNCR
Sulfur dioxide	26 ppmdv or 80% reduction, at 7% O_2 as a 24 hour block average 26 ppmdv or 80% reduction, at 7% O_2 as an annual average 44 ppmdv or 80% reduction at 7% O_2 as a 3-hour block average	Spray Dryer Absorber
Particulate Matter[(2)] and MWC Metals	PM: 12 mg/dscm, at 7% O_2 Cadmium: 10 µg/dscm, at 7% O_2 Lead: 140 µg/dscm, at 7% O_2 Mercury: 28 µg/dscm, at 7% O_2	Activated Carbon Injection[(1)] (Hg only), Spray Dryer Absorber, and Fabric Filter
Particulate Matter< 10 microns (PM10)[(2)]	32 mg/dscm, corrected to 7% O_2	Fabric Filter
Particulate Matter < 2.5 microns (PM2.5)[(2)]	30 mg/dscm, corrected to 7% O_2	SNCR, Spray Dryer Absorber, and Fabric Filter
Sulfuric acid mist	5 ppmdv, at 7% O_2	Spray Dryer Absorber
Fluorides	3.5 ppmdv, at 7% O_2	Spray Dryer Absorber
MWC Acid Gases	SO_2 – as above HCl: 25 ppmdv or 95% reduction, at 7% O_2	Spray Dryer Absorber
MWC Organics (dioxins and furans)	13 ng/dscm, at 7% O_2	GCP, Spray Dryer Absorber, Fabric Filter

(1) Operation of the activated carbon system is dependent on compliance test results.
(2) PM includes only filterable particulate matter; PM10 and PM2.5 include filterable + condensable.

4.2.2.4 Impacts

The PSD review process requires an evaluation of ambient air quality impacts associated with a proposed project. The components of the ambient air quality impacts analysis are:

- Demonstrations that the new emission source will comply with PSD allowable incremental increases of ambient air concentrations; and
- Demonstrations that the new emission source together with other sources in the region will comply with NAAQS and SAAQS.

The allowable PSD increment is the maximum increase in concentration that is allowed to occur above baseline values in an area for a given pollutant. This allowable increment may not be exceeded by the combination of the impact of any new source of emissions and other neighboring sources that have triggered PSD review previously in the same area.

Modeling Results

Compliance with the PSD increment and NAAQS and SAAQS has been demonstrated using USEPA-approved air dispersion modeling methods. The air quality model uses information on source locations, emission rates of pollutants, and topographic and meteorological data to predict the changes in ambient air quality concentrations that may result from construction of the proposed new MWC Unit.

Air dispersion modeling also was used to calculate ambient air quality concentrations of Hazardous Air Pollutants (HAPs) to provide information to assess health impacts based on inhalation.

The following summarizes the results of the ambient air quality impacts analysis that was completed as part of the HDOH air permitting process.

AERMOD was programmed to compute maximum predicted pollutant concentrations for averaging times that are relevant to each pollutant. The results of the modeling using the 1992/1993 JCIP meteorological data are summarized in Tables 4.2-6, 4.2-7, 4.2-8 and 4.2-9 for scenarios 1 though 4, respectively. These tables also compare the maximum predicted results with their respective PSD Significant Impact Levels (SILs). According to the USEPA, compliance with the PSD increments and NAAQS is demonstrated if modeling results are less than SILs.

As shown in Tables 4.2-6 through 4.2-9, all maximum predicted concentrations of the modeled pollutants are below their respective SILs. Based on these modeling results, the proposed modification, though defined as a major modification, will not contribute significantly to PSD increment consumption or to the deterioration of air quality as measured with the NAAQS/SAAQS.

Other Regulated Pollutants

Table 4.2-10 presents a comparison of the maximum eight-hour ambient air concentration to 1/100 of the time limited value (TLV) – time weighted average (TWA) for non-carcinogenic HAPs. Table 4.2-11 presents a comparison of the maximum annual average ambient air concentration to 1/420 of the TLV-TWA for non-carcinogenic HAPs. Table 4.2-12 presents a comparison of carcinogenic HAPs with corresponding HDOH thresholds.

TABLE 4.2-6 SUMMARY OF SIGNIFICANT IMPACT ANALYSIS MODELING FOR H-POWER – OPERATIONAL SCENARIO 1: UNIT 3 @ 110% MCR, 6400 BTU/LB

Pollutant	Estimated Emission Rate For Unit 3	Estimated Emission Rate For Cooling Towers[1]	Estimated Emission Rate For Carbon Silo	Estimated Emission Rate For Lime Silo	Estimated Emission Rate Vehicle Dust	Highest Predicted Concentration ($\mu g/m^3$)					PSD Sig Impact Levels ($\mu g/m^3$)[3]				
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/ft^2-hr)	ANNUAL	1-HR	3-HR	8-HR	24-HR	ANNUAL	1-HR	3-HR	8-HR	24-HR
Carbon monoxide	48.6	NA[4]	NA	NA	NA		38		16.4			2000		500	
Nitrogen dioxide	71.8	NA	NA	NA	NA	0.33					1.0				
Sulfur dioxide[2]	28.9	NA	NA	NA	NA	0.96		22		3.4	1.0		25		5.0
PM-10	13.4	0.188	0.00027[5]	0.0035[5]	2.5E-07	0.72				2.0	1.0				5.0
PM-2.5	12.5	0.0027	0.00027[5]	0.0035[5]	3.6E-08	0.43				1.5					

(1) Emission rates shown represent the sum of the three cooling tower cells.
(2) Emission rates correspond to 24-hr and annual average time periods. Modeled 3-hr concentration is based on a 48.8 lb/hr (44 ppmdv7).
(3) USEPA has not yet promulgated $PM_{2.5}$ SILs.
(4) Not applicable.
(5) Value shown is the annual average emission rate. 24-hour average emission rates are 0.0106 lbs/hr for both PM-10 and PM-2.5.

TABLE 4.2-7 SUMMARY OF SIGNIFICANT IMPACT ANALYSIS MODELING FOR H-POWER – OPERATIONAL SCENARIO 2: UNIT 3 @ 110% MCR, 4420 BTU/LB

Pollutant	Estimated Emission Rate For Unit 3	Estimated Emission Rate For Cooling Towers[1]	Estimated Emission Rate For Carbon Silo	Estimated Emission Rate For Lime Silo	Estimated Emission Rate Vehicle Dust	Highest Predicted Concentration ($\mu g/m^3$)					PSD Sig Impact Levels ($\mu g/m^3$)[3]				
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/ft^2-hr)	ANNUAL	1-HR	3-HR	8-HR	24-HR	ANNUAL	1-HR	3-HR	8-HR	24-HR
Carbon monoxide	48.0	NA[4]	NA	NA	NA		38		16.0			2000		500	
Nitrogen dioxide	71.2	NA	NA	NA	NA	0.32					1.0				
Sulfur dioxide[2]	28.5	NA	NA	NA	NA	0.94		22		3.3	1.0		25		5.0
PM-10	13.2	0.188	0.00027[5]	0.0035[5]	2.5E-07	0.71				2.0	1.0				5.0
PM-2.5	12.4	0.0027	0.00027[5]	0.0035[5]	3.6E-08	0.42				1.5					

(1) Emission rates shown represent the sum of the three cooling tower cells.
(2) Emission rates correspond to 24-hr and annual average time periods. Modeled 3-hr concentration is based on a 48.2 lb/hr (44 ppmdv7).
(3) USEPA has not yet promulgated $PM_{2.5}$ SILs.
(4) Not applicable.
(5) Value shown is the annual average emission rate. 24-hour average emission rates are 0.0106 lbs/hr for both PM-10 and PM-2.5.

TABLE 4.2-8 SUMMARY OF SIGNIFICANT IMPACT ANALYSIS MODELING FOR H-POWER – OPERATIONAL SCENARIO 3: UNIT 3 @ 60% MCR, 5860 BTU/LB

Pollutant	Estimated Emission Rate For Unit 3	Estimated Emission Rate For Cooling Towers[1]	Estimated Emission Rate For Carbon Silo	Estimated Emission Rate For Lime Silo	Estimated Emission Rate Vehicle Dust	Highest Predicted Concentration ($\mu g/m^3$)					PSD Sig Impact Levels ($\mu g/m^3$)[3]				
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/ft²-hr)	ANNUAL	1-HR	3-HR	8-HR	24-HR	ANNUAL	1-HR	3-HR	8-HR	24-HR
Carbon monoxide	26.3	NA[4]	NA	NA	NA		25		11.3			2000		500	
Nitrogen dioxide	38.9	NA	NA	NA	NA	0.25					1.0				
Sulfur dioxide[2]	15.7	NA	NA	NA	NA	0.72		17		2.5	1.0		25		5.0
PM-10	7.2	0.188	0.00027[5]	0.0035[5]	2.5E-07	0.67				2.0	1.0				5.0
PM-2.5	6.8	0.0027	0.00027[5]	0.0035[5]	3.6E-08	0.33				1.1					

(1) Emission rates shown represent the sum of the three cooling tower cells.
(2) Emission rates correspond to 24-hr and annual average time periods. Modeled 3-hr concentration is based on a 26.4 lb/hr (44 ppmdv7).
(3) USEPA has not yet promulgated $PM_{2.5}$ SILs.
(4) Not applicable.
(5) Value shown is the annual average emission rate. 24-hour average emission rates are 0.0106 lbs/hr for both PM-10 and PM-2.5.

TABLE 4.2-9 SUMMARY OF SIGNIFICANT IMPACT ANALYSIS MODELING FOR H-POWER – OPERATIONAL SCENARIO 4: UNIT 3 @ 88% MCR, 3535 BTU/LB

Pollutant	Estimated Emission Rate For Unit 3	Estimated Emission Rate For Cooling Towers[1]	Estimated Emission Rate For Carbon Silo	Estimated Emission Rate For Lime Silo	Estimated Emission Rate Vehicle Dust	Highest Predicted Concentration ($\mu g/m^3$)					PSD Sig Impact Levels ($\mu g/m^3$)[3]				
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/ft^2-hr)	ANNUAL	1-HR	3-HR	8-HR [2]	24-HR	ANNUAL	1-HR	3-HR	8-HR	24-HR
Carbon monoxide	37.9	NA[4]	NA	NA	NA		29		13.9			2000		500	
Nitrogen dioxide	56.0	NA	NA	NA	NA	0.28					1.0				
Sulfur dioxide[2]	22.5	NA	NA	NA	NA	0.82		19		2.9	1.0		25		5.0
PM-10	10.4	0.188	0.00027[5]	0.0035[5]	2.5E-07	0.69				2.0	1.0				5.0
PM-2.5	9.8	0.0027	0.00027[5]	0.0035[5]	3.6E-08	0.37				1.3					

(1) Emission rates shown represent the sum of the three cooling tower cells.

(2) Emission rates correspond to 24-hr and annual average time periods. Modeled 3-hr concentration is based on a 38.1 lb/hr (44 ppmdv7).

(3) USEPA has not yet promulgated $PM_{2.5}$ SILs.

(4) Not applicable.

(5) Value shown is the annual average emission rate. 24-hour average emission rates are 0.0106 lbs/hr for both PM-10 and PM-2.5.

TABLE 4.2-10 SUMMARY OF PREDICTED NON-CARCINOGENIC HAZARDOUS AIR POLLUTANT CONCENTRATIONS FROM UNIT 3 AND COMPARISON TO 1/100TH OF TLVS

Air Pollutant (1)	Hazardous Air Pollutant	Carcinogenic Rating (2)	TLV-TWA (3) µg/m³	Maximum 8-hr Unit Impact (µg/m³ per lb/hr)	Maximum Unit 3 Emission Rate Emission Rate (lb/hr) (4)	Maximum 8-hr Concentration (5) (µg/m³)	1/100 of TLV - TWA (µg/m³)	Exceeds 1/100 of TLV - TWA (Yes/No)
Cadmium	Yes	B1	2	0.33679	4.17E-03	1.40E-03	0.02	No
Fluorides (Hydrogen fluoride)	Yes	NA	415	0.33679	1.21E+00	4.08E-01	4.15	No
Hydrogen chloride	Yes	NA	3040	0.33679	1.58E+01	5.32E+00	30.4	No
Lead (elemental)	Yes	B2	50	0.33679	5.84E-02	1.97E-02	0.5	No
Mercury	Yes	D	25	0.33679	1.17E-02	3.94E-03	0.25	No
Dioxins and furans	Yes	NA	---	0.33679	5.42E-06	1.83E-06	NA	No

(1) Air pollutants reportedly emitted from MWC Units.

(2) Carcinogenic Rating from USEPA's Integrated Risk Information System (http://www.epa.gov/iris/index.html):
A = Human Carcinogen
B1 = Probable Human Carcinogen - based on limited evidence of carcinogenicity in humans
B2 = Probable Human Carcinogen - based on limited evidence of carcinogenicity in animals
C = Possible Human Carcinogen
D = Not Classifiable as a Human Carcinogen

(3) TLV - TWA obtained from 2005 TLVs and BEIs Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices

(4) Emission rates for 110% MCR at 6400 BTU/hr.

(5) Maximum concentrations are the product of the maximum 8-hr average impact unit and maximum emission rate.

NA - Not Available

TABLE 4.2-11 SUMMARY OF PREDICTED NON-CARCINOGENIC HAZARDOUS AIR POLLUTANT CONCENTRATIONS FROM UNIT 3 AND COMPARISON TO 1/420TH OF TLVS

Air Pollutant (1)	Hazardous Air Pollutant	Carcinogenic Rating (2)	TLV-TWA (3) $\mu g/m^3$	Maximum Annual Unit Impact ($\mu g/m^3$ per lb/hr)	Maximum Unit 3 Emission Rate Emission Rate (lb/hr) (4)	Maximum Annual Concentration (5) ($\mu g/m^3$)	1/420 TLV - TWA ($\mu g/m^3$)	Exceeds 1/420 of TLV - TWA (Yes/No)
Cadmium	Yes	B1	2	0.03315	4.17E-03	1.38E-04	0.0048	No
Fluorides (Hydrogen fluoride)	Yes	NA	415	0.03315	1.21E+00	4.01E-02	0.9881	No
Hydrogen chloride	Yes	NA	3040	0.03315	1.58E+01	5.24E-01	7.2381	No
Lead (elemental)	Yes	B2	50	0.03315	5.84E-02	1.94E-03	0.1190	No
Mercury	Yes	D	25	0.03315	1.17E-02	3.88E-04	0.0595	No
Dioxins and furans	Yes	NA	---	0.03315	5.42E-06	1.80E-07	NA	No

(1) Air pollutants reportedly emitted from MWC Units.

(2) Carcinogenic Rating from USEPA's Integrated Risk Information System (http://www.epa.gov/iris/index.html):

A = Human Carcinogen
B1 = Probable Human Carcinogen - based on limited evidence of carcinogenicity in humans
B2 = Probable Human Carcinogen - based on limited evidence of carcinogenicity in animals
C = Possible Human Carcinogen
D = Not Classifiable as a Human Carcinogen

(3) TLV - TWA obtained from 2005 TLVs and BEIs Based on the Documentation of the Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices

(4) Emission rates for 110% MCR at 6400 BTU/hr.

(5) Maximum concentrations are the product of the maximum annual average unit impact and maximum emission rate.

NA - Not Available

TABLE 4.2-12 SUMMARY OF POTENTIAL INHALATION CANCER RISK FROM CARCINOGENIC HAZARDOUS AIR POLLUTANT CONCENTRATIONS FROM UNIT 3

Air Pollutant (1)	Carcinogenic Rating (2)	Maximum Annual Unit Impact ($\mu g/m^3$ per lb/hr)	Maximum Unit 3 Emission Rate Emission Rate (lb/hr) (3)	Maximum Annual Concentration (4) ($\mu g/m^3$)	USEPA Region IX AIR-PRG(5) (ug/m^3)	Estimated Potential Maximum Inhalation Cancer Risk (6)
Cadmium	B1	0.03315	4.17E-03	1.38E-04	1.40E-03	9.87E-08
Fluorides (Hydrogen fluoride)	NA	0.03315	1.21E+00	4.01E-02	NA	NA
Hydrogen chloride	NA	0.03315	1.58E+01	5.24E-01	2.10E+01	2.49E-08
Lead (elemental)	B2	0.03315	5.84E-02	1.94E-03	NA	NA
Mercury	D	0.03315	1.17E-02	3.88E-04	3.10E-01	1.25E-09
Dioxins and furans(7)	NA	0.03315	5.42E-06	3.59E-09	6.40E-08	5.61E-08
				Total Cancer Risk =		**1.81E-07**

(1) Air pollutants reportedly emitted from MWC Units.

(2) Carcinogenic Rating from USEPA's Integrated Risk Information System (http://www.epa.gov/iris/index.html):

A = Human Carcinogen

B1 = Probable Human Carcinogen - based on limited evidence of carcinogenicity in humans

B2 = Probable Human Carcinogen - based on limited evidence of carcinogenicity in animals

C = Possible Human Carcinogen

D = Not Classifiable as a Human Carcinogen

(3) Emission rates for 110% MCR at 6400 BTU/hr.

(4) Maximum concentrations are the product of the maximum annual unit impact and maximum emission rate.

(5) Residential USEPA Region IX Preliminary Remediation Goals (PRGs) from http://www.epa.gov/region09/waste/sfund/prg/ (Sept 2008)

(6) Computed as [(max. ann. conc.)/(PRG)] x 1E-06.

(7) Dioxin TEQ computed as MWC Organics concentration/50 as per USEPA MACT Rule official docket documentation.

NA - Not Available

4.2.2.5 Impacts and Mitigation Summary

The proposed new unit is a major modification that has been analyzed in accordance with HDOH PSD review requirements, including completing an ambient air quality impacts analysis. Modeling results demonstrate that all maximum predicted concentrations of the modeled pollutants are below their respective SILs. Based on these modeling results, the proposed modification, though defined as a major modification, will not contribute significantly to PSD increment consumption or to the deterioration of air quality as measured with the NAAQS/SAAQS.

Potential emissions of HAPs from the proposed Expansion will not adversely impact human health either from a carcinogenic and non-carcinogenic standpoint, and thus comply with HAR§11-60.1-179(c)(1) and (3).

Additionally, the H-POWER Expansion provides a considerable climate and air quality benefit by off-setting greenhouse gas (GHG) emissions caused by electric power generation. H–POWER Units #1 and 2 have been providing disposal reduction, electrical energy production, and reduction of greenhouse gas (GHG) emissions since it began operations in 1990. This discussion summarizes the reduction in GHG emissions from the existing H–POWER Units #1 and 2 and the projected emissions reduction from the proposed Unit #3. It is included in this evaluation to highlight the reduction in GHG emissions that can be expected when all three units are operational.

The emissions estimates provided here are based on official reports that Covanta has provided to the State of Hawaii (for H–POWER Units #1 and 2) and to the California Climate Action Registry (CCAR) (for its California plants). The GHG emissions have been verified as correct by an independent third party, RMA, for the CCAR reporting and reviewed by ICF, the State of Hawaii GHG Taskforce's independent contractor, for the Units #1 and 2 reporting.

The emissions from Units #1 and 2 have been reported to State of Hawaii GHG Taskforce as part of the Hawaii Greenhouse Gas Inventory for the years 2005, 2006, and 2007. The emissions include the direct emissions of anthropogenic CO_2 expressed as metric tons of CO_2 equivalent ($MTCO_2e$). The emissions include anthropogenic CO_2 and two other greenhouse gases (CH_4 and N_2O), which are converted to the equivalent amount of CO_2 for reporting purposes.

In addition to the CO_2e emissions we have reported the emissions that would have been produced by HECO to generate the power that H–POWER sold into the grid. Table 4.2-13, Summary of GHG Emissions from Units #1 and 2, shows the calculated emissions for the existing facility.

The emissions for H–POWER Unit #3 were estimated differently. Units #1 and 2 are RDF combustors so the emissions would be different than for Unit #3, which will be a Mass Burn combustor. We used the emissions reported by Covanta for its Stanislaus plant in California, which is a Mass Burn plant accepting nearly the same amount of waste as the proposed Unit #3. Using the emissions reported to CCAR for 2007 and the net energy sales for the Stanislaus plant, we calculated the expected emissions, energy sales, and reduction in HECO emission scaled to that which can be expected from Unit #3. Table 4.2-14, Estimated Future H–POWER

GHG Emissions combines the average emissions impact from Units #1 and 2 with the calculated emissions impact from Unit #3 to project what the emissions impact of the three units might be after full operation of Unit #3 in 2013.

TABLE 4.2-13 SUMMARY OF GHG EMISSIONS FROM UNITS #1 AND #2

Activity	Quantity		Emissions (MTCO2e per year)
Emissions in 2005	153,028	MTCO2e	153,028
Emissions in 2006	177,194	MTCO2e	177,194
Emissions in 2007	159,838	MTCO2e	159,838
Net energy produced in 2005	292,926	MWh	
Net energy produced in 2006	338,857	MWh	
Net energy produced in 2007	302,127	MWh	
Credit for reduced HECO emissions in 2005	(229,614)	MTCO2e	(229,614)
Credit for reduced HECO emissions in 2006	(265,617)	MTCO2e	(265,617)
Credit for reduced HECO emissions in 2007	(236,826)	MTCO2e	(236,826)
Average emissions			163,353
Average credit for reduced HECO emissions			(244,019)
Average net reduction in emissions			(80,666)

As can be seen from Table 4.2-14, the effect of H–POWER Units #1, 2, and 3 is to reduce the emissions of CO_2 equivalent on the island, and globally, by a total of 104,691 metric tons of CO_2 equivalent per year.

TABLE 4.2-14 ESTIMATED FUTURE H-POWER GHG EMISSIONS

Activity	Emissions (MTCO2e per year) *
Estimated emissions from Units #1 and 2	163,353
Estimated emissions from Unit #3	95,287
Estimated credit for reduced HECO emissions from Units #1 and 2	-244,019
Estimated credit for reduced HECO emissions from Unit #3	-119,312
Net annual estimated emissions	-104,691

* Metric tons of CO_2 equivalent

4.3 Surface Water

This section discusses the existing surface water environment. Baseline conditions, including designated resource areas of concern, are identified and the potential impacts of the proposed

Expansion are presented. Mitigation measures, such as avoiding or minimizing impacts to resource areas of concern are evaluated.

4.3.1 Baseline Surface Water Conditions

Surface waters for the Island of Oʻahu are classified by water quality standards established under Hawaii Administrative Rules, Title 11, Chapter 54 (HAR 11-54). The regulations categorize all State waters as either marine or inland. It is also important to note that "State Waters", as defined by section 342D-1, HRS, exclude "…drainage ditches, ponds, and reservoirs required as part of a water pollution control system…" Figure 4.3-1 provides a broad overview map of the Water Quality Standards for the island. As can be seen from Figure 4.3-1, the project site is located within the defined hydrographic area IV and has an Inland (Water) Classification of Class 2. Class 1 waters are more heavily restricted, and it is the objective that Class 1 waters remain in their natural state as nearly as possible. The objective of Class 2 waters, is defined as follows: "The objective of Class 2 waters is to protect their use for recreational purposes, the support and propagation of aquatic life, agricultural and industrial water supplies, shipping, and navigation. The uses to be protected in this class of waters are all uses compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in and on these waters" (HAR 11-54-3).

Figure 4.3-1 also depicts the Marine Classifications and shows that the site is located most proximate to Class A marine waters. Class AA marine waters are more heavily restricted, and it is the objective that these waters remain in their natural pristine state as nearly as possible. The objective of Class A waters is defined as follows: "It is the objective of Class A waters that their use for recreational purposes and aesthetic enjoyment be protected. Any other use shall be permitted as long as it is compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in and on these waters" (HAR 11-54-3).

As noted earlier (Section 4.1), the Expansion is located on what is commonly referred to as the ʻEwa Plain, an emerged coral-algae reef formed during the Pleistocene period when the ocean was at a higher level. The ʻEwa Plain today is one of the driest areas on Oʻahu, so dry that it has commonly been characterized as "barren" and "desolate" and even referred to as a desert (Pacific Consulting Services Inc (PCSI) 2008).

Site specific water resources, for both the H-POWER site and the construction laydown area are addressed below.

4.3.1.1 H-POWER Surface Waters

As shown previously on the site locus map, Figure 1.7-1, there are no perennial or intermittent streams, tidal channels or springs located on the H-POWER site. The H-POWER site is roughly 24.6 acres in size, or 1,071,576 square feet. Of that, approximately one-third, 357,192 square feet is not paved. The remaining area, 714,384 square feet consists of impervious surface area.

Other than the Pacific Ocean, the nearest surface waters to H-POWER are industrial holding ponds and industrial park drainage canals. These consist of: (1) A drainage canal abutting the southeast corner of H-POWER that extends south to the Pacific Ocean; (2) drainage canals that exist proximate to the Kaomi Loop bend, that drain to the Pacific Ocean; and (3) nearby holding

WATER QUALITY STANDARDS

LEGEND

EXPLANATION:
WATER QUALITY STANDARD CLASSIFICATION
INLAND CLASSIFICATION
CLASS 1
CLASS 2
PEARL HABOR ESTUARY
MARINE CLASSIFICATION
CLASS A (BOUNDED BY 100-FATHON CONTOUR)
CLASS AA (BOUNDED BY 100 FATHOM CONTOUR)
RESERVE, PRESERVE, WILDLIFE REFUGE, SANCTUARY OR NATIONAL OR STATE PARK
MARINE CONSERVATION AREA
ZONE OF MIXING
100-FATHOM CONTOUR OR 600-FOOT-DEPTH CONTOUR
REEF
BEACH
MARSH OR SWAMP
STREAM, INTERMITTENT STREAM, OR GULCH
HYROGRAPHIC BOUNDARY AND AREA NUMBER

NOTES & SOURCES

OFFICE OF ENVIRONMENTAL PLANNING
HAWAII DEPARTMENT OF HEALTH
OCTOBER 1987

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

amec

FIGURE
4.3-1

Figure 4.3-1 back side

ponds situated on the industrial Chevron property. Each of these surface waters can be seen on the previously provided site locus Figure 1.7-1.

The facility is permitted under the State of Hawaii, Department of Health (HDOH), National Pollutant Discharge Elimination System (NPDES) permit program which requires Storm Water Pollution Control planning and stormwater sampling. This Storm Water Pollution Control Plan outlines all Best Management Practices (BMPs) followed by the facility to prevent stormwater pollution, and the stormwater sampling evaluates the efficiency of these stormwater pollution prevention measures. The design of the Expansion facility includes additional stormwater retention ponds on the facility and in the laydown area that have been designed to handle any additional stormwater by the addition of impervious area. In addition to compliance with NPDES requirements, the H-POWER waste handling operations take place indoors to minimize exposure to the elements and for good housekeeping practice. Two grounds keeping personnel work Monday through Friday to clean up any MSW that escaped from the MSW Feed and Storage Area and to provide general clean-up around the facility. Facility personnel are also trained in Spill Prevention Countermeasure and Control annually which increases their awareness on the necessity to be careful in handling liquid materials around the facility.

4.3.1.2 Construction Laydown Surface Waters

As shown previously on the site locus map, Figure 1.7-1, there are no perennial or intermittent streams, tidal channels or springs located on the parcels proposed for temporary construction laydown. There are no surface water resources located on or proximate to the proposed construction laydown parcels. Field reconnaissance of these sites, conducted following rain events, indicated that surface water is limited to puddling within existing tracks and trails onsite. Waters are also reported to sometimes occur within sinkholes on protected areas of the site, but these areas may also be affected by tidally influenced groundwaters. (Interview with Shad Kane, 2004) There are currently no stormwater systems, swales or designed controls in place, though natural drainage patterns do exist. Field reconnaissance indicates that the site is relatively flat, but that in addition to the existing depressions caused by small sinkholes, the tracks and trails from human activity influence stormwater patterns due to the slightly lower grade of these disturbed portions of the site. A prominent track abutting the eastern property line likely dominates runoff patterns along the eastern boundary of the laydown parcels. The eastern boundary is defined by a berm that supports an aboveground pipeline from the adjacent AES facility, which further accentuates the drainage swale aspect of this linear track. Interviews conducted by the cultural resource investigators, PCSI, with City representatives (see Appendix A) indicated that the area along Kaomi Loop was used for many years by dune buggy enthusiasts. The tracks and trails and maze of small roads or paths still visible on aerial photography (see Figure 4.3-2) are likely remnants of that and other unauthorized activities such as dumping of rubbish. The area is currently fenced in an effort to eliminate unauthorized access.

As noted previously, other than the Pacific Ocean, the nearest surface waters are industrial holding ponds and industrial park drainage canals. These consist of: (1) A drainage canal abutting the southeast corner of H-POWER that extends south to the Pacific Ocean; (2) drainage canals that exist proximate to the Kaomi Loop bend, that drain to the Pacific Ocean; and (3) nearby holding ponds situated on the industrial Chevron property. Each of these surface waters can be seen on the previously provided site locus Figure 1.7-1.

4.3.2 Surface Water Impacts and Mitigation

This section presents the system of pollution prevention measures that the Expansion will utilize to (1) minimize pollutants in the project's stormwater discharges, (2) assure compliance with the terms and conditions of both construction and operational NPDES permits, and (3) attenuate peak stormwater runoff discharge rates.

Though baseline surface water resources are similar throughout the H-POWER site and the adjacent construction laydown parcels, the construction and operational impacts and mitigation measures are anticipated to differ and are therefore addressed separately for each site area.

4.3.2.1 H-POWER

H-POWER is currently authorized to discharge stormwater runoff that is not associated with industrial activity (operational activities), under an NPDES General Permit. However, stormwater from construction activity associated with the proposed Expansion will include construction activities on the adjacent City-owned parcels, as well as on the H-POWER site. This will require coverage under a General Permit for stormwater runoff associated with construction activity for the entire acreage to be affected by these temporary construction impacts. A Notice of Intent (NOI) for coverage under the General Permit will be filed for construction activities. This NOI will also include a construction site best management practices plan, timetables and nature of the activities proposed, and calculated stormwater runoff quantities for the affected area(s). The contents of the NOI will satisfy the requirements for the General Permit and will describe the measures that will minimize discharge of pollutants via stormwater. Both structural and non-structural controls will be outlined. A brief summary of controls and practices specific to the H-POWER site is provided below.

<u>Construction Stormwater Management</u>
To prevent sedimentation and erosion on the H-POWER site, one of the first steps in the construction process will be the installation of siltation barriers around the limit of work. The barriers will act as a boundary for the limit of work, minimizing intrusion into areas outside the construction footprint. In addition, the barriers will collect sediment that may be transported from the construction area and will prevent sediment from leaving the site or degrading the existing H-POWER stormwater management system. The sedimentation barriers will remain in place throughout the construction effort. Routine inspections will be undertaken to ensure that their integrity is maintained, and to remove accumulated sediments following storm events.

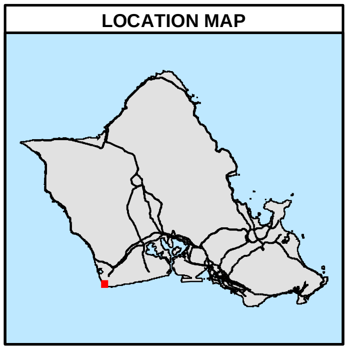
Details with regard to erosion and sediment control measures undertaken during construction will be included within the Construction Storm Water Pollution Control Plan (SWPCP) which will be prepared prior to construction. This document will outline the measures that will be followed to ensure minimal impact on water quality throughout the construction effort. These measures will remain in place until the site is stabilized.

<u>Post-Development Stormwater Management</u>
Once construction is finished and site stabilization is completed, the temporary construction siltation barriers will be removed. Once the Expansion is complete, the facility's Operational SWPCP will be updated to comply with stormwater quality standards. Additional stormwater retention basins will be constructed, so no additional stormwater flow is anticipated.

LEGEND

H-POWER

LOCATION MAP



H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

NOTE & SOURCES
MAP COORDINATES:
UTM NAD83, ZONE 4N, UNITS METERS

SOURCE: AERIAL PHOTO COURTESY OF NOAA, MAY 16, 2000

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0 300 FEET

amec

AERIAL PHOTOGRAPH - KAOMI LOOP

FIGURE
4.3-2

H:/H-POWER/MXD_Current/Environmental/SitePhotoZoom.mxd
H:/H-POWER/Export/Environmental/SitePhotoZoom.pdf
March 25, 2005 DWN: RLO CHKD:

Figure 4.3-2 back side

4.3.2.2 Construction Laydown Area

Stormwater from construction activity associated with the proposed Expansion will include construction activities on the laydown parcels, as well as on the adjacent H-POWER site. This will require coverage under a General Permit for stormwater runoff associated with construction activity for the entire acreage to be affected by these temporary construction impacts. A NOI for coverage under the General Permit will be submitted for construction activities. This NOI will also include a construction site best management practices plan, timetables and nature of the activities proposed, and calculated stormwater runoff quantities for the affected area(s). The contents of the NOI will satisfy the requirements for the General Permit and will describe the measures that will minimize discharge of pollutants via stormwater.

Both structural and non-structural controls will be outlined. A brief summary of some of the controls and practices anticipated during construction, and upon completion, is provided below.

Construction Stormwater Management
To prevent sedimentation and erosion, one of the first steps in the construction process will be the installation of siltation barriers around the limit of work. The barriers will act as a boundary for the limit of work, minimizing intrusion into areas outside the construction zone. In addition, the barriers will collect sediment that may be transported from the construction area and will prevent sediment from leaving the site or degrading the fenced enclosures and the habitats they safeguard. In order to ensure that the enclosed areas are safeguarded, the siltation barriers will be placed 25-feet from the fencelines, creating an additional protected buffer area. The sedimentation barriers and absorbant material will remain in place throughout the construction effort. Routine inspections will be undertaken to ensure that their integrity is maintained, and to remove accumulated sediments following storm events. Details with regard to erosion and sediment control measures undertaken during construction will be included in the Construction SWPCP which will be prepared prior to construction. This document will outline the measures that will be followed to ensure minimal impact on water quality throughout the construction effort. These measures will remain in place until the site is stabilized.

Post-Development Stormwater Management
The proposed post-development drainage concept for the construction parking and equipment laydown area will seek to return the area to pre-construction conditions. Once construction is finished, temporary crushed stone construction roads and parking areas will be removed and the area re-graded. Once site stabilization is completed, the temporary construction siltation barriers will be removed.

4.3.3 Designated Surface Water Resource Areas

A review of known or designated surface water features and coastal constraints was conducted, to determine proximity to potential resources of concern. These included coastal constraints as well as designated floodplains. Figure 4.3-3, Surface Water Constraints, depicts these designated areas with respect to the H-POWER site and the construction laydown parcels.

4.3.3.1 Coastal Constraint Areas

Surface water constraints on Oʻahu are shown on Figure 4.3-3 and are regulated by a variety of state and local agencies. The following is a brief summary of these designated coastal resource areas proximate to H-POWER and the proposed construction laydown area. Additional detailed discussion regarding consistency with various federal, state and local plans and permits, and the jurisdiction of the identified agencies is found in Chapter 3, Required Approvals and Permits, and Chapter 7, Conformance to Federal, State, and City Planning Policies.

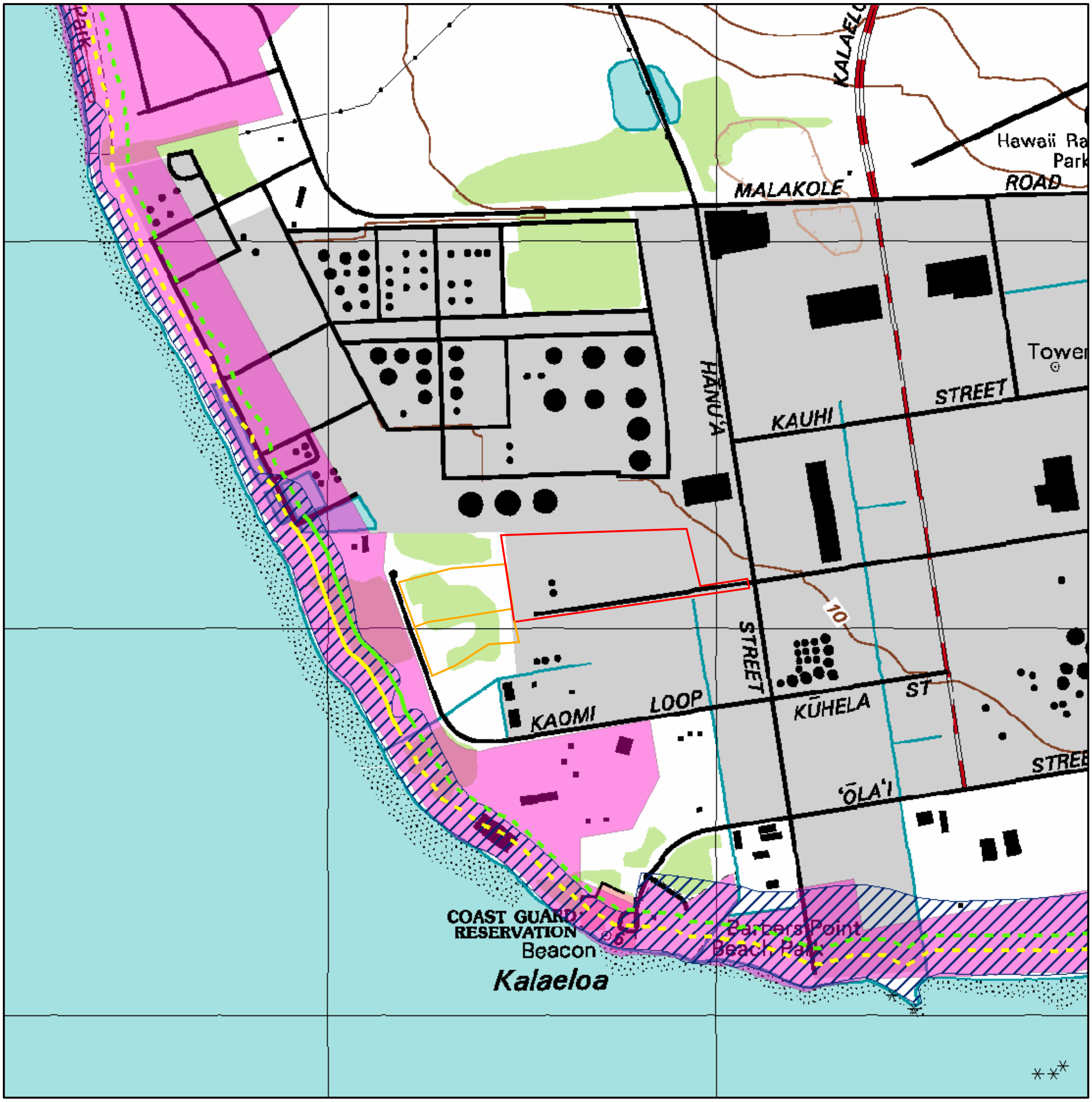
<u>Coastal Zone</u>
The entire Island of Oʻahu is classified as within the Coastal Zone, as footnoted on Figure 4.3-3, with the exception of regulatory exemptions for federally owned lands. Though not mapped, both the H-POWER site and the construction laydown parcels are within the Coastal Zone. The Hawaii Coastal Zone Management (CZM) Program (under the Department of Business, Economic Development & Tourism's Office of Planning) conducts CZM federal consistency review for certain types of projects. The thresholds and triggers requiring CZM consistency review are discussed in greater detail in Chapter 7 of this EIS.

A November 5, 2008 letter was sent to the Hawaii CZM Program requesting a determination as to whether a CZM federal consistency review would be required for the H-POWER Expansion (Appendix B). That letter included a copy of the Preparation Notice describing the Expansion along with information about the parcels under consideration for construction laydown use. The Hawaii CZM Program is currently reviewing the request. The Department of Business, Economic Development & Tourism (DBEDT) determined in a 2008 letter confirming a CZM federal consistency review is not required for the proposed Expansion as the project does not involve federal agency activity, require federal license or permit subject to CZM Program review and will not be receiving federal funds.

<u>Special Management Area (SMA)</u>
As mapped on Figure 4.3-3, the H-POWER site and the proposed laydown parcels are not within the SMA.

<u>Shoreline Setback Line</u>
As mapped on Figure 4.3-3, Surface Water Constraints, neither the H-POWER site nor the parcels to be used temporarily for construction laydown, are located within the Designated Shoreline Setback line, or the Shoreline Buffer Zone Line. As shown on Figure 4.3-3, the Designated Shoreline Setback and Buffer Zone Lines are each situated west of Kaomi Loop. The City and County of Honolulu, DPP regulates activities within the Shoreline Setback Line and the thresholds and triggers requiring DPP review are discussed in greater detail in Chapter 7.

A November 5, 2008 letter was sent to the City and County of Honolulu, DPP. That letter indicated that on the basis of available mapping obtained from DPP, the Expansion project and the temporary construction area impacts would be outside of the Shoreline Setback Line and the Buffer Area and requested a formal determination from DPP confirming that assessment. The City and County of Honolulu, DPP <u>has confirmed in 2009 that the proposed project is outside of the Shoreline Setback Line and Buffer Area.</u> ~~is currently reviewing the request.~~

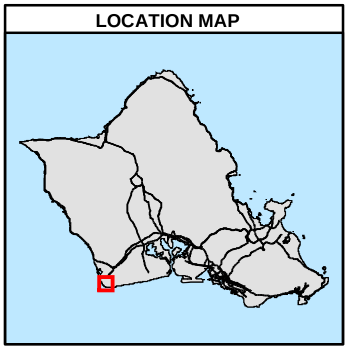


LEGEND

- H-POWER SITE BOUNDARY
- CONSTRUCTION LAYDOWN AREA
- SHORLINE SETBACK LINE (60 FT)[2]
- SHORELINE BUFFER ZONE LINE (100 FT)[2]
- APPROXIMATED SHORELINE SETBACK LINE
- APPROXIMATED SHORELINE BUFFER ZONE
- FEMA 100-YEAR FLOODPLAIN[1,3]
- SHORELINE MANAGEMENT AREA[3]

[1]FEMA FLOOD BOUNDARY, 1996
[2]PROVIDER BY DPP FOR IMMEDIATE AREA ONLY (SOLID LINE)
[3]PROVIDER BY HAWAII STATEWIDE GIS PROGRAM (2008)
(http://www.state.hi.us/dbedt/gis/index.html)

LOCATION MAP



H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

NOTE & SOURCES
MAP COORDINATES:
UTM NAD83, ZONE 4N, UNITS METERS
TOPOGRAPHIC MAP SOURCE: USGS, 2000

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amec

SURFACE WATER CONSTRAINTS MAP

FIGURE 4.3-3

Figure 4.3-3 back side

Tsunami Evacuation Zone

As described previously in Section 4.1.3, tsunamis pose a risk to many coastal areas on O‘ahu. Figure 4.1-3, Tsunami Evacuation Zones, shown previously depicts the O‘ahu evacuation zone identified for this area of O‘ahu. The evacuation zones, developed by the National Oceanic and Atmospheric Administration (NOAA) in partnership with the State of Hawai'i Civil Defense, include the majority of the H-POWER site and all of the construction laydown area. In the event of advance warning issued by the PTWC, Emergency Broadcast System or Civil Defense Sirens, H-POWER construction and operational staff will immediately shut down operations and evacuate to the designated Public Shelter Refuge Area, the Makakilo Elementary School or other identified location at a safe elevation. All temporary construction personnel will be instructed on Emergency Response Procedures prior to initiating construction activities.

4.3.3.2 Floodplains

The H-POWER site and the construction laydown parcels are located within Flood Zone D ~~outside of designated Special Flood Areas~~. Figure 4.3-3, Surface Water Constraints, depicts the mapped Flood Area (DPP 2004). A review of the most recent Federal Emergency Management Area (FEMA) Flood Insurance Rate Map (FIRM) was also conducted (FEMA 2008). The FIRM maps were not available in hard copy or electronic format. However, no change from the DPP electronic map data was observed in the project area. A copy of the 2004 FIRM is provided in Figure 4.3-4. The project parcels, both permanent and temporary, are ~~clearly outside of the designated Flood Hazard Zones~~ located in Flood Zone D which encompasses all of inland Oahu. The Flood Insurance Program does not have any regulations for developments within Flood Zone D, which is designated for areas where flood hazards are undetermined but possible.. As shown on Figure 4.3-3 and confirmed on the FIRM map, the closest ~~designated~~ regulated Flood Hazard Area is situated west of Kaomi Loop along the coast and is designated Zone AE which is a flood insurance rate zone that correspond to the 1-percent annual chance floodplains that are determined in the Flood Insurance Study. Mandatory flood insurance purchase requirements apply.

4.4 Groundwater

This section discusses the existing groundwater environment. Baseline conditions, including resource areas of concern and existing withdrawal limits, are identified and the potential impacts of the proposed Expansion project are presented. Mitigation measures, such as maintaining existing permit/usage limits when possible, are also evaluated.

4.4.1 Baseline Conditions

Groundwater is a key resource for the island of O‘ahu. Of the total freshwater used on O‘ahu, 326 Mgal/d is from ground water and 71 Mgal/d is from surface water. Most of the groundwater on the island of O‘ahu is derived from extensive volcanic aquifers of thin-bedded basalts in central and southern O‘ahu. These aquifers are unconfined and though often at great depth (600-1,000 ft) are essentially “surficial” aquifers and therefore vulnerable to contamination. (USGS 1999). As a result, water resource protection and management is important on O‘ahu.

The H-POWER facility and the temporary construction laydown area are each located within the ‘Ewa (Limestone) Caprock Aquifer. The ‘Ewa limestone aquifer is a brackish to saline groundwater body that exists as a thin basal lens in the permeable coralline reef deposits that comprise the ‘Ewa Plain. Figure 4.4-1 Aquifers, depicts aquifers, the ‘Ewa Caprock zone, and the location of H-POWER.

The Hawaii Water Plan: Water Resource Protection Plan and H-POWER’s consistency with the Plan, are discussed in greater detail in Chapter 7.

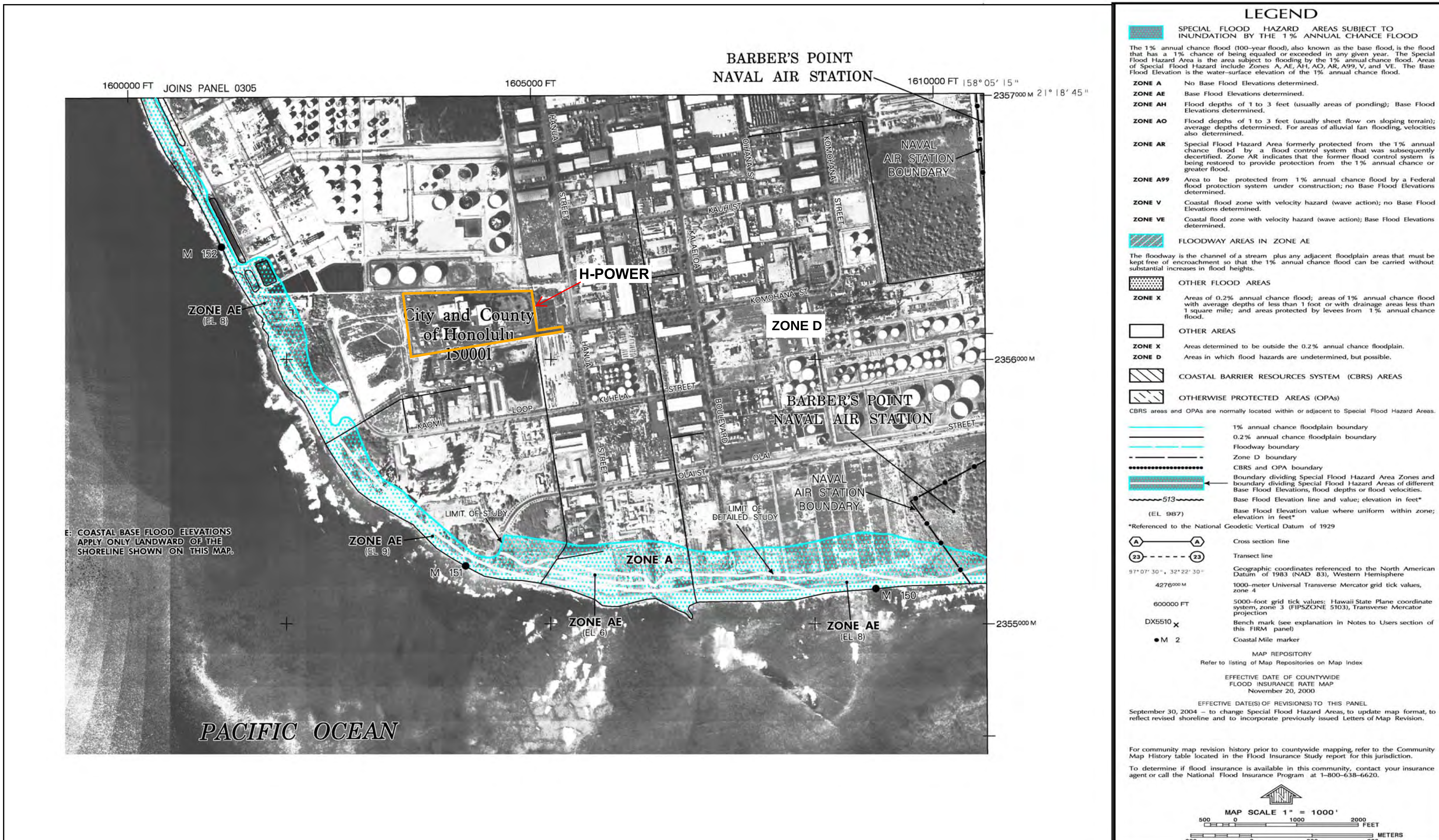
Consistent with the goals of protecting water resources, groundwater governance in Hawaii is split into two distinct aspects: (1) Groundwater withdrawals and (2) injection wells. Groundwater withdrawals, stream diversions and water use are regulated under the State Water Code and its implementing rules. The Commission on Water Resource Management (CWRM), Department of Land and Natural Resources (DLNR) manages the designation and regulation of Water Management Areas, water withdrawals and well construction activities. Groundwater injection wells, typically used for disposal of cooling waters, are governed by rules administered by HDOH.

The permitting of underground injection wells on O‘ahu is also affected by the location of the wells. Figure 4.4-2, Island of O‘ahu Underground Injection Control Areas, shows that in coastal regions where waters can be saline at depth, the underlying aquifers may not be considered a drinking water source and though permit limitations are imposed, wells may be permitted.

The H-POWER facility is currently permitted for, and operating, two water withdrawal wells to supply primarily industrial (non-potable) water for facility operations. The industrial process water~~, permitted at an average annual withdrawal rate of 2.26 mgd and maximum daily withdrawal rate of 2.26 mgd,~~ is used primarily for industrial cooling. The Expansion ~~proposes to modify~~ requested and received approval for a modification to this permit to 3.34 mgd (based on a twelve-month moving average) for the two water withdrawal wells on site. This is the maximum water quantity based on engineering design anticipated to be used on a daily basis. Typical actual daily use will likely be less than this figure. The water withdrawal wells are permitted through DLNR, and the injection wells are permitted by the HDOH. The underground injection wells are permitted to discharge primarily non-contact cooling water of an average concentration of 1.7 times caprock water (source water) with residual amounts of dispersants, biodispersants, corrosion inhibitors, biocides and pH control agents. Intermittent discharges of reject water from the on-site reverse osmosis water treatment system, with trace amounts of dechlorination agents and antiscalents may also be injected. The above additives are typical components of water treatment systems. The maximum disposal quantity for the underground injection wells is currently permitted for 1.2 mgd, and monitoring and reporting requirements dictate a daily record of the injectant quantity (gpd) and representative grab samples (three types) of the injectant are collected for analysis in accordance with USEPA methods and standards. The Expansion proposes to increase the injection to 1.82 mgd without changing the quality of injection.

4.4.2 Groundwater Impacts & Mitigation from Construction and Operation

This section presents the expanded H-POWER facility’s groundwater withdrawal and reinjection process, and the systems in place to (1) minimize groundwater withdrawals; (2) assure safe and appropriate reinjection of primarily cooling waters; and (3) ensure that construction operations



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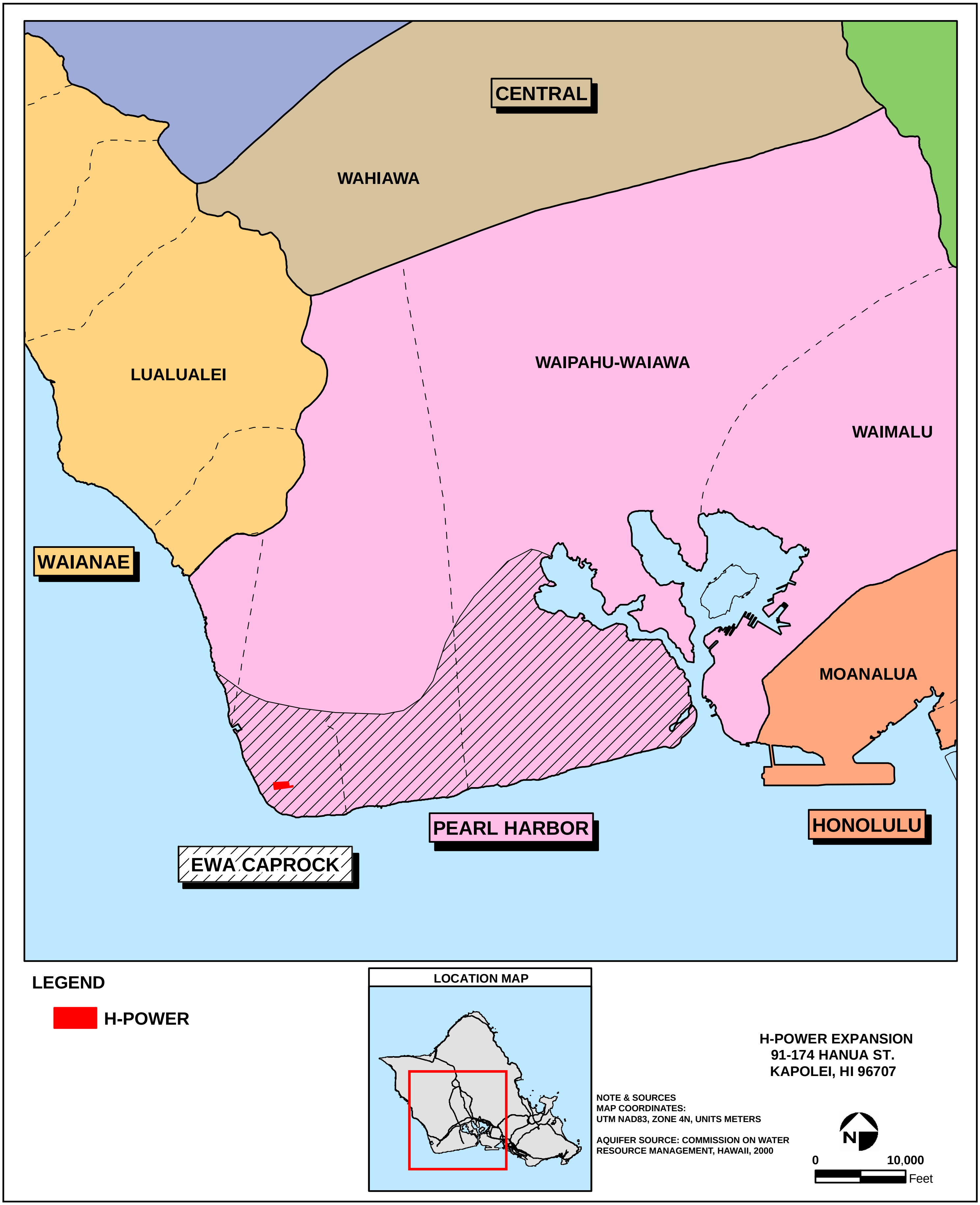
FLOOD INSURANCE RATE MAP (FIRM) EFFECTIVE 9/30/2004

FIGURE
4.3-4

Figure 4.3-4 back side



H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

NOTE & SOURCES
MAP COORDINATES:
UTM NAD83, ZONE 4N, UNITS METERS

AQUIFER SOURCE: COMMISSION ON WATER RESOURCE MANAGEMENT, HAWAII, 2000

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AQUIFERS

FIGURE
4.4-1

H:/H-POWER/MXD_Current/Environmental/Aquifer.mxd
H:/H-POWER/Export/Environmental/Aquifer.pdf
March 4, 2005 DWN: RLO CHKD: AP

Figure 4.4-1 back side

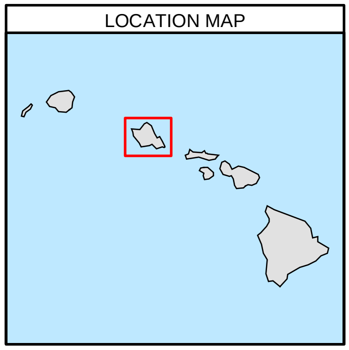
LEGEND

BELOW (makai) UIC LINE
- Underlying aquifer not considered drinking water source
- Wider variety of wells allowed
- Injecton wells need UIC Permit or Permit Exemption
- Permit limitations are imposed

ABOVE (mauka) UIC LINE
- Underlying aquifer considered a drinking water source
- Limited types of injection wells allowed
- Injection wells need UIC Permit or Permit Exemption
- Permit limitations are imposed and requirements are more stringent

Major Roads

LOCATION MAP



H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

NOTES & SOURCES
MAP COORDINATES:
UTM NAD83, ZONE 4N, UNITS METERS

MAP SOURCE: HAWAII DEPARTMENT OF HEALTH
(http://www.hawaii.gov/health/environmental/water/sdwb/uic/uicmaps.html)

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UNDERGROUND INJECTION CONTROL AREAS

FIGURE
4.4-2

H:/H-POWER/MXD_Current/Environmental/UIC.mxd
H:/H-POWER/Export/Environmental/UIC.pdf
March 4, 2005 DWN: RLO CHKD:

Figure 4.4-2 back side

are designed to protect groundwaters, both at the H-POWER site and the adjacent construction laydown area.

4.4.2.1 Construction Impacts & Mitigation

Potential construction effects upon groundwater resources are very limited and would be similar for construction activities both at the H-POWER site as well as at the nearby construction laydown area. Construction activities will not involve the use of substantial amounts of chemicals or other potential contaminants so potential for impact to groundwater would be limited to contamination from a leak or accidental spill of fuel or lubricants from construction vehicles or equipment. Oil absorbent pads and/or mats will be available at the construction site for use in the event of a spill or leak from construction equipment, and it is not anticipated that significant groundwater impacts would result from construction operations. All construction activities will occur in compliance with the construction SWPCP.

Excavation at the laydown area will be minimal, limited primarily to relocation of a steam pipe at depth of approximately 3 feet and grading and storage activities. However, excavation at the H-POWER site will extend to a depth of approximately 10 feet for placement of footings, comparable to the depths of such footings at the existing facility. As a result, some temporary dewatering activities may be required during certain phases of construction excavation. Construction dewatering would be directed to the existing stormwater management basin located on site, and would not enter any offsite stormwater system. Thus no significant impact from construction operations would occur.

4.4.2.2 Operation Impacts & Mitigation

Operational impacts due to the proposed Expansion are restricted to the H-POWER site since the laydown area will not be utilized post-construction, after site stabilization is complete. As noted above in Section 4.4.1, the H-POWER facility is currently permitted both for water withdrawal and underground injection of predominantly cooling water. The proposed Expansion has been designed to minimize water demands and resultant discharges, however applications to modify the Groundwater Use and UIC permits have been submitted to increase withdrawal and injection limits. Design considerations include the following items. The expansion is designed to reuse as much water as possible. The boiler blow down water will be reused for lime slaking and as dilution water in the scrubber. Water from the settling basin will be reused in the ash discharger as quench water. Cooling tower uses water from the caprock wells. The non-contact cooling water will be injected back into the caprock.

The Groundwater Use Permit has been approved for an increase in water withdrawal. Under normal conditions, the water use and injection rates are well below the permit limits. All proper flow rate testing will be done as required to insure no negative impact to the underlying aquifer. There are currently no limitations imposed on withdrawal of high chloride content water from this aquifer.

4.4.3 Alternative Water Sources

Currently, H-POWER extracts Brackish/saline water from the Malakole coralline water table caprock aquifer that is current located beneath the Site and is adequate for these operations. The current Water Use Permit, issued by the Commission on Water Resource Management of the Department of Land and Natural Resources, is regulated by a set of standard conditions. This includes that:

- *Should an alternate permanent source of water be found for this use, then the Commission reserves the right to revoke this permit, after a hearing.*

- *This permit shall be subject to the Commission's periodic review for the Malakole Aquifer System Area's sustainable yield. The amount of water authorized by this permit may be reduced by the Commission if the sustainable yield of the Malakole Aquifer System Area, or relevant modified aquifer(s), is reduced.*

Although the use of groundwater is the most convenient, cost effective, and has been shown to have no environmental impact, CHRRV is currently exploring possible alternatives to extracting groundwater for its water resource needs, with the main focus on Wastewater Reuse. Wastewater Reuse could be a viable source of water for the H-POWER facility if at some point the Commission on Water Resource Management determines that wastewater can be a permanent source of water or that the Malakole aquifer can no longer be the main water resource for the area.

The Honouliuli Water Recycling Facility operated by the City and County of Honolulu Board of Water Supply is the largest water recycling facility in Hawaii. This facility takes 13 million gallons per day wastewater secondary effluent treatment and produces approximately 12 million gallons of reclaimed water per day for industrial and irrigation use. The plant recycles wastewater to produce two grades of recycled water. R-1 for irrigation and Reverse Osmosis (RO) for industry.

- *R-1 water is the highest level of treatment as regulated by the State of Hawaii Department of Health. R-1 water is currently being used in the State of Hawaii for irrigating golf courses, schools, green spaces and growing crops like bananas, papayas, ornamental plants and seed corn.*

- *RO or "reverse osmosis" water is an ultra pure water suitable for industrial purposes, such as refineries and power plants. It will be sold to power and petro-refining companies at nearby Campbell Industrial Park.*

Both of these grades of water would be of sufficient quality to support the needs of H-POWER. Potential obstacles in converting H-POWER to rely solely on wastewater reuse include the permitting of injections of wastewater into the Malakole Aquifer. H-POWER is currently permitted to inject a large percentage of the water it withdrawals back into the Malakole Aquifer. The current UIC permit issued through the HDOH Safe Drinking Water Branch would need significant modification to address any environmental issues which may arise with the injection of wastewater (R-1 or RO) into the Malakole Aquifer. The use of R-1 Water is also regulated through the HDOH Wastewater Branch, and additional consultation and environmental studies may be warranted before any further action is taken. Additionally, the development to provide H-POWER with sufficient wastewater resources would require a significant amount of additional infrastructure. RO water is supplied to other facilities within JCIP, but would still require a significant amount of infrastructure to supply H-POWER as compared to using existing wells.

R-1 water is not currently supplied to JCIP, and would require a major amount of infrastructure before it would be reasonably feasible.

4.5 Biological Resources

This section discusses the existing biologic environment in the proposed Expansion and construction laydown area (Parcel 33 and portions of Parcel 34). Baseline conditions, including resource areas of concern and special status species, are identified and the potential impacts of the proposed Expansion are presented. Mitigation measures, such as stormwater controls and use of buffer areas are evaluated.

4.5.1 Existing Conditions - Biological Resources

The project site and the parcels directly west of the facility (Parcel 33 and portions of Parcel 34) under consideration for use as construction laydown area are located in what is commonly referred to as the ‘Ewa Plain. The ‘Ewa plain is characterized as:

> A semiarid region of intense sunshine, warm tradewinds, and sparse rainfall. At the western end of the plain these conditions are all the more accentuated. Except for a few coastal marshlands and other favored localities, the vegetation is typically xeric and, where undisturbed by modern developments, is dominated by hardy exotics (Davis 1990a).

Figure 4.5-1 depicts National Wetland Inventory (NWI) data for the region surrounding the H-POWER site. As shown on that figure, no onsite resources are identified. An initial biological resource site reconnaissance survey of the 24.6-acre H-POWER facility and the adjacent laydown area (8.164 acres) was conducted by an AMEC biologist during November 9 – 11, 2004. A confirmation biological survey was conducted by an AMEC biologist on August 27, 2008 to update the findings of the initial survey for this current EIS. Findings from the August 2008 survey were in agreement with the findings from the November 2004 survey. A list of plant species observed is presented in Table 4.5-1.

<u>Survey Methodology</u>
Methodology for the November 2004 survey included a pedestrian survey of the H-POWER facility perimeter and open lawn areas and transects through the laydown areas. Due to limited site access, perimeter-only survey of a fenced enclosure (endangered plant preservation area) within the laydown area was also conducted in the November 2004 survey.

The methodology for the August 2008 survey was modified from the 2004 survey since the vegetation throughout the laydown area had become more dense (over 12 feet tall in the fenced enclosures and typically at least four feet tall outside the enclosures). A pedestrian survey was conducted around the perimeter of the H-POWER facility, open lawn areas of the facility, and surrounding access roads bordering the laydown area. Transects were also surveyed in open areas around the perimeter of the laydown area. Dense surrounding vegetation provided only limited access to the fenced enclosures within the laydown area. When openings in the vegetation permitted, the perimeter of the fenced enclosure was surveyed during the August 2008 survey.

4.5.1.1 H-POWER Facility

The majority of the H-POWER site consists of developed infrastructure (e.g., concrete parking lots, asphalt roads, buildings, ancillary facilities, etc.). Undeveloped areas consist of manicured lawns with ornamental trees and shrubs.

Flora
The open lawn areas of the H-POWER facility area consist of introduced and ornamental vegetation, including Bermuda grass (*Cynodon dactylon*), monkey pod trees (*Samanea saman*), autograph trees (*Clusia rosea*), *Hibiscus sp*., and milo trees (*Thespesia populnea*). Other plant species included coconut trees (*Cocos nucifera*), beach naupaka (*Scaevola* sericea), and yellow oleander (*Cascabela thevetia*).

Fauna
Animals currently found in the area include feral cats and a variety of other non-native species wildlife such as mongoose, mice, and rats. Bird species observed included: zebra doves (*Geopelia striata*), spotted doves (*Streptopelia chinensis*), sharp-tailed sandpipers (*Calidris acuminata*), mynah birds (*Acridotheres tristis*), feral chickens (*Gallus gallus*), red vented bulbuls (*Pycnonotus cafer*), common waxbills (*Estrilda astrild*), and cattle egrets (*Bubulcus ibis*). These animal species are transient over much of the 24.6 acres of the facility. Additionally, the ornamental trees and bushes may serve as nesting sites for various bird species.

4.5.1.2 Laydown Area (Parcels 33 and 34)

Aerial photographs of the site from the early 1990's indicate that clearing and grubbing activities (of unknown date) have occurred in these parcels (Figure 4.5-2). The presence of a plant preservation enclosure (within Parcels 33-34) is evident in the early 1990's aerial photograph.

Field reconnaissance of the construction laydown parcels conducted in November 2004 and August 2008 indicate that current conditions are representative of an open brush habitat interspersed with stands of low lying herbaceous plants. Access trails and tracks through the stands of vegetation are evident on aerial photography from 2000, shown previously in Figure 4.3-2. A cleared area, at the southern boundary of the enclosure in Parcels 33 and 34, is comprised of exposed soils and coral limestone outcrop. The terrain appears to be predominantly level with drainage affected by the trails and tracks interspersed throughout, including a prominent track abutting the eastern property line which likely dominates runoff patterns along the eastern boundary of the laydown parcels. The eastern boundary is defined by a berm that supports an aboveground pipeline from the adjacent AES facility, which further accentuates the drainage swale aspect of this linear track. The outer perimeter of the laydown parcels area is fenced and gated with pedestrian access in the western and eastern boundaries. According to Mr. Kane, this outer perimeter fence line was installed in November 2003 (Kane 2004). Mr. Kane was hired in November 2003 by the City and County of Honolulu to ~~prepare a Habitat Conservation Plan for~~ study the enclosures. Mr. Kane was again consulted in 2008. In a letter dated August 11, 2008, Mr. Kane reiterated his recommendations from 2004 in regards to the protection of endangered flora located in fenced plant sanctuaries in the construction laydown area and to the maintenance of the plant sanctuaries and sinkholes. The City and County of Honolulu has initiated steps to address the recommendations by Mr. Kane in an effort to stabilize the plant sanctuaries. Mr. Kane's recommendations include the following:

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NATIONAL WETLANDS INVENTORY MAP

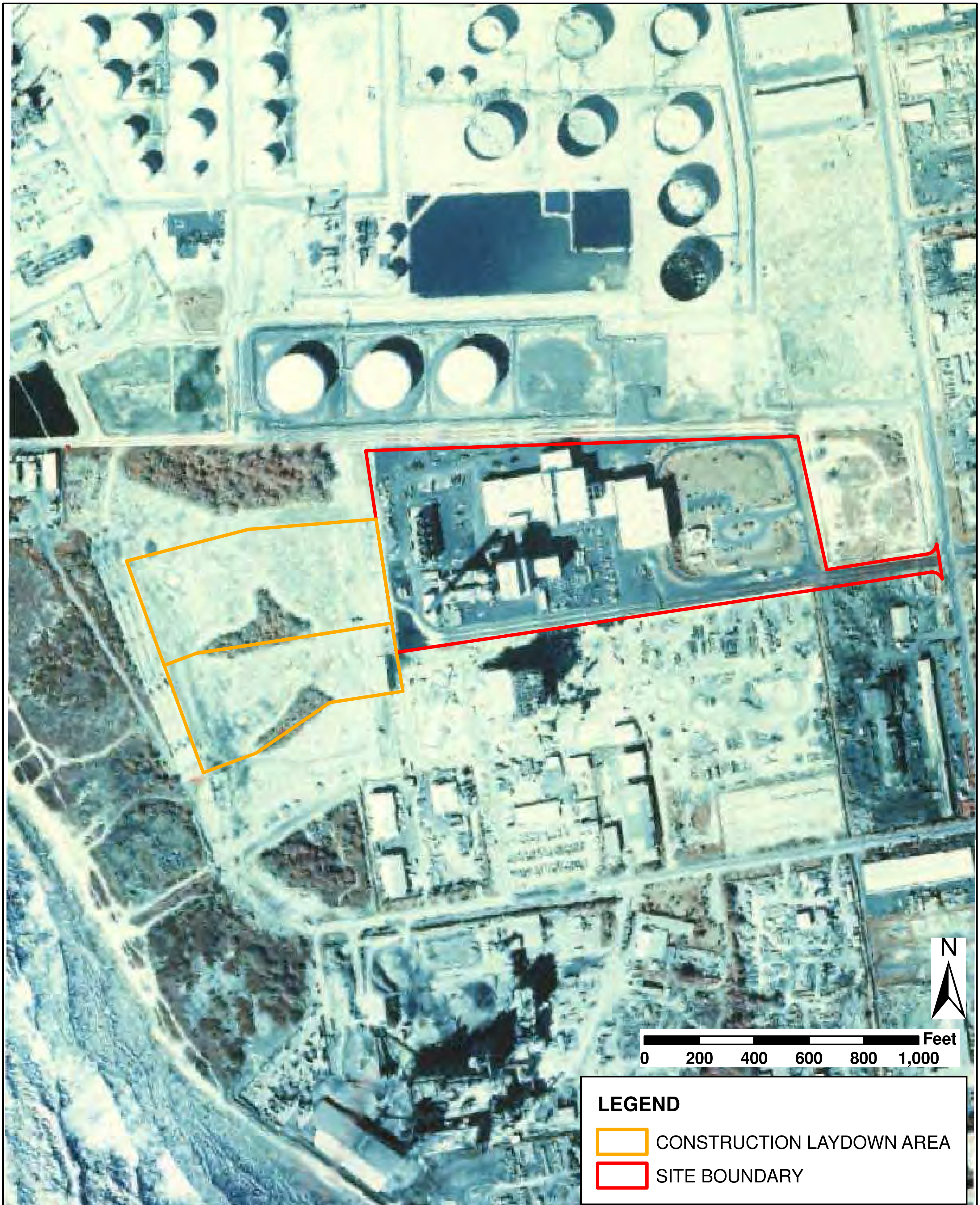
FIGURE 4.5-1

Figure 4.5-1 back side

TABLE 4.5-1 PLANT SPECIES OBSERVED OR KNOWN TO OCCUR AT THE H-POWER FACILITY AND THE LAYDOWN AREA NOVEMBER 2004 BIOLOGICAL RECONNAISSANCE SURVEY

Plant Species	Common Names	Family	Status
Asystasia gangetica	Chinese violet	Acanthaceae	non-native
Sesuvium portulacastrum	akulikuli; sea purslane	Aizoaceae	indigenous; common
Achyranthes splendens var. rotundata	--	Amaranthaceae	endemic; endangered
Amaranthus spinosus	spiny amaranth	Amaranthaceae	non-native
Amaranthus viridis	slender amaranth	Amaranthaceae	non-native
Cascabela thevetia	yellow oleander; be-still tree	Apocynaceae	non-native
Schefflera actinophylla	octopus tree	Araliaceae	non-native
Cocos nucifera	coconut tree; niu	Arecaceae	non-native
Bidens alba	beggar's tick	Asteraceae	non-native
Pluchea indica	Indian pluchea; Indian fleabane	Asteraceae	non-native
Pluchea symphytifolia	Sourbush	Asteraceae	non-native
Tridax procumbens	coat buttons	Asteraceae	non-native
Verbesina encelioides	golden crown-beard	Asteraceae	non-native
Batis maritima	pickleweed; salt wort	Bataceae	non-native
Heliotropium curassavicum	seaside heliotrope; kipukai; nena	Boraginaceae	indigenous; common
Heliotropium procumbens	--	Boraginaceae	non-native
Opuntia ficus-indica	prickly pear cactus; panini	Cactaceae	non-native
Capparis sandwichiana	maiapilo; pilo; pua pilo	Capparaceae	endemic, vulnerable
Atriplex semibaccata	Australian saltbush	Chenopodiaceae	non-native
Clusia rosea	autograph tree	Clusiaceae	non-native
Ipomea cairica	ivy-leaved morning glory; koali ai	Convolvulaceae	non-native
Momordica charantia	balsam pear; bitter gourd	Cucurbitaceae	non-native
Chamaesyce hirta	garden spurge	Euphorbiaceae	non-native
Acacia fernesiana	Klu	Fabaceae	non-native
Alysicarpus vaginalis	Alysicarpus	Fabaceae	non-native
Desmanthus virgatus	slender mimosa; virgate mimosa	Fabaceae	non-native
Leucaena leucocephala	haole koa; koa haole; wild tamarind	Fabaceae	non-native
Mimosa pudica	sensitive plant; sleeping grass	Fabaceae	non-native

Plant Species	Common Names	Family	Status
Prosopis pallida	kiawe; mesquite	Fabaceae	non-native
Samanea saman	monkeypod tree	Fabaceae	non-native
Scaevola sericea	beach naupaka; naupaka kahakai	Goodeniaceae	non-native
Abutilon grandifolium	hairy abutilon	Malvaceae	non-native
Sida fallax	Ilima	Malvaceae	indigenous, common
Myoporum sandwicense	naio; naeo; naieo; bastard sandalwood	Myoporaceae	indigenous; common
Boerhavia coccinea	--	Nyctaginaceae	non-native
Oxalis corniculata	wood sorrel; 'ihi' ai	Oxalidaceae	non-native
Passiflora foetida	love-in-a-mist; wild passionfruit; pohapoha	Passifloraceae	non-native
Brachiaria subquadripara	--	Poaceae	non-native
Cenchrus ciliaris	buffel grass	Poaceae	non-native
Chloris barbata	swollen finger grass; mau'u lei	Poaceae	non-native
Cynodon dactylon	Bermuda grass; manienie	Poaceae	non-native
Dactyloctenium aegyptium	beach wiregrass	Poaceae	non-native
Eleusine indica	goose grass; manienie ali'i	Poaceae	non-native
Sporobolus diander	Indian dropseed	Poaceae	non-native
Lycopersicon pimpinellifolium	cherry tomato	Solanaceae	non-native
Nicotiana glauca	tree tobacco; Indian tobacco; makahala	Solanaceae	non-native
Waltheria indica	Uhaloa	Sterculiaceae	indigenous; common



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AERIAL PHOTOGRAPH - EARLY 1990's

FIGURE
4.5-2

Figure 4.5-2 back side

- *Hire contractor to remove alien vegetation by cutting. Most kiawe trees need to be removed completely with the exception of a few trees that would provide some shade. These few trees will be marked after consultation with the State of Hawaii Botanist and U. S. Fish and Wildlife. No heavy equipment. Hand removal per Mitigation Plan.*

- *Hire contractor to remove debris and coral stones from sinkholes per Mitigation Plan. The open sinkholes are important to the survival of the Achyranthes Splenden Rotunda. It has been determined and documented that those parent plants growing in close proximity to sinkholes are doing better than those adjacent to sinkholes filled in with trash and coral stones. These plants survive the long hot seasons from the condensation and humidity within the moist sinkholes.*

- *Hire contractor to cut back alien shrubs 5' back from fences per Mitigation Plan_ Clear a 5' path on both sides of the fence line.*

- *Mulch or remove all green waste.*

- *Shad Kane to be notified and present when contractor is on site to monitor cleanup effort.*

Flora
Vegetation in the brush land of the laydown parcels is dominated by Indian pluchea (*Pluchea indica*) with interspersed stands of low lying herbaceous plants (*Sesuvium portulacastrum*, *Atriplex semibaccata*, and *Batis maritima*), grasses, and kiawe trees (*Prosopis pallida*). Other plant species included nena (*Heliotropium curassavicum*), sourbush (*Pluchea symphytifolia*), and naio (*Myoporum sandwicense*).

Fauna
Terrestrial biota includes various reptiles (geckos and anoles) and rodents (mice and rats). Other mammal species include mongoose and feral cats. Bird species observed included: zebra doves, spotted doves, sharp-tailed sandpipers, and mynah birds. These species are transient over much of the 8.164 acres of the laydown area.

Though not observed during the AMEC November 2004 and August 2008 surveys, Mr. Kane mentioned that he has occasionally observed populations of tiny shrimp living in the sinkholes located in the plant preservation enclosure of Parcels 33 and 34. These shrimp are likely to be the endemic species of Hawaiian red shrimp (*Halocaridina rubra*), commonly called *‘ōpae’ula*. Though not endangered, it is recommended that care should be taken to minimize impacts to the habitat of this native species.

4.5.2 Special Status Species

Flora and Invertebrate Fauna
On October 8, 2004, the U.S. Fish and Wildlife Service (USFWS) replied to a letter requesting a list of rare, threatened, or endangered species, and significant natural communities that may be affected by the proposed Expansion. The USFWS list included one endangered plant, *Achyranthes splendens* var. *rotundata*, as occurring in the vicinity of the proposed project, specifically, within the footprint of the proposed temporary construction (laydown) area (USFWS 2004a; 2009). This species is a low shrub varying in height from 1½ to 6½ feet. Three

locations within the laydown area have been fenced and are currently protected as plant preservation areas. Due to limited site access, only the perimeters of the three fenced enclosures were surveyed during the November 2004 biological site reconnaissance. When the dense surrounding vegetation occasionally permitted access, the perimeters of the fenced enclosures were surveyed in August 2008. A follow-up letter was sent to USFWS in 2008. The USFWS responded indicating the proposed Expansion area is classified as development based on data compiled by the Hawaii Biodiversity and Mapping Program (HBMP) and Hawaii GAP Program. USFWS concluded that no federally listed or proposed threatened or endangered species, or proposed or designated critical habitats occur within the proposed project footprint.

The Hawaii Biodiversity and Mapping Program (formerly Hawaii Natural Heritage Program) was consulted in 2004 and again in 2008. HBMP reported *Achyranthes splendens* var. *rotundata* may be present on the parcels adjacent to the H-POWER site. At the 1993 sighting, several hundred plants were observed in various stages of growth. A population of *Achyranthes splendens* var. *rotundata* was also observed in the Kalaeloa area near the Barber's Point lighthouse in 1994. This population was smaller in size and consisted of mainly juvenile plants. HBMP also reported that *Himantopus mexicanus knudseni* may be present on the adjacent parcel in the Chevron Ponds.

No populations or individuals of *Achyranthes splendens* var. *rotundata* ~~were~~ could be observed from the perimeter of the three fenced enclosures examined during the November 2004 and August 2008 site reconnaissance surveys. However, according to Mr. Kane, the enclosures within Parcels 33 and 34 shelter the last two naturally occurring populations of the endangered plant *Achyranthes splendens* var. *rotundata*, and a population of this plant was transplanted in the third enclosure in another adjacent parcel. AMEC notes that HBMP (2009) states that additional populations of the plant were observed near the Barber's Point lighthouse in 1994. Another stand of these plants can be found in the Ka`ena Point Natural Area Reserve and Ka`ena Point State Park. The USFWS is also currently performing a habitat restoration at the Kalaeloa Unit of the Pearl Harbor National Wildlife Refuge, located to west of Kalaeloa Airport and adjacent to Campbell Industrial Park. This refuge is home to the second largest population of the *Achyranthes splendens* var. *rotundata* on O'ahu. *Achyranthes splendens* var. *rotundata* is also known to grow on Molokai and Lanai (Wagner 1990). Mr. Kane also shared his observation that condensation from precipitation and runoff that collects in the sinkholes within the plant preservation enclosures appears to support the *Achyranthes* populations, especially during the drier summer months.

Additionally, prior communication on July 20, 2004 with USFWS (USFWS 2004b) indicated that the endangered plant *Chamaesyce skottsberegi* var. *skottsbergii* is known from the surrounding area. The July 2004 correspondence also indicated that an invertebrate species of concern, *Lyropupa perlonga,* is thought to be present in an area adjacent to the project site, though a specific location was not identified, and no individuals of this species were observed during the November 2004 and August 2008 site reconnaissance surveys.

Vertebrate Fauna

The shoreline, estuarine, and freshwater areas associated with Pearl Harbor are known habitat for four species of endemic waterfowl which are listed by both federal government and by the State of Hawaii as endangered species: the Hawaiian moorhen (*Gallinula chloropus sandvicensis*), the Hawaiian coot (*Fulica americana alai*) the Hawaiian duck (*Anas wyvilliana*) and the Hawaiian stilt (*Himantopus mexicanus knudseni*) [50 CFR Part 17]. Previous sightings of three of these four species (Hawaiian coot, Hawaiian moorhen and Hawaiian stilt) have been documented in the vicinity of the project area (USFWS 2004a). Population levels of these endangered waterfowl have been severely reduced primarily because of the loss of wetland habitat. Other threats to these species include predation by introduced mammals, invasion of wetlands by alien plants and fish, hybridization, disease, and possibly environmental contaminants (USFWS 1994). No endangered waterfowl species were observed during the November 2004 and August 2008 site reconnaissance surveys.

Two additional species of birds, listed as threatened or endangered by the State of Hawaii, but not listed by the federal government, are found in the vicinity of Pearl Harbor. These two species include the state-threatened white tern (*Gygis alba rothschildi*), a diminutive, arboreal-nesting seabird which can be seen around Pearl Harbor, and the state-endangered Hawaiian owl (*Asio flammeus sandwichensis*) an endemic race of the crepuscular, ground-nesting short-eared owl). Neither of these species was encountered during the November 2004 and August 2008 site reconnaissance surveys.

4.5.3 Impacts and Mitigation

The construction impacts and mitigation measures for the H-POWER site and the adjacent construction laydown parcels are anticipated to differ. This is due to the fact that proposed changes at the H-POWER facility are permanent structural changes, whereas the laydown parcels are proposed to undergo temporary, predominantly non-structural impacts. Upon completion of the Expansion, temporary parking and staging/fabrication improvements will be removed and the area stabilized. Proposed impacts and mitigation measures for both the H-POWER site and laydown parcels are described in the following sections.

4.5.3.1 H-POWER Facility

No threatened or endangered species were observed onsite, and construction activities within the boundaries of the H-POWER facility should pose no risk to any sensitive species. The likelihood of any sensitive species occurring within this highly developed area is minimal.

Impacts to potential transient and nearby native biota will be minimized by maintaining onsite drainage patterns that will direct runoff from the site into the existing stormwater basins located in the southeast and southwest corners of the facility. Onsite surface runoff will be contained to minimize surface flow to the off-site laydown parcels located to the west of the facility. Thus, impacts to the adjacent laydown area plant preservation enclosure and the dense vegetation will be avoided.

Though not likely to occur due to the existing dryland habitat and industrial nature of the site, construction workers will be trained to suspend construction activities if transient bird species of concern are encountered at or near the site. A biologist will conduct the initial training and provide a short information packet so that workers are familiar with (1) the endangered Hawaiian coot or alae keokeo (*Fulica alai*), (2) the Hawaiian gallinule or alae ula (*Gallinule chloropus sandvicensis*), and (3) the black-necked stilt or aeo (*Himantopus mexicanus knudsenii*). Workers will be instructed to notify their supervisor who will contact an on-call biologist for confirmation. If confirmed, the biologist will contact the Pacific Islands Fish and Wildlife Office. In the event that the on-call biologist is unavailable the construction supervisor will be provided with the contact information and will be instructed to contact the Pacific Islands Fish and Wildlife Office directly. Once the supervisor, on-call biologist and/or the Pacific Islands Fish and Wildlife Office is contacted and confirmation made, recommendations by the specialist will be followed.

4.5.3.2 Laydown Area

Populations of the endangered plant, *Achyranthes splendens* var. *rotundata*, are known to exist in the plant preservation enclosures. Other seasonal or transient protected species may sometimes occur within the laydown parcels, but no endangered species were observed during the November 2004 and August 2008 surveys. A survey is performed for a limited amount of time, and a certain species may or may not be observed during this timeframe. An evaluation of habitat quality is therefore used to determine the probability of whether or not a species will occur onsite.

The lack of wetland habitat onsite minimizes the potential for impacts to waterfowl species due to lack of proper habitat. The plant preservation enclosures may serve as nesting areas for the state-endangered Hawaiian owl and state-threatened white tern, respectively. Also, it has been reported that the endemic *‘ōpae’ula* shrimp may occur in the enclosure sinkholes when tidal and rainfall conditions are adequate (Kane 2004). The endangered plant species and invertebrate snail species previously discussed in Section 4.5.2 could also occur in these areas as well. For these reasons, there will be no construction activity in the plant preservation areas in Parcels 33 and 34.

Mitigation measures will be implemented to minimize impacts to known and likely endangered species habitat (see previously provided construction site plan in Figure 2.31). Silt fencing and petroleum abatement measures will surround the construction areas designated for parking, equipment storage, prefabrication operations, trailer office space, and crushed stone roadways. A 25-foot buffer zone will be placed around the plant protection areas in Parcels 33 and 34 to further protect these areas from exposure to construction activities. The aboveground pipeline on the eastern boundary of the laydown area will be buried temporarily and the area will be graded to facilitate access to the H-POWER site from the laydown area. Post construction site restoration will include removal of any structures and concrete pads and stabilization of the area.

As discussed earlier in this section, animal species are transient, and construction contractors will be informed about endangered bird species that may potentially forage or nest onsite. Due to insufficient habitat and constant site activity, the likelihood of sighting an endangered bird species is low. However, should any of these birds be seen at or near the site, construction activity will be suspended and the Pacific Islands Fish and Wildlife Office will be informed of the sighting. As noted in Section 4.5.3.1 above, the procedure will specify that workers who identify a potential species of concern will notify their supervisor who will contact an on-call biologist for confirmation. If confirmed, the biologist will contact the Pacific Islands Fish and Wildlife Office. In the event that the on-call biologist is unavailable, the construction supervisor will be provided with the contact information and will be instructed to contact the Pacific Islands Fish and Wildlife Office directly. Once the supervisor, on-call biologist and/or the Pacific Islands Fish and Wildlife Office is contacted and confirmation made, recommendations by the specialist will be followed.

5.0 ASSESSMENT OF THE EXISTING HUMAN ENVIRONMENT, POTENTIAL IMPACTS, AND MITIGATIVE MEASURES

This chapter describes the existing human environment in the area of the H-POWER facility that would potentially be affected by the proposed Expansion. The area includes the existing H-POWER site as well as the adjoining parcels under consideration for temporary storage of construction equipment, pre-fabrication activities, and for construction parking and trailers. In addition, because the human environment can be regional in nature, regional issues are addressed where necessary to establish an appropriate perspective on the human environment. This discussion is organized by topic (e.g., cultural resources, transportation, noise, visual resources, socioeconomics, infrastructure, solid waste, energy, and human health).

This chapter also assesses the environmental consequences to the human environment that may result from the Expansion Project. Within each topic, potential temporary and permanent impacts are described and evaluated and mitigation measures that would eliminate and/or reduce potential adverse impacts are identified.

5.1 Archeological and Cultural Resources

Pacific Consulting Services, Inc. (PCSI) undertook an archaeological and cultural impact assessment study in support of the proposed Expansion of the H-POWER facility. PCSI, a Honolulu-based consulting firm offering professional archaeology services, evaluated both the H-POWER site, consisting of 24.635 acres of industrially zoned land and designated by Tax Map Key (TMK) number 9-1-026:030, and the adjacent parcels, 9-1-026:033 and 9-1-026:034, consisting of vacant land and totaling an additional 14.205 acres, being proposed as construction laydown area. Their analysis included an evaluation of baseline (existing) and potentially existing resources, as well as an assessment of the effect that the Expansion might have upon archaeological or cultural resources. The PCSI study is provided in Appendix A. This section summarizes the results of that study. Standards and guidelines for archaeological and cultural resource assessments are presented, baseline conditions described, anticipated impacts are evaluated and the potential for mitigation discussed.

5.1.1 Standards and Guidelines for Archaeological and Cultural Resource Assessments

Various local and federal agencies have established guidelines and standards for assessing archaeological and cultural impacts. The applicable guidelines and standards are summarized below:

5.1.1.1 National Historic Preservation Act

The National Historic Preservation Act (NHPA) was passed in 1966 which, in the words of the Act, the Federal Government's role would be to "provide leadership" for preservation, "contribute to" and "give maximum encouragement" to preservation, and "foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony."

To achieve this, NHPA and related legislation sought a partnership among the Federal Government and the States that would capitalize on the strengths of each. The Federal Government, led by the National Park Service as the agency with the longest and most direct experience in studying, managing, and using historic resources, would provide funding assistance, basic technical knowledge and tools, and a broad national perspective on America's heritage.

The States, through State Historic Preservation Officers appointed by the Governor of each State, would provide matching funds, a designated State office, and a statewide preservation program tailored to State and local needs and designed to support and promote State and local historic preservation interests and priorities. In Hawaii the State Historic Preservation Office is referred to as the State Historic Preservation Division (SHPD).

5.1.1.2 State Historic Preservation Division

The Hawaii SHPD issued draft guidelines for the preparation of archaeological studies in December 2002 and the requirements for certain archaeological assessments are described in Chapters 13-275 and 13-276 of the Hawaii Administrative Rules. Section 13-275 (a) 5(A) states that:

> An archaeological assessment shall include the information on the property and the survey methodology as set forth in subsections 13-276-5(a) and (c), as well as a brief background section discussing the former land use and types of sites that might have been previously present.

The archaeological assessment that was undertaken follows the draft guidelines issued by SHPD and the Hawaii Administrative Rules.

5.1.1.3 State Office of Environmental Quality Control

The State OEQC publishes *Guidelines for Assessing Cultural Impact*, which are designed to comply with the requirements of Chapter 343 HRS as amended in 2000 and approved by the Governor as Act 50 that same year. The archaeological assessment that was undertaken follows these guidelines.

5.1.2 Study Methodology and Scope

The study methodology and scope of the work conducted included the following:

- Archival background research on the culture history and previous land uses of the project area;
- Literature review of previous archaeological studies within the project area and in areas near the H-POWER facility;
- Verbal and written consultation with the Office of Hawaiian Affairs (OHA);
- Interviews with community members recommended by the State Historic Preservation Division; and
- Archaeological reconnaissance survey of the parcels (TMK: 9-1-026:033 and 034) adjacent to the current H-POWER facility to determine the presence/absence of cultural resources.

An archaeological reconnaissance survey and follow-up test excavations of possible historic sites at the H-POWER site were undertaken as part of the environmental review process for the H-POWER facility in 1983-84 (Ahlo and Hommon 1983; Hommon and Ahlo 1984). No historic properties were found at that time. Human remains were found during construction of the facility, in 1986. There is a possibility that more burials might be found during the construction phase of the proposed project, although the area has already been landscaped and developed. For this reason, CHRRV and the City and County of Honolulu propose that the site will be monitored during the initial stages of excavation for the Expansion (see Mitigation discussion in Section 5.1.4, below).

Due to the extensive prior disturbance at depth from construction of the original H-POWER facility in 1985, in combination with construction mitigation (on-call monitoring) already proposed, the current archaeological assessment did not include additional survey or excavations of Parcel 30, which will be monitored during the initial stages of excavation for the Expansion (see Recommendations below). The study did include, however, archaeological and cultural impact assessments of the adjacent vacant parcels, Parcel 33 (6.041 acres) and Parcel 34 (8.164 acres). Parcel 33 and a portion of Parcel 34 will be needed for a laydown area for temporary staging areas and parking during construction, which is expected to take place over a period of approximately 34 months.

The results of the site reconnaissance and cultural resource investigations form the basis of the summary of existing conditions that follows in Section 5.1.3 below.

5.1.3 Existing Conditions - Archeological and Cultural Resources

In discussing existing conditions for archaeological and cultural resources, it is important to understand that much of the evaluation must focus on resource potential and oral history. Though some information about identified resources does exist, often, existing conditions are defined on the basis of resources suspected to have existed or on the basis of those potentially remaining at a given location. The project area is located on what is commonly known today as the ‘Ewa Plain, a vast expanse of land that is part of an emerged Pleistocene age coral reef that was subsequently covered to varying depths with a mantle of marine sediments, alluvium and a shallow calcareous soil mantle, except for a few places on or near the shoreline where the reef surface is still exposed. The surface of the reef is pock-marked with solution cavities or “sinkholes” of widely varying sizes. The soil survey map for O‘ahu shows the project area as coral outcrop (Foote et al. 1972)

5.1.3.1 Archeological Resources

As noted above, the H-POWER site is a heavily industrialized site that has undergone extensive ground disturbance at depth, during construction of the original H-POWER facility. Though archaeological resources are therefore not likely, the fact that human remains were found during construction of the facility in 1986 indicates that however remote, there is a possibility that more burials may exist. For this reason, CHRRV and the City and County of Honolulu propose that the site will be subject to on-call monitoring during the initial stages of excavation for the Expansion (see Mitigation discussion in Section 5.1.4, below).

A walk- through survey of Parcels 33 and 34, the proposed laydown area, was undertaken by Patrick McCoy and Stephan D. Clark of PCSI on October 20, 2004. The survey was conducted over a period of 1 1/2 hours. The entire survey area was found to have been extensively disturbed, except for the fenced plant sanctuaries which were not surveyed since none of them will be utilized during the proposed Expansion project. There is evidence that large portions of Parcels 33 and 34 have been grubbed and graded. Clearing may have occurred on more than one occasion. As already noted, aerial photographs suggest that the land clearing project undertaken by Campbell Estate in the early 1960s on Parcel 30 and documented during the archaeological reconnaissance survey in 1983 also included Parcels 33 and 34. Mr. Shad Kane, one of the individuals interviewed for the cultural impact assessment (see below), noted that a number of sinkholes were buried at the time the land was bulldozed.

Mr. Colin Jones, former Energy Recovery Administrator of the Refuse Division of the City Department of Environmental Services, provided valuable information concerning the recent land use history of the subject parcels, which helped to explain the various kinds of land disturbance that were observed during the brief field survey. According to Mr. Jones (personal communication), the area below the H-POWER facility, along Kaomi Loop, was used for many years by dune buggy enthusiasts and for illegal dumping of all kinds of materials, including industrial waste. A maze of small roads or paths is still visible in many areas. Mr. Jones recalled seeing, some years ago, piles of what appeared to be foundry slag, tools for the grinding of eye glasses, and other kinds of rubbish, primarily along the road, which for many years was unpaved. Some of the rubbish appears to have been removed, either by persons interested in salvaging certain items or citizens simply interested in cleaning up the area. Mr. Jones did not recall that there was ever any systematic cleanup of the area by the City after the land was purchased from Campbell Estate. Some trash remains in the area. Mr. Jones noted that the City erected a chain link fence along Kaomi Loop in 2004 to prevent further dumping and unauthorized use of the area. Installation of the fence appears to have involved the addition of some introduced reddish brown clayey soil, which was observed in the easement between the chain link fence and Kaomi Loop and on a small area of Parcel 34.

It appears that the eastern edge of Parcel 33 and Parcel 34 were also filled, most probably during the construction of the existing H-POWER facility in the 1980s. The land along the chain fence separating the H-POWER Facility (Parcel 30) from the adjacent parcels to the west (Parcels 33-34) and extending some 15 to 20 meters into the three parcels is raised roughly 1 meter or so above the adjoining land surface, which is flat. Situated on top of the fill is a roughly north-south oriented steam pipe that runs from the AES facility north to the Chevron USA Oil refinery.

A brief reconnaissance of the proposed location of the third municipal waste combustor unit was conducted on August 13, 2008. This location, immediately east (mauka) of the existing H-POWER plant, includes the plant's existing parking lot and adjacent landscaped lawn areas. While the karst landscape of the 'Ewa Plain no longer exists in the proposed building site, Burial Site 6684 is located nearby

A reconnaissance survey of Parcels 33 and 34, the proposed equipment laydown area, was also conducted on August 13, 2008. While the vegetation in the parcels has grown denser, little else has changed in these parcels since the 2005 reconnaissance survey. It was noted that the chain link fence that marks the west (*makai*) boundary of the Parcels 33-34 along Kaomi Loop is broken in two areas and tire tracks were observed in the area of the fence breaks.

5.1.3.2 Cultural Resources

The cultural impact assessment for this project involved: (1) a literature search prior to the archaeological field assessment to determine the presence/absence of Traditional Cultural Properties; (2) verbal and written consultation with the Office of Hawaiian Affairs (OHA), and (3) field interviews with two individuals from the Kapeolei area, Ms. Lynette ("Auntie Nettie") Tiffany and Mr. Shad Kane, who were recommended by Muffet Jourdane (Assistant O'ahu Archaeologist) and Nathan Napoka (History and Culture Branch Chief) of the State Historic Preservation Division (SHPD). Auntie Nettie, who is employed by the Estate of James Campbell, is the supervisor (*kahu*) for Lanikuhonua. She is also a member of the O'ahu Island Burial Council. Mr. Kane, who is actively involved in community affairs in the 'Ewa area, also manages the plant sanctuaries on Parcels 32-33 and 33-34 for the City. He was hired by the City to assist in the preparation of a habitat preservation plan and the establishment of "wild sites" for the endangered species contained within the sanctuaries.

The site visit with Auntie Nettie and Shad Kane took place on November 16, 2004. After an initial meeting in the office of Colin Jones, which included an overview of the proposed project and examination of the aerial photographs showing recent changes to the project area, Mr. Rodney Smith (Covanta) accompanied PCSI to the site of the re-interred burial.

Following a brief discussion about the burial, Mr. Kane took PCSI into the plant sanctuary on Parcels 33-34, which ~~contains~~ protects the *Achyranthes splenden* var. *rotundata*, *naio* (*Myoporum sandwicense*) and various other plants reportedly located within. Mr. Kane noted the presence of an endemic shrimp *('ōpae'ula*) in the brackish water located in the sinkholes within the enclosure. According to Mr. Kane, the sinkholes fill up with water after heavy rains. There are two species of *'ōpae'ula* (*Halocaridina rubra* and *Metabetaeus lohena*). It is unclear which of the two species occur in these particular sinkholes. The *'ōpae'ula* was used in traditional times as bait for *'ōpelu* fishing (Pukui and Elbert 1986:291). Mr. Kane expressed a concern that the *'ōpae'ula* population could be adversely affected by contaminants entering the water table, depending on what kinds of equipment and supplies will be temporarily placed in the laydown area. Both Mr. Kane and Auntie Nettie emphasized the importance of preserving more sinkholes in the Kalaeloa area and other areas because of the native plants, human remains, and other evidence of past human uses that are often found in and around them. The sinkholes, which once numbered in the thousands and formed part of a vast natural and cultural landscape in the Kalaeloa area, are now restricted to a small number of undeveloped or undisturbed properties. The sinkholes contained within the two plant enclosures represent some of the last remaining examples of this landscape in the local area. Auntie Nettie and Mr. Kane also expressed a concern that more attention be given to protecting the shoreline area across the road from the proposed laydown area.

No information on beliefs, cultural practices, or culturally important places within the boundaries of the proposed project area or adjacent areas was provided, except for a story Auntie Nettie related about her mother, Leilani Fernandez, exchanging dried fish and salted meat for *'ōkole hao*, a liquor made from ti plants, that was made by a man who lived somewhere nearby. No response was received from OHA to a letter dated October 14, 2004 requesting information on traditional Hawaiian beliefs, cultural practices, and culturally significant sites (now commonly referred to in the Cultural Resource Management (CRM) literature as Traditional Cultural Properties) in or near the proposed project area. A second letter was sent to OHA on August

13, 2008 requesting information concerning traditional cultural practices and places. OHA's response, dated September 4, 2008, requested that burials and plant sanctuaries be protected during Expansion activities and reiterated the elevated potential of additional undiscovered subsurface burial sites existing in the area (Appendix A). Measures will be taken to ensure that the re-internment site will not be impacted by construction activities. A temporary barrier will be employed during construction activities that will further improve the visibility of the re-internment site. Additionally, workers will be made aware of its location prior to construction.

On current evidence, there are no known Traditional Cultural Properties or on-going cultural practices within or near the Area of Potential Effect (APE) based on a review of the pertinent literature for the area and the consultation with Auntie Nettie and Mr. Kane. While it is likely that culturally significant sites did exist at one time within or in close proximity to the H-POWER plant, the nearest (approximately 2.7 miles) known surviving site with cultural significance is Pu'uokapolei, a small cinder cone that is the most prominent landmark on the ʻEwa Plain and the former site of Fort Barrette. In their synthesis of cultural resource studies on the ʻEwa Plain, Tuggle and Tomonari-Tuggle (1997:21) noted that Pu'uokapolei was the sacred center of that part of Oʻahu:

Probably the most important of all traditional locales on the ʻEwa Plain is the hill known as Pu'uokapolei. This volcanic cone at the inland edge of the ʻEwa Plain was the location of a temple, (of unknown affiliation), a residence of the family of the demi-god Kamapua'a, a reference point for solar observation, and a traveller's landmark (McAllister 1933:108; Kamakau 1976:14; Ii 1959:27; Thrum 1907:46).

Additional information on Pu'uokapolei is summarized in *Sites of Oʻahu* (Sterling and Summers 1978:33-34).

In 2008, follow-up consultation was conducted in the form of contacting Mr. Shad Kane and Ms. Lynette (Auntie Nettie) Tiffany, as well as the Office of Hawaiian Affairs. When Auntie Nettie was contacted, she indicated that she did not have any further concerns regarding the H-POWER project.

5.1.4 Impacts Mitigation - Archaeological and Cultural Resources

The archaeological assessment included a review of previous work in and near the proposed project area, including the existing H-POWER parcel, and a field survey of the adjacent parcels (TMK: 9-1-026:033 and 034) that may be utilized as a temporary construction laydown area. These parcels had not been previously surveyed based on a review of reports on file in the State Historic Preservation Division. Research undertaken prior to the survey indicated that the parcels had probably been cleared in the early 1960s. The field survey confirmed that the proposed laydown area is in fact highly disturbed, except for the plant sanctuaries. The cultural impact assessment, which included a literature search, consultation with the Office of Hawaiian Affairs, and interviews with two individuals from the ʻEwa area, did not result in the identification of any Traditional Cultural Properties or on-going cultural practices in the Area of Potential Effect (APE).

While no historic properties were identified in the APE during the current project, there is a possibility that subsurface cultural and paleontological deposits and human remains might be found in some areas of the proposed project area in sinkholes, some of which are still partially open and others that were undoubtedly covered (filled) when the land was cleared. The possibility of subsurface historic sites in the proposed project area points to the need for on-call monitoring of selected areas and/or phases of work and other precautionary measures. The following measures were recommended by PCSI and will be implemented:

- Although the area of the proposed additions to the H-POWER facility has been cleared, graded and covered with gravel, there is a slight possibility that additional burials might be found in sinkholes during construction of the third combustor foundation given the close proximity to the burial found in a previously unidentified sinkhole in 1986. Excavations in this area, below the level of previous disturbance, should be subjected to on-call monitoring by a qualified archaeologist.

- The plant sanctuary in Parcels 32-33 and 33-34, though protected by chain-link fences, should be protected with an additional 20-25 foot buffer because of the unknown extent of the sinkholes within each of the two areas.

- The plans for the laydown area call for: (a) the use of compactors to identify areas suitable for fabrication and storage areas; (b) grading of usable areas to a depth of approximately 1 to 1.5 feet, and (c) burial of the steam pipe at least 3 feet below grade. The latter two ground altering activities should be subjected to on-call monitoring by a qualified archaeologist.

5.2 Roadways and Traffic

This section discusses the existing access to H-POWER and the Expansion. A traffic analysis and summary of vehicle trip generation for the surrounding area under both construction and operational scenarios is presented. Mitigation measures to ensure safe and functional traffic operations are discussed.

5.2.1 Existing Conditions - Traffic

Figure 5.2-1 illustrates the H-POWER site and the surrounding roadway system. H-1, located north of the site, is an east-west freeway that provides access for the majority of traffic approaching the site, and feeds onto the north-south interchange at Kalaeloa Blvd. Kalaeloa Blvd. feeds traffic into the H-POWER Site from H-1, and is a four lane divided arterial that widens to include left and right-turn lanes at major intersections. Kalaeloa Blvd. has four major intersections on the way to H-POWER that are evaluated in order to present baseline findings from which to determine the impacts of both construction and operation of the H-POWER Expansion.

Kalaeloa Blvd. intersects Farrington Highway and the H-1 Westbound Ramps at the very north end of the traffic impact area. A few hundred feet south of this intersection, Kalaeloa Blvd. intersects with the H-1 Eastbound Ramps. A few hundred feet south of the H-1 Eastbound Ramps, Kalaeloa Blvd. intersects with Kapolei Parkway into the Honolulu Advertiser Building. Kapolei Parkway serves both the Honolulu Advertiser Building, west of Kalaeloa Blvd. and a new commercial/industrial mixed use development to the east of Kalaeloa Blvd. South of the Honolulu Advertiser Building access road, Kalaeloa Blvd. intersects with Malakole Road, a two-lane street that provides access to the predominantly industrial areas south of Malakole Road.

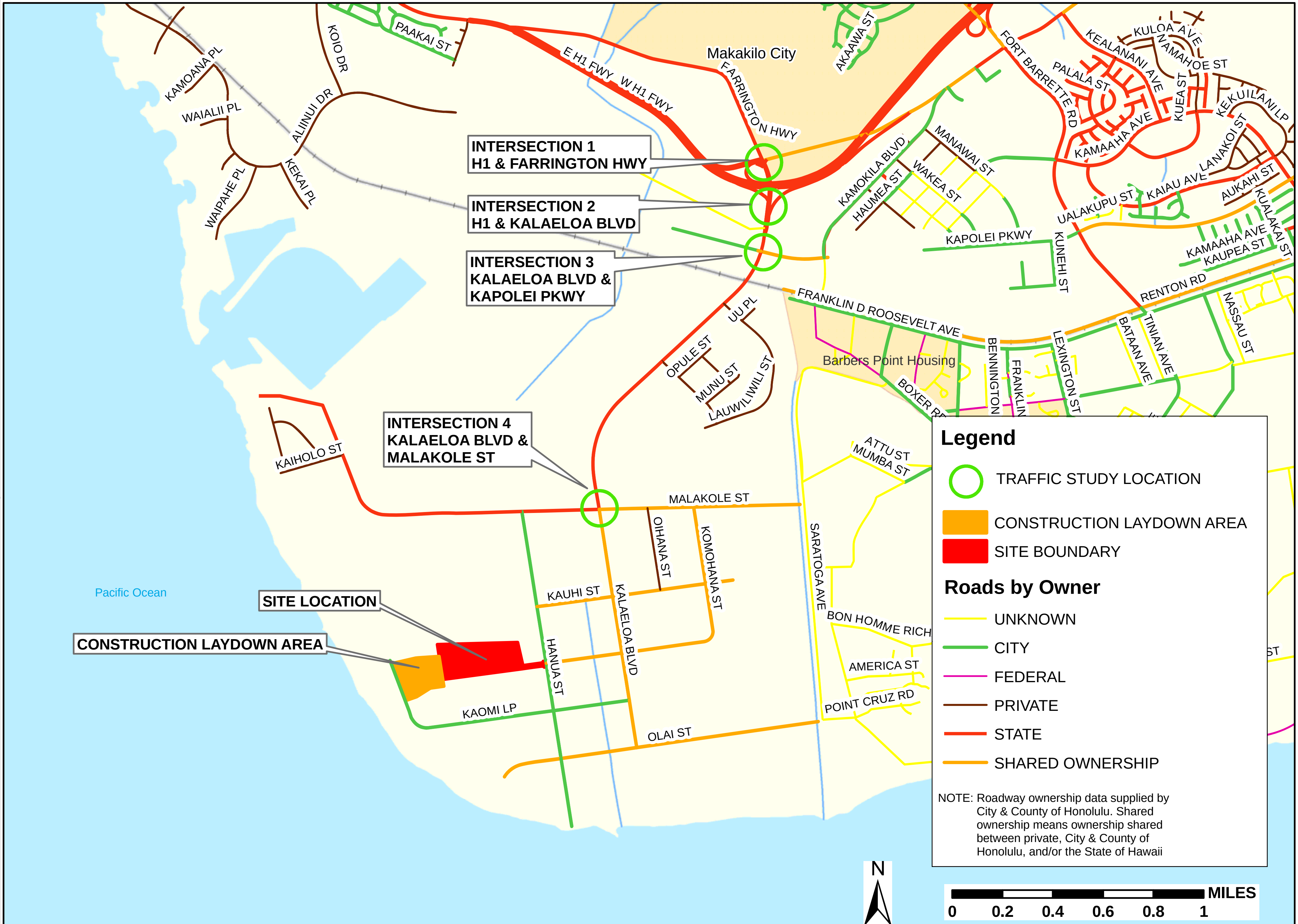
The H-POWER facility is located at the intersection of Hanua Street and Komohana Street (southwest of Kalaeloa Blvd. and Malakole Road intersection). As described above, to reach H-POWER the traffic proceeds through four main intersections as follows, from north to south on Kalaeloa Blvd.:

1. Kalaeloa Blvd. and H-1 Westbound Ramps (North-South Stop Signs)
2. Kalaeloa Blvd. and H-1 Eastbound Ramps (Eastbound Stop Signs)
3. Kalaeloa Blvd. and Honolulu Advertiser Building (Traffic Signal)
4. Kalaeloa Blvd. and Malakole Road (Traffic Signal)

The geometries of each of these key intersections are depicted, from north to south, on Figures 5.2-2, 5.2-3, 5.2-4, and 5.2-5. These four intersections are the only major crossroads locations on Kalaeloa Blvd., starting from the H-1 Ramps south to the H-POWER site. These are the locations that changes in traffic caused by the H-POWER Expansion would likely be felt. Kalaeloa Blvd. ends just north of Farrington Road/H-1 Westbound Ramps, into a private driveway. South of Malakole Road, traffic begins to disperse over a much larger network of local and collector-distributor type roadways. Also, the H-POWER Expansion Site is only a few blocks south of Malakole Road, and there would likely be no significant traffic impacts south of Malakole Road.

Peak hour traffic counts (AM and PM) were conducted between July 21 through 24, 2008. A single intersection was observed each day. Each intersection was videotaped for a period of three hours during perceived peak morning (between 5:30 am and 8:30 am) and afternoon (between 3:00 pm and 6:00 pm) travel time to ensure capture of the peak hour. The video was observed and counts were recorded for vehicles and trucks for each directional movement at the individual intersections. Based on the vehicle and truck counts, the traffic hour with the highest counts was selected as the peak traffic hours. Peak traffic hours are presented below, while peak traffic counts are presented in Figures 5.2-6 through 5.2-11.

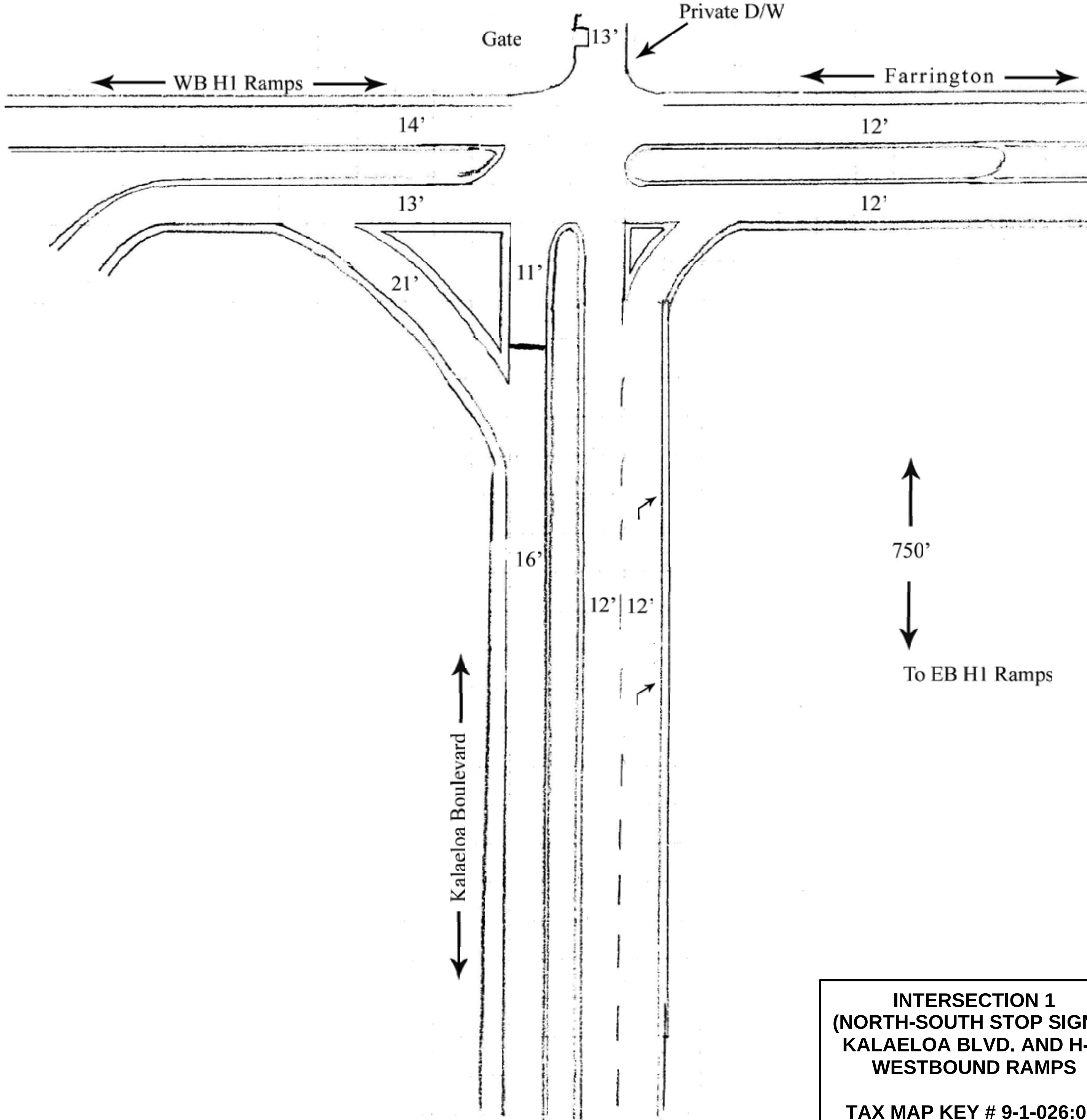
A Level of Service (LOS) analysis was conducted at each of the four intersections using the Highway Capacity Manual software (Highway Capacity Software). LOS refers to the quality of traffic flow along roadways and intersections. It is described in terms of levels A through F, where A indicates nearly free-flow conditions, and LOS F, indicates congested or forced flow traffic conditions. For unsignalized intersections, Average Total Delay (the delay encountered by each approach, averaged for the entire intersection) is used to determine LOS. LOS for signalized intersections are determined by Delay Ranges relating to the mean stopped delay incurred by all vehicles entering the intersection. These measurements are briefly explained in Table 5.2-1. Appendix C provides the Highway Capacity Software input and output spreadsheets for the various scenarios described in the sections below.



H-POWER SITE AND SURROUNDING ROADWAY SYSTEM

FIGURE 5.2-1

Figure 5.2-1 back side



INTERSECTION 1
(NORTH-SOUTH STOP SIGNS)
KALAELOA BLVD. AND H-1 WESTBOUND RAMPS

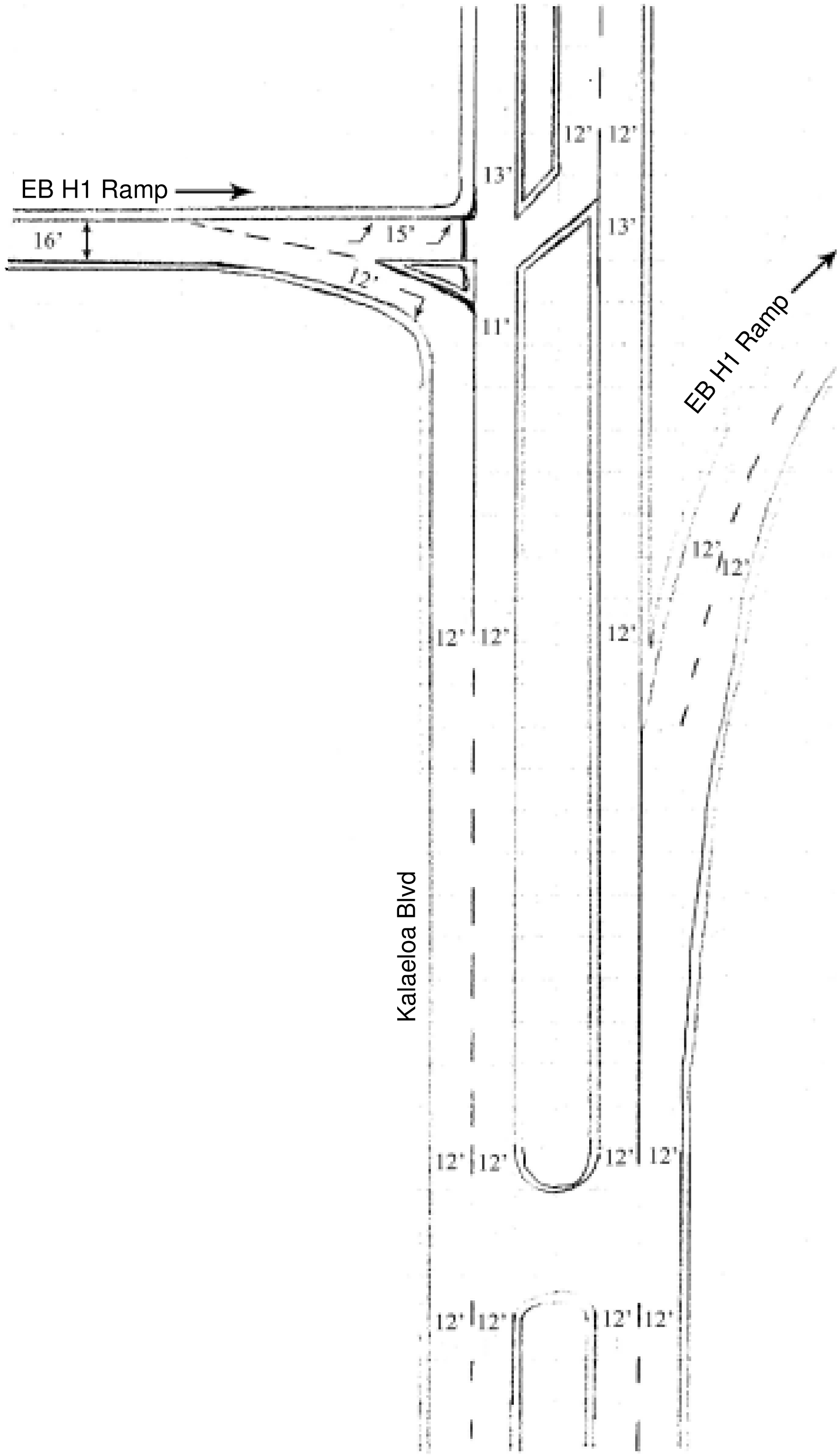
TAX MAP KEY # 9-1-026:030

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

amec

FIGURE 5.2-2

Figure 5.2-2 back side



INTERSECTION 2
(EASTBOUND STOP SIGNS)
KALAELOA BLVD. AND
H-1 EASTBOUND RAMPS

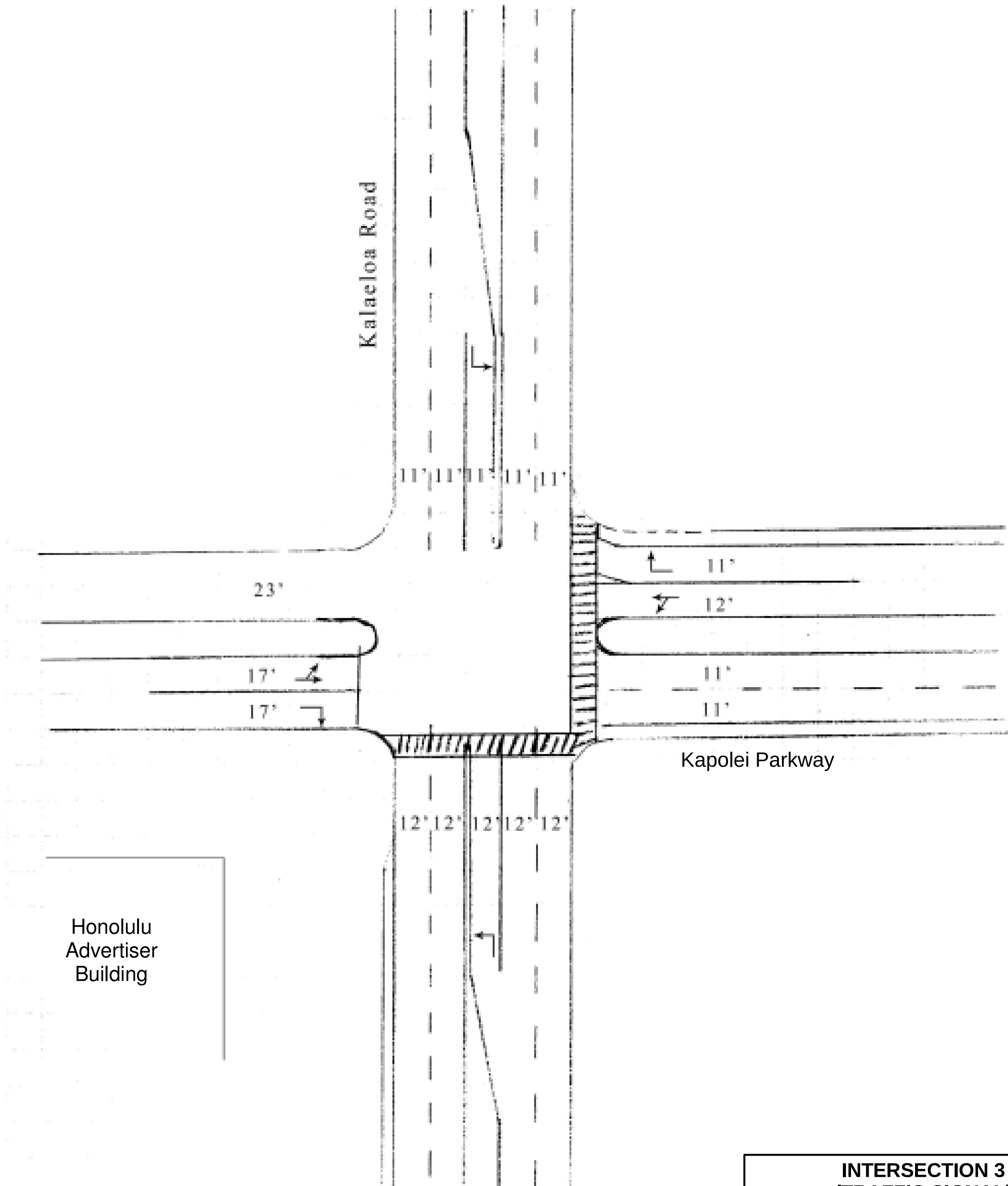
TAX MAP KEY # 9-1-026:030

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

amec

FIGURE 5.2-3

Figure 5.2-3 back side



INTERSECTION 3
(TRAFFIC SIGNAL)
KALAELOA BLVD. AND
KAPOLEI PARKWAY
HONOLULU ADVERTISER BUILDING

TAX MAP KEY # 9-1-026:030

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

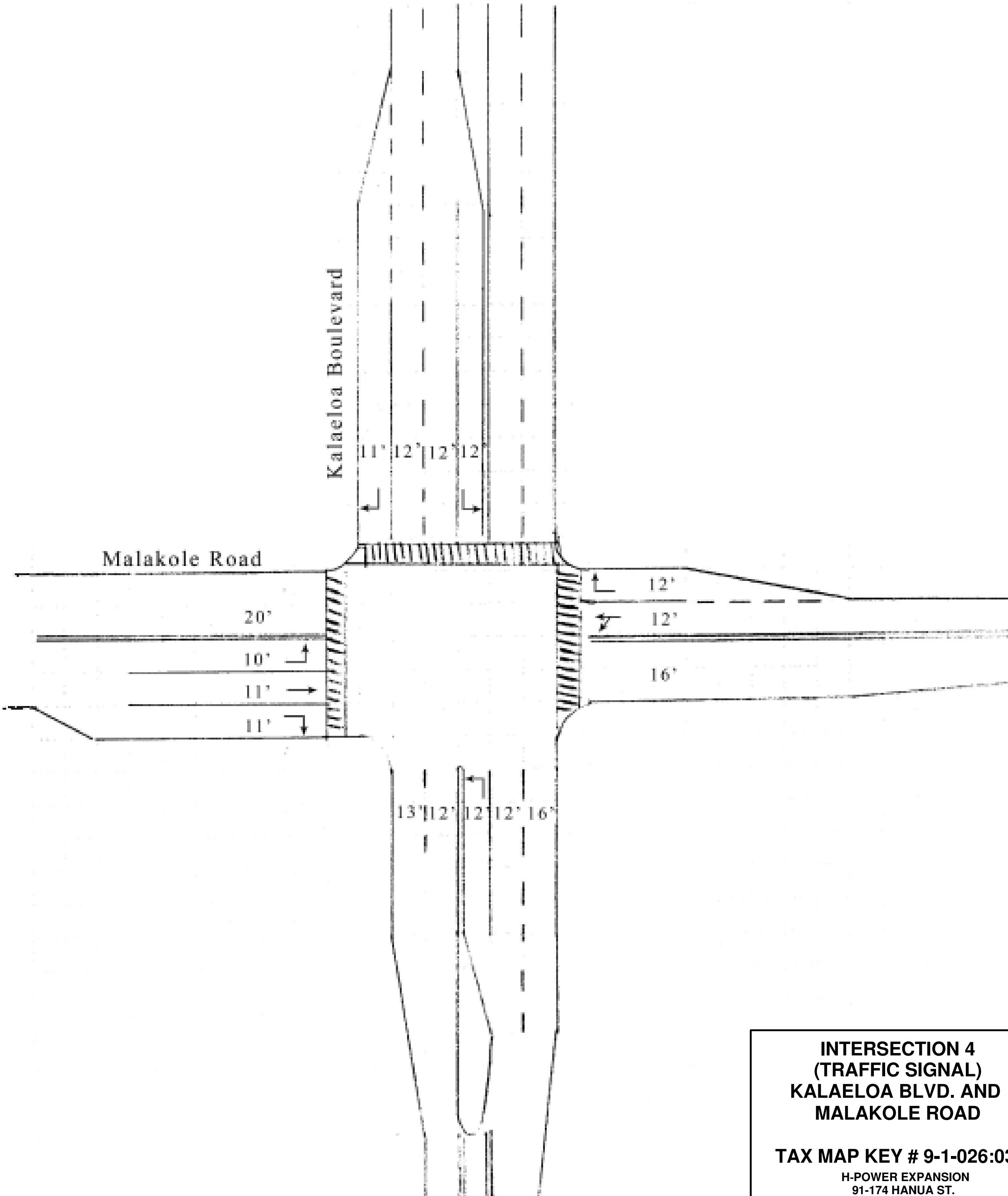
N

amec

FIGURE 5.2-4

H:\H-Power\MXD_Current\Environmental\Intersection3_Feb05.mxd H:\H-Power\Export\Intersection3_Feb05.pdf February 8, 2005 RO

Figure 5.2-4 back side



INTERSECTION 4
(TRAFFIC SIGNAL)
KALAELOA BLVD. AND
MALAKOLE ROAD

TAX MAP KEY # 9-1-026:030

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

amec

FIGURE 5.2-5

Figure 5.2-5 back side

TABLE 5.2-1 LEVEL OF SERVICE (LOS) DESIGNATIONS*

Category	Description	Signalized Intersections: Delay Range** (Seconds per Vehicle)	Unsignalized Intersections: Average Total Delay*** (Seconds per Vehicle)
LOS A	No Traffic Congestion	$\leq$ 10	$\leq$ 10
LOS B	Some Minor Congestion	> 10-20	> 10-15
LOS C	Noticeable Traffic Congestion	> 20-35	> 15-25
LOS D	Significant Congestion	> 35-55	> 25-35
LOS E	At Capacity	> 55-80	> 35-50
LOS F	Forced Flow	> 80	> 50

*Source: "Highway Capacity Manual", Transportation Research Board, 2000 edition.
**Delay ranges relate to the mean stopped delay incurred by all vehicles entering the intersection and do not consider the effects of traffic signal coordination. This criteria is intended for use in the evaluation of individual signalized intersections.
***Average Total Delay refers to the delay encountered by each approach, averaged for the entire intersection. This criteria is limited to use in the evaluation of two-way stop-controlled unsignalized intersections.

As noted above, peak hour traffic counts (AM and PM) were conducted at each of the four intersections. The morning peak hour for Intersections 1, 2 and 4 was observed to occur from 6:30 a.m.-7:30 a.m. The intersection of the Advertiser Building (Intersection 3) was observed to have an AM peak hour from 6:20 a.m. to 7:20 a.m. The PM peak hour for the intersections varied as follows:

- Intersection 1: 3:50 p.m. - 4:50 p.m.
- Intersection 2: 4:00 p.m. - 5:00 p.m.
- Intersection 3: 3:40 p.m. - 4:40 p.m.
- Intersection 4: 3:20 p.m. - 4:20 p.m.

Figures 5.2-6 and 5.2-7 illustrate the relative location of the four intersections along Kalaeloa, as well as the AM and PM peak hour traffic counts. The total number of trucks observed is also noted, including but not limited to refuse trucks. For instance, 100/27^{T} indicates 100 vehicles, 27 of which were trucks. In addition, a discriminatory visual analysis was conducted at the H-1 westbound and H-1 eastbound intersections (Intersections 1 and 2) during the AM peak hour to differentiate refuse trucks from other trucks accessing Kalaeloa Boulevard. The results of that visual analysis indicated that roughly 21% of the trucks during the AM peak period were refuse trucks. As might be expected, the vast majority of the refuse trucks, or roughly 77%, were accessing Kalaeloa from the H-1 East on/off ramp, which is consistent with most refuse originating in the east from sources proximate to the City of Honolulu.

The "existing LOS" values for the four intersections are shown in Table 5.2-2 as follows:

TABLE 5.2-2 LEVEL OF SERVICE ANALYSIS FOR BASELINE CONDITIONS

INTERSECTION 1: KALAELOA + FARRINGTON/WESTBOUND H-1 RAMPS

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F(59 sec)**	D(26 sec)	A(0)	A(0)
PM Peak	**F(645 sec)**	D(28 sec)	A(0)	A(0)

INTERSECTION 2: KALAELOA + EASTBOUND H-1 RAMPS

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	D(34 sec)	n/a
PM Peak	A(0)	A(0)	B(13 sec)	n/a

INTERSECTION 3: KALAELOA + HONOLULU ADVERTISER BLDG. (SIGNAL)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B(13 sec)	**F(103 sec)**	B(12 sec)	**E(77 sec)**
PM Peak	**F(147 sec)**	B(18 sec)	B(13 sec)	C(29 sec)

INTERSECTION 4: KALAELOA + MALAKOLE (SIGNAL)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(9 sec)	A(8 sec)	C(24 sec)	B(13 sec)
PM Peak	B(14 sec)	A(10 sec)	C(33 sec)	B(10 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).

It can be seen that there is an existing problem for NB traffic in both the AM and PM peak conditions at Kalaeloa and Farrington/WB H-1 Ramps. The LOS is F for the northbound left-turn movement. This movement is Stop sign controlled, and conflicts with a fairly heavy westbound through and left-turn movement. It should be noted (see Figure 5.2-7) that a very small percentage of traffic at that intersection consists of trucks during the PM peak hour: $315/10^T$ indicates only ten trucks of the total 315 vehicles. The AM peak hour traffic count has a higher percentage of trucks: $103/18^T$ indicates 18 trucks of the total 103 vehicles. Even the conflicting westbound and left-turn movement consists of predominantly non-truck traffic (AM: $378/11^T$ for westbound and $267/13^T$ for the left turn; PM: $752/17^T$ for westbound and $138/16^T$ for the left turn).

A problem also exists for northbound traffic in the PM and southbound and westbound traffic in the AM for the Kalaeloa and Honolulu Advertiser Bldg intersection. Traffic is signal controlled. The LOS is F for the southbound through movement. A small percentage of the vehicles at that intersection consist of trucks ($1488/115^T$). Northbound traffic also resulted in a LOS of F for through movement. As previously, a small percentage of the traffic is trucks ($1129/85^T$). The LOS is E for the westbound through movement. The remaining locations and time periods result in acceptable LOS values.

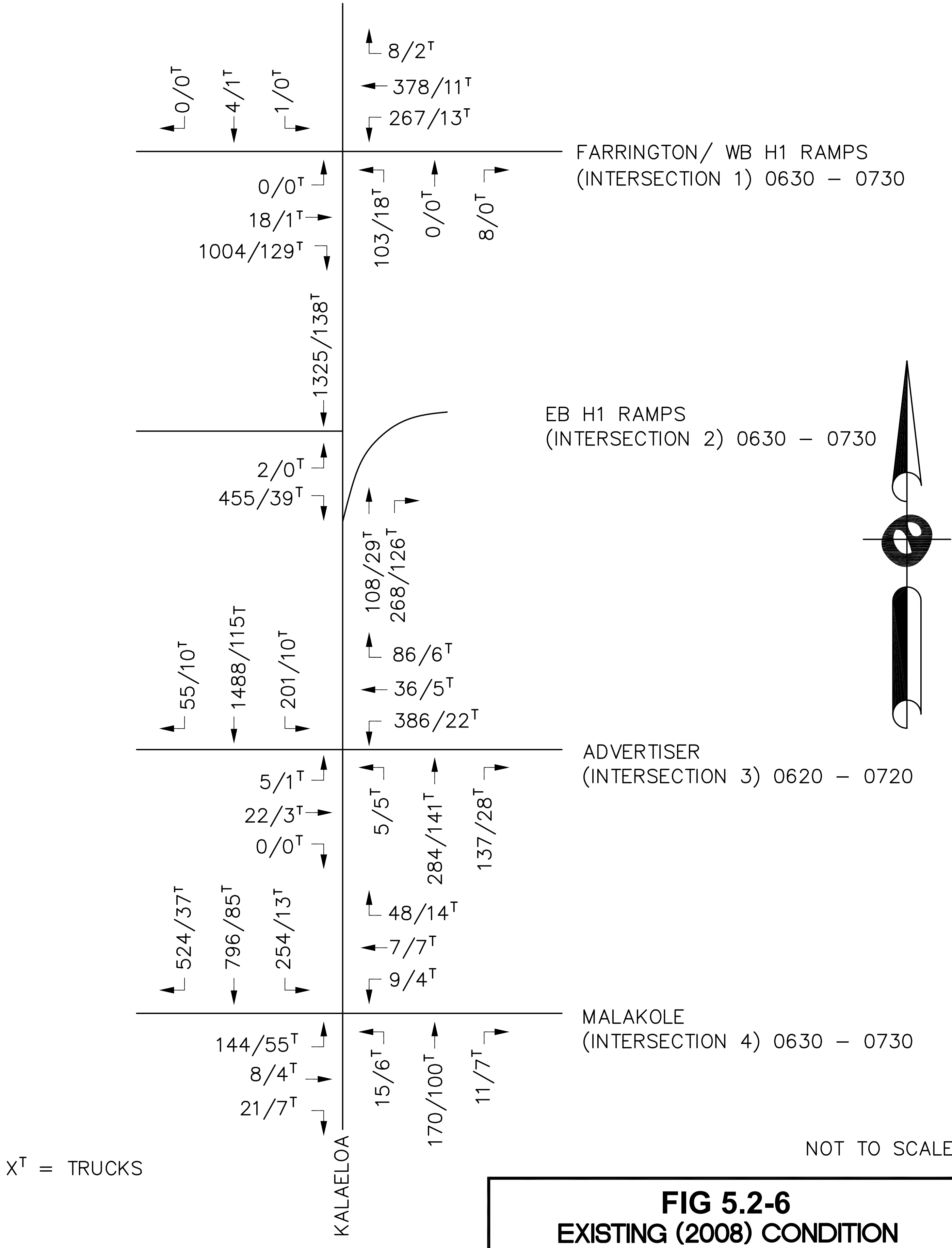


FIG 5.2-6
EXISTING (2008) CONDITION

AM PEAK HOUR TURNING MOVEMENT COUNT

DRAWING NUMBER EXPANSION (OPERATION) CONDITION	FIGURE NUMBER 5.2-6
PROJECT NUMBER 776350000	

Figure 5.2-6 back side

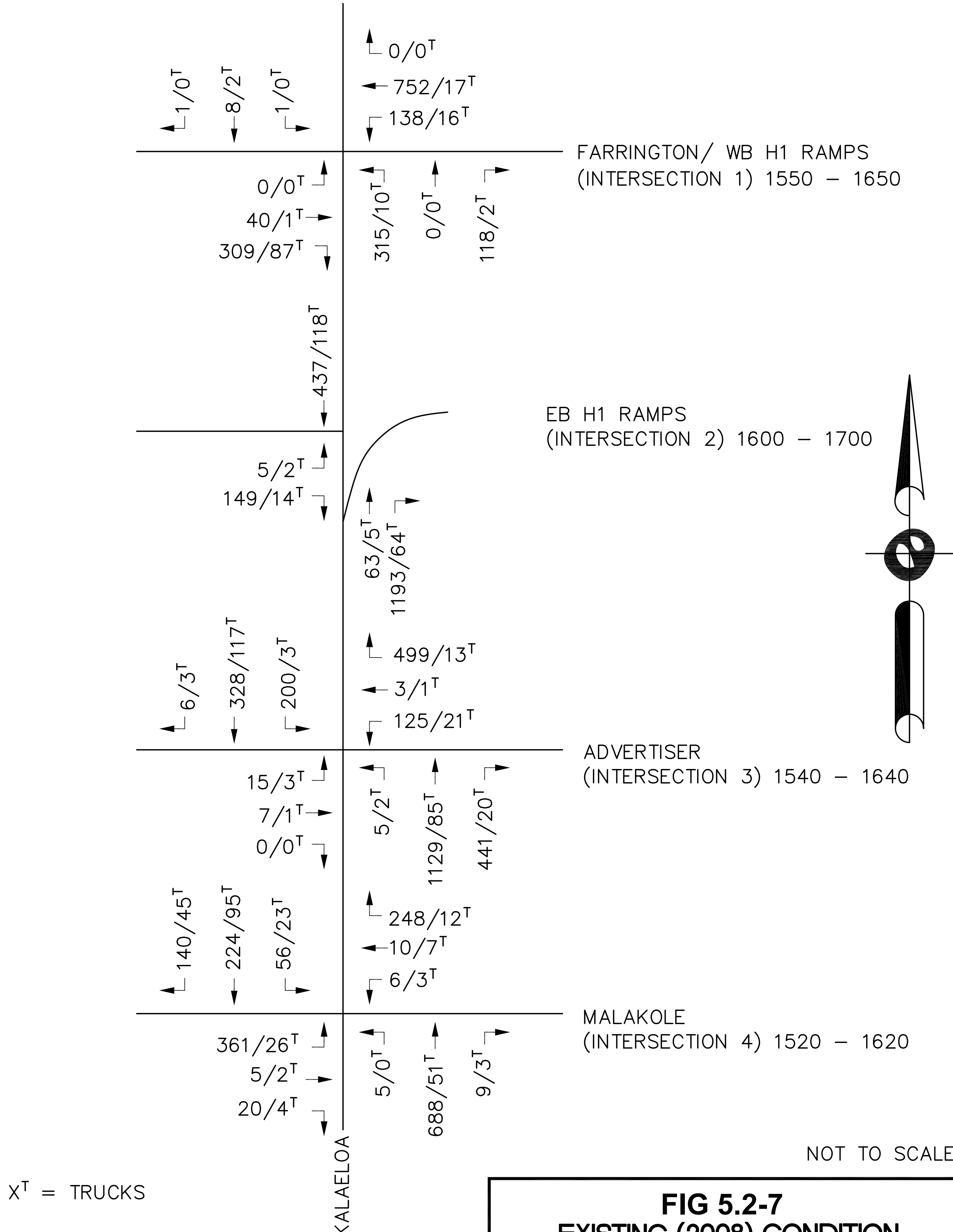


FIG 5.2-7
EXISTING (2008) CONDITION

PM PEAK HOUR TURNING MOVEMENT COUNT

DRAWING NUMBER **EXPANSION (OPERATION) CONDITION**	FIGURE NUMBER **5.2-7**
PROJECT NUMBER **776350000**	

Figure 5.2-7 back side

5.2.2 Traffic Impacts During Facility Operation

The H-POWER Expansion consists of expanding the waste capacity intake of the facility from 610,000 tons to 910,000 tons of MSW per year. Commercial operation of the proposed Expansion is anticipated in 2012. As noted in Section 5.1, the baseline number of trucks at each intersection (existing traffic) was counted and the percentage of total trucks that are bound for H-POWER during peak hours was estimated from the traffic counts taken at the H-1 intersections (Intersection 1 and 2). This estimate, roughly 21 percent, was based on visual observation of the trucks accessing Kalaeloa Boulevard from H-1 and was consistent with H-POWER truck count for that day. A higher estimate, assuming that H-POWER trucks reflect 30 percent of truck traffic during the peak hours, was used for the operational impact assessment to ensure a conservative analysis.

To account for the additional trucks generated by the H-POWER Expansion, the H-POWER trucks (only) will be increased by a 900,000/600,000 (or 1.50) factor. This equates to a truck factor of 1.15 (0.30 x 1.50 = 0.45, plus the "other" trucks (0.7) = 1.15 factor), or overall truck volumes are anticipated to be 15 percent greater than existing truck volumes. To determine the traffic impact following the H-POWER Expansion, it was determined that the number of refuse trucks using Kalaeloa Blvd. would increase in a ratio similar to the increase in the H-POWER Expansion. Approximately five to eight new fulltime positions would also be created to support the expanded operation. This would represent a 3 to 5 percent increase employment at the facility and a negligible increase in traffic impacts.

Figures 5.2-8 and 5.2-9 illustrate the increased number of trucks and the impacts of such, during the AM and PM peak hours. It can be seen from the post-Expansion LOS analyses (Table 5.2-3) at the four intersections that the LOS and delay values do not change appreciably (and in most instances, do not change at all) when the total truck volumes are increased by a factor of 1.15 (to account for the H-POWER Expansion).

As shown in Table 5.2-3, based on the estimated increase in traffic volume, the existing problems are estimated to remain (but do not change appreciably) for northbound traffic in the AM and PM conditions at Kalaeloa and Farrington/WB H-1 Ramps. The LOS is F for the northbound left-turn movement. This movement is Stop sign controlled, and conflicts with a fairly heavy westbound through and left-turn movement. As noted earlier and shown on Figure 5.2-7, a very small percentage of traffic during the PM peak hour at that "Forced Flow" northbound left-turn movement consists of trucks: $315/10^{T.}$ The AM peak hour traffic count has a higher percentage of trucks: $103/18^{T}$ with trucks accounting for 18 of the total 103 vehicles. Post-Expansion, the PM traffic at that "Forced Flow" northbound left-turn movement is estimated to increase by two trucks: $317/12^{T}$, as shown on Figure 5.2-9. The AM traffic is estimated to increase by three trucks: $106/21^{T}$.

A projected increase in traffic is estimated to lower the LOS at the Kalaeloa & Eastbound H-1 Ramps eastbound movement. Prior to Expansion, the LOS is estimated to be D. Post-Expansion the LOS is estimated to be E. AM traffic at eastbound movement that is now "Significantly Congested" will increase by 19 trucks: $287/145^{T}$.

The existing problem for northbound traffic in the PM and southbound traffic in the AM for the Kalaeloa and Honolulu Advertiser Bldg. intersection is estimated to remain unchanged after the Expansion. PM northbound traffic was estimated to be LOS F in the baseline study, and it remains LOS F after the Expansion. As noted in the baseline study, a small percentage of the baseline traffic is trucks (1129/85^{T}). Post-Expansion,

TABLE 5.2-3 LEVEL OF SERVICE ANALYSIS DURING OPERATION FOLLOWING EXPANSION

INTERSECTION 1: KALAELOA + FARRINGTON/WESTBOUND H-1 RAMPS

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F(65 sec)**	D(26 sec)	A(0)	A(0)
PM Peak	**F(672 sec)**	D(28 sec)	A(0)	A(0)

INTERSECTION 2: KALAELOA + EASTBOUND H-1 RAMPS

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	***E(36 sec)***	n/a
PM Peak	A(0)	A(0)	B(14 sec)	n/a

INTERSECTION 3: KALAELOA + HONOLULU ADVERTISER BLDG. (SIGNAL)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B(14 sec)	**F(92 sec)**	B(12 sec)	***F(94 sec)***
PM Peak	**F(157 sec)**	B(18 sec)	B(13 sec)	C(30 sec)

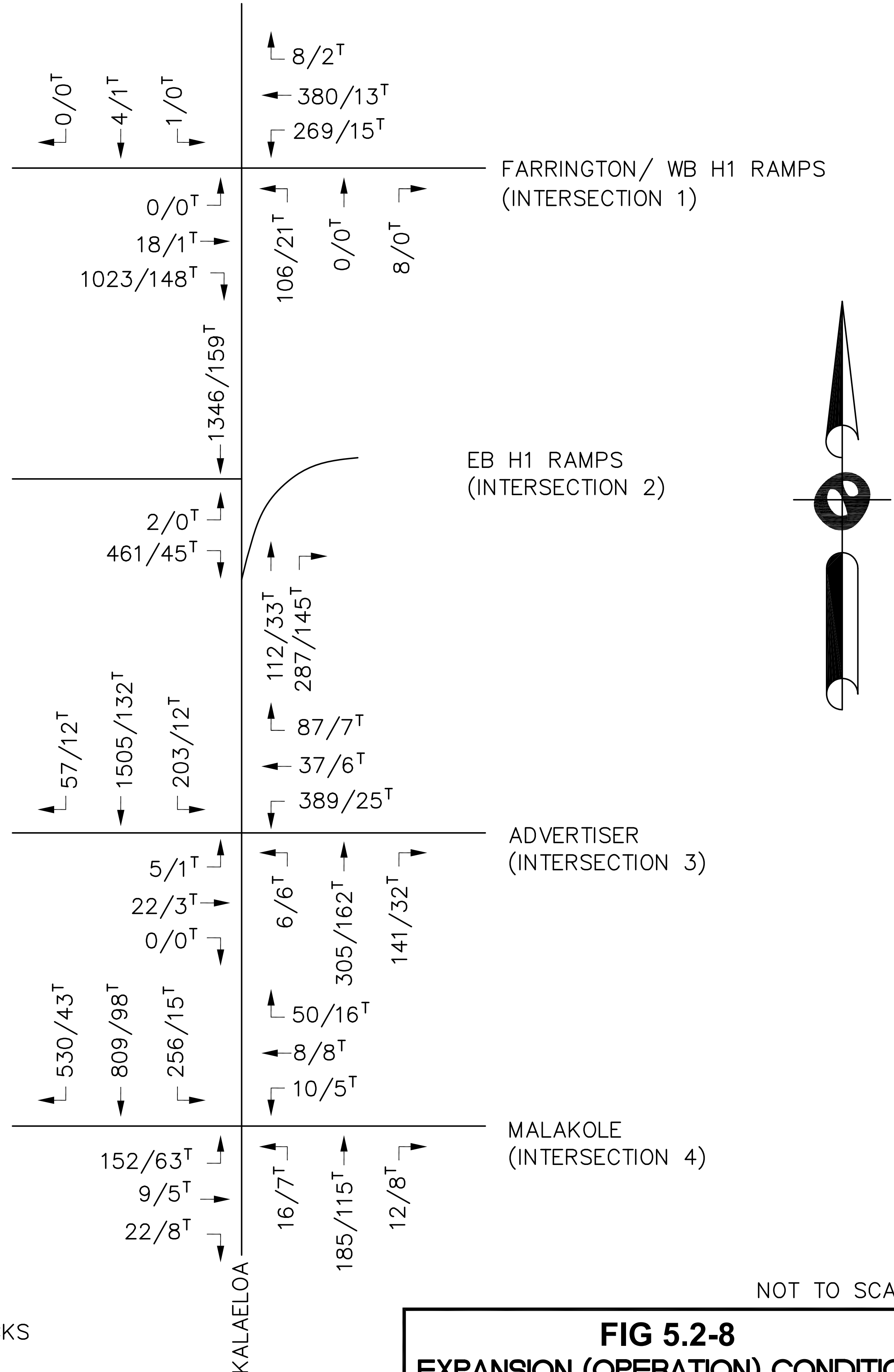
INTERSECTION 4: KALAELOA + MALAKOLE (SIGNAL)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(9 sec)	A(8 sec)	C(28 sec)	B(13 sec)
PM Peak	B(15 sec)	B(10 sec)	C(33 sec)	B(10 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

the PM traffic at that failing northbound movement will increase truck traffic by only 13 trucks: 1142/98^{T}, as shown on Figure 5.2-9. For the southbound through movement, the baseline LOS was estimated to be F. Traffic at this intersection is signal controlled. As shown previously, a small percentage of the vehicles at that intersection consist of trucks (1488/115^{T}). The “Forced Flow” southbound AM traffic will increase by only 17 trucks: 1505/132^{T} and its LOS remains F. The baseline AM traffic in the westbound movement was estimated to be LOS E in the baseline study. Post-Expansion the LOS is estimated to be F. AM traffic at the “Forced Flow” westbound movement increases by 1 truck: 37/6 ^{T}. Although only one vehicle is added to the westbound movement, the Highway Capacity Software system redistributes green times in an effort to minimize average delay for all entering vehicles and evaluates the intersection in summation (total of all directions). The values and delay times observed in the LOS analysis are therefore a product of this effort. Eastbound traffic is estimated to remain unchanged following Expansion with traffic designated by an LOS of B for both AM and PM periods.

The remaining locations and time periods result in lower LOS values.



NOT TO SCALE

X^T = TRUCKS

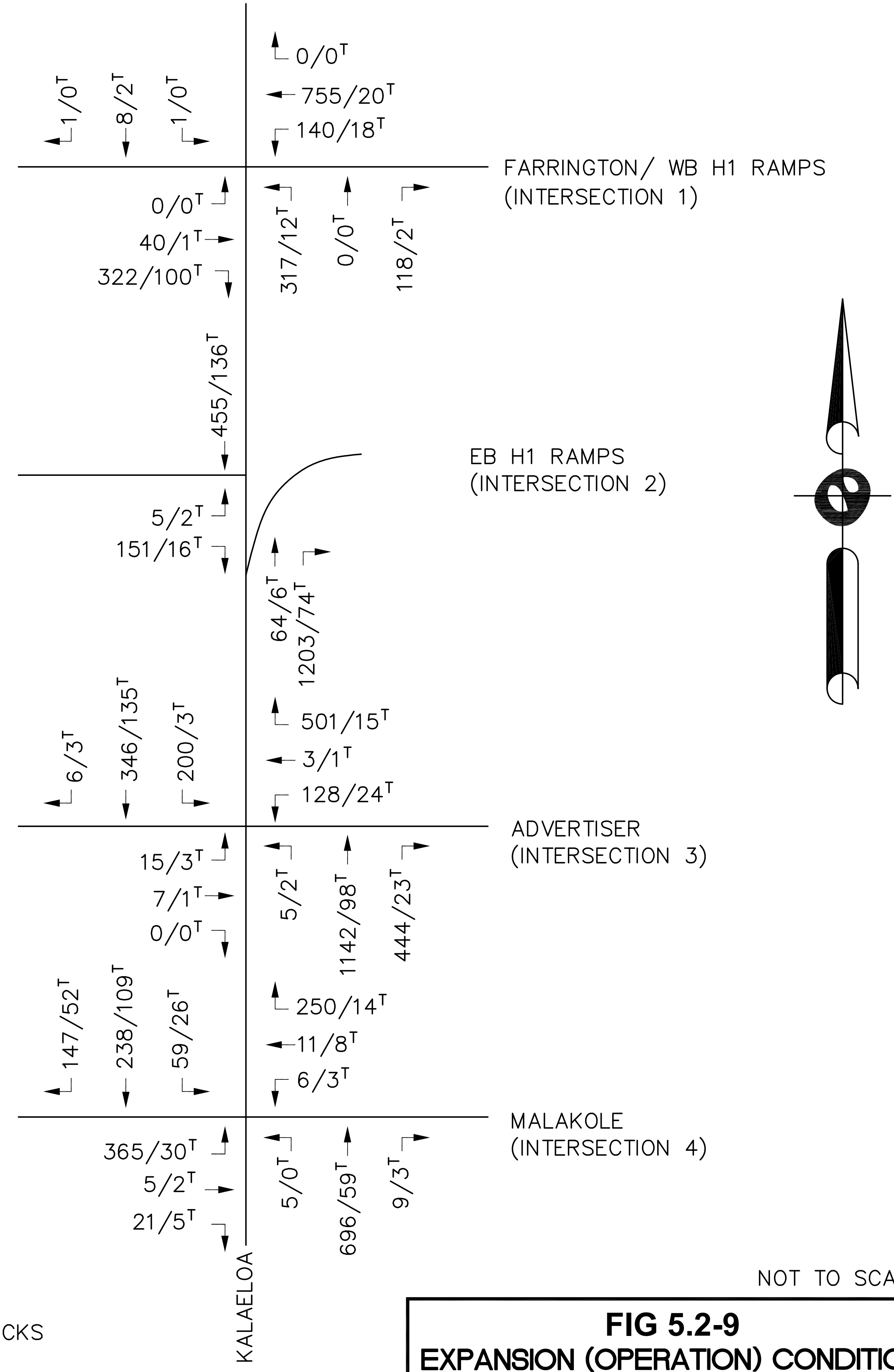
FIG 5.2-8

EXPANSION (OPERATION) CONDITION

AM PEAK HOUR TURNING MOVEMENT COUNT

DRAWING NUMBER **EXPANSION (OPERATION) CONDITION**	FIGURE NUMBER **5.2-8**
PROJECT NUMBER **776350000**	

Figure 5.2-8 back side



NOT TO SCALE

X^T = TRUCKS

FIG 5.2-9
EXPANSION (OPERATION) CONDITION

PM PEAK HOUR TURNING MOVEMENT COUNT

DRAWING NUMBER EXPANSION (OPERATION) CONDITION	FIGURE NUMBER 5.2-9
PROJECT NUMBER 776350000	

Figure 5.2-9 back side

5.2.3 Traffic Impacts During Facility Construction

As shown previously in Table 2.3-1, Construction Staffing and Delivery Matrix construction is anticipated to begin in mid 2009, and run for 34 months, followed by a 3-month start-up and testing period. The highest construction activity month is anticipated to occur approximately between months 10 through 13 and 21 through 24 after project initiation. Months 10 through 13, have a higher number of trucking trips at approximately 240 truck deliveries (trips/month), while the expected staffing on site range between 69 and 90 personnel. During months 21 through 24, approximately 165 staff will be on site, and approximately 120 truck deliveries (trips/month) will be required to construct the facility. For the analysis, month 13 was selected for the highest truck delivery month (240 truck trips, 90 personnel). Month 22 was selected for the peak personnel month (165 personnel, 120 truck deliveries). The additional construction trips are a temporary condition and vans, carpooling, or peak spreading could be used to mitigate traffic impacts through Traffic Demand Management. To be conservative this analysis examines the impacts as if each staff person drove to the construction site, individually, during the AM and PM peak hours on weekdays (presenting a “worst case” scenario). This is an extremely conservative assumption, since the construction process could utilize multiple shifts, involve car-pooling and/or weekend shifts. Furthermore, it is not anticipated that all staff will arrive and depart at exactly the same time.

For the purposes of this analysis, all the additional trips related to the construction of the facility will be assumed to utilize the H-1 and Kalaeloa interchange, and progress southbound to the H-POWER Expansion site. Construction traffic may impact the four intersections along Kalaeloa, including the H-1 interchange (both Farrington and the EB H-1 Ramps), the Honolulu Advertiser Building intersection, and the Malakole intersection. Figures 5.2-10 and 5.2-11 illustrate the impacts of construction traffic during the peak month of 2010.

Month 13: The impact of adding 90 construction employee vehicles and 12 construction trucks per day (240 monthly delivery trucks/20 work days) or 6 additional directional (delivery) trucks per peak hour were analyzed, with the following results presented in Table 5.2-4.

The addition of 90 vehicles and 12 delivery trucks per day during the construction phase is not anticipated to have any impact to traffic. LOS designations are not estimated to change from current baseline conditions.

Month 22: The impact of adding 165 construction employee vehicles and 6 construction trucks per day (120 monthly delivery trucks/20 work days) or 3 additional directional (delivery) trucks per peak hour were analyzed, with the following results as noted in Table 5.2-5.

The addition of 165 vehicles and 6 delivery trucks per day during the construction phase is not anticipated to have any impact to traffic. LOS designations are not estimated to change from current baseline conditions.

TABLE 5.2-4 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION – MONTH 13

Intersection 1: Kalealoa + Farrington/Westbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F(59 sec)**	D(26 sec)	A(0)	A(4 sec)
PM Peak	**F(687 sec)**	D(28 sec)	A(0)	A(2 sec)

Intersection 2: Kalealoa + Eastbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	C(35 sec)	n/a
PM Peak	A(0)	A(0)	B(13 sec)	n/a

Intersection 3: Kalealoa + Honolulu Advertiser Bldg. (Signal)

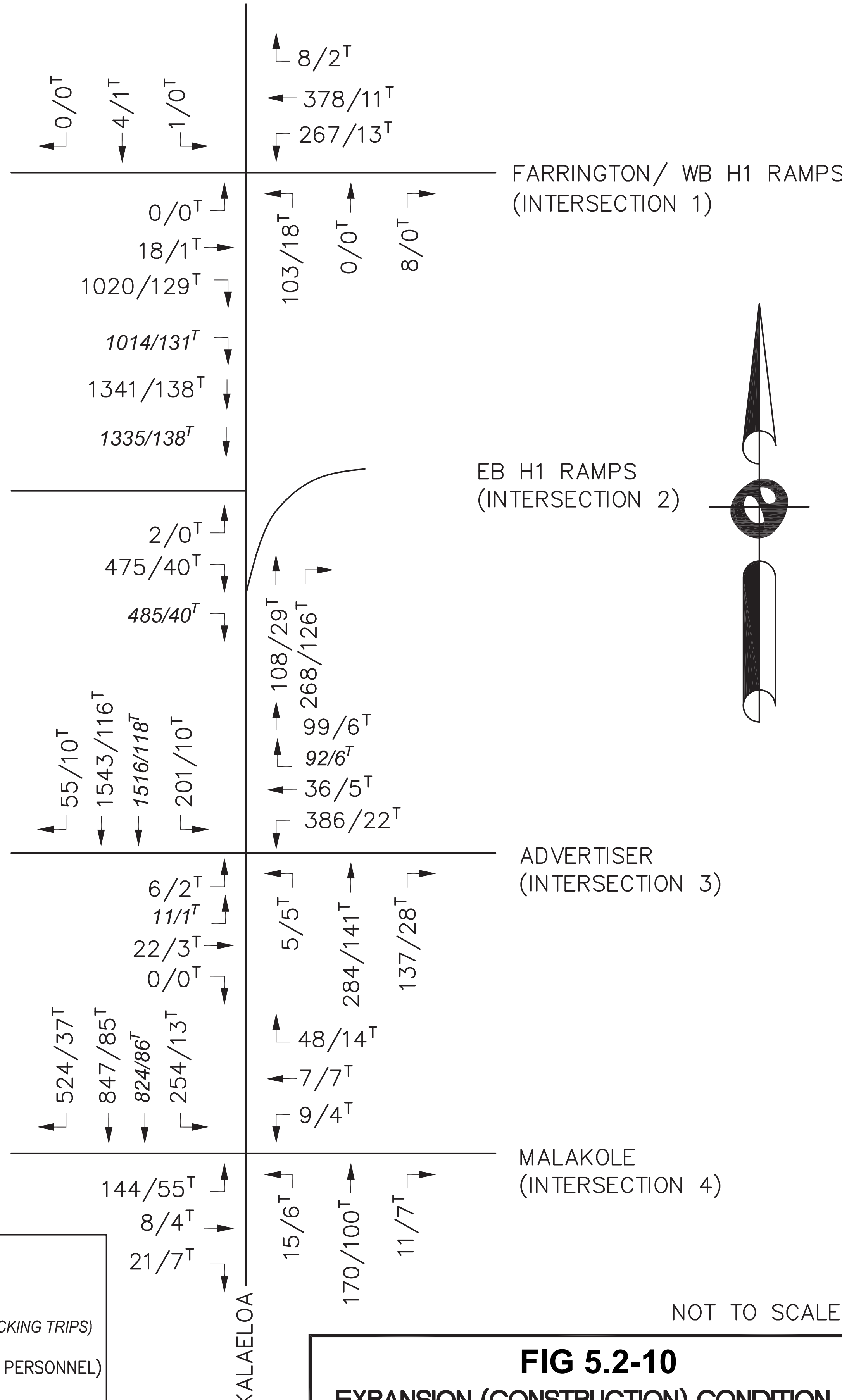
	Northbound	Southbound	Eastbound	Westbound
AM Peak	B(13 sec)	**F(112 sec)**	B(12 sec)	**E(77 sec)**
PM Peak	**F(150 sec)**	B(18 sec)	B(13 sec)	C(29 sec)

Intersection 4: Kalealoa + Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(9 sec)	A(8 sec)	C(25 sec)	B(13 sec)
PM Peak	B(15 sec)	A(10 sec)	C(33 sec)	B(11 sec)

*Bolded items either "At Capacity" (LOS E) or "Forced Flow" (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

It should be restated that this is a conservative estimate for the peak traffic months of construction (month 13 for increase in truck deliveries and month 22 for increase in personnel). The additional traffic, although transitory, will be experienced for a period of 34 months, although the other months' impacts will not be as great as the illustrated months. The already heavily congested locations, Kalaeloa + Farrington/Westbound H-1 Ramps, and Kalaeloa + Honolulu Advertiser Building will become slightly more congested. However, the LOS designations for these locations remain unchanged. In summary, additional H-POWER traffic generated on a temporary basis by construction will not add significantly to the existing congestion.



LEGEND

X^T = TRUCKS

$92/6^T$ = MONTH 13 (INCREASE IN TRUCKING TRIPS)

$99/6^T$ = MONTH 22 (INCREASE IN PERSONNEL)

amec

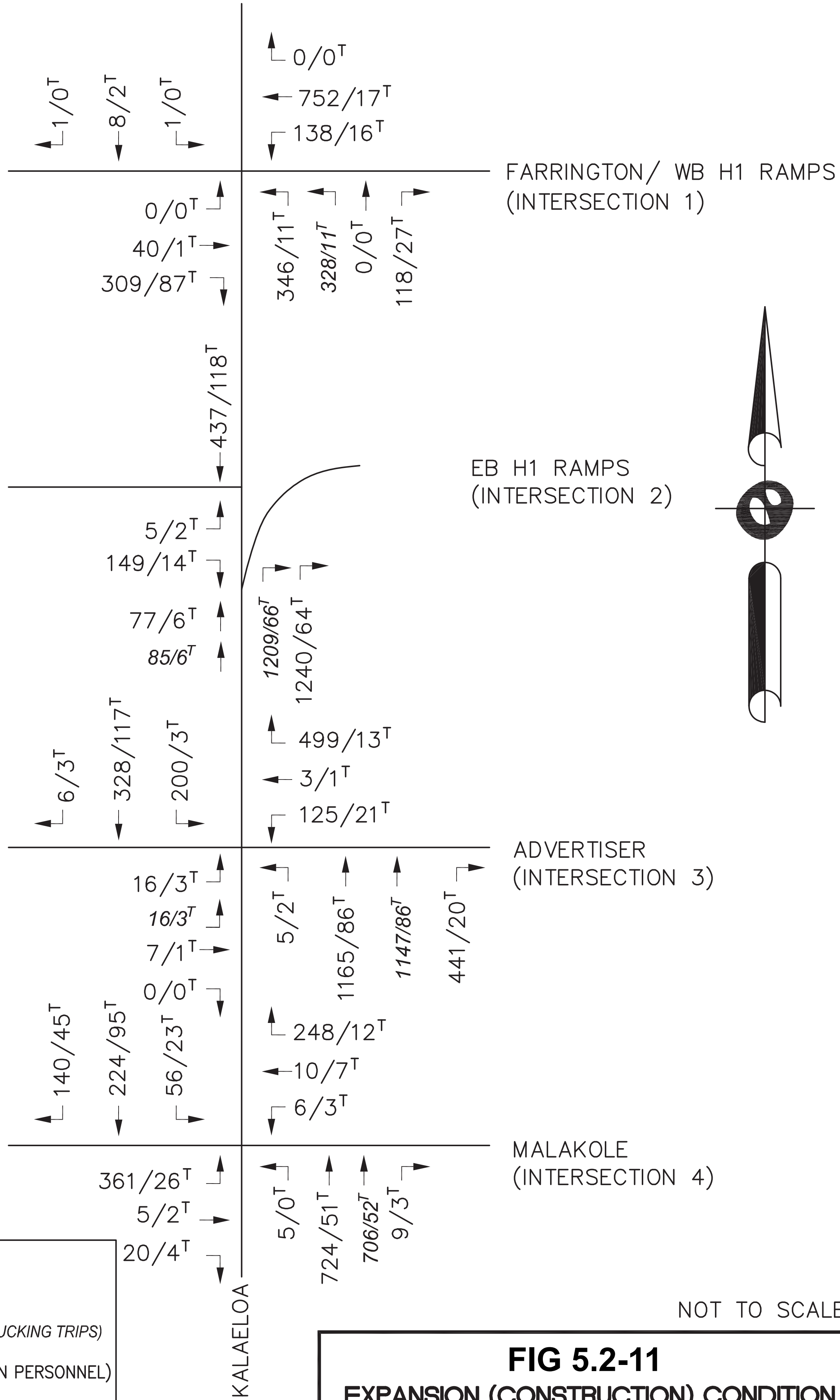
FIG 5.2-10

EXPANSION (CONSTRUCTION) CONDITION

AM PEAK HOUR TURNING MOVEMENT COUNT

DRAWING NUMBER EXPANSION (OPERATION) CONDITION	FIGURE NUMBER **5.2-10**
PROJECT NUMBER 776350000	

Figure 5.2-10 back side



LEGEND

X^T = TRUCKS

$92/6^T$ = MONTH 13 (INCREASE IN TRUCKING TRIPS)

$99/6^T$ = MONTH 22 (INCREASE IN PERSONNEL)

NOT TO SCALE

amec

FIG 5.2-11

EXPANSION (CONSTRUCTION) CONDITION

PM PEAK HOUR TURNING MOVEMENT COUNT

DRAWING NUMBER EXPANSION (OPERATION) CONDITION	FIGURE NUMBER 5.2-11
PROJECT NUMBER 776350000	

Figure 5.2-11 back side

TABLE 5.2-5 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION – MONTH 22

Intersection 1: Kalealoa + Farrington/Westbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F(59 sec)**	D(26 sec)	A(0)	A(0)
PM Peak	**F(744 sec)**	D(28 sec)	A(0)	A(0)

Intersection 2: Kalealoa + Eastbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	D(35 sec)	n/a
PM Peak	A(0)	A(0)	B(14 sec)	n/a

Intersection 3: Kalealoa + Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B(13 sec)	**F(120 sec)**	B(12 sec)	**E(77 sec)**
PM Peak	**F(157 sec)**	B(18 sec)	B(13 sec)	C(30 sec)

Intersection 4: Kalealoa + Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(9 sec)	A(8 sec)	C(25 sec)	B(13 sec)
PM Peak	B(15 sec)	A(10 sec)	C(33 sec)	B(11 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

5.2.4 Traffic Mitigation

The traffic impacts of the H-POWER Expansion will be limited. The anticipated truck growth at each of the four impacted intersections is on the order of 15 percent. This 15 percent growth in total truck volume will not significantly degrade the current LOS values, and should not be distinguishable to drivers from today’s conditions except in the westbound movement at the Kalaeloa and Honolulu Advertiser Bldg intersection (Baseline LOS E vs an estimated Expansion LOS F) and the eastbound movement at the Kalaeloa and Eastbound H-1 Ramps (Baseline LOS D vs an estimated Expansion LOS E) during operations of the expanded facility.

In addition, the H-POWER Expansion will include the construction of a new 60-ton, 70-foot capacity receiving scale located adjacent to the central scale house. With two receiving scales, the flow of in-coming truck traffic will be improved.

Currently there is roadwork underway that would improve these intersections and widen Kalaeloa Blvd from four lanes to six lanes. An LOS analysis was conducted for the intersections assuming these roadway improvements were implemented but assuming Expansion construction or operations have not occurred. With the exception of the deterioration of traffic in the Eastbound direction of the Kalaeloa and Eastbound H-1 ramp at intersection 2 (LOS D estimated to change to LOS E), traffic remained the same or improved at all intersections and in all flow directions. The deterioration of traffic in the eastbound direction at intersection 2 may be attributed to vehicles needing to cross more lanes to get to the signal controlled left turn lane. Additionally, the Highway Capacity Software system redistributes green times in an effort to minimize average delay for all entering vehicles and evaluates the intersection in summation (total of all directions). The values and delay times observed in the LOS analysis are therefore a product of this effort. The roadway improvement project should be completed by 2010, which would coincide with construction increases and the subsequent operations Expansion. The LOS analysis was recalculated for the Operations and Construction scenarios utilizing the roadway improvements.

5.2.4.1 Traffic Impacts During Facility Operation Post Kalaeoloa Roadway Improvements

An increase in traffic due to Expansion operation is estimated to cause greater traffic delays at the Kalaeloa & Eastbound H-1 Ramps eastbound movement (Intersection 2). Prior to Expansion, the LOS was estimated as D. Post-Expansion the LOS is estimated as E. This LOS is estimated to remain the same (E) after the Kalaeloa roadway improvement.

TABLE 5.2-6 LEVEL OF SERVICE ANALYSIS DURING OPERATION FOLLOWING EXPANSION – EFFECT OF ROADWAY IMPROVEMENTS

Intersection 1: Kalaeloa+Farrington/Westbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F(65 sec)**	D(26 sec)	A(0)	A(0)
PM Peak	**F(672 sec)**	D(28 sec)	A(0)	A(0))

Intersection 2: Kalaeloa+Eastbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	**E(37 sec)**	n/a
PM Peak	A(0)	A(0)	B(14 sec)	n/a

Intersection 3: Kalaeloa+Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	C(23 sec)	C(23 sec)	B(14sec)	C(34sec)
PM Peak	C(22 sec)	B(15 sec)	B(13 sec)	C(27 sec)

Intersection 4: Kalaeloa+Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B(10 sec)	A(7 sec)	D(35 sec)	B(15 sec)
PM Peak	B(16 sec)	B(12 sec)	C(24 sec)	B(11 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

The existing traffic congestion for northbound traffic in the PM and southbound traffic in the AM for the Kalaeloa and Honolulu Advertiser Bldg intersection (Intersection 3) improves greatly from existing conditions. The LOS was F for the southbound through movement and northbound traffic. Once roadway improvements are completed, the LOS improves to C for both directions.

Westbound AM movement improves from an LOS of F for pre-roadway improvement conditions to C for post-roadway improvement.

In summary, the roadway improvements are projected to improve traffic on Kalaeloa during operational activities post-Expansion.

5.2.4.2 Traffic Impacts During Facility Construction Post Kalaeloa Roadway Improvements

It should be restated that the analysis presented herein is a conservative estimate for the peak traffic months of construction (months 13 and 22). Selection of peak months has previously been described in Section 5.2.3. The additional traffic due to construction, although transitory, will be experienced for a period of 34 months, although the other months' impacts will not be as great as the peak months analyzed.

Month 13:

Traffic problems at Intersection 1 are not improved by the Kalaeloa roadway improvements because the failing lane is northbound traffic onto the H-1 ramp. The estimated LOS remains F for the northbound left-turn movement.

As previously noted, an increase in traffic due to roadway improvement activities increases congestion at the Kalaeloa & Eastbound H-1 Ramps, eastbound movement (Intersection 2). Prior to Expansion (baseline), the LOS was designated D. During construction the LOS was estimated to remain D, with a delay in the Eastbound direction of 35 seconds. This LOS dropped to E post-roadway improvement with an estimated delay of 37 sec in the eastbound direction. The deterioration of traffic flow in the eastbound direction at intersection 2 may be attributed to vehicles needing to cross more lanes to get to the signal controlled left turn lane. Additionally, the Highway Capacity Software system redistributes green times in an effort to minimize average delay for all entering vehicles and evaluates the intersection in summation (total of all directions). The values and delay times observed in the LOS analysis are therefore a product of this effort. The degradation observed is not a result of construction activities and rather is a product of roadway improvements. Baseline traffic counts have been evaluated under the roadway improvement scenario (without the Expansion) and this analysis resulted in an LOS of E for the AM eastbound movement at Intersection 2.

The existing traffic congestion for northbound traffic in the PM and southbound traffic in the AM for the Kalaeloa and Honolulu Advertiser Bldg intersection (Intersection 3) improves greatly from existing conditions. The LOS was F for the southbound through movement and northbound traffic. Once roadway improvements are completed, the LOS improves to C and B, respectively.

In summary, the roadway improvements in general are projected to improve traffic on Kalaeloa during construction activities as noted in Table 5.2-7.

TABLE 5.2-7 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION – MONTH 13 – EFFECTS OF ROADWAY IMPROVEMENTS

Intersection 1: Kalaeloa+Farrington/Westbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F(59 sec)**	D(26 sec)	A(0)	A(4 sec)
PM Peak	**F(687 sec)**	D(28 sec)	A(0)	A(2 sec)

Intersection 2: Kalaeloa+Eastbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	***E(37 sec)***	n/a
PM Peak	A(0)	A(0)	B(14 sec)	n/a

Intersection 3: Kalaeloa+Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B(19 sec)	*C(20 sec)*	B(16 sec)	*D(46 sec)*
PM Peak	*B(17 sec)*	B(18 sec)	B(15 sec)	*D(42 sec)*

Intersection 4: Kalaeloa+Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(10 sec)	A(7 sec)	C(31 sec)	B(15 sec)
PM Peak	B(16 sec)	*B(11 sec)*	C(24 sec)	B(11 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Month 22:

An increase in traffic due to roadway improvements increases congestion at the Kalaeloa & Eastbound H-1 Ramps eastbound movement (Intersection 2). Prior to the Expansion, the LOS was designated D. During construction the LOS was estimated to remain D, with a delay in the Eastbound direction of 35 seconds. As before in the 13 month analysis, this LOS is estimated to deteriorate to E post Kalaeloa roadway improvement with an estimated delay of 37 sec in the eastbound direction. Again, the deterioration of traffic in this area in the eastbound direction may be attributed to signal controlled left turn vehicles needing to cross more lanes which may sometimes result in an increased delay. Under improved conditions, the intersection should be viewed in summation (total of all directions) as the Highway Capacity Software redistributes green times in an effort to minimize average delay for all entering vehicles. Additionally, this increase in traffic congestion is not a result of Expansion activities and is a product of roadway improvements. As stated above, baseline traffic counts have been evaluated under the roadway improvement scenario (without the Expansion) and this analysis resulted in an LOS of E for the eastbound movement at Intersection 2.

The existing traffic congestion for northbound traffic in the PM and southbound traffic in the AM for the Kalaeloa and Honolulu Advertiser Bldg intersection (Intersection 3) improves greatly from existing conditions. The LOS was estimated to be F for the southbound through movement and northbound traffic. Once roadway improvements are completed, the LOS is estimated to improve to C and B, respectively. Westbound movement improves from an LOS of E for pre-roadway improvement conditions to C for post-roadway improvement.

In summary, the roadway improvements in general are projected to improve traffic on Kalaeloa during construction activities.

TABLE 5.2-8 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION MONTH 22 – EFFECTS OF ROADWAY IMPROVEMENTS

Intersection 1: Kalaeloa+Farrington/Westbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F(59 sec)**	D(26 sec)	A(0)	A(4 sec)
PM Peak	**F(744 sec)**	D(28 sec)	A(0)	A(2 sec)

Intersection 2: Kalaeloa+Eastbound H-1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	***E(37 sec)***	n/a
PM Peak	A(0)	A(0)	B(14 sec)	n/a

Intersection 3: Kalaeloa+Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	*C(20 sec)*	*C(22 sec)*	B(14 sec)	*C(34 sec)*
PM Peak	*B(16 sec)*	B(18 sec)	B(16 sec)	*D(49 sec)*

Intersection 4: Kalaeloa+Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(10 sec)	A(7 sec)	C(32 sec)	B(15 sec)
PM Peak	B(16 sec)	*B(11 sec)*	C(25 sec)	B(11 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

5.2.4.3 Mitigation Recommendations

The intersection of Kalaeloa and Farrington/Westbound H-1 Ramps is a congested intersection today, and adding construction or operational traffic to the mix is estimated to slightly increase traffic delays. Traffic is also estimated to slightly worsen at the Kalaeloa and Eastbound H-1 Ramps during both construction and operational activities. The analysis described herein depicts a “worst-case” scenario. It is likely that actual traffic impacts would be minimal. Traffic consultants concluded that mitigation was not necessary; however, once construction plans and schedules are complete, the following options can be considered:

- Encourage staggered work shifts;
- Encourage the use of work shifts during off-peak hours;
- Encourage construction work-force car-pooling;
- Offer bus or shuttle service from remote parking;

- Provide a temporary traffic control officer at the unsignalized intersection of Kalaeloa and Farrington (Intersection 1) during the peak hours of the peak construction month(s);
- Provide temporary traffic control officer(s) at other unsignalized intersections on an as needed basis, during peak hours of the peak construction month(s); or
- Investigate use of Barber's Point Port for unloading, rather than the Port of Honolulu, in order to minimize distances traveled by delivery vehicles and keep deliveries within the industrial zone surrounding H-POWER and the Barber's Point Port.

It should be noted that the construction impacts to Kalaeloa should only occur during the AM and PM peak hours, are temporary in nature, and should not cause any long-term traffic congestion impacts. In addition, since adequate construction parking will be provided at the parcels proposed for temporary construction laydown and parking, no mitigation regarding construction parking will be required.

5.2.5 Traffic Impacts Due to Projected Growth in the JCIP

Although JCIP is almost completely developed, limited growth of the JCIP area may have an impact on traffic conditions during construction and operation of the proposed Expansion. Actual projected growth numbers were unavailable for JCIP, however growth rates for Kapolei and Ewa were reported as follows in several source documents, including City of Kapolei, Moving Kapolei Forward. http://www.kapolei.com/pdf/news/Moving%20Kapolei%20Forward.pdf; Kapolei Magazine. http://www.kapolei.com/pdf/magazine/MovingKapoleiForward.pdf; Kapolei Quick Facts. http://www.kapolei.com/quick_facts.cfm?quickFactID=16; …ID-21; and Oahu Metropolitan Planning Organization. Oahu Regional Transportation Plan. www.honolulutraffic.com/DraftORTP2030.pdf.

- 6-11% growth/year in jobs in Kapolei
- 5-8% growth/year in population in Kapolei
- 5.6% growth/year in population in Ewa
- 8% growth/year in jobs in Ewa

Due to the minimal growth potential in JCIP itself, AMEC conservatively assumed that the JCIP would expand at a rate of 5% per year. These estimates are likely very optimistic considering the current economic climate. Both Operational and Construction scenarios were evaluated. Growth was compounded annually to 2012 for the Operational scenario and through 2010 for the Construction scenario to coincide with the construction year with peak transient traffic impacts.

5.2.5.1 Traffic Impacts During Facility Operation

Traffic conditions during operation of the expanded facility prior to roadway improvements and in consideration of JCIP growth through 2012 are discussed below. At Intersection 1, the Northbound direction remains an LOS of F. Southbound traffic declines from an LOS of D to an LOS of E when compared to Level of Service Analysis During Operation Following Expansion (Section 5.2.2). Intersection 2 in the Eastbound, AM analysis declines from an LOS of E to F. Eastbound PM changes from an LOS of B to C. Intersection 3 Southbound conditions remained a LOS of F in the AM hours, but declined from an LOS of B to C in the PM. AM Westbound traffic remained an LOS of F. PM traffic declined from an LOS of C to E. At Intersection 4, a slight decline in the Southbound AM traffic is observed with an LOS change from A to B. Eastbound AM and PM both show a decline from an LOS of C to D and C to F, respectively. Overall there is a slight impact to traffic conditions when potential growth of JCIP (at 5% per year) is considered.

TABLE 5.2-9 LEVEL OF SERVICE ANALYSIS DURING OPERATION FOLLOWING EXPANSION WITH PROJECTED GROWTH TO 2012 PRIOR TO ROADWAY IMPROVEMENTS

Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (342 sec)**	***E (40 sec)***	A(0)	A(0)
PM Peak	**F (>1000 sec)**	***E (41 sec)***	A(0)	A(0)

Intersection 2: Kalaeloa + Eastbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0 sec)	A(0 sec)	***F (64 sec)***	n/a
PM Peak	A(0 sec)	A(0 sec)	*C (15 sec)*	n/a

Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B (15 sec)	**F (220 sec)**	B (13 sec)	**F (206 sec)**
PM Peak	**F (323 sec)**	*C (24 sec)*	B (13 sec)	***E (58 sec)***

Intersection 4: Kalaeloa + Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A (10 sec)	*B (11 sec)*	*D (48 sec)*	B (12 sec)
PM Peak	B (17 sec)	B (10 sec)	***F (100 sec)***	B (12 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Traffic conditions during operation of the expanded facility following roadway improvements and in consideration of JCIP growth through 2012 are discussed below. At Intersection 1, the Northbound direction remains an LOS of F. Southbound AM and PM traffic declines from an LOS of D to an LOS of E when compared to Traffic Impacts During Facility Operation Post Kalaeloa Roadway Improvements (Section 5.2.4.1). Intersection 2 in the Eastbound, declines from an LOS of E to F in the AM and from B to C in the PM. At Intersection 3, a slight decline in the Southbound traffic is observed with an LOS change from C to D in the AM and B to C in the PM. Northbound PM traffic also has a slight decline from C to D. Westbound AM and PM have a sharp decline from an LOS of C to F. Intersection 4 Northbound PM has a slight decline from an LOS of B to C. Southbound conditions also slightly declined from an LOS of A to B. Eastbound PM declined from C to D, where AM improved from D to C. This isolated improvement at Intersection 4 may be attributed to the Highway Capacity Software redistribution of signal times. Traffic for the intersection should be viewed as a whole. Overall a decline in LOS is observed when JCIP growth is considered. However, traffic conditions are alleviated to some degree when roadway improvements of Kalaeloa are completed.

TABLE 5.2-10 LEVEL OF SERVICE ANALYSIS DURING OPERATION FOLLOWING EXPANSION WITH PROJECTED GROWTH TO 2012 AFTER ROADWAY IMPROVEMENTS

Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (342 sec)**	***E (40 sec)***	A (0 sec)	A (0 sec)
PM Peak	**F (>1000 sec)**	***E (41 sec)***	A (0 sec)	A (0 sec)

Intersection 2: Kalaeloa + Eastbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A (0 sec)	A (0 sec)	***F (67 sec)***	n/a
PM Peak	A (0 sec)	A (0 sec)	*C (16 sec)*	n/a

Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	C (29 sec)	*D (50 sec)*	B (16 sec)	***F (87 sec)***
PM Peak	*D (47 sec)*	*C (24 sec)*	B (15 sec)	***F (98 sec)***

Intersection 4: Kalaeloa + Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B (15 sec)	*B (12 sec)*	*C (30sec)*	B (13 sec)
PM Peak	*C (23 sec)*	B (14 sec)	*D (39 sec)*	B (12 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

5.2.5.2 Traffic Impacts During Facility Construction

Traffic conditions during construction of the expanded facility prior to roadway improvements and in consideration of JCIP growth through 2012 are discussed below. Increases due to construction personnel and construction vehicles are discussed separately. Month 13 baseline traffic was used as the peak traffic month due to truck increases during the construction period, while Month 22 baseline traffic was used as the peak traffic month due to increases in personnel.

Construction Vehicle Increases – Month 13

At Intersection 1, the Northbound direction remains an LOS of F. LOS designations for the other directional traffic remains the same at this intersection when compared to Level of Service Analysis During Facility Construction (Section 5.2.3). Intersection 2 in the Eastbound, AM analysis declines from an LOS of C to E. Intersection 3 Westbound conditions slightly declines in the AM and PM from an LOS of E to F and C to D, respectively. At Intersection 4, a decline in the Eastbound PM traffic from an LOS of C to E is observed.

TABLE 5.2-11 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION (CONSTRUCTION VEHICLE INCREASES) WITH PROJECTED GROWTH TO 2010

Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (106 sec)**	D (30 sec)	A(0)	A(5 sec)
PM Peak	**F (>1000 sec)**	D (33 sec)	A(0)	A(3 sec)

Intersection 2: Kalaeloa + Eastbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	*E (43 sec)*	n/a
PM Peak	A(0)	A(0)	B (14 sec)	n/a

Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B (14 sec)	**F (137 sec)**	B (13 sec)	***F (130 sec)***
PM Peak	**F (229 sec)**	B (17 sec)	B (13 sec)	*D (39 sec)*

Intersection 4: Kalaeloa + Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A (9 sec)	A (8 sec)	C (30 sec)	B (12 sec)
PM Peak	B (16 sec)	A (10 sec)	***E (56 sec)***	B (11 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Construction Personnel Increases – Month 22

At Intersection 1, the Northbound direction remains an LOS of F. LOS designations for the other directional traffic remains the same when compared to Level of Service Analysis During Facility Construction (Section 5.2.3). Intersection 2 in the Eastbound, AM analysis declines from an LOS of D to E. Intersection 3 Westbound conditions slightly decline in the AM and PM from an LOS of E to F and C to D, respectively. At Intersection 4, a decline in the Eastbound PM traffic from an LOS of C to E. Overall there is a slight impact to traffic conditions assuming a JCIP growth rate of 5% per year.

TABLE 5.2-12 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION (CONSTRUCTION PERSONNEL INCREASES) WITH PROJECTED GROWTH TO 2010

Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (106 sec)**	D (30 sec)	A(0)	A(5 sec)
PM Peak	**F (>1000 sec)**	D (32 sec)	A(0)	A(3 sec)

Intersection 2: Kalaeloa + Eastbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	***E (43 sec)***	n/a
PM Peak	A(0)	A(0)	A (14 sec)	n/a

Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	B (13 sec)	**F (145 sec)**	B (13 sec)	***F (131 sec)***
PM Peak	**F (237 sec)**	B (17 sec)	B (13 sec)	*D (39 sec)*

Intersection 4: Kalaeloa + Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A (9 sec)	A (9 sec)	C (29 sec)	B (12 sec)
PM Peak	B (16 sec)	A (10 sec)	***E (58 sec)***	B (11 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Traffic conditions during construction of the expanded facility following roadway improvements and in consideration of JCIP growth through 2012 are discussed below. Increases due to construction personnel and construction vehicles are discussed separately.

Construction Vehicle Increases – Month 13

Conditions at Intersection 1 and 2 remain the same when compared to Traffic Impacts During Facility Construction Post Kalaeloa Roadway Improvements (Section 5.2.4.2). Intersection 3 Northbound AM and PM conditions decline slightly from an LOS of B to C for both. Southbound AM conditions decrease to an LOS of D from C. Westbound conditions decline in the AM and PM from an LOS of D to E for both. At Intersection 4, slight decline a decline in the Northbound AM traffic from an LOS of A to B and in Eastbound PM traffic from an LOS of C to D.

TABLE 5.2-13 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION (CONSTRUCTION VEHICLE INCREASES) FOLLOWING EXPANSION WITH PROJECTED GROWTH TO 2010 AFTER ROADWAY IMPROVEMENTS

Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (106 sec)**	D (30 sec)	A(0)	A(5 sec)
PM Peak	**F (>1000 sec)**	D (33 sec)	A(0)	A(3 sec)

Intersection 2: Kalaeloa + Eastbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	**E (45 sec)**	n/a
PM Peak	A(0)	A(0)	B (15 sec)	n/a

Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	*C (22 sec)*	*D (25 sec)*	B (16 sec)	***E (60 sec)***
PM Peak	*C (26 sec)*	B (18 sec)	B (15 sec)	***E (60 sec)***

Intersection 4: Kalaeloa + Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	*B (11 sec)*	A (8 sec)	*D (40 sec)*	B (15 sec)
PM Peak	B (18 sec)	B (12 sec)	C (31 sec)	B (12 sec)

*Bolded items either "At Capacity" (LOS E) or "Forced Flow" (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Construction Personnel Increases – Month 22

Conditions at Intersection 1 and 2 remain the same when compared to Traffic Impacts During Facility Construction Post Kalaeloa Roadway Improvements (Section 5.2.4.2). Intersection 3 Northbound PM conditions decline slightly from an LOS of B to C. Westbound conditions decline in the AM and PM from an LOS of D to E for both. At Intersection 4, slight decline a decline in the Northbound AM traffic from an LOS of A to B and in Eastbound PM traffic from an LOS of C to D.

TABLE 5.2-14 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION (CONSTRUCTION PERSONNEL INCREASES) FOLLOWING EXPANSION WITH PROJECTED GROWTH TO 2010 AFTER ROADWAY IMPROVEMENTS

Intersection 1: Kalealoa + Farrington/Westbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (106 sec)**	D (30 sec)	A(0)	A(5 sec)
PM Peak	**F (>1000 sec)**	D (33 sec)	A(0)	A(3 sec)

Intersection 2: Kalealoa + Eastbound H1 Ramps

	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	**E (45 sec)**	n/a
PM Peak	A(0)	A(0)	B (15 sec)	n/a

Intersection 3: Kalealoa + Honolulu Advertiser Bldg. (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	C (22 sec)	C (24 sec)	B (16 sec)	***E (59 sec)***
PM Peak	*C (25 sec)*	B (18 sec)	B (15 sec)	***E (59 sec)***

Intersection 4: Kalealoa + Malakole (Signal)

	Northbound	Southbound	Eastbound	Westbound
AM Peak	*B (12 sec)*	A (8 sec)	*D (39 sec)*	B (15 sec)
PM Peak	B (18 sec)	B (12 sec)	C (31 sec)	B (11 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

As with Operational traffic, projected growth of the JCIP does negatively impact traffic conditions during Construction activities (truck and personnel increases). However, roadway improvements that are currently underway assist in alleviating some of the congestion. Mitigation options discussed in Section 5.2.4.3 could also further reduce impacts of JCIP growth and the proposed Expansion to the area.

5.3 Noise

AMEC has assessed the effect that the Expansion might have upon the noise environment of the Campbell Industrial Park (JCIP) in which the H-POWER facility and its industrial neighbors are located. This section summarizes the results of that study. Noise standards are presented, baseline noise conditions are described, anticipated impacts are evaluated and the potential for mitigation is discussed. The anticipated effects from temporary construction activities as well as operation of the Expansion are evaluated.

5.3.1 Noise Standards

Various local and federal agencies have established guidelines and standards for assessing environmental noise impacts. The applicable guidelines and standards are summarized below.

Community Noise Control Rule

The Hawaii Department of Health (HDOH) Community Noise Control Rule (HAR Chapter 11-46) defines three classes of zoning districts (A, B, and C) and specifies corresponding maximum permissible sound levels due to stationary noise sources (Table 5.3-1). Sound levels for “A” districts are more restrictive while sound levels for “C” districts are least restrictive. These levels may be enforced by the HDOH for any location at or beyond the property line. More specifically, the HDOH rule states that the specified noise levels shall not be exceeded for more than 10% of the time during any 20-minute period. The noise limits are a function of the zoning and time of day. Industrial districts are classified as “C” and both day and nighttime noise limits are 70 dBA. H-POWER is industrially zoned and is therefore subject to the 70 dBA guideline.

TABLE 5.3-1 COMMUNITY NOISE CONTROL RULE: MAXIMUM PERMISSIBLE SOUND LEVELS

ZONING DISTRICT	DAY HOURS (7 AM TO 10 PM)	NIGHT HOURS (10 PM TO 7 AM)
Class A		
Residential, Conservation, Preservation, Public Space, Open Space	55 dBA(1)	45 dBA
Class B		
Multi-Family Dwellings, Apartments, Business, Commercial, Hotel, Resort	60 dBA	50 dBA
Class C Agriculture, County, Industrial	70 dBA	70 dBA

(1) dBA – A-weighted sound level or unit of measurement describing the total sound level of all noises as measured with a sound level meter using the "A" weighting network. dB (decibel) – Unit for measuring the volume of sound.

In determining the maximum permissible sound level, the HDOH considers the ambient (existing) noise level. In general, if the background noise levels are less than 5 dB from the given criteria then the threshold can be increased by 3 dBA (as indicated in HAR Chapter 11-46). If the background level is equal to the given criteria, the new threshold is +5 dBA. Background/ambient noise levels in the JCIP area range from 55-69 dBA. Thus, the accepted HDOH maximum permissible noise threshold for the H-POWER facility is 73 dBA (70 dBA + 3 dBA). The background sound measurement assessment is described in Section 5.3.2. Background measurement locations are depicted in Figure 5.3-1.

Exceedances of the HDOH Community Noise Rules values are determined via comparison of the maximum permissible sound levels detailed above to a site-specific LN10 value calculated over a specified time period. The LN10 is a statistically-based value of sound or noise that represents the sound level that is exceeded for 10% of the measurement time. Thus, for this evaluation, the community noise rule value of 73 db was compared to the maximum LN10 for any 20-minute time period.

To calculate the maximum 20-minute LN10, this assessment utilized the 1 minute average noise levels as reflected by LEQ data (1-minute average). The maximum 20-minute LN10 is the sound level that is exceeded by the two highest 1-minute LEQs during the worst case 20-minute period.

$$L_{eq} = 10\log\left[\frac{1}{t_2 - t_1}\int_{t_1}^{t_2} \frac{p_A^2}{p_0^2} dt\right]$$

Where:

- Leq = equivalent continuous sound pressure level [dB]
- p0 = reference pressure level = 20 µPa
- pA= acquired sound pressure in Pa
- t1 = start time for measurement
- t2 = end time for measurement

Construction Noise Rule

The HDOH also regulates temporary noise due to construction activities. In cases where construction noise exceeds, or is expected to exceed, the State's "maximum permissible" property line noise levels (described above), a permit must be obtained from the HDOH to allow the operation of vehicles, cranes, construction equipment, power tools, etc., which emit noise levels in excess of the "maximum permissible" levels. A HDOH noise permit does not limit the noise *level* generated at the construction site, but rather the *times* at which noisy construction can take place. Specifically, permit restrictions for construction activities (HAR 1996) are:

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BACKGROUND NOISE MEASUREMENT LOCATIONS

FIGURE 5.3-1

Figure 5.3-1 back side

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NOISE MEASUREMENT LOCATIONS

FIGURE 5.3-2

Figure 5.3-2 back side

"No permit shall allow any construction activities which emit noise in excess of the maximum permissible sound levels ... before 7:00 a.m. and after 6:00 p.m. of the same day, Monday through Friday."

"No permit shall allow any construction activities which emit noise in excess of the maximum permissible sound levels... before 9:00 a.m. and after 6:00 p.m. on Saturday."

"No permit shall allow any construction activities which emit noise in excess of the maximum permissible sound levels on Sundays and on holidays."

5.3.2 Existing Baseline Conditions Assessment

This section describes the current existing noise levels at the H-POWER site as well as current existing background noise in the JCIP area.

H-POWER Site: Continuous ambient (existing) noise level measurements were conducted at eight locations around the H-POWER Facility; two at the north property line, three at the south property line, one at the western property line and two within the perimeter of the H-POWER site (Figure 5.3-2, Noise Measurement Locations). Measurements were conducted on August 11, 2008 between 5:30 am and 5:30 pm. Quest Model 2900 Integrating/Datalogging Sound Level Meters were used. At each measurement location, the Quest Sound Level Meter was propped approximately 5' above grade. A windscreen covered the microphone during the entire measurement period. Continuous, LEQ, A-weighted measurements were recorded over the measurement period. Summarized data are presented in Table 5.3-2. Noise measurement data are presented in Appendix D.

Background: Noise measurements were also taken from within the JCIP area to determine a background range of noise for comparison. Background noise measurements were taken on July 15, 2008 between 8:00 am and 5:00 pm. Casella CEL-490 Real Time Sound Level Meters were used. At each measurement location, the Casella Sound Level Meter was held approximately 5' above grade. A windscreen covered the microphone during the measurement period. Measurements were obtained from the instrument after a period of 15 minutes at each location. Noise measurements ranged between 55 dBA to 68 dBA within JCIP (see Appendix D). At the outer fringe of JCIP the noise measurements ranged between 50 dBA and 66 dBA.

TABLE 5.3-2 RESULTS AND NOISE SOURCES: H-POWER FACILITY

LOCATION	LEQ[1]	MAX LN10[3]	MAX LN10 TIMEPERIOD	LEQ RANGE	NOISE SOURCES	
	(dBA)[2]	(dBA)		(dBA)	PRIMARY	SECONDARY
1	67	***81***	***16:50 – 17:10***	***52-87***	***HECO & Metal Separation***	***H-POWER Activities, Vehicle Traffic, Miscellaneous Industrial Activities***
2	70	***78***	***05:30 – 05:50***	***66-81***	***HECO & Metal Separation***	***H-POWER Activities, Vehicle Traffic, Miscellaneous Industrial Activities***
3[4]	75	80	05:50 – 06:10	73-81	Cooling Tower	H-POWER Activities, Miscellaneous Industrial Activities
4	***77***	***80***	***05:30 – 05:50***	***58-80***	***AES, H-POWER MSW combustion, steam turbine, HD exhaust fans***	***Vehicle Traffic, Miscellaneous Industrial Activities***
5	***77***	***79***	***07:50 – 08:10***	***63-79***	***AES, H-POWER MSW combustion, steam turbine, HD exhaust fans***	***Vehicle Traffic, Miscellaneous Industrial Activities***
6	**71**	***81***	***06:30 – 06:50***	***68-87***	***AES, H-POWER activities***	***Vehicle Traffic, Miscellaneous Industrial Activities***
7[4]	65	80	09:50 – 10:10	56-82	H-POWER activities, Vehicle Traffic	AES, Miscellaneous Industrial Activities
8	70	***76***	***05:30 – 05:50***	***58-78***	***Cooling Tower***	***H-POWER Activities, Miscellaneous Industrial Activities***

* Bolded and italicized locations exceed the HDOH noise criteria (with background taken into account) for Class C districts.

(1) LEQ – Equivalent Sound Level. Computed by Sound Level Meter for each minute.12-hour averages of 1-minute LEQs are shown.

(2) dBA – A-weighted sound level or unit of measurement describing the total sound level of all noises as measured with a sound level meter using the “A” weighting network. dB (decibel) – Unit for measuring the volume of sound.

(3) LN10 – Sound level that is exceeded for 10% of any specified time period. In this case, the relevant time period is 20 minutes. The maximum 20 minute LN10 is the sound level that is exceeded by the two highest 1-minute LEQs during the worst case 20-minute period.

(4) The LN10 standard for Locations 3 and 7 are not applicable as the standard is only relevant at the perimeter of the property.

5.3.2.1 Selection of Noise Measurement Locations (H-POWER Site)

Noise measurement locations at the H-POWER site were selected to give a representative depiction of noise for the Site as a whole (Figure 5.3-2).

Location 1: Location 1 was positioned along the north H-POWER property line approximately 450 feet west of the east property line.

Location 2: Location 2 was positioned mid-point along the north H-POWER property line approximately 875 feet west of the east property line and 875 feet east of the west property line.

Location 3: Location 3 was positioned between the cooling towers and the Existing RDF Storage Area building approximately 375 feet east of the west H-POWER property line, 400 feet south of the north H-POWER property line and 400 feet north of the south H-POWER property line.

Location 4: Location 4 was positioned along the south H-POWER property line approximately 250 feet east of the west H-POWER property line.

Location 5: Location 5 was positioned mid-point along the south H-POWER property line approximately 875 feet east of the west H-POWER property line and 875 feet west of the east H-POWER property line.

Location 6: Location 6 was positioned along the south H-POWER property line approximately 450 feet west of the east H-POWER property line.

Location 7: Location 7 was positioned between the H-POWER parking lot and the front of the H-POWER office building approximately 300 feet from the east H-POWER property line, 235 feet from the north H-POWER property line and 400 feet north of the south H-POWER property line.

Location 8: Location 8 was positioned on City & County of Honolulu property 30 feet west of the western H-POWER property line mid-point between the north and south H-POWER property lines.

5.3.2.2 Existing/Baseline - Noise Measurement Results

As noted above, continuous current ambient (existing) noise levels were measured at eight locations, along the H-POWER north, south, east, and west property lines. Current conditions include noise contributions from H-POWER as well as other surrounding industrial facilities, traffic, aircraft flyovers, etc. These may or may not have been present when the H-POWER facility was designed and constructed. The numerical results are summarized below and in Table 5.3-2. Also provided are likely noise contributors at each location.

5.3.2.3 Noise Contributors at Each Location

Location 1 and 2: Maximum noise levels along the north property line bordering the HECO property (Locations 1 and 2) were 87 and 81 dBA (LEQ 1-minute average), respectively. The high maximum noise levels at these locations can be attributed to their close proximity to the

H-POWER metal separating equipment located within the Existing Load-out Area building. However, the metal separating equipment is not operated continuously and consequently; the noise level at this boundary and these specific locations is dynamic and variable. The 20-minute maximum LN10 values at Locations 1 and 2 were 81 and 78 dBA, respectively. These values exceed the HDOH Community Noise Rule limit of 73 dBA for any 20-minute time period.

Location 3: Noise levels at Location 3 ranged from 73 to 81 dBA (LEQ 1-minute average). This sampling location is directly proximate to the H-POWER cooling towers and is located within the H-POWER site between the cooling towers and the existing RDF Storage Area building. As this sampling location is not at the perimeter, the LN10 standard is not applicable.

Locations 4, 5 and 6: Noise levels at Locations 4 through 6 ranged from 58 to 87 dBA (LEQ 1-minute average). These locations are situated west to east along the AES Hawaii – H-POWER property line. Noise contributors include the AES Hawaii Coal Plant facility, H-POWER MSW combustors, steam turbine and HD exhaust fans. Maximum LEQ (1-minute average) values were 80, 79, and 87 dBA, respectively. 20-minute maximum LN10 values at these locations were 80, 79 and 81, dBA, respectively. These locations exceed the HDOH Community Noise Rule Maximum Permissible LN10 level of 73 dBA.

Location 7: On the eastern perimeter of the site (Location 7), vehicular truck traffic was determined to be the greatest contributor to area noise. Noise levels at this location ranged from 56 to 82 dBA (LEQ 1-minute average), Location 7 is located in the current parking lot of the H-POWER Site. As this sampling location is not at the perimeter, the LN10 standard is not applicable.

Location 8: Location 8 is located at the far western end of the Site. Noise at this location can be attributed to the nearby cooling towers. Noise in the area ranged from 58 to 78 dBA (LEQ 1-minute average). The 20-minute maximum LN10 value at this location was 76 dBA. This value exceeds the HDOH Community Noise Rule limit of 73 dBA for any 20-minute time period.

5.3.2.4 Comparison to Regulatory Standards

Data collected from the field investigation were compared to the HDOH Community Noise Rules. The following describes the results of the areas exceeding the HDOH Community Noise Rules.

Community Noise Rules Comparison

As discussed above, the HDOH Community Noise Rules threshold for the H-POWER facility is 73 dB. At 73 dBA, all perimeter measurement locations operating under current conditions (i.e., without the Expansion) exceed the HDOH noise threshold for Class C industrial areas.

As noted in Figure 5.3-2, Location 3 is positioned within the interior of the H-POWER site between the cooling towers and the existing RDF Storage Area building; Location 7 is located within the current facility parking lot. As these are not perimeter sample locations, the HDOH Community Noise Rule does not apply. The community noise rules are only pertinent at locations at or beyond the property line.

Measurement locations 1 and 2 are situated along the northern boundary of the H-POWER property line. The northern boundary is completely bounded by the HECO site to the north. Locations 4, 5 and 6 are all situated along the AES Hawaii – H-POWER property line. AES Hawaii is a large coal burning power plant and provides the Hawaiian Electric Company (HECO) with over 189 megawatts of electricity annually. HECO operations to the north and AES Hawaii operations to the south are highly industrial in nature and noise contributions from these facilities are likely (or will be likely in the future as in the case of the planned HECO Biodiesel plant) to be significant contributors to noise at the H-POWER Site. Unfortunately, it is not feasible to determine the magnitude of the current and future noise contributions from these facilities because AES Hawaii and H-POWER operate 24 hours per day, 7 days per week.

Location 8 is situated on the City and County property to the west near the H-POWER property line. Noise contributions at this location can almost solely be attributed to the impact of the H-POWER cooling towers.

As the intent of the HDOH community noise rule is to protect public health and welfare and to prevent significant degradation of the environment and quality of life, the exceedances identified by this study are not considered significant. Locations 1 and 2 (i.e., the north property line) is completely bounded by a future HECO Biodiesel facility. Meter locations 4, 5 and 6 (the south property line) is bounded completely by the AES Hawaii, also a highly industrial facility. Additionally, JCIP in its entirety is comprised of industrial facilities only. Although exceedances are observed at all property boundaries the closest residences are over a mile away and would not be impacted by H-POWER noise. No significant degradation of the environment and quality of life is anticipated.

5.3.3 Impacts of the Expansion and Mitigation

The noise impacts from the Expansion will consist of temporary increases during construction as well as permanent operational effects once the Expansion is completed. Since these construction and operational impacts are anticipated to differ, they are addressed separately below.

5.3.3.1 Construction Impacts and Mitigation

Development of project areas will involve excavation, grading and traffic from the associated trucks, cranes and other types of heavy equipment necessary for these construction activities. The various construction phases of the project may generate significant, but temporary, amounts of noise. The actual noise levels produced during construction will be a function of the methods employed during each stage of the construction process.

Noise due to construction equipment falls under the terms and conditions of a HDOH- issued noise permit. Such a permit allows noisy construction activities to take place during the daytime hours (see the specific hours referenced above). However, any activities that require overnight operation or operation outside of the permit hours, such as water pumps or electric generators for lights, must meet the State's maximum permissible sound limits for a "C" class industrial zoning district. Temporary enclosures or barrier walls may be required to adequately mitigate noise from such equipment if it is planned for use. If it is not feasible or practical to meet the State's noise limits, the Contractor may apply for a noise variance with the HDOH. As noted in

Section 3, a Construction Noise Permit is required and will be obtained through the HDOH Indoor and Radiological Health Branch prior to construction of the proposed Expansion.

5.3.3.2 Operational Impacts and Mitigation

The installation of the H-POWER Expansion equipment will likely increase noise levels in the immediate vicinity of the new equipment. However, a significant increase in noise level is not expected at the H-POWER property lines. The specifications associated with the proposed Expansion specify that the noise radiated from any equipment will be less than or equal to 80 dB at a distance of one (1) meter from the equipment and less than or equal to 60 dB at a distance of 50' from the equipment. Specific attention will be paid to outside areas and equipment such as cooling towers, fans, rappers, air cooled condensers and ducts, steam pipes, relief valves, safety valves, ash handling equipment, etc. and to continuously occupied spaces such as administrative buildings and control rooms.

5.4 Visual Resources

This section discusses the existing visual environment in the region surrounding the H-POWER Facility. Baseline conditions are presented and the methodology for selection of potential vantage points from which to evaluate impacts is discussed. The potential impacts of the Expansion project upon regional viewsheds are identified, and proposed mitigation measures described.

5.4.1 Existing Conditions - Visual Environment

The H-POWER Facility is located in a developed industrial area. As noted in Chapter 1, the current H-POWER facility is located adjacent to existing industrial buildings and structures, comprised of the AES coal-fired power plant to the south, HECO parcels to the east and north, a Chevron tank farm to the north, and a HECO substation to the east. West of the H-POWER site lies currently undeveloped but industrially zoned parcels that are proposed for use as temporary construction laydown. All of these neighboring industrial facilities sites are located within the JCIP. As previously shown on Figure 1.8-3, Zoning, most of the area within 1-mile of the site is zoned I-2 Intensive and is currently in industrial use.

5.4.2 Selection of Viewshed Locations

Due to the industrial nature of the JCIP, existing views from proximate locations are heavily industrial. The visual receptors, comprised of nearby industrial locations, are therefore not expected to be sensitive to a changed industrial view in the way that residential or recreational visual receptors might be. Therefore, in order to assess the potential visual impacts associated with the proposed Expansion, visual receptors at various distances and elevation were specifically selected in an effort to gauge impacts to the more sensitive viewers. Topographic maps and aerial photography were reviewed and a “windshield” reconnaissance conducted to select locations on the basis of residential and recreational areas that have existing views of H-POWER. Five representative locations (viewsheds), identified below and shown on Figure 5.4-1, were selected. A sixth “birds-eye view” rendering of the existing H-POWER facility was generated so as to provide a vantage point from which the proposed facility modifications could best be viewed and compared to existing condition. Lastly, four aerial photographs are shown that depict what the proposed expansion will look like from the air.

LEGEND

1 VIEWSHED PHOTO LOCATION & NUMBER

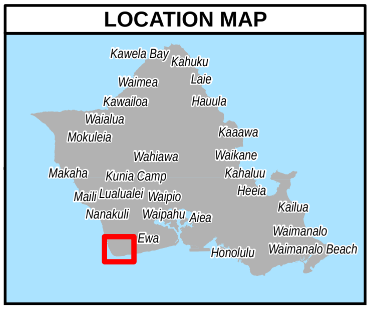
H1 FREEWAY

FARRINGTON HWY

SITE BOUNDARY

CONSTRUCTION LAYDOWN AREA

LOCATION MAP



NOTES & SOURCES
MAP COORDINATES
UTM NAD83, ZONE 4N, UNITS METERS
BASEMAP DATA FROM ESRI, 2007

H-POWER EXPANSION
91-174 HANUA ST.
KAPOLEI, HI 96707

N

MILES
0 0.1 0.2 0.3 0.4 0.5

amec

VIEWSHED LOCATIONS

FIGURE 5.4-1

Figure 5.4-1 back side

The adjacent industrial parcels proposed for construction laydown are to be used on a temporary basis for approximately 34 months. Since these vacant parcels are situated within the heavily industrialized JCIP, no significant permanent impact is anticipated and therefore no viewshed analysis was performed. However, some existing vegetation will be cleared at that location and construction equipment and cranes will be used and/or stored at various periods during the 34-month construction period. Upon completion of construction all equipment will be removed and the parcels will be allowed to revegetate, eventually returning to current conditions.

5.4.3 Visual Impact Analysis

The Expansion will consist of the addition of a Mass Burn MWC to the two existing H-POWER RDF combustors. The Expansion will not exceed the height of the existing building and stack. A zoning waiver will be obtained for any~~, and all~~ structures and equipment ~~will be less than~~ exceeding the 60-foot height limit applicable within the Heavy Industrial (I-2) zoning district. The highest building is currently 149 feet, and the highest proposed building is 100 feet. In addition, the highest building at the adjacent AES facility is 161 feet. The current stack is 290 feet, and the proposed stack is 199 feet. In addition, the stack at the adjacent AES facility is 285 feet. The additional square footage will expand the overall coverage of the H-POWER property, bringing the facility buildings closer to the eastern property boundary in proximity to the existing HECO electrical substation. The change is not visually substantial given the size and scale of the existing H-POWER facility and that of its industrial neighbors. In addition, HECO is currently constructing a power generation facility to the north of the H-POWER facility on HECO's southern property boundary. The estimated height of the stacks associated with this new facility is 210 feet. Associated with the new facility is an electrical transmission line that will require 120 foot high structures. The following viewshed analysis is presented to discuss both the scale of the change and the relative impact to potential visual receptors.

Figures 5.4-2 through 5.4-6 present photographs from the selected residential/recreational locations. A 3D rendering software program has been utilized to provide an approximated visualization for each viewshed following completion of the proposed construction. This visualization allows for a pre-construction and post-construction visual comparison to qualitatively determine the visual impacts of the proposed expansion. Table 5.4-1 provides a description of the visual impacts of the proposed expansion for each viewshed.

Figure 5.4-7 is provided, from which a "birds-eye" perspective is shown in order to capture a vantage point from which the proposed modifications are clearly visible and can be compared to existing conditions. As shown on that Figure, the Expansion footprint is oriented on the northeast portion of the existing H-POWER facility. Figures 5.4-8 through 5.4-11 show aerial photographs from different directions with the proposed expansion added to the photograph using computer graphics.

TABLE 5.4-1 VISUAL IMPACTS FOR EACH VIEWSHED

Viewshed No.	Location	Description of Visual Impact
1	Midway Rd & Franklin Ave	The proposed expansion will be visible from this location. However, it is difficult to distinguish the additional structure from the existing H-POWER facility. Visual impact of the proposed expansion is considered very low.
2	Kamokila Park Back Fence	The proposed expansion is clearly visible from this location, the visual impact is considered low due to the presence of many visually similar structures around the Barbers Point area.
3	Nohopaa St & Palailai St	The proposed expansion is visible from this location. The nearby Chevron refinery structures and H-POWER structures appear joined from this perspective. The proposed expansion adds approximately 20% size to the appearance of the combined mass of structures. The proposed stack is visually identifiable. Due to similar structures from this perspective, the visual impact is considered low.
4	Malakole St	The primary objects in view from this perspective are refinery holding tanks. The proposed expansion will add a stack to this visualization. Again, due to the mass of industrial features, the expansion is considered to be of low visual impact.
5	Kapolei Hale, Room 688	The proposed expansion adds a stack to the view from this location. Many similar structures can be on the skyline from this perspective. Again, the expansion is considered to be of low visual impact.

BEFORE VIEW OF SITE PHOTO #1

AFTER VIEW OF SITE PHOTO #1

amec

VIEWSHED 1 – MIDWAY RD & FRANKLIN AVE

FIGURE

5.4-2

Back side of Figure 5.4-2

BEFORE VIEW OF SITE PHOTO #2

AFTER VIEW OF SITE PHOTO #2

amec

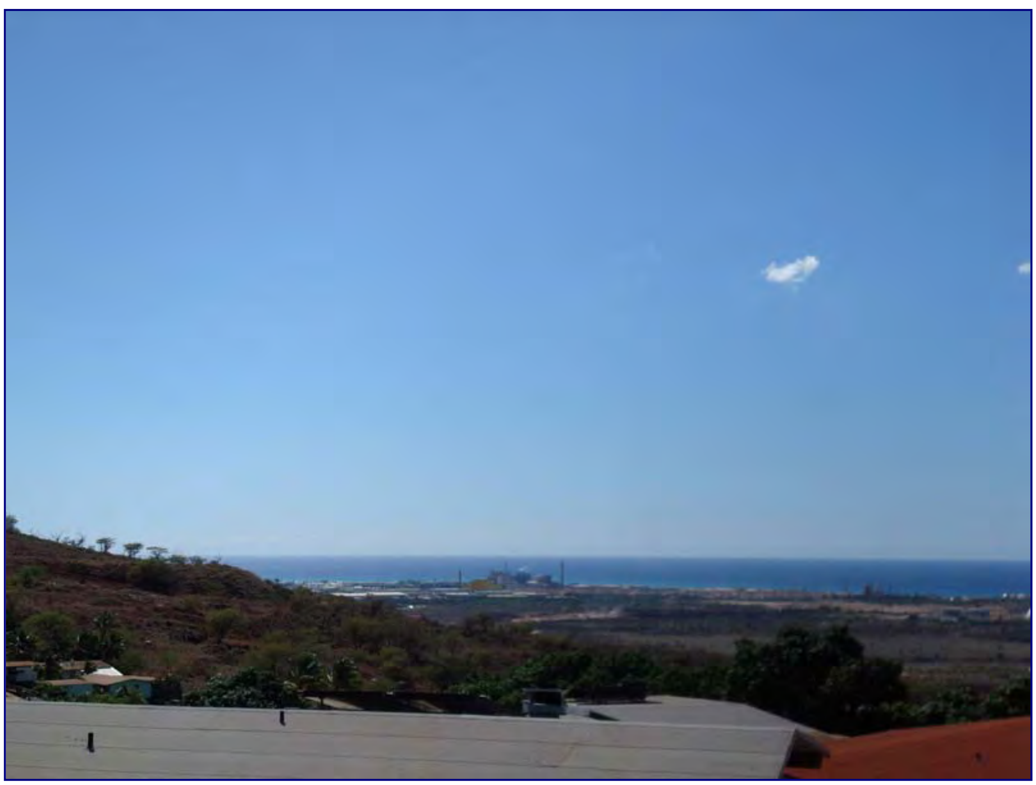
VIEWSHED 2 - KAMOKILA PARK BACK FENCE

FIGURE

5.4-3

Back side of Figure 5.4-3

BEFORE VIEW OF SITE PHOTO #3



AFTER VIEW OF SITE PHOTO #3

Back side of Figure 5.4-4

BEFORE VIEW OF SITE PHOTO #4

AFTER VIEW OF SITE PHOTO #4

amec

VIEWSHED 4 - MALAKOLE ST

FIGURE

5.4-5

Back side of Figure 5.4-5

BEFORE VIEW OF SITE PHOTO #5

AFTER VIEW OF SITE PHOTO #5

VIEWSHED 5 - KAPOLEI HALE, ROOM 688

FIGURE
5.4-6

Back side of Figure 5.4-6

amec

3D SITE RENDERING

FIGURE

5.4-7

Figure 5.4-7 back side

amec

AERIAL VISUALIZATION LOOKING SSE

FIGURE

5.4-8

Figure 5.4-8 back side

AERIAL VISUALIZATION LOOKING NNW

FIGURE
5.4-9

Figure 5.4-9 back side

AERIAL VISUALIZATION LOOKING ENE

FIGURE

5.4-10

Figure 5.4-10 back side

AERIAL VISUALIZATION LOOKING ESE

FIGURE

5.4-11

Figure 5.4-11 back side

5.4.4 Mitigation - Visual Environment

As shown on the viewshed photographs, the Expansion is predominantly obstructed from view or barely distinguishable from the surrounding industrial features from areas that would be considered sensitive. The obstructions generally consist of the existing H-POWER facility and vegetation or other intervening facilities, buildings, structures or terrain. As a result, the Expansion will only be seen clearly from neighboring industrial facilities. Since no significant change to the visual environment will result from the Expansion, the proposed mitigation measures will consist of the following:

- The Expansion façade will be designed to blend with the existing H-POWER facility materials, color, and appearance. This is depicted on Figures 5.4-7 through 5.4-11.
- Upon completion of construction, the area of the Expansion will be landscaped consistent with the existing H-POWER facility. Post-construction, the landscaping will include additional paved/gravel access as well as manicured lawn and drainage swales.
- Upon completion of construction, the adjacent parcels used for temporary construction will be emptied of construction equipment and allowed to revegetate, eventually returning to current conditions.

As depicted in the viewshed photographs taken from regional vantage points, there will be no significant change in views from potentially sensitive viewshed locations.

5.5 Socioeconomics

The potential to impact local socioeconomic resources like population, housing, employment, education (schools), public services, and fiscal resources are addressed in this Section. This section compares the project demands with the existing socioeconomic resources of the affected area. This section also analyzes the impacts of the proposed project on each of these areas.

5.5.1 Definition of Resource

Socioeconomics is defined as the basic attributes and resources associated with the human environment, particularly population and economic activity. Human population is affected by regional birth and death rates as well as net in-or out-migration. Economic activity typically comprises employment, personal income, and industrial growth. Impacts on these fundamental socioeconomic indicators can also influence other components such as housing availability and public services provision.

Socioeconomic data in this section are presented at the county, state, and national level to analyze baseline socioeconomic conditions in the context of regional, state, and national trends. Data have been collected from previously published documents issued by Federal, state, and local agencies and from state and national databases.

5.5.2 Existing Conditions - Socioeconomics

The H-POWER project site is located in JCIP, on the Island of O‘ahu. JCIP is adjacent to Kapolei, approximately 20 miles west of downtown Honolulu.

The Island of O‘ahu is divided into eight planning areas, shown on Figure 5.5-1 and the H-POWER facility is located within ‘Ewa. ‘Ewa is located in The City and County of Honolulu on the southern coast of O‘ahu, between Waipahu and ‘Ewa Beach along Highway 76 near the West Loch of Pearl Harbor, Kapolei, and Kalaeloa Airport ~~Barbers Point Naval Air Station~~. ‘Ewa is part of the Honolulu, Hawaii metropolitan statistical area.

5.5.2.1 Population

From 1980 to 2000, the population of the City and County of Honolulu increased by 14.9 percent, from 762,565 people to 876,156 people (see Table 5.5-1). During the same time period, the State of Hawaii’s population increased by 25.6 percent, and the nation increased by 24 percent (U.S. Bureau of the Census 2000). Approximately 72 percent of Hawaii’s population resides in the City and County of Honolulu.

TABLE 5.5-1 SUMMARY OF POPULATION GROWTH, 1980 - 2000

	1980	1990	2000
‘Ewa*		42,931	67,718
City and County of Honolulu	762,565	836,231	876,156
Hawaii	964,691	1,108,229	1,211,537
United States	226,545,805	248,709,873	281,421,906

Source: U.S. Bureau of the Census 2000
*Census STF1 File, Planning Division, Honolulu Division of Planning and Permitting

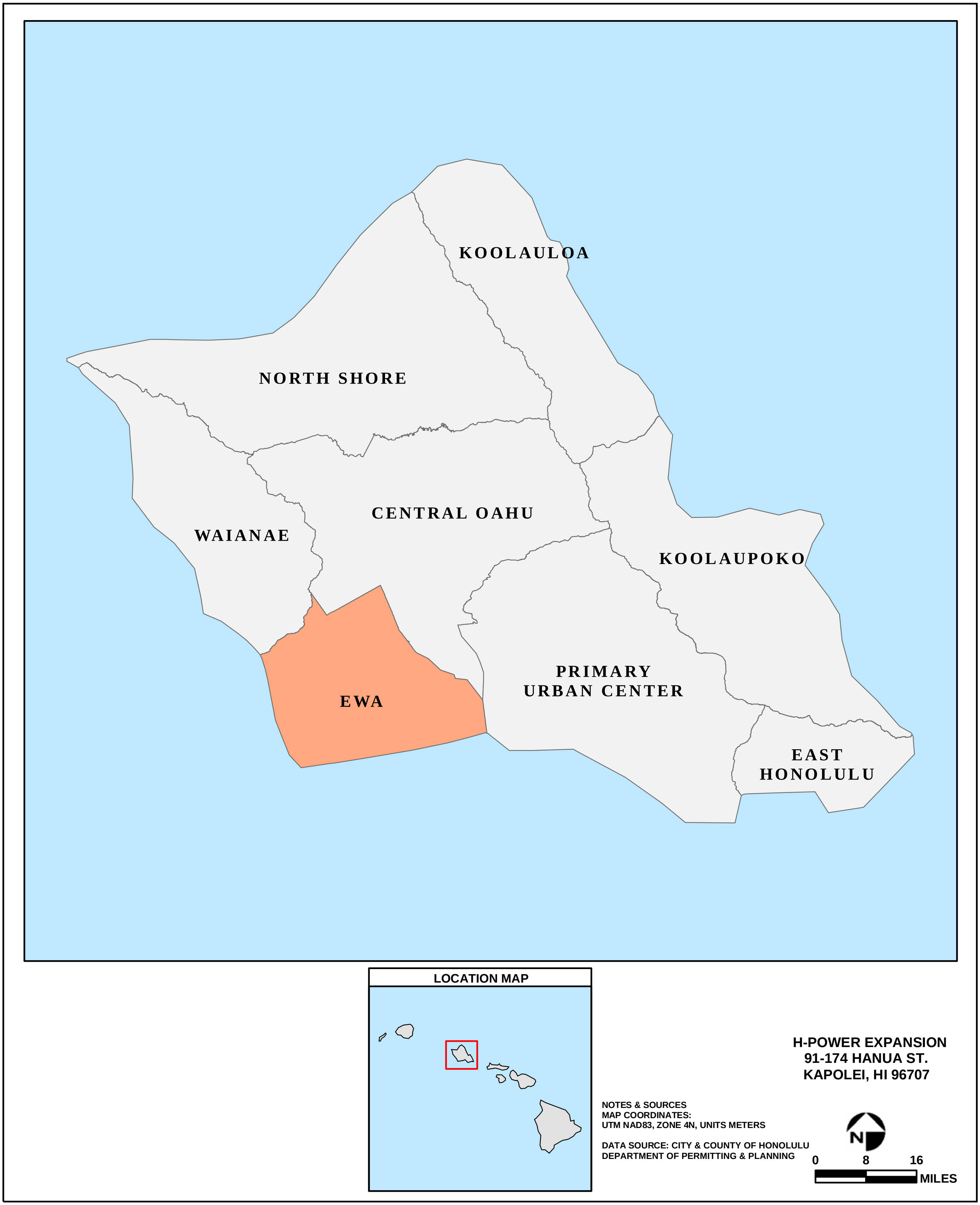
According to *Enterprise Honolulu*, a non-profit economic development organization funded by O‘ahu's private sector, the City and County of Honolulu is expected to reach a population of 964,800 by 2015 and 1,029,800 by 2025.

As part of their directed growth policies, the City and County of Honolulu approved a General Plan that designated ‘Ewa as the Secondary Urban Center for O‘ahu. This urban area will be centered on the Kapolei area and will function as a center for government services and as the focus of major economic activity and housing development. It is projected that population in this urban center will grow from 43,000 in 1990 to 125,000 in 2020. 28,000 new housing units are scheduled to be built during that same time span (City and County of Honolulu DPP 1997; Revised 2000).

5.5.2.2 Job Growth and Unemployment

Employment

Table 5.5-2 presents the distribution of jobs by employment sector in the City and County of Honolulu for 1980, 1990, 2002, and 2006. Employment sectors providing the greatest number



PLANNING REGIONS

FIGURE
5.5-1

Figure 5.5-1 back side

of jobs in 2006 (the most recent year for which these data were available) were Services (42 percent), Government and Government Enterprises (23 percent), Retail Trade (10 percent), and Finance, Insurance, Real Estate (8 percent). Combined, these sectors provide jobs for 83 percent of Honolulu's workforce, which totaled 622,373 people in 2006. Of these employment sectors, from 1980 to 2006, a net increase of 146 percent was experienced in services (increased by 153,371 jobs); a net increase of 6 percent was experienced in government and government enterprises (increased by 7,998 jobs); a net decrease of 23 percent was experienced in retail trade (decreased by 18,110 jobs); and a net decrease of 2 percent was experienced in finance, insurance and real estate (decreased by 1,170 jobs). Mining experienced the most significant percentage increase during the 22-year period, with an increase of 192 percent (increased by 251 jobs) (U.S. Bureau of Economic Analysis [BEA] 2008).

TABLE 5.5-2 CITY AND COUNTY OF HONOLULU EMPLOYMENT BY SECTOR

Employment Sector	1980	1990	2002	2006	Total Change 1980 - 2006
Farm	3,766	3,429	2,978	2,572	-47%
Non-Farm	464,119	559,350	570,411	619,801	34%
Ag. Services, Forestry, & Fishing	2,830	4,192	2,472	1,750	-38%
Mining	131	251	333	382	192%
Construction	21,900	29,251	22,328	31,024	42%
Manufacturing	18,758	17,877	13,299	13,817	-26%
Wholesale Trade	17,636	21,124	16,293	17,438	-1%
Retail Trade	79,552	97,898	57,764	61,442	-23%
Transportation and Public Utilities	27,428	36,897	25,305	27,578	1%
Finance, Insurance, Real Estate	51,603	48,536	45,919	50,433	-2%
Services	105,394	153,052	231,747	258,765	146%
Govt. and Govt. Enterprises	138,887	150,272	143,976	146,885	6%

As shown on Table 5.5-3, Honolulu employment levels increased between 1990 and 2006, experiencing a cumulative increase of 59,594 jobs (11 percent overall increase).

TABLE 5.5-3 ECONOMIC INDICATORS

	1980	1990	2002	2006
City and County of Honolulu				
Total full-time and part-time employment	467,885	562,779	573,389	622,373
Average earnings per job (dollars)	$16,214	$29,231	$39,092	$40,185
Per capita personal income (PCPI)	$11,799	$23,562	$31,707	$39,653
Net earnings	6,935,650	14,756,846	20,098,846	29,223,464
State of Hawaii				
Total full-time and part-time employment	575,172	730,455	772,941	864,393
Average earnings per job (dollars)	$15,922	$27,689	$37,030	$38,775
PCPI	$11,443	$22,186	$29,628	$37,023
Net earnings	8,377,346	18,112,069	25,644,893	37,757,555
United States				
Total full-time and part-time employment	114,231,200	139,380,900	166,500,000	178,332,900
Average earnings per job (dollars)	$15,894	$26,561	$41,017	$41,991
PCPI	$10,114	$19,477	$30,795	$36,714
Net earnings	1,649,427,000	3,292,748,000	6,081,438,000	8,432,719,000

Unemployment

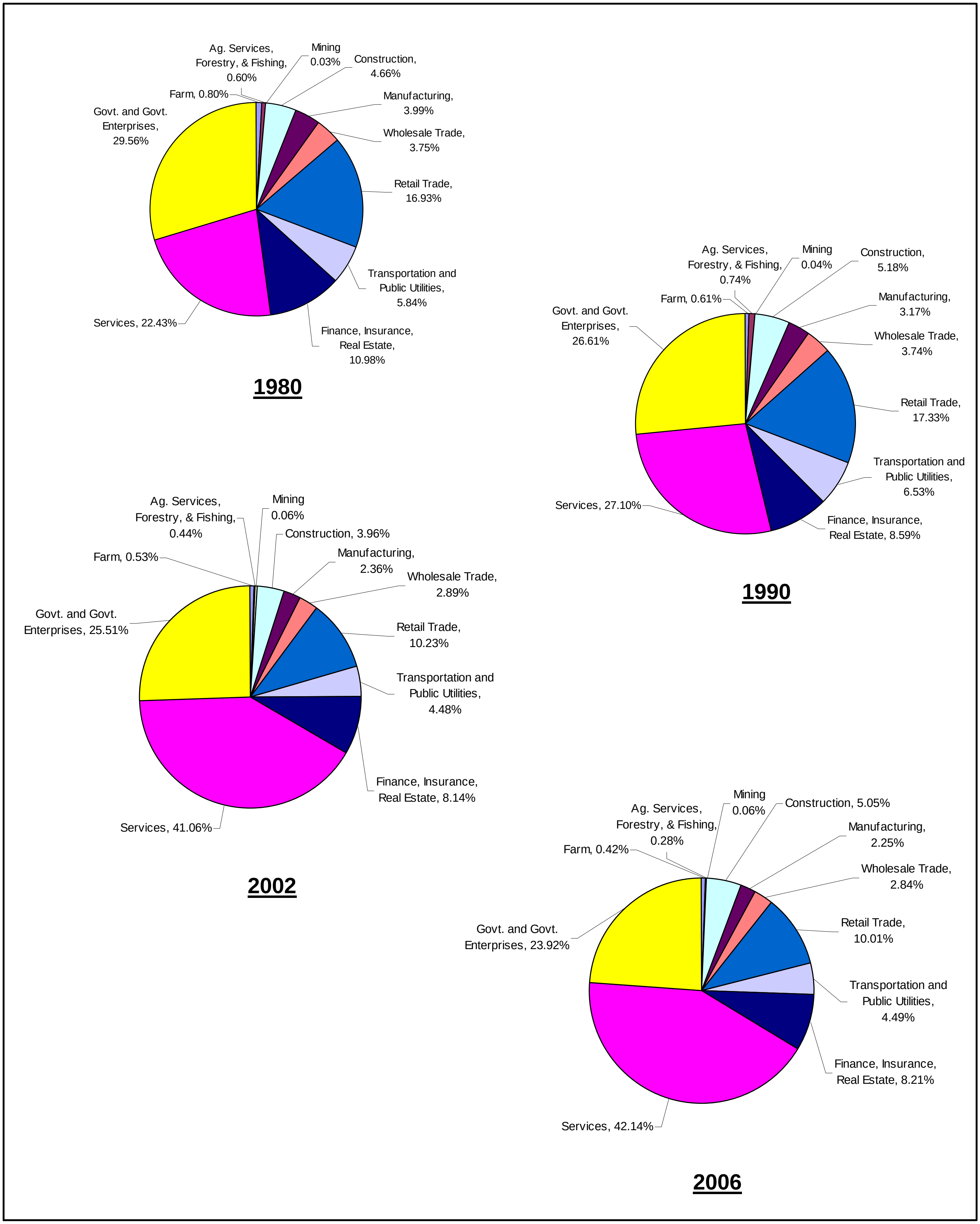
In 2000, the unemployment rate for the City and County of Honolulu was 3.7 percent, 3.8 percent for Hawaii, and 3.7 percent for the nation. In 2003, the unemployment rate was 6.6 percent in the City and County of Honolulu, 6.4 percent for Hawaii, and 7.6 percent in the United States. In 2007, the unemployment rate for the City and County of Honolulu was 2.5 percent, 2.6 percent for Hawaii, and 4.6 percent for the United States (U.S. Bureau of the Census 2000). Comparing state and local unemployment to that of the nation, Hawaii appears to have been slightly buffered against the national increase in unemployment experienced between 2000 and 2003.

Job Composition

Figure 5.5-2 presents the distribution of jobs by employment sector in the City and County of Honolulu for 1980, 1990, 2002, and 2006.

5.5.2.3 Earnings

From 2005 to 2006, The City and County of Honolulu's net earnings increased by 6.2 percent, from $27.5 billion to $29.2 billion; during the same timeframe, the state's net earnings increased by 6.4 percent. The most significant industries in 2006 were *services* (34.4 percent of earnings) and *government and government enterprises* (31.9 percent of earnings). Of *government and government enterprises*, the industry with the largest net earnings was the *military*, which accounted for 11.9 percent of City and County of Honolulu's total net earnings. In 2006, the City and County of Honolulu had a total personal income (TPI) of $35.9 billion. This TPI ranked



amec

DISTRIBUTION OF JOBS

FIGURE **5.5-2**

Figure 5.5-2 back side

highest in the state and accounted for 76 percent of the state total. The 2006 TPI for Honolulu reflected an increase of 6.7 percent from 2005; the 2005-2006 TPI increase statewide was 6.9 percent.

In addition, the City and County of Honolulu had a per capita personal income (PCPI) of $39,653 in 2006. This PCPI ranked highest in the state and was 107 percent of the state average ($37,023) and 108 percent of the national average ($36,714). Honolulu's 2006 PCPI reflected an increase of 6.1 percent from 2005. The 2005-2006 statewide change was 5.9 percent and the national change was 5.6 percent. In 2006, Hawaii had a PCPI of $37,023, which ranked 19th in the United States and reflected an increase of 5.9 percent from 2005 (U.S. BEA 2008).

5.5.2.4 Schools

Hawaii has one school district for the entire state. It has a total of 285 schools and educates 182,818 students annually (http://nces.ed.gov/ccd/schoolsearch/). The office for the Hawaii Department of Education is located in Honolulu. There are seven geographical districts in the Hawaii School District: Honolulu, Central, Leeward, and Windward on O‘ahu; and Hawaii, Maui (including Molokai and Lanai) and Kauai (including Niihau) on the Neighbor Islands. Schools on O‘ahu are organized into nine complex areas. A complex consists of a high school and all of the intermediate and elementary schools that flow into it. A group of two to four complexes are grouped into a complex area that is under the supervision of a complex area superintendent, essentially comprising “mini-districts.” Kapolei schools are located in the Campbell-Kapolei complex area, which is located in the Leeward geographical district (http://doe.k12.hi.us/index.html).

For the 2005-2006 school year, the complex of Kapolei had six schools with a total enrollment of 6,697 students: four elementary schools (2,784 students), one middle school (1,580 students), and one high school (2,333 students) (http://nces.ed.gov/ccd/schoolsearch/). For the same period, the Leeward district had a total of 45 schools with a 38,250 students enrolled (http://doe.k12.hi.us/index.html). The Kapolei complex has an average student/teacher ratio of 17.6. The State of Hawaii has an average student/teacher ratio of 17.5 (http://nces.ed.gov/ccd/schoolsearch/).

5.5.2.5 Fire and Emergency Response

The island of O‘ahu has 42 fire stations with over 1,000 fire fighters. The island is divided into five battalions, which include 42 engine companies, 14 ladder companies, two rescue companies, two hazardous materials companies, one snorkel company, one fireboat company, five tankers, one helicopter, and one helicopter tender (http://www.honolulu.gov/hfd). The project area is served by Station 40 in Kapolei, which also serves as the headquarters for Battalion 4. Kapolei is also home to one of the two hazardous materials companies.

The Honolulu Police Department has divided the island of O‘ahu into eight patrol districts. Kapolei is located in District 8, which serves the communities of ‘Ewa, ‘Ewa Beach, Westloch, Barbers Point, Kapolei, Makakilo, Campbell Industrial Park, Honokai Hale, Koolina, Nanakuli, Maili, Waianae, Makaha, Makua and Kaena. The District 8 headquarters is located in Kapolei (http://www.honolulupd.org/). District 8, which serves 111,000 people has 18 beats and employs 223 officers (http://www.co.honolulu.hi.us/budget/execbgt/fy2008_oper_vol1.pdf).

5.5.2.6 Housing

Kapolei Property Development LLC, a local source of housing information, reports that there were 25,660 housing units available in 2005. They report that 41,280 should be available by 2015 and 56,710 should be available in 2025.

The City's DPP reports that in 2000, there were 20,804 housing units available in ‘Ewa, of which 1,872 (9 percent) were vacant. By 2015, ‘Ewa is expected to have 36,405 housing units available, and by 2025 expects 50,430 housing units available. The City's DPP reports that in 2000, there were 2,508 units available in Kapolei Villages. In 2000 there was an available housing vacancy rate of 3.7 percent, homeowner vacancy rate of 3.3 percent, and a rental vacancy rate of 6.3 percent (SF1 File 2002).

5.5.2.7 Tax Revenues

The City and County of Honolulu has projected that it will receive $1.869 billion in operating resources in FY2008. This includes a capital improvement budget of $724 million. Real property tax makes up 41.85 percent of the operating budget. Revenue received from the Public Utility Franchise comprises 2.05 percent of the operating budget. The FY2008 operating resources and expenditures are summarized in Figures 5.5-3 and 5.5-4.

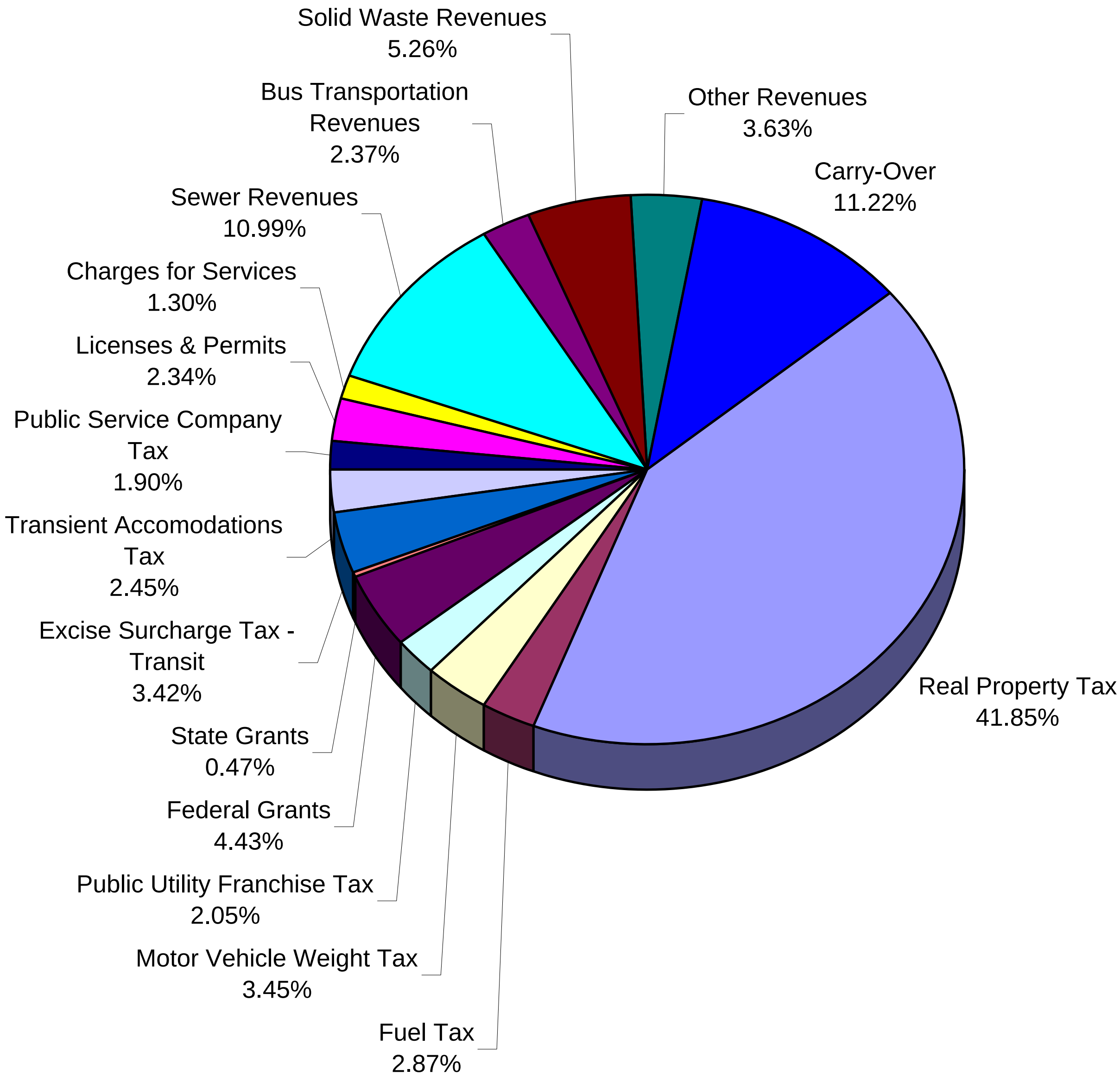
5.5.3 Socioeconomic Impact Analysis

Significance of population and expenditure impacts are assessed in terms of their direct effects on the local economy and related effects on other socioeconomic resources. The magnitude of potential impacts varies depending on the location of a proposed action. For example, an action that creates 20 employment positions may be unnoticed in an urban area, but may have significant impacts in a more rural region. If potential socioeconomic impacts would result in substantial shifts in population trends, or adversely affect regional spending and earning patterns, they would be significant.

5.5.3.1 Socioeconomic Impact of H-POWER Expansion (Construction)

Economic Activity
Economic activity associated with proposed construction activities, such as hiring of laborers, contractors, and the purchasing of materials over a potential 34-month construction and 3-month start-up/testing period, would provide regional economic benefits. Therefore, the construction phase of the H-POWER Expansion would have an economic boost to the local economy.

Employment
Approximately 300 construction-related jobs would be supported temporarily by the project, and the spending of payrolls earned by construction workers and other project expenditures for the goods and services in the local area would support a number of indirect jobs. There were 31,024 jobs in the construction industry in the City and County of Honolulu in 2006 (U.S. BEA 2006). If the 2007 unemployment rate (2.5 percent) is applied to the construction sector,



TOTAL OPERATING RESOURCES: $1.869 BILLION

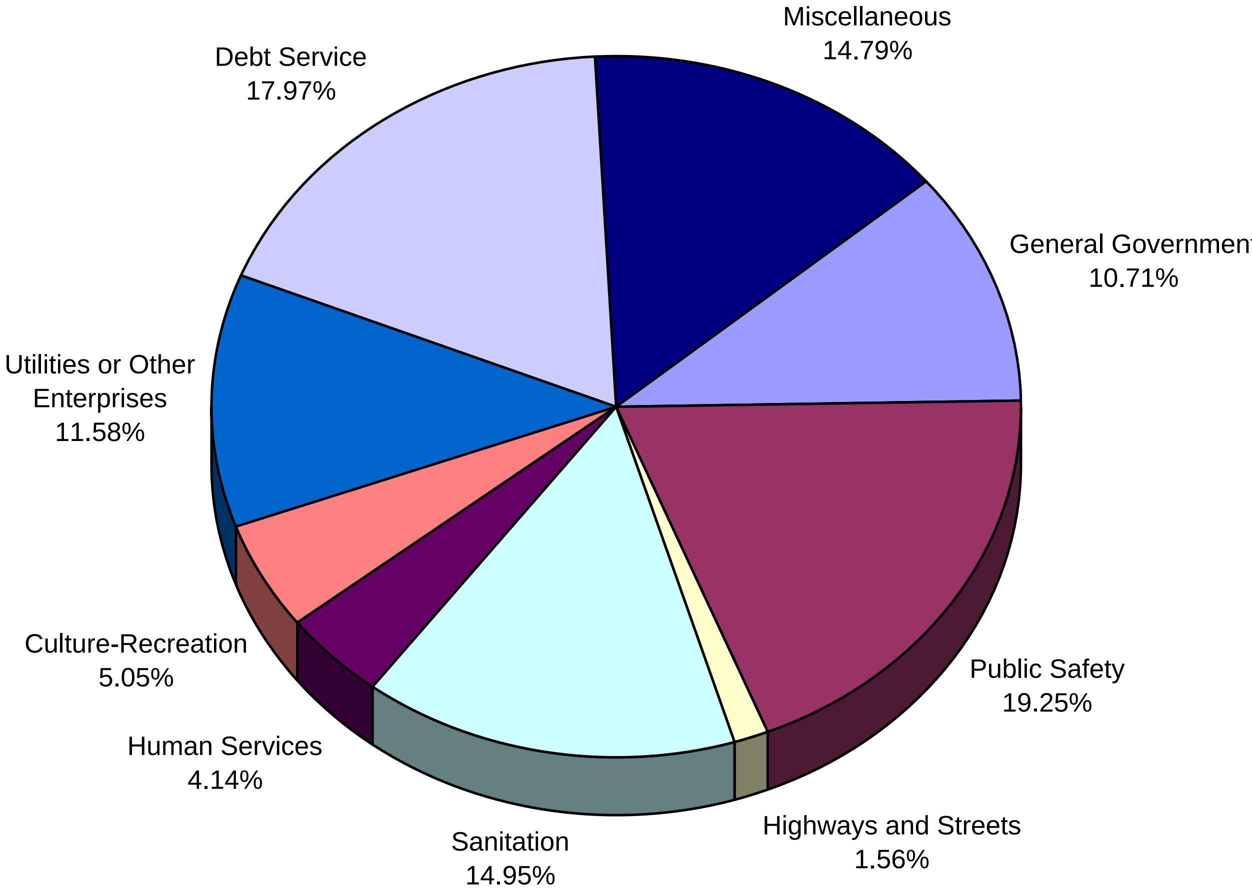
NOTE: THE PIE CHART SHOWS THE COMPOSITION OF RESOURCES FOR THE CITY'S VARIOUS FUNDS FOR FY 2008. CARRY-OVER INCLUDES UNAPPROPRIATED AND RESTRICTED FUND BALANCES.

SOURCE: CITY & COUNTY OF HONOLULU PROPOSED OPERATING BUDGET FY 2008

CITY & COUNTY OF HONOLULU FY2008 OPERATING RESOURCES

FIGURE 5.5-3

Figure 5.5-3 back side



TOTAL OPERATING EXPEDITURE: $1.637 BILLION

NOTE: THE PIE CHART SHOWS THE COMPOSITION OF EXPENDITURES FOR THE CITY'S VARIOUS FUNDS FOR FY 2008

SOURCE: CITY & COUNTY OF HONOLULU PROPOSED OPERATING BUDGET FY 2008

CITY & COUNTY OF HONOLULU FY2008 OPERATING EXPENDITURES

FIGURE 5.5-4

Figure 5.5-4 back side

approximately 795 construction workers were unemployed in the City and County of Honolulu [out of work construction workers = (number of construction workers / (1-unemployment rate)) – number of construction workers]. The construction of the H-POWER Expansion is expected to add 300 jobs for the 34-month construction period, approximately 38 percent of the available construction force; therefore, no in-migration into the area is expected to complete the construction of the H-POWER Expansion.

Schools

Education services are defined to be elementary and secondary educational programs provided by public school systems. The influx of children accompanying in-migrating workers can impact the ability of the existing system to provide public school services. However, as stated above, the Expansion is not expected to cause workers to migrate to Honolulu. Therefore, the impact of this project on education services will not be significant.

Police and Fire

Police and fire protection are public safety services provided to communities by police and fire departments. Impacts are considered significant if the project causes a temporary or permanent increase in need for police and fire protection personnel, or for equipment that is not matched by availability of such services and the financial resources to acquire such additional services. Without an in-migrating population, no additional need for police or fire protection is anticipated to be caused by implementation of the Expansion.

Housing

The significance of potential housing impacts is determined by the impact the proposed project would have on the availability of existing housing. Vacancy rates are used to measure the availability of housing in the City and County of Honolulu and in the Kapolei area. An impact on the availability of housing is considered significant if a substantial change in vacancy rates occurs. A change created by the project affecting more than 0.5 percent of the housing availability is substantial and would be considered a significant impact. However since no in-migration of workers is expected for the Expansion, there would not be any substantial change in housing vacancy rates and no significant impact on the area housing stock.

5.5.3.2 Socioeconomic Impact of H-POWER Expansion (Operation)

The proposed action would increase the number of personnel required to staff the new H-POWER Expansion once it is completed. Approximately five to eight new fulltime positions would be created to support the expanded operation. This would represent a 0.03 percent increase (8 employees/25,673) in Transportation and Public Utilities sector over 2006 employment numbers and a negligible increase in percent of total jobs in the City and County of Honolulu. Increased secondary spending would also be negligible on a regional scale, but any realized impact would be beneficial.

As described previously in Chapter 2, Description of Project, the H-POWER Expansion will increase net electrical production from 319,000 mWh (average over the last 5 years) to 520,000 mWh, an increase of 201,000 mWh. This amount of additional electric power generation will decrease the need to purchase approximately 550,000 barrels of residual fuel oil on an annual basis.

According to Appendix M of the Hawaiian Electric Company, Inc.'s 2008 Integrated Resource Plan (HECO 2008), the price of residual fuel oil that would be offset by the generation of electric power by the proposed Unit 3 would range from $70.80 per barrel to $126.00 per barrel in 2012. Thus, in 2012 dollars, the amount of money that would not need to be spent on residual fuel oil (cost savings) would range between $38,000,000 and $69,000,000, depending on residual fuel oil costs, starting in 2012. These costs savings would then increase or decrease over time as the cost of residual fuel changed. Based on the most recent fuel oil price forecast[7], the cumulative present value[8] of the total cost savings realized by reducing the need to purchase foreign oil over the entire period from 2012 to 2030 is expected to range from $740,000,000 to $1,200,000,000. This represents the sum of all total cost savings if realized all at once today. It should be noted that the most recent forecasts assume that the real cost of a barrel of residual fuel oil (ignoring inflation) will decrease over the next 20 years. If real energy costs were to rise, the potential foreign oil costs savings arising from increased production from the H-POWER project could be substantially higher. Reducing the City and County of Honolulu's dependence on foreign oil is a substantial benefit expected from the proposed Expansion.

No other economic indicators would be substantially affected by long-term operation of the expanded H-POWER facility.

5.6 Solid Waste

This section discusses the solid waste environment, both from the perspective of solid waste disposal provided by H-POWER as well as with respect to regional integrated solid waste management planning and goals. Baseline conditions are presented and the potential impacts of the proposed Expansion Project upon the Hawaii solid waste disposal situation are evaluated and mitigating factors discussed.

5.6.1 Existing Conditions – H-POWER Waste Disposal Capacity

The H-POWER facility converts ordinary garbage into environmentally sound, renewable electricity that powers thousands of O‘ahu households. However, the primary function of the H-POWER facility is to provide disposal of MSW. The facility, comprised of an MSW processing plant which produces RDF and two 854 ton per day RDF combustors, processes an average of 610,000 tons of MSW per year. This has reduced the volume of processed refuse that would otherwise go to a landfill by 90 percent, saving valuable landfill space. Additionally, H-POWER annually recovers 20,000 tons of metal such as aluminum and steel from the waste stream. Table 5.6-1 Waste Management, provides an overview of the current waste stream management options for O‘ahu, and the integrated approach to solid waste reuse and disposal provided by the City and County of Honolulu.

[7] EIA & NYMEX BASE – See Appendix M of (HECO, 2008)
[8] Calculated using the current federal reserve discount rate of 1.25%.

TABLE 5.6-1 SOLID WASTE MANAGEMENT

MSW Management Option	Quantity (tons)*	Percent of Waste
Total Waste Quantity:	1,793,560	
Recycle Quantity:	628,373	35%**
Waste Disposed at PVT & Unpermitted Facilities	225,000	12.5%**
Present H-POWER Capacity:	610,000	34%**
MSW Remaining for Landfill:	330,187	18.4**
*Waste Generated, July 1, 2005 to June 30, 2006. Source of data is Table 8-7, City and County of Honolulu ISWMP, October 2008. **Percent of Total Waste Quantity of 1,793,560 tons.		

5.6.2 Regional Solid Waste Generation and Disposal Projections

According to statistics available from the Organization for Economic Co-operation and Development (OECD)[9], the United States records the highest rate of municipal waste generation (2 kg/person/day) among OECD countries (UN 2005). However, the U.S. has made great progress in controlling the rate of increase in waste generation and in promoting recycling (UN 2005). Currently in the U.S., 32.5 percent of MSW is recovered and recycled or composted, 12.5 percent is combusted for energy recovery in combustion facilities, and the remaining 55 percent is disposed of in landfills. As shown on Table 5.6-1 the City and County of Honolulu is currently recovering materials and energy at a greater rate than the overall U.S. and is sending a smaller percentage of waste to landfill: roughly 35 percent recycled/composted, 34 percent converted to energy, and 31 percent sent to landfill. This matches the general trend of data provided on USEPA's MSW website which cites 1999 data that ranks Hawaii as falling within a 20-29 percent recycle rate, a greater than 20 percent combustion rate (highest category available) and a land disposal rate of less than 50% (lowest category available) (USEPA, 2006).

Solid waste disposal in Hawaii is regulated by the State DOH and is coordinated and implemented at the City and County level. A summary of the ISWMP and goals at the State and City and County level are provided in sections 5.6.2.1 and 5.6.2.2.

5.6.2.1 State of Hawaii ISWMP and ERC

HDOH has had a solid waste program since 1969. HRS Chapter 342G established the Office of Solid Waste Management (OSWM). In 1991 the first Hawaii ISWMP was published by OSWM, and the most recently available update, the Hawaii 2000 Plan, builds upon and revises prior ISWMP and goals. According to the Hawaii 2000 Plan, the Plan has two basic purposes:

- To address the primary environmental burdens and liabilities caused by improper handling of solid wastes in Hawaii; and

[9] "The OECD groups 30 member countries sharing a commitment to democratic government and the market economy. With active relationships with some 70 other countries, NGOs and civil society, it has a global reach. Best known for its publications and its statistics, its work covers economic and social issues from macroeconomics, to trade, education, development and science and innovation" (OECD, 2005).

- To develop programs that have the greatest potential to reduce the quantity of wastes generated and to increase recycling and composting.

Additionally, the Plan included a number of recommendations, including reaffirmation of the State's commitment to the priorities of solid waste management, identified as:

1. Source reduction;
2. Recycling and bioconversion; and
3. Landfilling and incineration.

Each year the State Environmental Council publishes the Hawaii Environmental Report Card (ERC) to monitor the progress of state, county, and federal agencies' environmental goals and policies and to advise state policy makers on issues affecting Hawaii's environment (ERC 2006). The ERC 2006 addresses solid waste generation and diversion under the chapter on Use and Recycling of Resources. The Environmental Council, states that "Renewable and alternative energy currently accounts for only 5% of total energy supply. For example, the largest electric utility in the state currently produces only 7% of its energy from renewable and alternative sources, which is significantly short of the Governor's goal of 20% by 2020". The report also specifically recommends that "priority permitting processes for renewable-energy and energy-efficient projects be instituted, and that these processes emphasize public participation and community benefits". This is consistent with the definitions and concepts of sustainability that are discussed in greater detail in Chapter 9.

5.6.2.2 City and County ~~Council~~ of Honolulu Plans and Policies ~~Goals~~

The Hawaii Revised Statutes (HRS), Chapter 342G (see also Section 9-.13 of the Revised Ordinances of Honolulu 1990), requires each county to develop an integrated solid waste management plan (Plan) and revise the Plan once every five years. The October 2008 ISWMP was developed to guide solid waste management activity for the City and County of Honolulu for the next 25 years, with the first five years discussed in greater detail (CCH, 2008a). The October 2008 Plan set forth as its primary objective to "design an integrated solid waste management system for the City was to maximize the recovery of solid waste through reuse, recycling, composting and energy conversion, in order to minimize the amount of waste that requires landfill disposal."

H-POWER is an integral component of existing City and County disposal plans. The Expansion of H-POWER will significantly reduce material for landfill disposal and is consistent with the "primary objective" of the City and County of Honolulu. Table 5.6-2 is a summary of waste projections and disposal options for the next 22 years. It considers population growth, increase in waste generation, recycling, transshipment and the Expansion (CCH, 2008a).

As shown on Table 5.6-2, even with additional recycling recovery, there remains a significant quantity of waste that will require proper handling and disposal. In fact, the H-POWER Expansion alone cannot satisfy future waste disposal needs.

5.6.3 Expansion Impacts and Mitigating Factors

As described previously in Chapter 2, Description of Project, the H-POWER Expansion will increase the amount of solid waste processed from approximately 610,000 tons (average over the last 5 years) to 910,000 tons, an increase of 300,000 tons. This is approximately a 50 percent increase in solid waste disposal capacity, though these are projections and exact values may vary on the basis of future operational and waste stream characteristics. Clearly, a 50 percent increase in solid waste disposal capacity at H-POWER will contribute to the achievement of Hawaii's overall solid waste management goals. It is also important to understand that H-POWER fits into an integrated approach to solid waste management.

As shown on Table 5.6-2, H-POWER's existing solid waste disposal capacity is significant, and in the future it may be critical to achieving the goals of the ISWMP. Thus, even as enhanced waste minimization and recycling recovery is sought, there is remaining waste that requires management.

TABLE 5.6-2 OVERVIEW OF WASTE MASS (TPY)

FY Year	Waste Generated	Commercial Waste Reused, Recycled, Composted	Reused, Recycled, Composted That Is Managed By the City	Waste Disposed At PVT and Unpermitted Facilities	Trans-Ship	WTE Capacity	Waste Requiring Landfill Disposal*	WTE Ash and Residue Requiring Disposal
2006	1,793,560	411,828	216,545	225,000		610,000	330,187	167,800
2007	1,821,730	419,660	232,670	229,280		610,000	330,120	167,800
2008	1,859,180	427,880	247,980	233,770		610,000	339,550	167,800
2009	1,897,220	436,260	283,390	238,350		610,000	329,220	167,800
2010	1,935,810	444,800	306,280	243,010	100,000	610,000	231,720	167,800
2011	1,975,030	453,510	312,230	247,780	100,000	610,000	251,510	167,800
2012**	2,015,100	462,460	318,350	252,660	100,000	610,000	271,630	167,800
2013**	2,056,120	471,660	324,640	257,690		910,000	92,130	250,320
2014	2,097,760	481,040	331,040	262,810		910,000	112,870	250,320
2015	2,118,300	485,750	334,250	265,390		910,000	122,910	250,320
2016	2,139,050	490,510	337,510	267,990		910,000	133,040	250,320
2017	2,158,900	495,060	340,620	270,470		910,000	142,750	250,320
2018	2,177,840	499,400	343,580	272,850		910,000	152,010	250,320
2019	2,196,950	503,780	346,690	275,240		910,000	161,340	250,320
2020	2,216,210	508,200	349,610	277,650		910,000	170,750	250,320
2021	2,235,640	512,660	352,650	280,090		910,000	180,240	250,320
2022	2,254,770	517,040	355,660	282,480		910,000	189,590	250,320
2023	2,273,570	521,350	358,610	284,840		910,000	198,770	250,320
2024	2,292,530	525,700	361,570	287,210		910,000	208,050	250,320
2025	2,311,650	530,090	364,580	289,610		910,000	217,370	250,320
2026	2,330,940	534,510	367,600	292,030		910,000	226,800	250,320
2027	2,349,800	538,840	370,560	294,390		910,000	236,010	250,320
2028	2,368,220	543,060	373,440	296,700		910,000	245,020	250,320
2029	2,386,800	547,320	376,350	299,020		910,000	254,110	250,320
2030	2,405,500	551,610	379,270	301,370		910,000	263,250	250,320

From Table 8-7, Beck (2008)

* Sum of "Non Combustible Waste Requiring Landfill Disposal" and "Combustible MSW Requiring Landfill Disposal."

** The H-POWER Expansion is now planned for 2012.

The benefits derived from H-POWER and those anticipated to result from the Expansion include:

- Landfill space will continue to be minimized because the volume of processed MSW is reduced by approximately 90 percent;
- Production of renewable energy to provide a reliable and sustainable on-island source of electricity and reduce dependence upon imported fuels will be increased; and
- The separation of ferrous and non-ferrous material for recycling in an environmentally sound way will increase, saving energy and landfill space.

The H-POWER Expansion impacts are positive with respect to meeting Hawaii's existing and future solid waste disposal needs. The Project will increase the state's solid waste disposal capabilities and reduce the need for additional landfill space. Therefore no mitigation measures with respect to solid waste impacts are anticipated. To the contrary, should H-POWER not be expanded, significant mitigation would be required to ensure adequate disposal options are available to handle projected waste quantities in a responsible and environmentally sound manner.

5.7 Energy

This section discusses the energy environment, both from the perspective of energy generation at H-POWER as well as with respect to regional energy resource supply and demand. Baseline conditions are presented and the potential impacts of the proposed Expansion upon Hawaii Energy Resources are evaluated and mitigating factors discussed.

5.7.1 Existing Conditions - Regional Energy Resources

Hawaii is the most oil-dependent of the 50 states, relying on imported petroleum for over 89 percent of its primary energy. Hawaii residents pay among the nation's highest costs for electricity and gasoline (ERC 2006). However, a large percentage of energy consumption in Hawaii can be attributed to aircraft and other fuels so of the 89 percent, not all of it is attributable to electricity production (ERC 2006).

The most recent electricity production statistics available from HECO's website, sourced to data as of December 31, 2007, indicate that of the electricity sold to customers of HECO and its subsidiaries Maui Electric Company (MECO) and Hawaii Electric Light Company (HELCO), 77 percent is from petroleum, 13 percent from coal, 9 percent from Non-Hydro Renewables, and less than 1 percent from Hydro (HECO 2007).

On June 2, 2004, with the signing of SB2474 SD3 HD2 (Act 95, Session Laws of Hawaii 2004, amended by Act 162, 2006), Hawaii's existing renewable portfolio standard (RPS) goal was replaced with an even higher goal. Under the new standard, 20 percent of electricity is to be generated from renewable resources by the end of 2020. Each electric utility is required to establish the following RPS percentages:

1. 10 percent of its net electricity sales by December 31, 2010;
2. 15 percent of its net electricity sales by December 31, 2015; and

3. 20 percent of its net electricity sales by December 31, 2020.

Renewable energy is defined in different ways and includes different forms of energy depending upon state regulations. In Hawaii it is defined as electrical energy produced by wind, solar energy, hydropower, landfill gas, waste-to-energy, geothermal resources, ocean thermal energy conversion, wave energy, biomass (including MSW, biofuels, or fuels derived from organic sources), hydrogen fuels derived from renewable energy, or fuel cells where the fuel is derived from renewable sources (HECO IRP 2008). Hawaii also allows electrical savings that meet specific criteria to be classified and credited as renewable energy.

H-POWER's existing energy production, as well as its significant role in helping to achieve the goals of Hawaii's RPS, are described below.

5.7.2 Existing Conditions – H-POWER

The 1983 EIS for the H-POWER facility identified two ways that the facility would benefit the energy situation: (1) it would promote greater energy self-sufficiency by reducing the dependence on imported fossil fuels, and (2) the recycling of ferrous metals would result in substantial energy savings for the metals industry (EIS 1983). Both of these advantages have been realized over the facility's eighteen year operating history. These advantages are even more important in today's environment.

The H-POWER facility currently generates approximately 46 MW of renewable electricity, which is distributed to customers by HECO and represents approximately 5 percent of O'ahu's electricity. On an annual basis, H-POWER generates enough power for approximately 45,000 local homes today and approximately 68,000 local homes with the Expansion. 46 MW also represents a substantial amount of Hawaii's renewable energy supply according to HECO, MECO and HELCO statistics. The HECO website currently cites 2007 data indicating a total of 175 MW from renewable energy sources. The website also cites H-POWER as generating a total of 46 MW, which represents roughly 26 percent of the 2007 renewable supply, roughly 2 percent of the total energy supply for the state.

Data from 2007 shows that renewable energy as a percent of total was 16.1 percent, up from 8.2 percent in 2003. Thus, due to expanding renewable energy sources, H-POWER in 2007 represented a slightly smaller though still significant portion of the renewable portfolio. This still represents a large percentage of Hawaii's existing renewable energy supply and demonstrates that H-POWER remains a significant factor in meeting both existing and future goals, as defined within Hawaii's RPS.

5.7.3 Impacts and Mitigating Factors

As described previously in Chapter 2, Description of Project, the H-POWER Expansion will increase net electrical production from 319,000 mWh (average over the last 5 years) to 520,000 mWh, an increase of 201,000 mWh. This is more than a 50% increase in net electrical production. Clearly, this magnitude increase in renewable energy production from H-POWER will contribute to the achievement of Hawaii's overall RPS goals and reduce Hawaii's reliance upon imported fuels. In addition, the separation of ferrous and non-ferrous material for recycling is an environmentally sound activity that saves energy.

The Expansion impacts are substantial and positive with respect to existing and future energy supplies. The Project will increase the state's renewable energy supply and reduce reliance on imported fuels therefore no mitigation measures with respect to energy resources are proposed.

5.8 Human Health

A human health risk assessment of the H-POWER Expansion (using existing H-POWER emissions plus estimated Expansion emissions) was conducted by AMEC to estimate the hypothetical health risk to the local population due to emissions from the expanded Facility. The health risk assessment is a quantitative tool that estimates the exposure of various groups of people by different pathways including respiration and consumption of food products (produce, fish, dairy, etc.). This is referred to as a Multi-pathway Human Health Risk Assessment. This section summarizes the results of that study and relates those results to the guidelines established by the USEPA and the HDOH. A copy of the Human Health Risk Assessment is provided in Appendix E.

5.8.1 Human Health Guidance

The approach adopted in the risk assessment is consistent with the approach recommended by the United States National Research Council, a group established by the National Academy of Sciences to further scientific knowledge and to advise the Federal government. This risk assessment estimates both potential carcinogenic risks (that is, the chance of developing cancer) and noncarcinogenic risks (that is, the likelihood that toxic health effects other than cancer may occur). USEPA has established a benchmark cancer risk level for combustion facilities of $1x10^{-5}$, or one extra cancer case in one hundred thousand exposed people, and a benchmark noncancer hazard index of 1.

USEPA guidance (2005) for conducting risk assessments of combustion facilities requires evaluation of risks for three hypothetical groups of people (residents, farmers, and fishers) so that all of the ways that facility emissions could affect human health are evaluated. These groups of people (called "receptors") must be assumed to be located in areas of maximum facility impact where it is reasonable to anticipate that they could be exposed to facility emissions. Assuming people are located in the areas of maximum facility impact is a worst case assumption. People may not actually live in the locations evaluated in the risk assessment or engage in the activities assumed in the risk assessment, in which case their actual risks would be lower than those estimated. Because of the many conservative assumptions used in the risk assessment, it is most likely that the risk assessment overestimates any actual risks associated with Facility emissions.

For example, the evaluation assumes that chemicals will be emitted from the Expansion at the maximum limit allowed by USEPA regulations. Actual emissions are expected to be lower than these levels. Also, the groups of people evaluated in the risk assessment are assumed to be present continuously in the maximum impact area for up to 30 years, which almost certainly overestimates actual exposures.

5.8.2 Risk Assessment Methodology

This risk assessment followed the four step method developed by the National Research Council of the U.S. National Academy of Sciences. The four steps are:

1. Hazard Identification;
2. Toxicity Assessment;
3. Exposure Assessment; and
4. Risk Characterization.

The methods and results of each of the four steps of the risk assessment are summarized in the following paragraphs. The methodology used to estimate potential exposures and risks is consistent with guidance from USEPA (2005).

5.8.2.1 Hazard Identification

The compounds to be quantitatively assessed in the risk assessment are selected in the Hazard Identification step. The compounds evaluated in the risk assessment are those which have been measured in emissions from the Facility. Each compound was evaluated for its potential to pose a threat to human health. For each boiler, an emission rate was estimated for each compound based on previous emissions testing from existing boilers and/or emissions standards required by USEPA.

In order to estimate air concentrations of the compounds of potential concern in the region around the Facility, air dispersion modeling was conducted using computer models. These models take into account emission rates, physical properties of the emitted compounds and local weather data to predict the annual average air concentrations. The results were used to provide the air concentration data used to evaluate the various receptor locations.

Deposition modeling was performed using the results of the air dispersion modeling and meteorological data to describe the behavior of compounds associated with particles and vapors in the air that deposit on soils or water bodies. Additional modeling was performed to predict compound concentrations in soils and surface waters resulting from deposition, runoff, and other environmental fate and transport processes.

5.8.2.2 Toxicity Assessment

In order to determine if exposures to the compounds of potential concern may potentially result in adverse human health effects, it is necessary to have a numerical estimate of the toxicity of each compound of potential concern. The toxicity assessment identifies the types of adverse health effects a compound of potential concern may potentially cause and defines the relationship between the dose of a compound and the likelihood or magnitude of an adverse effect (dose-response).

Adverse effects are characterized as carcinogenic or noncarcinogenic. Dose-response relationships are defined for oral exposure and for exposure by inhalation. In the risk assessment conducted, the relationship between the dose of a compound and the likelihood and magnitude of an adverse effect was determined for each compound included in the quantitative risk assessment. Both potential carcinogenic and potential noncarcinogenic effects were considered in the risk assessment. Dose-response information used in the risk assessment was identified from USEPA sources.

5.8.2.3 Exposure Assessment

The results of the various modeling tasks performed in the Hazard Identification step provide estimates of the concentrations of the compounds of potential concern in air, soil, surface water, and food products as a result of facility emissions. These concentrations are used to predict receptor exposure to the compounds. To estimate potential human exposure to compounds of potential concern, potential exposure pathways were defined for each receptor. Potential exposure pathways describe ways in which receptors may be exposed to compounds of potential concern in the various environmental media.

For each of the receptors identified in this risk assessment, it was assumed that exposure could occur through some or all of the following direct and indirect pathways:

- Inhalation of emissions from the Facility;
- Incidental ingestion of soil while working or playing outdoors;
- Ingestion of produce grown in backyard gardens or farms;
- Ingestion of fish caught from Pearl Harbor, the West Loch, and the Wahiawa Reservoir; and
- Consumption of locally grown food products (beef, dairy, pork, poultry, and eggs).

Compound concentrations at each receptor location (residential area, farm, poultry area, compost area, and water bodies) were estimated using conservative (health-protective) assumptions. In addition, conservative assumptions were also made about the magnitude of each exposure, such as the quantity of soil or fish that is ingested on a daily basis. The use of many upper-bound factors (conservative factors) in calculating potential risks results in an estimate that tends to overstate actual risks, if any, which may occur as a result of receptors' potential exposure to facility emissions.

5.8.2.4 Risk Characterization

The potential exposure dose for each receptor from each compound via each route of exposure was combined with the appropriate dose-response value for that compound in order to estimate the potential for adverse health effects. In the risk characterization process, to evaluate if potential noncarcinogenic effects may occur due to exposure to compounds of potential concern, the ratio of the receptor's exposure dose to the noncarcinogenic dose-response value is calculated for each compound of potential concern. This ratio is termed the hazard quotient. If the hazard quotient is less than one, no adverse noncarcinogenic health effects are expected to occur as a result of exposure to that compound via that route of exposure.

The hazard quotient for each pathway by which each receptor is assumed to be exposed are summed to yield a hazard index for that compound. A total hazard index is then calculated for each receptor by summing the compound-specific hazard indices for that receptor for each toxicity endpoint (such as liver effects or kidney effects) for which it is appropriate to sum the effects of several compounds of potential concern. A total hazard index of less than one for a given receptor for each toxicity endpoint provides further evidence that no adverse noncarcinogenic health effects are expected to occur as a result of that receptor's potential exposure to environmental media given the emission rates and exposures assumed in the risk assessment. As a screening step, hazard indices for all compounds are summed to determine if it is necessary to calculate toxicity endpoint-specific hazard indices. If the total hazard index is less than one, then hazard indices for each toxicity endpoint are not necessary.

The purpose of carcinogenic risk characterization is to estimate the likelihood, over and above the background cancer rate, that a receptor will develop cancer in his or her lifetime as a result of exposures to compounds of potential concern in environmental media due to facility emissions. The product of the exposure dose of a compound via a particular pathway times the cancer slope factor for that compound is a unitless value. It provides an estimate of the potential carcinogenic risk associated with a receptor's exposure to that compound via that pathway. This value is termed the excess lifetime cancer risk. The excess lifetime cancer risk for each compound is calculated by summing the excess lifetime cancer risk values for each pathway by which the receptor is assumed to be exposed. The total excess lifetime cancer risk for each receptor is calculated by summing the compound- and pathway-specific excess lifetime cancer risks. Excess lifetime cancer risks are compared to a target risk range of $1x10^{-6}$ to $1x10^{-4}$ or one to 100 excess cancer cases per 1,000,000 people exposed. In addition, the USEPA has designated $1x10^{-5}$, or 1/100,000, as the acceptable risk benchmark for the siting of combustor facilities. An excess lifetime cancer risk for a compound that is less than the target risk of 1/100,000 is less than the regulatory level of concern. A total excess lifetime cancer risk for a receptor that is less than the target risk of 1/100,000 provides further evidence that the receptor's potential exposure to facility emissions will not result in unacceptable cancer risk.

5.8.3 Impacts and Mitigation

Potential risks were estimated for each receptor for the facility after the Expansion is completed. The total hazard index for all compounds of potential concern is below 1 for each receptor, and the total carcinogenic risk for all compounds of potential concern is less than $1x10^{-5}$ or 1/100,000 for each receptor.

Table 5.8-1 shows the estimated total excess lifetime cancer risk and total hazard index for each receptor.

Note that the maximum estimated lifetime cancer risk of $2x10^{-7}$ or 0.02/100,000 is 50 times lower than the USEPA benchmark. The estimated lifetime cancer risk for a child resident of $1x10^{-8}$ or 0.001/100,000 is 1,000 times lower and the estimated lifetime cancer risk for an adult of $2x10^{-8}$ or 0.002/100,000 is 500 times lower than the USEPA benchmark.

Because of the many conservative assumptions used in the risk assessment, it is most likely that the risk assessment overestimates any actual risks associated with Facility emissions. For example, the evaluation assumes that chemicals will be emitted from the Expansion at the maximum limit allowed by USEPA regulations. Actual emissions are expected to be lower than these levels. Also, the groups of people evaluated in the risk assessment are assumed to be present continuously in the maximum impact area for up to 30 years, which almost certainly overestimates actual exposures.

TABLE 5.8-1 SUMMARY OF CARCINOGENIC AND NONCARCINOGENIC RISK ESTIMATES

Receptor	Total Excess Lifetime Cancer Risk	Total Hazard Index
Child Resident	1×10^{-8}	0.003
Adult Resident	2×10^{-8}	0.0009
Child Resident Using Compost from the Compost Area	4×10^{-8}	0.01
Adult Resident Using Compost from the Compost Area	4×10^{-8}	0.003
Child Fisher (Pearl Harbor)	1×10^{-8}	0.006
Adult Fisher (Pearl Harbor)	2×10^{-8}	0.004
Child Fisher (West Loch)	1×10^{-8}	0.008
Adult Fisher (West Loch)	2×10^{-8}	0.008
Child Fisher (Wahiawa Reservoir)	1×10^{-8}	0.01
Adult Fisher (Wahiawa Reservoir)	2×10^{-8}	0.02
Child Farmer	5×10^{-8}	0.005
Adult Farmer	2×10^{-7}	0.003
Child Resident at Poultry Area	3×10^{-9}	0.0006
Adult Resident at Poultry Area	4×10^{-9}	0.0002

In conclusion, a human health risk assessment for the H-POWER facility including the third unit Expansion was conducted in accordance with USEPA requirements. The estimated risks are 50 to 3,333 lower than the USEPA's combustion facility benchmark for cancer risk, 50 to 5,000 times lower than USEPA's noncancer risk benchmark (Hazard Index).

6.0 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

Consistent with HRS Chapter 343 and the rules for implementing the Hawaii environmental review process, CHRRV and the City and County of Honolulu have undertaken a review of the likely irreversible and irretrievable commitments of resources that might result from the Expansion, and in certain cases the irreversible and irretrievable commitments of resources that might result if the Expansion is not built. To best present this information, the irreversible/irretrievable commitment of resources is evaluated for each of the subject areas addressed in Chapters 4 and 5.

6.1 Commitment of Resources - Natural Environment

The following sections summarize the commitment of resources of the natural environment. They include: geology and soils (Section 6.1.1), climate and air quality (6.1.2), groundwater and hydrology (6.1.3) and biological resources (6.1.4).

6.1.1 Geology and Soils

Impacts to geology and soils will occur at both the H-POWER site and the adjacent parcels proposed for temporary construction use. These impacts will consist of excavation for foundations and grading and stockpiling activities. Each site area will experience some change in surficial characteristics even with proposed post-construction stabilization and re-vegetation. These changes will not differ from those that would result from any other industrial development and are not significant. In fact, most of these impacts exist currently due to construction of the original H-POWER facility and prior site disturbance. Since the geologic environment has already been impacted, the irreversible or irretrievable impacts anticipated to result from the Expansion will be minimal. Furthermore, these minimal impacts will occur in areas that have already been impacted, rather than at undisturbed location(s).

6.1.2 Climate and Air Quality

Air emissions do result from the consumption of MSW for energy production, though within highly regulated state and federal limits. The flue gas from the Expansion will be treated by the most modern air pollution control technologies designed to minimize impact to air quality. Furthermore, the H-POWER facility currently, and with the Expansion, produces energy that would otherwise need to be generated from other sources, predominantly through the consumption of petroleum or coal since these comprise 90% of the region's power supply (HECO 2007). Thus, emissions would occur even if H-POWER were to cease operation. In fact, even if the energy supplied by H-POWER could entirely be replaced by something other than imported fuels, emissions would still occur as a result of the formation of landfill gases, since land disposal would be the most likely remaining disposal option for the MSW. Thus, irreversible or irretrievable commitments of resources would still occur. Furthermore, H-POWER's production of electricity is supplied from a renewable source, consistent with the goal of reduced dependence upon non-renewable, imported fuels. Increased use of renewable fuels is consistent with recommendations from many forums concerned with potential impacts to global climate. Therefore, though irreversible and irretrievable impacts are anticipated (i.e., air emissions), these impacts are within regulatory limits and would therefore not be significant.

Furthermore, these impacts are not avoidable without extensive changes to existing solid waste and energy production technologies and options – changes that however desirable, may take decades to research, design, and fully implement.

6.1.3 Groundwater Resources/Hydrology

Impacts to groundwater resources and hydrology consist of both construction impacts, due to construction dewatering and stormwater controls, and operational impacts, from withdrawal of groundwater for cooling and from stormwater controls. Stormwater controls, both during construction and operation, will have minimal impact upon groundwater and hydrology. They are designed to be consistent with stormwater regulatory requirements, and to allow recharge on-site. The permanent use of groundwater via the two existing groundwater wells for cooling water supply is a partially consumptive use of water, with the remainder recharged via the two existing injection wells on-site. Importantly, though increases in demand and discharge will result from the Expansion, the water requirements for the Expansion will be reviewed and permitted to ensure the withdrawal and discharge quantities for both water supply and injection will have little to no negative impact. Thus, impact to groundwater resources and hydrology will be minimal and will be consistent with regulatory requirements.

6.1.4 Biological Resources

Operational impacts to biological resources are negligible due to the existing industrial nature of the H-POWER site, and the footprint area proposed for the Expansion, as well as the industrial nature of the neighboring land uses. Impacts to biological resources consist predominantly of temporary construction impacts, due to clearing and grading activities at the temporary construction laydown area. Construction activities will avoid the known resources of significance, which are located within fenced enclosures. An additional 25-foot setback will be maintained around the fencelines of these enclosed areas. The irreversible and irretrievable commitment of biological resources is therefore limited to the clearing of the existing scrub/shrub vegetation on the laydown parcels. These vegetated areas consist predominantly of post-disturbance regrowth, that, post-construction, will be stabilized and allowed to revegetate once again. Thus, though biological disturbance will occur, critical resources will be avoided and irreversible and irretrievable impacts limited to disturbance of previously impacted areas that will be stabilized and allowed to revegetate once construction is completed.

6.2 Commitment of Resources - Human Environment

Section 6.2.1 through 6.2.8 discusses the commitment of resources regarding the human environment. It includes a summary of potential impacts to archaeological and cultural resources, traffic, noise, visual, socioeconomics, solid waste, energy and human health.

6.2.1 Archaeological and Cultural Resources

No impact to archaeological and cultural resources is anticipated to result from the Expansion, though mitigation is proposed to ensure that in the event that resources are identified that they will be adequately and appropriately protected. Potential construction impacts are acknowledged, and mitigation measures proposed to minimize the potential for impact. Significant ground altering activities will be subject to on-call monitoring by a qualified archaeologist. Thus no irretrievable or irreversible impacts to archaeological or cultural resources are anticipated. If resources are identified they will be treated in accordance with Hawaii regulation and guidelines for inadvertent discovery.

6.2.2 Roadways and Traffic

The estimated impacts to roadways and traffic from the proposed Expansion will consist of both operational and temporary construction impacts. The effect of future growth of the JCIP region was also evaluated under the operational and temporary construction scenarios. However, the majority of these impacts is alleviated by the Kalaeloa Roadway Expansion currently being conducted. It should be noted that the traffic impacts assessment was conservative to ensure "worst-case" impacts were captured and it is highly unlikely that actual impacts would be as described. The traffic analysis indicates that although traffic is increased during both construction and operation, the need for mitigation during the construction phase or operation of the Expansion are not required. Mitigation measures, however, could consist of work-force car-pooling, shift adjustments to avoid peak periods, and the use of temporary traffic control officers at unsignalized intersections. These impacts are not irreversible or irretrievable, since they are insignificant and can be mitigated even during the period of impact.

6.2.3 Noise

Background noise measurements from the perimeter of the H-POWER facility exceed the threshold for class "C" industrial zoning district. As the intent of the HDOH community noise rule is to protect public health and welfare and to prevent significant degradation of the environment and quality of life, these exceedances are not relevant. The H-POWER facility is situated in what has become a heavily industrialized area. The closest residences are over a mile away and would not be impacted by H-POWER noise. No significant degradation of the environment and quality of life is anticipated. Furthermore, background measurements include substantial contribution from neighboring sources and traffic.

Temporary construction impacts will fall under the terms and conditions of the HDOH issued noise permit that allows noisy construction activities to take place during daytime hours. Any activities that require overnight operation must meet the State's maximum permissible sound limits for industrial zoning districts. If needed, temporary enclosures or barriers may be used to mitigate noise from such activities/equipment or contractors may apply for a noise variance with the HDOH. These potential construction impacts, though temporary, will be follow HDOH guidelines and are not significant, irreversible, or irretrievable.

The installation of the H-POWER Expansion equipment will likely increase noise levels in the immediate vicinity of the new equipment. However, a significant increase in noise level is not expected at the H-POWER property lines. The specifications associated with the proposed Expansion specify that the noise radiated from any equipment will be less than or equal to 80 dB at a distance of one (1) meter from the equipment and less than or equal to 60 dB at a distance of 50' from the equipment.

6.2.4 Visual Resources

Upon completion of the Expansion project there will be no significant change to the facility appearance. The Expansion will not exceed the height of the existing building and stack. A zoning waiver will be obtained for any~~, and all~~ structures and equipment ~~will be less than~~

exceeding the 60-foot height limit applicable within the Heavy Industrial (I-2) zoning district. The highest building is currently 149 feet, and the highest proposed building is 100 feet. In addition, the highest building at the adjacent AES facility is 161 feet. The current stack is 290 feet, and the proposed stack is 199 feet. The façade will be designed to blend with the existing H-POWER facility materials, color and appearance.

In addition, the stack at the adjacent AES facility is 285 feet. The additional square footage will expand the overall coverage of the H-POWER property, bringing the facility buildings closer to the eastern property boundary in proximity to the existing HECO electrical substation. The change is not visually substantial given the size and scale of the existing H-POWER facility and that of its industrial neighbors. In addition, HECO is currently constructing a power generation facility to the north of the H-POWER facility on HECO's southern property boundary. The estimated height of the stacks associated with this new facility is 210 feet. Associated with the new facility is an electrical transmission line that will require 120 foot high structures.

Structural changes will be irreversible or irretrievable for the life of the facility, but viewsheds taken from regional vantage points demonstrate that there are no significant changes in views from potentially sensitive areas. It is anticipated that even temporary impacts during construction will largely be blocked from view by the surrounding industrial structures, and though cranes may be visible from regional vantage points, most potential views outside the adjacent industrial areas are at substantial distances. Thus, the irreversible and irretrievable impacts to views are minor, and the impact to potentially sensitive views is negligible due to intervening industrial structures.

6.2.5 Socioeconomics

The socioeconomic impacts anticipated to result from the proposed Expansion include significant increases in construction employment distributed over an approximately 34-month construction period and an additional 3-month start-up and testing period. The socioeconomic impacts will also include significant material and equipment expenditures and therefore tax revenues locally. Though temporary, the increased employment and construction expenditures and tax revenues will improve the economy of Hawaii during that roughly 33-month period. The workforce will be predominantly local so no significant demands upon local infrastructure, such as housing or schools, is expected. Additionally, the H-POWER facility and the proposed Expansion provide a cost effective solution to solid waste disposal and simultaneously provide a renewable source of energy production. This helps to avoid the otherwise expensive proposition of increasing landfill capacity and constructing new power facilities elsewhere on O'ahu. This long-term cost effective and reliable solution to solid waste disposal, providing renewable energy, is likely the most significant and beneficial impact of the H-POWER Expansion upon the local economy.

6.2.6 Solid Waste

The H-POWER Expansion impacts are positive with respect to meeting O'ahu's existing and future solid waste disposal needs. The Project will increase the state's solid waste disposal capacity while simultaneously reducing reliance on imported fuels and reducing the need for additional landfill space. The beneficial impacts are irreversible and irretrievable, in that waste, including recyclable ferrous and non-ferrous material, will be permanently diverted from landfill destinations. Furthermore, demand for imported fuel to satisfy electricity production will be reduced. However, even with the Expansion, solid waste projections indicate that future landfill capacity will be required. Without the H-POWER Expansion, the quantities of MSW sent to landfill would nearly double (Fiscal Year projection for 2030), and the amount of waste produced would increase by approximately 34 percent. Thus, a substantial and irreversible/irretrievable impact would result in the absence of the proposed Expansion.

6.2.7 Energy

The existing H-POWER facility and the proposed H-POWER Expansion impacts are positive with respect to existing and future energy supplies. The Expansion will increase the state's renewable energy supply and reduce reliance on imported fuels. The existing H-POWER facility has already saved more than 10 million barrels of oil since its start of operation and represents roughly 26 percent of Hawaii's total renewable energy supply. The Expansion will result in an approximately 50 percent increase in net electrical production. Thus, detrimental irreversible/ irretrievable impacts would occur only in the absence of the proposed Expansion.

6.2.8 Human Health

Emissions from the proposed H-POWER Expansion are estimated to result in human health impacts that are within state and federal regulatory limits and guidelines. Therefore, the impacts are minimal and are not significant. As stated above regarding air quality resources, the Expansion will result in energy production that would otherwise need to be produced by other means. If the energy to be produced by the facility needed to be generated by other means, such operations would result in emissions (from combustion of other fuel sources such as coal or petroleum products), and diverted waste would result in emissions from landfilled MSW.

6.3 Conclusion

The proposed Expansion of the H-POWER facility is not without some impact to both the natural and human environment, impacts which, when fully evaluated, are:

1. Unavoidable given current waste disposal technologies and economics;
2. Positive, providing strong benefits to either the natural or human environment; or
3. Insignificant in light of the overriding project benefits offered and given the selection of a heavily industrialized and previously impacted area well suited for project development

Given these considerations, it is the absence of the H-POWER Expansion that would require greater use of non-renewable resources (imported fuels) and a resultant irreversible and irretrievable commitment of resources (fuel supply, decreased ferrous and non-ferrous recycling, greater commitment of land for waste disposal, reduced generation of renewable energy, etc.). Thus, when balancing the impact from expanding the H-POWER facility against the impact of not doing so, it is clear that the proposed Expansion will result in fewer irreversible and irretrievable impacts, and is an important part of ISWM planning on Oʻahu.

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7.0 CONFORMANCE TO FEDERAL, STATE, AND LOCAL PLANNING POLICIES

In accordance with the requirements of HAR §11-200-17(h), this chapter discusses the relationship of the proposed action to land use plans, policies and controls for the area that would be affected by the Expansion. It identifies the extent to which the Expansion would conform or conflict with the objectives or terms of land use plans, policies, and controls. This chapter is organized first by jurisdiction (Federal, State, or City/County) and then by specific ordinance, regulation, law or plan that regulates land use. Under each of those subheadings, the objectives and authority of the plan, policy or control are discussed followed by an evaluation of the consistency of the proposed Expansion to the specific plan, policy or control.

7.1 Federal

The following sections provides the Federal requirements associated with the Expansion

7.1.1 Federal Aviation Administration

Federal Aviation Administration (FAA) Regulations, Part 77 – Objects Affecting Navigable Airspace, outline the specific criteria for FAA notification and determinations. The FAA review process begins with the filing of a Notice of Proposed Construction or Alteration for projects – FAA Form 7460-1. This is required for projects of ranging heights at varying distances from airports, airfields, and heliports. FAA Form 7460-1 must be filed for any construction or alteration of more than 200 feet in height and for any construction or alteration extending outward and upward in excess specified slopes: 100 to 1 for a horizontal distance of 20,000 feet from nearest runway greater than 3,200 feet in length, excluding heliports; 50 to 1 for a horizontal distance of 10,000 feet from the nearest runway less than 3,200 feet in length, excluding heliports; and 25 to 1 for a horizontal distance of 5,000 feet from the nearest landing and takeoff area of a heliport.

Importantly, the Notice is required both for the presence of temporary construction equipment at a project site (such as cranes) as well as with respect to the estimated final build out heights of the new structure(s). If advised by FAA a Supplemental Notice (Form 7460-2) is required to be filed within 5 days after the construction or alteration reaches its greatest height.

Evaluation: A preliminary review of topographic maps, airport locations and Expansion design and construction plans indicated that the project would not trigger the thresholds for review. However, to ensure that the Expansion is consistent with FAA requirements and to ensure safe and proper construction planning, CHRRV and the City and County of Honolulu shall submit an FAA Form 7460-1 30 days prior to construction advising the FAA of the Expansion and requesting a determination.

7.1.2 Federal Coastal Zone Consistency

The Coastal Zone Management Program (CZMP) is authorized by the Coastal Zone Management Act of 1972 and administered at the federal level by the Coastal Programs Division of the National Oceanic and Atmospheric Administration's Office of Ocean and Coastal Resource Management. The National Coastal Management Program is a federal-state partnership and the CZMP leaves day-to-day management decisions at the state level in the 34 states and territories with federally approved coastal management programs. The state of Hawaii gained federal approval for their state coastal management program in 1978. Consistency with both federal and state CZMP is discussed and evaluated below in Section 7.2.1.

7.2 State of Hawaii

The following sections summarize the State of Hawaii requirements as they pertain to the Expansion.

7.2.1 Hawaii State Coastal Zone Management Program

As discussed above in Section 7.1.2, CZM is a federal-state partnership with delegated states implementing the day-to-day management decisions. The Hawaii Coastal Zone Management Program, delegated in 1978, is administered by the Hawaii Office of Planning and seeks to balance marine and coastal resource protection with sustainable economic development. The program encompasses the entire state (federal lands are exempted) including the 12-mile U.S. territorial sea and all archipelagic waters. The program is built upon ten policy areas: Recreational Resources, Historic Resources, Scenic and Open Space Resources, Coastal Ecosystems, Economic Uses, Coastal Hazards, Managing Development, Public Participation, Beach Protection, and Marine Resources. Other key areas of the CZMP include designated SMAs managed by the Counties and the Office of Planning and discussed in Section 7.3.3 below, and a Shoreline Setback Area which serves as a buffer against coastal hazards and erosion, and protects view-planes, also discussed in Section 7.3.4 below.

<u>Evaluation</u>: A November 6, 2008 letter was sent to the Hawaii CZMP requesting a determination as to whether a CZM federal consistency review would be required for the Expansion. That letter included attachments describing the Expansion project along with information about the parcels under consideration for construction laydown use. The Hawaii CZMP responded in a letter dated November 17, 2008 and determined that a CZM federal consistency review is not required for this project.

7.2.2 Hawaii State Plan

The Hawaii State Plan, HRS Chapter 226, was enacted in 1978 and is intended to guide the long-range development of the State of Hawaii, as excerpted:

> The Hawaii state plan that shall serve as a guide for the future long-range development of the State; identify the goals, objectives, policies, and priorities for the State; provide a basis for determining priorities and allocating limited resources, such as public funds, services, human resources, land, energy, water, and other resources; improve coordination of federal, state, and county plans, policies, programs, projects, and regulatory activities; and to establish a system for plan formulation and program coordination to provide for an integration of all major state, and county activities.

The section of the State Plan that is most relevant to the H-POWER Expansion is HRS §226-14 Objective and policies for facility systems--in general, excerpted as follows:

(a) Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.

(b) To achieve the general facility systems objective, it shall be the policy of this State to:

Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.
Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.
Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.
Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.

Evaluation: The Proposed Expansion is fully consistent with the goals and policies of the Hawaii State Plan, in that the Expansion will support statewide economic objectives in providing safe and reliable disposal of solid waste. The Expansion also supports the goals of the State Plan in that it is consistent with State solid waste management plans and is an integral component of the City and County of Honolulu's ISWMP discussed in Section 5.6 Solid Waste and Section 7.3.5, below. The H-POWER Expansion is a prudent use of resources, recovering renewable energy while satisfying waste disposal needs. H-POWER has proven its reliability and cost effectiveness over the last 18 years and the Expansion will ensure continued capacity to satisfy public demand for waste disposal at reasonable cost.

7.2.3 State Energy Plan

The first Hawaii Energy Strategy (HES) was initiated in 1992 and completed in 1995 (HES 2000). The HES was updated in January 2000 by the Energy, Resources, and Technology Division of the State of Hawaii Department of Business, Economic Development & Tourism. As of July 2006, a new HES 2007 project began its planning stages.

The purpose of the HES 2000 is to "assist State of Hawaii planners and policy makers, members of the Hawaii energy community, and Hawaii's people to better understand Hawaii's current energy situation" (HES 2000). The specific objectives of HES 2000 are to:

- Increase diversification of fuels and the sources of supply of these fuels;
- Increase energy efficiency and conservation;
- Develop and implement regulated and non-regulated energy development strategies with the least possible overall cost to Hawaii's society;
- Enhance a system of comprehensive energy policy analysis, planning, and evaluation;
- Increase the use of indigenous renewable energy resources; and

- Enhance contingency planning capabilities to effectively contend with energy supply disruptions.

The HES 2007 will build upon previous work and the Governor's "Energy for Tomorrow" initiative to chart a clear, executable path to:

- Reduce the state's dependence on oil;
- Protect the environment;
- Reduce negative economic impacts related to use of imported fuels;
- Enhance renewable energy use and energy efficiency; and
- Improve the security and reliability of Hawaii's energy system.

With regard to increasing diversification and renewable energy use in Hawaii, the HES Summary states that: "Hawaii's current use of renewable energy provides important diversification of the state's energy supply, helps keep funds spent for energy in the state, provides local jobs, and reduces damage to the environment when compared to other forms of energy used for electricity generation." The summary goes on to state: "Additional use of renewable energy will add to these benefits and reduce Hawaii's dependence on imported fossil fuels" (HES 2000).

Evaluation: H-POWER's existing energy production, as well as the proposed Expansion energy increases and increased reliability, are fully consistent with the goals of increased diversification of fuels as well as increased use of renewable energy resources.

7.2.4 Hawaii State Water Plan

The State of Hawaii's CWRM, was established in 1987 when the Legislature enacted the State Water Code, ~~HES~~ HRS Chapter 174C (CWRM 2004). The State Water Code requires that the CWRM implement and utilize comprehensive water resources planning in its regulation and management of Hawaii's water resources. The development and updating of the Hawaii Water Plan guides CWRM in executing its general powers, duties and responsibilities (CWRM 2000). There is currently a Statewide Framework for Updating the Hawaii Water Plan published in 2000 by the CWRM, DLNR.

Evaluation: The Expansion has been designed to minimize demand for water and will modify the existing H-POWER permit limits for water withdrawal and re-injection as permitted through CRWM and HDOH respectively. This is consistent with the goals and regulations implemented by CWRM.

7.3 City and County of Honolulu

The following sections provide City and County of Honolulu general requirements as they pertain to the Expansion.

7.3.1 O‘ahu General Plan

As described within the O‘ahu General Plan for the City and County of Honolulu, the O‘ahu General Plan is "a comprehensive statement of objectives and policies which sets forth the long-range aspirations of O‘ahu's residents and the strategies of actions to achieve them." The General Plan addresses eleven areas of concern:

1. Population
2. Economic activity
3. The natural environment
4. Housing
5. Transportation and utilities
6. Energy
7. Physical development and urban design
8. Public safety
9. Health and education
10. Culture and recreation
11. Government operations and fiscal management

Of these eleven categories, the three that directly relate to the proposed Expansion are Transportation and Utilities, Energy, and Government Operations and Fiscal management. Within each of these areas of concern, the O‘ahu General Plan itemizes key objectives, followed by specific policies. Those most relevant to the proposed Expansion are cited below along with an evaluation of consistency:

7.3.1.1 Transportation and Utilities

Objective B – To meet the needs of the people of O‘ahu for an adequate supply of water and for environmentally sound systems of waste disposal.

Policy 5 – Provide safe, efficient, and environmentally sensitive waste-collection and waste-disposal services.

Policy 6 – Support programs to recover resources from solid-waste and recycle wastewater.

Evaluation: The Expansion will provide safe, efficient and sensitive waste-disposal services and will recover resources (materials and electricity) from solid waste. The Expansion will help to meet the needs of the people of O‘ahu for environmentally sound systems of waste disposal.

7.3.1.2 Energy

Objective C – To fully utilize proven alternative sources of energy.

Policy 2 – Support the increased use of operational solid waste energy recovery and other biomass energy conversion systems.

Evaluation: The Expansion will support the increased use of operational solid waste energy recovery. The Expansion will fully utilize proven alternative sources of energy.

7.3.1.3 Government Operations and Fiscal Management

Objective A – To promote increased efficiency, effectiveness, and responsiveness in the provision of government services by the City and County of Honolulu.

> Policy 1 – Maintain City and County government services at the level necessary to be effective.

Evaluation: The Expansion will help to maintain City and County government services at the level necessary to be effective and will promote increased efficiency in the provision of government (waste disposal) services by the City and County of Honolulu.

7.3.2 ‘Ewa Development Plan

As shown previously on Figure 5.5-1, Planning Areas, O‘ahu is divided into eight planning areas, each area has a Development Plan (DP) which is adopted by City Council ordinance and administered by the DPP. A public review draft of the 2008 'Ewa DP is available for review. It will not be finalized until after the public commenting period ending in January 2009.

With regard to relevant consistency review of the Expansion, Chapter 3 of the ‘Ewa DP addresses Land Use Policies, Principles and Guidelines and Chapter 4 addresses Public Facilities and Infrastructure Polices and Guidelines.

7.3.2.1 Land Use Policies, Principles and Guidelines

According to Chapter 3 of the 2008 Public Review Draft of the ‘Ewa DP, the Barbers Point Industrial Area/Kalaeloa including the site of the State’s largest heavy industrial area (JCIP) continue “as one of O‘ahu and the State’s most important industrial areas.” This area is an important industrial harbor and fuel transfer point. It is further stated in the 2008 Public Review Draft of the ‘Ewa DP to “Allow construction of an additional electrical power generating plant at the Barber’s Point Industrial Area, possibly taking advantage of cogeneration opportunities with other industrial activities”. The 2008 Public Review Draft of the ‘Ewa DP also recommends that building heights should generally not exceed 60 feet when they consist of large mass and that taller vertical structures are acceptable when required as part of an industrial operation but that a viewplane study should be conducted for structures over 100 feet in height to minimize visibility from residential, resort, and commercial areas, public rights-of-way and the shoreline.

Evaluation: The proposed Expansion is fully consistent with the stated industrial land use objectives of the 2008 Public Review Draft of the ‘Ewa DP for the Barbers Point Industrial Area and the JCIP. It is also consistent with the stated energy use objective for that region as well. The building height of the Expansion is consistent with the existing facility height and a viewshed analysis from potentially sensitive locations, such as shoreline parks and residential areas was conducted and demonstrates no significant visual impact.

7.3.2.2 Public Facilities and Infrastructure Policies and Guidelines

Within Chapter 4 of the 2008 Public Review Draft of the ‘Ewa DP, Section 4.5 addresses Solid Waste Handling and Disposal. According to that DP the two major solid waste handling and disposal facilities located in ‘Ewa consist of the H-POWER facility and the Waimanalo Gulch Sanitary Landfill. The general policies with respect to solid waste disposal are to “Analyze and approve siting and/or Expansion of sanitary landfills based on islandwide studies and siting evaluations.” The 2008 Public Review Draft of the 'Ewa DP does address the proposed Expansion of H-POWER that would increase “capacity up to 720,000 tons per year and provide a significant reduction of material sent to the landfill for disposal. That DP also cites the updated 2004 Solid Waste Integrated Management (SWIM) Plan. This updated version of the SWIM Plan has since been produced and the consistency of the H-POWER Expansion with that plan is addressed in section 5.6 Solid Waste as well as below in Section 7.3.5. The SWIM Plan identifies the following goals for ‘Ewa in regards to H-POWER:

- Constructing and operating a third boiler at the H-POWER Plant;
- Exploring alternatives to disposal in landfills and burning waste in the H-POWER plant, such as mass burn waste-to-energy, gasification, and plasma torch/arc;
- Continuing to work with the State Department of Health to obtain approval for alternative uses for H-POWER ash.

Evaluation: The proposed H-POWER Expansion is consistent with the pre-existing uses identified within the 2008 Public Review Draft of the ‘Ewa DP and is, consistent with the 2008 ISWMP and the 2004 SWIM Plan prepared by the City and County of Honolulu, which is referenced within the 2008 Public Review Draft of the ‘Ewa DP.

7.3.3 Public Infrastructure Map (PIM) for the Ewa Development Plan Area

Resolution 02-164, CD1 calls for “Adopting a Revision To The Public Infrastructure Map For The Ewa Development Plan Area, Campbell Industrial Park, Oahu, Hawaii.” This resolution outlines the constraints of current landfill capacity at the Waimanalo Gulch Sanitary Landfill, the Department of Environmental Services’ objective to reduce waste disposed of at the landfill by 75% and H-POWER’s Expansion’s ability to assist the Department of Environmental Services in achieving their goal most expeditiously. As such, the addition of a solid waste symbol to depict H-POWER’s proposed expansion was added to the PIM.

Evaluation: The Expansion will reduce the volume of municipal solid waste entering the Waimanalo Gulch Sanitary Landfill thereby extending the life and capacity of the landfill and aiding the Department of Environmental Services in achieving their objective. The project is in conformance to the City’s Public Infrastructure Map (PIM) in accordance with Chapter 4, Article 8, Revised Ordinances of Honolulu (ROH).

7.3.4 Special Management Area (SMA)

As described above in Section 7.2.1 - State CZMP, the SMA is a key aspect of the Hawaii State Coastal Management Program. Administered by the City and County of Honolulu, DPP, no development can occur in the SMA unless the DPP first issues a permit. Development is defined to include most uses, activities and operations on land and in the water.

The SMA originally encompassed all lands extending not less than 100 yards inland from the shoreline, though in some areas, the SMAs extend several miles inland to cover areas in which coastal resources are likely to be directly affected by development activities.

Evaluation: A letter was sent to the City and County of Honolulu, DPP on November 5, 2008, informing the agency that Expansion and its associated construction is outside of the SMA and requesting a formal determination confirming that assessment. A determination from the DPP ~~has not yet been received~~ that the Expansion and its associated construction laydown areas are not located within the SMA was received on March 4, 2009.

7.3.5 Shoreline Setback Area

As described above in Section 7.2.1 – State CZMP, the shoreline setback area is a key aspect of the Hawaii State Coastal Management Program. Administered by the City and County of Honolulu, DPP, the shoreline setback area is the area between the shoreline and the shoreline setback line. Currently most shoreline setback lines are set at 40 feet from the shoreline, although in some places the Shoreline Setback boundaries extend further inland. The counties have the authority to set deeper setbacks.

Evaluation: A November 6, 2008 letter was sent to the City and County of Honolulu, DPP. That letter indicated that on the basis of available mapping obtained from DPP, the Expansion project and the temporary construction area impacts would be outside of the Shoreline Setback Line and the Buffer Area and requested a formal determination from DPP confirming that assessment. A determination from DPP ~~has not yet been received.~~ that the Expansion and its associated construction laydown areas are not located within the Shoreline Setback Area was received on March 4, 2009.

7.3.6 Honolulu Solid Waste Master Plan

The October 2008 ISWMP was developed to guide solid waste management activity (CCH, 2008a). The October 2008 Plan is intended to plan for solid waste-related activities for the City and County of Honolulu for the next 25 years, with the first five years discussed in greater detail (CCH, 2008a). The 2008 Plan set forth as its primary objective to “design an integrated solid waste management system for the City was to maximize the recovery of solid waste through reuse, recycling, composting and energy conversion, in order to minimize the amount of waste that requires landfill disposal.”

Evaluation - H-POWER is an integral component of existing City and County disposal plans as noted in the October 2008 Plan. The Expansion of H-POWER will significantly reduce material for landfill disposal, and is consistent with the “primary objective” of the City and County of Honolulu – to significantly minimize the amount of material to be disposed of in landfill.

7.3.7 City and County of Honolulu Land Use Ordinance (LUO)

The purpose of the City and County of Honolulu LUO is to regulate land use in a manner that will encourage orderly development in accordance with adopted land use policies, and to promote and protect the public health, safety, and welfare. It is the intent that the LUO provide reasonable development and design standards for the location, height, bulk and size of structures, yard areas, off-street parking facilities, and open spaces, and the use of structures and land for agriculture, industry, business, residences or other purposes.

As described in Chapter 1 of this EIS, the City and County of Honolulu LUO defines the JCIP as I-2 Intensive (Industrial). “The intent of the I-2 intensive industrial district is to set aside areas for the full range of industrial uses necessary to support the city. It is intended for areas with necessary supporting public infrastructure, near major transportation systems and with other locational characteristics necessary to support industrial centers.”

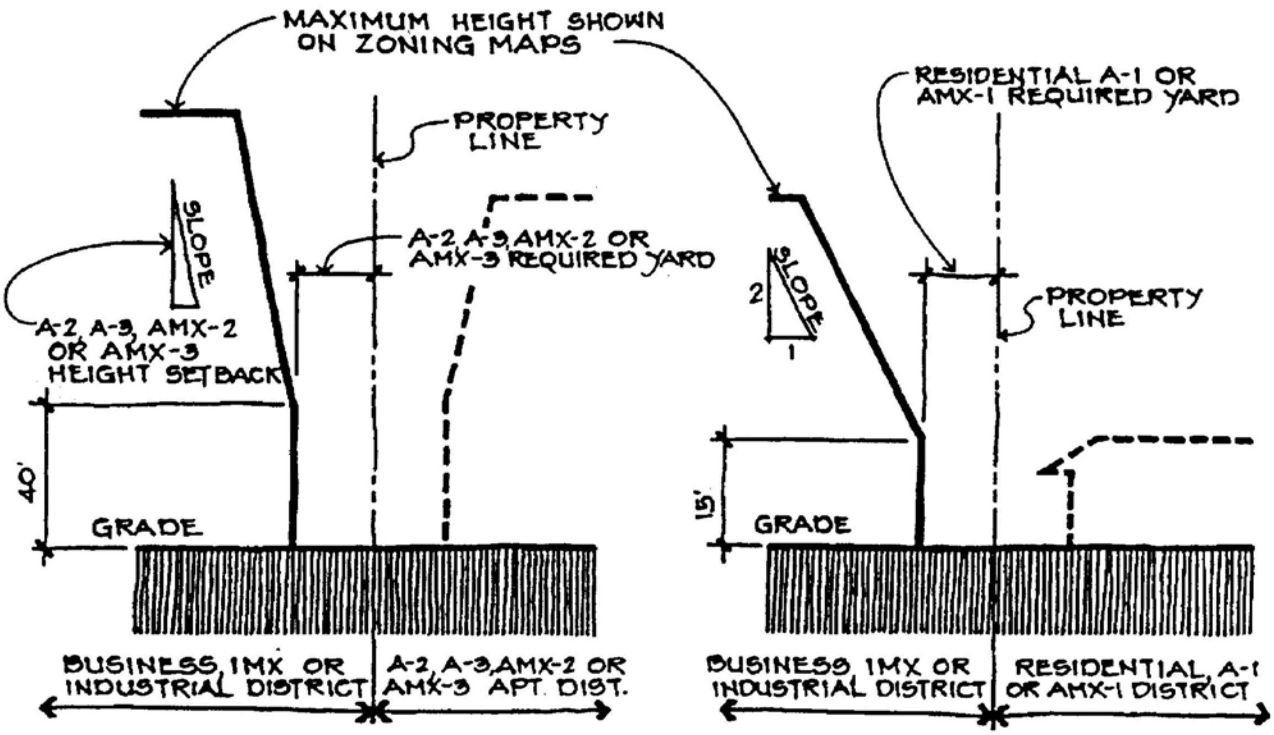
Under the LUO, the H-POWER facility is a “public use and structure” and is permitted in this district. ~~waste disposal and processing are allowed under a Conditional Use Permit –minor, and~~ H-POWER is not subject to the Specific Use Development Standards identified in Article 5 of the Ordinance. Table 7.3-1 provides a summary of the I-2 Industrial Development Standards, as excerpted from the LUO. Although the H-POWER facility is an existing use, alterations, additions, or modifications shall be processed under the applicable permit.

Evaluation: H-POWER will comply with ~~the application requirements of the Conditional Use Permit, and will be consistent with the Specific Use Development Standards identified in Article 5 of the Ordinance and~~ I2 – Industrial Development Standards summarized in Table 7.3-1, above.

TABLE 7.3-1 I-2 – INDUSTRIAL DEVELOPMENT STANDARDS

Development Standard		District I-2
Minimum lot area (square feet)		7,500
Minimum lot width and depth (feet)		60
Yards (feet):	Front[1]	5
	Side and rear	0
Maximum building area (percent of zoning lot)		80 However, the building area may be increased to include all of the buildable area of the zoning lot provided all structures beyond the designated 80 percent building area shall: a. Provide a minimum clear interior height of 18 feet; b. Contain no interior walls, except for those between a permitted use and a special accessory office; and c. Provide a minimum distance of 40 feet between interior columns and other structural features
Maximum density (FAR)		2.5
Maximum height (feet)		Per zoning map
Height setbacks		Additional Development Standards. (1) Transitional Height Setbacks. Where a zoning lot adjoins a zoning lot in a residential, apartment, apartment mixed use or resort district, the residential, apartment, apartment mixed use or resort district height setbacks shall be applicable at the buildable area boundary line on the side of the industrial zoning lot (see Figure 7.3-1). (2) Street Setbacks. In the I-2 districts on zoning lots adjacent to a street, no portion of a structure shall exceed a height equal to twice the distance from the structure to the vertical projection of the center line of the street (see Figure 7.3-2).

[1]Except for necessary access drives and walkways, all front yards shall be landscaped



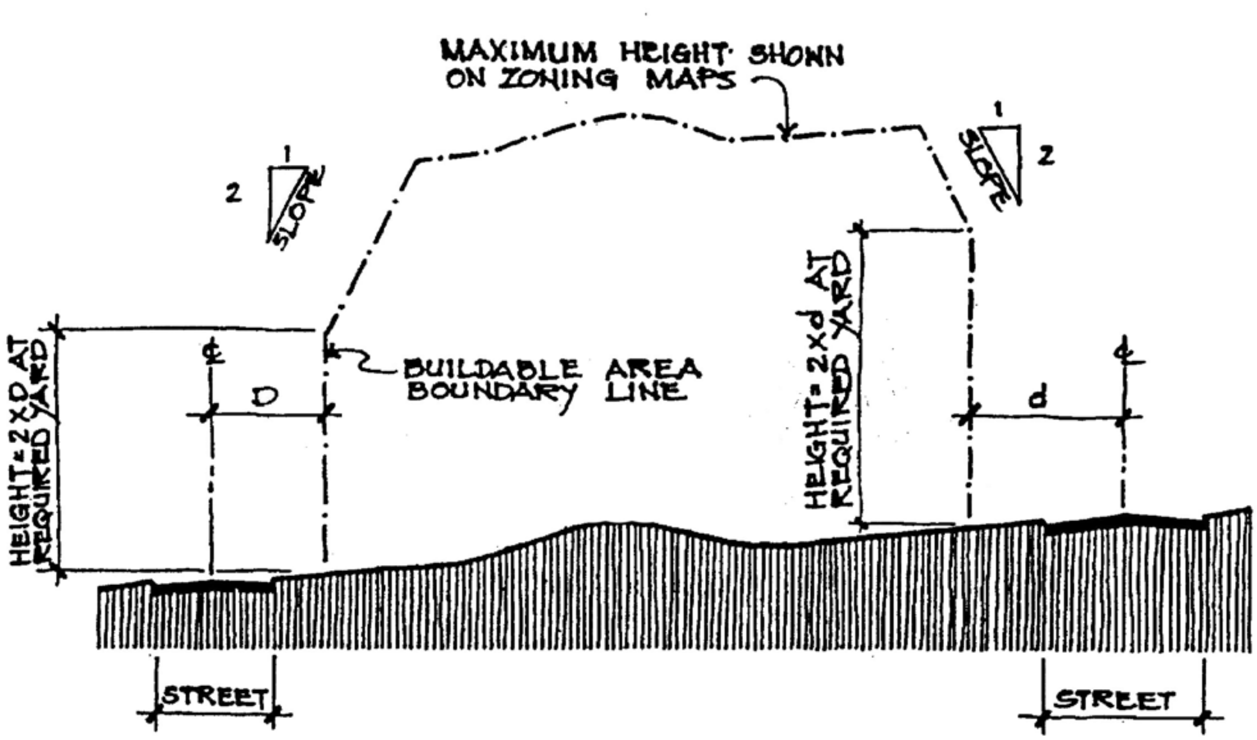
amec

TRANSITIONAL HEIGHTS
(BUSINESS, BMX, IMX AND ALL INDUSTRIAL DISTRICTS)

FIGURE
7.3-1

H:/H-POWER/MXD_Current/Environmental/street1.mxd
H:/H-POWER/Export/Environmental/street1.pdf
March 4, 2005 DWN: RLO CHKD:

Figure 7.3-1 back side



STREET SETBACKS

(B-2, BMX-3, I-2, I-3 AND IMX DISTRICTS)

FIGURE **7.3-2**

H:/H-POWER/MXD_Current/Environmental/street.mxd
H:/H-POWER/Export/Environmental/street.pdf
March 4, 2005 DWN: RLO CHKD:

Figure 7.3-2 back side

8.0 ALTERNATIVES TO THE PROPOSED ACTION

8.1 Alternatives Considered

In December 2008, the Alternatives Analysis for the Expansion of H-POWER report was completed for the subject EIS by Pacific Waste Consulting Group (PWCG) (Appendix F). The following includes a summary of the report and evaluation.

The following alternatives to the proposed project were evaluated:

- No Project – The Expansion would not be built, with no alternative site or technology available.
- Delayed Project – The action on the Expansion would be delayed. The delayed and No Action alternatives have the same effect, and the Delayed Project action could increase the cost of the Expansion.
- Transshipment – O‘ahu’s MSW would be baled and transported to a mainland landfill for disposal in Washington, Oregon, or Idaho. Even with this alternative, not all MSW can be transshipped.
- Alternative Technologies – Technologies other than the Expansion that could reduce the amount of material requiring disposal and generate electricity or another beneficial reuse product. Alternative technologies that were considered include:
    1. Thermal and non-thermal technologies; and
    2. Enhanced recycling.

The analysis was performed for each of the alternatives. The examination of alternative technologies involved a review of currently operating facilities and includes information describing the technologies.

Alternative technologies were compared to criteria or guidelines established by the City & County of Honolulu in the June 20, 2007 *Competitive Sealed Proposal for Alternative Technology*. The transshipment requirements were compared to criteria or guidelines established in the City’s bid documents from January 22, 2008.

8.2 No Project Alternative

Under this alternative, Unit #3 of H–POWER would not be constructed. The existing plant could continue to operate providing energy recovery, recycling and disposal reduction. These benefits would not be increased by the construction of the Expansion. Several actions would result:

- The Waimanalo Gulch Sanitary Landfill would continue to receive an additional 900 TPD of MSW that would have been reduced to 225 TPD through operation of the Expansion. Truck traffic to the landfill would have been reduced by the Expansion. The result would be a reduction in the life of the landfill.

- The loss of energy produced by the Expansion would decrease the potential amount of energy produced from this renewable fuel, which is estimated to increase from five to eight percent of the island needs after the Expansion. Under this alternative, that energy benefit would not be realized and additional oil would be imported to offset the lost power.

Under this alternative, the City would continue to send the MSW that would be converted to energy in H–POWER Unit #3 to the Waimanalo Gulch Sanitary Landfill. The landfill is currently in the environmental process to obtain approval for a 92.5-acre Expansion to allow for operation of the landfill for at least an additional 15 years. The landfill currently receives ash, RDF processing residue, and non-processibles waste from H–POWER. It is also the disposal site for MSW that exceeds the capacity at H–POWER.[10]

Under the *No Project* alternative, the use of the Waimanalo Gulch Sanitary Landfill rather than expanding H–POWER offers an opportunity in that the landfill can be used immediately since it already exists, is in an Expansion mode, and is a long-term resource to be conserved for the City's use, without the permitting and construction needed for the Expansion.

There are several disadvantages to the *No Project* alternative and the use of the Waimanalo Gulch Sanitary Landfill rather than expanding H–POWER, including:

- The landfill has a finite capacity and disposing of MSW in it rather than converting the MSW into energy in H–POWER is wasting precious land resources and the energy generation resources in the MSW.

- There are energy generation and oil fuel conservation benefits using H–POWER rather than importing oil to produce the electricity needed on the island.

8.3 Delayed Project Alternative

This alternative would have the project benefits realized, but at a later time. The results would be:

- The Waimanalo Gulch Sanitary Landfill would continue to receive an additional 900 TPD of MSW, but for a limited amount of time. The impact on the life of the landfill would be reduced compared to the "No Project" alternative, but the landfill life would be shortened.

- The energy penalty due to the loss of electric power generation from the Expansion would occur, but would be reversed when the Expansion was built.

[10] Draft Environmental Impact Statement Waimanalo Gulch Sanitary Landfill Expansion, May 2008.

- The project cost would likely increase if for no other reason than inflation.

The environmental benefits of the Expansion are not realized with the *No Project* alternative and are postponed with the *Delayed Project* alternative. The positive energy impacts of the Expansion are likewise not realized or delayed. There are likely increases in cost of the *Delayed Project* alternative. Taken together the negative impacts of not building the project or delaying it are greater than building the project.

8.4 Technology Alternatives

Alternative technologies could be used in lieu of an H-POWER Expansion, but the environmental and economic performance of energy from waste (EfW) is well documented through long-term operation, which is not the case with alternative technologies.

The alternatives fall into several categories:

- Alternative Technology — Thermal. These processes use heat to reduce the waste to energy or a fuel that can be used to produce energy and may produce recyclables. Pyrolysis, gasification, and EfW are examples of thermal processes.

- Alternative Technology — Non-thermal. These processes produce a material, such as compost, that is sold and may also have an energy output. Digestion and hydrolysis are two examples of non-thermal technologies.

- Alternative Disposal Location — Transshipment to the Mainland. This alternative would have the waste material shrink wrapped at a facility in Honolulu, barged to the mainland, and disposed at a landfill there.

- Alternative Technology — Enhanced Recycling. Rather than recovering the energy content of the waste in a combustor, such as H–POWER, this alternative would institute additional recycling programs to remove the materials from the waste stream. The City has characterized the H–POWER plant as “recycling to energy” because it reuses the energy value of the waste as electricity.

8.4.1 City & County of Honolulu Requirements for Alternative Technologies

In its June 20, 2007 *Competitive Sealed Proposal for Alternative Technology* the City identified the following six minimum requirements (not applicable to the Alternative Disposal Location or for Alternative Technology — Enhanced Recycling): [11]

- “There exists at least one (1) operational facility processing municipal solid waste that over the past two (2) years has been operating at a rate of at least five hundred (500) TPD in which the Offeror or its design and operational members have been substantially

[11] City and County of Honolulu, Notice to Bidders, Project to Construct and Operate Alternative Energy Facility and/or H–POWER Facility. Competitive Sealed Proposals for Alternative Technology (CSP) NO. 037, 16 January 2007.

involved. Names, addresses, and phone numbers of persons that can be contacted at the facility or at the agency responsible for the facility shall be provided.

- Such facility has been operated successfully for the past two (2) years and has been fully operational eighty five percent (85 percent) of this time while meeting all performance and environmental compliance requirements.

- The facility without major modification or equipment changes, other than for the acceptable application of good engineering practice for scale up or scale down, would substantially represent the system proposed for Honolulu.

- The product produced at the facility has for the past two (2) years been marketed and resulted in the beneficial reuse of energy. The Offeror shall provide descriptions and documentation of the beneficial reuse such as, operating reports, weight records, names of purchasers, revenues from sales, etc. in sufficient detail to demonstrate fulfillment of this requirement. For example, producing steam for steam sale is not as complex as producing steam for generating electric power. For an Offeror to be able to claim an ability to contract for electric power to a utility, the Offeror must demonstrate that it has power purchase contracts on going and that the utility or energy customer, to which the power is to be sold, provides evidence in writing that it shall enter into a power purchase contract based on its understanding of the proposed facility's ability to produce such power. If energy sales at existing facilities are not comparable to those proposed, anticipated revenues shall not be included in the Offeror's Price Proposal. Research and development projects or similar efforts that have not resulted in a contracted marketed product with actual sales are not acceptable and shall not be included as Revenue in the Offeror's Price Proposal. For the Options proposed, the selected Offerors shall participate with the City in the development and maintenance of the Power Purchase Agreement (PPA) between the City and the Utility similar to the PPA included as Appendix D of the Contract Documents. In order to assure a good understanding of the Hawaiian Electric Co., Inc. service requirements, the Offeror shall complete and submit Sections 1 and 2 of Attachment 'A' as part of its Proposal. In addition, the selected Contractor shall be required to enter into an Interconnection Requirements Study Agreement as provided for in Attachment 'B'. Attachment 'C' Sample Information on Performance Requirements is provided as information for the bidders. The specific values for these performance parameters would be finalized in the course of the PPA negotiations. It is understood that the selected Contractor shall be responsible for the payment of all cost required for the development of and adherence to conditions of the Power Purchase Agreement and those of Attachments 'A', 'B' and 'C' of this Notice to Bidders and for the payment of all penalties for non performance due to Contractors fault associated with these Contract Documents.

- The proposed Facility shall be commercially available such that: (1) The design is proven and the proposed facility is not the first of its kind; (2) The equipment proposed has operated successfully at least eighty-five percent (85 percent) of rated capacity while at the same time operating for at least eighty-five percent (85 percent) of the time during the past twenty-four (24) month period; (3) The equipment is regarded as being reliable and not subject to excessive maintenance, operational problems, or requires major re-designs; (4) The facility has processed a minimum of five hundred (500) TPD of municipal solid waste while operating in accordance with all environmental permits.

- Certification that the ash slag and residue by products from the proposed facility have met all environmental requirements for either marketing or landfill disposal including passage of the [Toxicity Characteristic Leaching Procedure (TCLP)] test and classification as non-hazardous materials, or, if deemed hazardous certification from the final disposal site that materials have been properly disposed of and how it would be disposed of for this project."

8.4.2 Summary of Alternative Evaluation

Each of the technology and non-technology alternatives is compared either to criteria that the City has published or to general criteria that came out of this evaluation. This section summarizes the results of the comparison of the alternatives to the Project, which is the construction and operation of H–POWER Unit #3.

The following two tables summarize the comparison of the alternatives to the Project. In Table 8.4-1 Comparison of Compliance of Alternative Technologies to City's Criteria, the alternative technologies are compared to the City's criteria for alternatives, which it has published in its Notice to Bidders released on January 22, 2008. Only one technology, EfW, satisfies all of the criteria. One other, Gasification/pyrolysis, satisfies one of the criteria, but none of the others. A criterion was indicated as "ND" if the technology vendor did not satisfy the threshold criteria of having an operating facility for two years processing 500 TPD of MSW. "ND" was not determinable.

TABLE 8.4-1 COMPARISON OF COMPLIANCE OF ALTERNATIVE TECHNOLOGIES TO CITY'S CRITERIA

Technology	Criterion and Note #						
	1	2	3	4	5	6	7
	One Facility Operating for 2 Years	500 TPD	85% Capacity	85% of time	Products Marketed	Compliance	Residue
EfW	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Anaerobic Digestion	No	No	ND	ND	ND	ND	ND
Aerobic Digestion	No	Possibly	ND	ND	ND	ND	ND
Hydrolysis	No	No	ND	ND	ND	ND	ND
Plasma Arc	No	No	ND	ND	ND	ND	ND
Gasification/Pyrolysis	Yes	No	ND	ND	ND	ND	ND

ND — not determinable

Notes:

1 The vendor has at least one facility that has been operating for two or more years processing MSW and has also met criteria 2 though 7.

2 The technology processes 500 TPD of MSW or more
3 The technology operates at 85 percent of the rated capacity.
4 The technology operates 85 percent of the time, that is has 85 percent availability.
5 Products produced are marketed. The products can range from electricity, steam, a gaseous fuel, and MSW compost.
6 The technology has operated in compliance with all environmental regulations.
7 The residue and by-products meet environmental requirements for marketing or landfilling**.**

In Table 8.4-2 Comparison of Other Alternatives, the other four non-technology based alternatives are compared to the Project based on the greenhouse gas emissions and need for imported oil. These alternatives were the only ones compared in this table because none of the technology alternatives met the City's criteria except EfW, which is the Project for the purposes of this analysis. None of the alternatives in Table 8.4-2 results in an improvement in either greenhouse gas emissions or importation of oil.

TABLE 8.4-2 COMPARISON OF OTHER ALTERNATIVES WITH RESPECT TO PROPOSED PROJECT

Alternative	Criterion and Note #	
	1	2
	GHG Emissions	Imported Oil
No Project	Increased	Increased
Delayed Project	Increased	Increased
Enhanced Recycling	ND	Increased
Transshipment	Increased	Increased

Notes:
1 GHG Emissions refers to whether the greenhouse gas emissions would be increased (detrimental or negative effect) or decreased (beneficial or positive effect) with the alternative as compared to the Project.
2 Imported oil refers to whether the need to import oil for energy production would be increased (detrimental or negative effect) or decreased (beneficial or positive effect) with the alternative as compared to the Project.

Enhanced recycling is indicated as a "ND" for greenhouse gas emissions because the calculation depends on the truck trips and the GHG benefits from recycling the materials, and this information is not known.

8.4.3 Energy from Waste

There are two general approaches to EfW - Mass Burn and RDF. In a RDF plant (the existing H-POWER facility is an RDF plant), MSW is processed through shredders and screens, through which dirt, glass, and other recyclable and non-combustible materials are sorted out. The remaining material is combusted, resulting in the creation of ash, RDF processing residue, and steam used to generate electricity. Metals are separated in the pre-combustion processing and from the ash post-combustion and are recycled.

Mass burn plants combust MSW without pre-processing. Waste is introduced into the furnace after being unloaded from the collection vehicle. The waste combustion creates steam, which is used to make electricity. By-products are ash and residual waste. Metals are separated from the ash and are recycled.

The project host and technology vendor are responsible for the disposal of ash and residual waste.

H-POWER extracts ferrous metals from the waste using magnets and non-ferrous metals from the ash using an eddy current separator. Approximately 18,600 tons of ferrous metals and 2,100 tons of non-ferrous metals were recycled in FY 2006. The sale of ferrous and non-ferrous metals generated approximately $1.5 million in that fiscal year.[12]

Additionally, H-POWER reduces the island's dependence on imported oil. One ton of trash produces saleable energy equivalent to 60 gallons of imported oil.

8.4.4 Other Jurisdictions Using Waste to Energy

EfW is a proven technology with facilities found throughout the United States and in many areas of the world. Covanta, the operator of H–POWER, owns and/or operates plants in Alabama, California, Connecticut, Florida, Indiana, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, Oregon, Pennsylvania, and Virginia. EfW plants have been operating for more than 75 years in some areas of the world.[13]

8.4.5 Consistency with City Requirements

EfW is consistent with the City requirements.

8.5 Non-Thermal Technologies

For the purpose of this report, non-thermal processes are defined as those that primarily produce a solid material, such as MSW compost, which is then marketed. Non-thermal technologies included in this analysis are digestion and hydrolysis.

[12] Department of Environmental Services. http://www.opala.org/solid_waste/archive/How_our_City_manages_our_waste.html#hpower. 24 July 2008.
[13] Covanta Holding. http://www.covantaholding.com/. 21 July 2008.

8.5.1 Anaerobic Digestion

Anaerobic digestion is the decomposition of MSW without the introduction of oxygen. End by-products tend to be liquid, gas, and solid materials. The organic fractions of MSW are converted into single-celled proteins, which can be used for compost and fertilizers. Due to the length of time anaerobic digestion takes, a significant amount of land is required to process the amount of MSW the City requires of an alternative technology.

8.5.1.1 Other Jurisdictions Using Anaerobic Digestion

Currently the only ArrowBio facility in operation is at the Hiriya transfer station. ArrowBio plans to build a 500 TPD plant in Mexico [14]. A 90,000 TPY facility that is part of Australia's Macarthur Resource Recovery Park at the Jack's Gully landfill site opened its doors on July 4, 2008.[15] [16]

8.5.1.2 Consistency with City Requirements

The anaerobic digestion facilities do not meet the City's requirements:

- The existing facilities either process less than the City's minimum waste stream (the existing ArrowBio facility 210 TPD of MSW, 290 TPD less than what the City requires) or they process source-separated organics.[17] ArrowBio could use multiple units to meet the City requirement.

- The facility design for the ArrowBio is the first full size facility.

- There is no proven market for the MSW compost product.

8.5.2 Aerobic Digestion

Aerobic digestion is the decomposition of MSW with the introduction of air. Examples of aerobic digestion include Converted Organics (formerly Mining Organics)[18], Real Earth Technologies, and Herhof Environmental's MBT Process. Due to the lack of readily available information about both Converted Organics and Real Earth Technologies, a generic explanation of Herhof Environmental's MBT Process is included in Appendix F. Different companies use different approaches and equipment, but produce similar products.

[14] Oaktech Environmental. http://www.oaktech-environmental.com/news.htm, 18 July 2008.
[15] WSN Environmental Solutions. http://wasteservice.nsw.gov.au/. 18 July 2008.
[16] Marshall, A.T. and Morris, J.M., "A Watery Solution," Chartered Institute of Waste Management Journal, August 2006.
[17] *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.
[18] Mining Organics merged with/bought out by Converted Organics in February 2006. 21 July 2008.

8.5.2.1 Other Jurisdictions Using Aerobic Digestion

Composting of kitchen, food, and green waste scraps is well established in Europe. Germany has more than 500 biochemical treatment facilities processing more than eight million TPY of food and green wastes; the majority of those facilities are aerobic compost facilities. However, these facilities are not processing MSW.[19] Vancouver, Canada has a 30 TPD demonstration plant by Herhof in operation processing separated food and other organic wastes.[20] There are currently seven commercial MSW Herhof plants in operation in Germany, Belgium, and Italy, with one proposed for the United Kingdom that will use the solid fuel produced by the MBT Process in a combustion plant. In 2009, Herhof plans to open a 160,000 TPY MSW facility in Larnaka, Cyprus and a 40,000 TPY CI&I facility in Athens, Greece.

8.5.2.2 Consistency with City Requirements

None of the Herhof Environmental plants have been in operation more than two years processing more than 500 TPD of MSW. However, Herhof Environmental states their MBT Process is capable of processing up to approximately 1,095 TPD.[21]

8.5.3 Hydrolysis

Hydrolysis is a chemical reaction in which water and another substance react, forming two or more new substances. With the hydrolysis of MSW, the reaction is between water and the cellulose fraction of the wastes to produce sugars. To obtain the cellulose fraction of the MSW, glass, metals, and other inorganic materials must first be removed.

Several types of hydrolysis technologies exist. The description by BlueFire Ethanol, Inc. (formerly Arkenol Fuels) is provided in Appendix F as an example for discussion. Another technology is the Masada Oxynol process.

8.5.3.1 Other Jurisdictions Using Hydrolysis

There are no hydrolysis facilities currently in operation that process MSW as feedstock and none are the size the City requires.[22]

8.5.3.2 Consistency with City Requirements

Hydrolysis is inconsistent with the City requirements because there has not yet been a successful facility at the size required by the City operating on MSW.

[19] Oaktech Environmental, http://www.oaktech-environmental.com/, 11 March 2008.
[20] *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.
[21] Herhof Environmental. http:// www.herhof.com/en/. 21 July 2008.
[22] Interstate Waste Technologies, http://www.iwtonline.com/. 21 July 2008.

8.6 Thermal Technologies

Thermal or combustion technologies produce a significant amount of heat which can be turned into energy. During the processes, both organic and non-organic materials are combusted while the non-combustible materials can be recycled either before or after combustion. Common thermal technologies are gasification, plasma arc, hydrolysis, pyrolysis, and combustion. Examples of thermal technologies include those listed below. Some of these companies may no longer be providing service.

- Covanta Energy — the City's H-POWER facility.
- Rigel Resource Recovery — Westinghouse Plasma Arc Gasification.
- Dynecology — Gasification with Briquetting of Refuse Derived Fuel (RFD)/Coal/Sewage Sludge.
- International Environmental Solutions (IES)—Advanced Pyrolysis Systems
- EBARA Corporation — Fluidized Bed Gasification with Ash Vitrification.
- GEM America — GEM Thermal Cracking Technology (Gasification).
- Global Energy Solutions — Thermal Converter Technology (Gasification and Vitrification).
- Interstate Waste Technologies — Thermoselect Gasification.
- Pan American Resources — Destructive Distillation Lantz Converter.
- Pratt Industries/VISY Paper (RDF).
- Comprehensive Resources, Recovery, & Reuse, Inc. (RDF).
- Takuma Mass Burn Renaissance System.
- Resource Recycling, L.L.C. (Mass Burn).

H-POWER technology is discussed in its own section since it is a proven technology that is currently in use by the City.

8.6.1 Plasma Arc

This technology uses large carbon rods in a sealed vessel to generate a high temperature arc that converts the materials in the vessel into plasma (ionized gas). Heat generated by the arc melts the inorganic fractions into a running slag (that can appear like glass) and vaporizes the organic fractions, which become a synthetic fuel gas. The glass can be disposed in a landfill or may be used for beneficial purposes, such as for replacement of imported sand for sand blasting. The synthetic gas is cleaned and burned to produce power.

8.6.1.1 Other Jurisdictions Using Plasma Arc

Currently, there are two operating plasma arc facilities that process MSW. The longest running one and the only one that is not a demonstration plant is the Eco Valley Utashinai facility located in Utashinai, Japan. The facility processed more than 270 TPD of MSW and 130 TPD of automobile shredder residue and generated approximately 4,400 kWh of salable energy in fiscal year 2005.[23]

The City of St. Lucie, Florida has been in negotiations for a plasma arc facility. The Georgia-based company, Geoplasma, has agreed to build and operate the facility and claims at full capacity, the facility will process 2,000 TPD of MSW and 1,000 TPD of MSW mined from a landfill while producing 120 MW of electricity.[24]

Geoplasma has agreed to build and operate the facility, estimating that within the next 15 to 18 years the facility will have disposed of all the current waste in the landfill. Ron Roberts, the Assistant Solid Waste Director in St. Lucie, estimates the plant will be finished within 25 to 30 months.[25]

A second plasma plant operating on MSW started operation in late January 2008 in Ottawa, Canada. It is a demonstration project that is designed to processes 85 TPD. The information about the plant was obtained from news sources[26], which stated:

> "A demonstration waste-to-energy plant in Ottawa has finally turned its first load of trash into power…
>
> … The $27 million plant uses a process called plasma gasification to decompose waste under high heat and low oxygen into a gas mixture called syngas, and a glass-like material that can be turned into asphalt or concrete….
>
> Once the plant is running at full capacity, it is to divert 85 tonnes of waste a day from the city's landfills while generating enough electricity to run the facility and power 3,600 homes….
>
> Plasco hopes its demonstration plant in Ottawa will persuade other cities to buy the technology….
>
> Construction of the plant started in September 2006. It was to run as a two-year pilot project."

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[23] Shigehiro, Michiaki, General Manager of Eco Valley Utashinai.
[24] Sladky, Lynne. "Florida county plans to vaporize landfill trash." USA Today. September 9, 2006 and Margasak, Gabriel. "Trash zapper in St. Lucie County gets shot in arm from Crist", TCPalm, 10 November 2007.
[25] Miller, Dan. "State-of-the-art plant makes trash vanish into thin air." County News Online. National Association of Counties, Washington, D.C., 2 October 2006.
[26] Information from http://www.cbc.ca/technology/story/2008/02/07/ot-plasco-080207.html, 24 July 2008.

The PLASCO plant was partially funded by the Canadian government.

> "This brings to over C$90 million the equity invested in PlascoEnergy since August 2005. The Company had nominal debt and a modest cash position prior to this issue, and is well funded for development of commercial facilities next year," said Rod Bryden, PlascoEnergy President and CEO. "Commitment of funding from Sustainable Development Technology Canada ('SDTC') to the Ottawa demonstration project was a key factor in bringing the PlascoEnergy technology to reality and to attracting private capital that will fund its future commercial use around the world. SDTC has committed a non-repayable contribution of C$9.5 million," he said.[27]

In June 2008 the City of Ottawa and Plasco Energy agreed to a letter of intent for the company to build a 400 tonne per day commercial-scale plant in Ottawa.

8.6.1.2 Consistency with City Requirements

Currently, plasma arc technology does not meet the City requirements. The Eco Valley Utashinai facility processes 270 TPD of MSW, 230 TPD short of the City requirements. The Ottawa facility, at 85 metric TPD and with less than two years operation, is also short of the City requirements. In addition, as shown in Table 10, Operating Information and expressed in the company's online literature, the Ottawa facility is intended to be a demonstration plant with the full scale facility to be constructed

These facilities are the only ones operating on MSW.

Plasma arc does not meet the City's requirements.

8.6.2 Gasification/Pyrolysis

Gasification is the process of reducing MSW to a synthesis gas. Pyrolysis is similar to gasification and often considered a type of gasification technology. The by-products of gasification are syngas and vitrified material (slag) and pyrolysis by-products are solid carbon and liquid fuel. Pyrolysis generally takes place during the first steps of gasification. Examples of gasification technologies are as follows. Some of these companies may no longer be providing the service.

[27] Information from PLASCO new release dated December 12, 2007, http://www.plascoenergygroup.com/?News/23/2007-12-03:First_Reserve_leads_PlascoEnergy_equity_funding, 22 July 2008. Information about the expanded plant accessed on October 30, 2008 at http://www.zerowasteottawa.com/en/.

- Dynecology—Gasification with Briquetting of Refuse Derived Fuel (RDF)/Coal/Sewage Sludge.
- International Environmental Solutions (IES)—Advanced Pyrolysis Systems
- EBARA Corporation—Fluidized Bed Gasification with Ash Vitrification.
- GEM America—GEM Thermal Cracking Technology (Gasification).
- Global Energy Solutions—Thermal Converter Technology (Gasification and Vitrification).
- Interstate Waste Technologies—Thermoselect Gasification.
- Pan American resources—Destructive Distillation Lantz Converter

8.6.2.1 Other Jurisdictions Using this Technology

Global Energy Solutions has 14 facilities in operation in Japan, Asia, and Europe. Two facilities operating in Japan process solely MSW.

Since the start-up of the Aomori, Japan plant in 2000, EBARA has since opened nine TwinRec gasification facilities in Japan and one in Kuala Lumpur, Malaysia. None of these plants process the amount of waste required by the City, but the plant in Kawaguchi City is close.

Interstate Waste Technologies has the following facilities:[28]

- Fondotoce, Italy, operated the demonstration Thermoselect facility for six years, with commercialization commencing in 1994, from 1992-1998. The plant was decommissioned in 1999.
- Karlsruhe, Germany, operated a Thermoselect facility from 1999 until 2004, when it was closed due to “general business strategy decisions.” The facility processed 225,000 TPY of waste from surrounding towns and rural districts.
- Currently, seven Thermoselect facilities are operating in Japan. Three of the facilities operate on MSW. Commercialization of the Matsu facility began in 2003 and currently processes 140 TPD. The Nagasaki and Tokushima facilities commenced operations in 2005, with the Nagasaki facility processing 300 TPD and the Tokushima facility processing 120 TPD of MSW.

[28] http://www.iwtonline.com/docs/Thermoselect_process_description.pdf, 21 July 2008.

8.6.2.2 Consistency with City Requirements

Global Energy Solutions' Thermal Converter technology might be consistent with the City requirements; there is no information readily available regarding how long either of the two MSW facilities in Japan have been in operation. This residual by-product requires a market that is not proven on O'ahu.

Interstate Waste Management's Thermoselect technology is inconsistent with the City requirements. Although there are seven Thermoselect facilities in Japan, only three operate on MSW, none at the size the City requires (the Matsu facility processes 140 TPD, the Nagasaki processes 300 TPD, and the Tokushima facility processes 120 TPD.) All those listed here have been in operation for more than two years. The market for the metal pellets and vitrified granulate by-products would have to developed on O'ahu.

EBARA has a plant that processes 462 TPD that has been operating for 6 years. It might be an alternative if the cost is reasonable. In a tour of the facility in early July 2008, a question was asked about the cost and the response indicated that they do not discuss cost, but also do not propose in many areas of the US because the market does not support the project cost. [29]

8.7 Expanded Recycling

Expanding current recycling infrastructure within the City would not eliminate the need for expanding H–POWER; however, expanded programs would decrease the amount of materials sent for disposal. The recycling programs cannot handle all the materials in the MSW. As a result, expanded recycling is not a viable alternative to Expansion of H–POWER.

The expanded recycling could include expansion of the number of sites that accept materials from the HI5 beverage container program, addition of more sites to the school drop-off program, increasing the frequency of curbside collection of residential green waste, and adding a program to collect other recyclables from residences at the curb.

The City conducted a pilot three-bin curbside program with once-per-week solid waste collection and once-per-week recycling collection, alternating between recycling and green waste. The residents in the pilot locations, Mililani and Hawaii Kai, were generally successful at separating their recyclables and green waste from the solid waste bins and reducing their overall weekly disposal. Most neighborhoods still have twice-per-week solid waste collection and bi-weekly green waste collection, but the three-bin service was extended to other communities on a rolling basis beginning in November 2008. The program is set to be offered island-wide by May 2010. [30]

If the expanded recycling program achieves the higher level of penetration evaluated, it is expected to divert 35,000 tons of recyclables and 60,000 tons of green waste from the landfill. According to the City's Integrated Solid Waste Management Plan (CCH, 2008a), even

[29] Personal communication with Paul Philleo, Chief of the Sacramento County Department of Waste Management and Recycling.
[30] City and County of Honolulu, Curbside Recycling Pilot Program Evaluation, June 2008.

considering Enhanced Recycling and assuming that 300,000 tons of MSW will be recycled into electric power by H–POWER Unit #3, there will still be over 100,000 tons per year of waste requiring landfilling in addition to ash and RDF processing residue from H-POWER. Thus, Enhanced Recycling is not a viable alternative to the Proposed Expansion Project.

8.7.1 Consistency with City Requirements

Expanded recycling is consistent with the City's plans, but cannot provide the same diversion from landfilling as H–POWER Unit #3. As noted above, even with Enhanced Recycling, there is a need to landfill more than 400,000 tons of MSW per year into the future unless H-POWER is expanded by the addition of Unit #3.

8.7.2 City Study on Recycling Alternative

The City has recently compared the environmental and economic impacts of materials recycling of wastepaper to produce new products and energy recycling of wastepaper to produce electricity at Honolulu's existing H-POWER facility. In 2007, the City contracted with R. W. Beck, Inc. (R.W. Beck, 2007) to prepare this limited comparison. The report does not consider energy recovery of waste paper from the proposed Expansion unit at H-POWER. The study considers the existing units at H-POWER. It assumes the disposal and collection of waste paper with mixed MSW, the processing of mixed MSW (containing waste paper) to prepare RDF, and the combustion of RDF to produce electricity in the existing Units 1 and 2 at H-POWER. The report is discussed here to provide general insight into the Expanded Recycling Alternative to the proposed Expansion.

According to the R.W. Beck report (2007):

> "The study analyzes selected impacts associated with managing 73,555 tons of wastepaper as was recycled in Honolulu during 2005." [R.W. Beck (2007)]
>
> "To provide a balanced analysis, the scenarios were analyzed in two distinct ways:
>
> - First, a variety of environmental and economic impacts accruing on the Island of O'ahu were estimated directly; and
> - Second, global life-cycle energy and greenhouse gas impacts accruing both on- and off-Island were estimated using the Waste Reduction Model (WARM), developed by the U.S. Environmental Protection Agency (EPA)." [R.W. Beck (2007)]

The conclusions of the R.W. Beck (2007) report are presented below:

> "If only on-island impacts are considered, energy recycling (i.e., H-POWER) provides greater energy and greenhouse gas benefits compared to materials recycling. However, if off-island impacts and on-island impacts are considered, materials recycling has greater benefits. The off-island energy and greenhouse gas benefits associated with substituting recycled paper for wood pulp to manufacture paper products are greater than the on-island H-POWER benefits." [R.W. Beck (2007)]

"Managing wastepaper using both materials recycling (i.e., remanufacture into paper products) and energy recycling (i.e., H-POWER) yield environmental benefits. Both approaches reduce environmental impacts that would have occurred had the materials not been recycled for materials or energy recovery. Specifically:

- Generating electricity from the combustion of wastepaper at the H-POWER facility provides energy benefits by offsetting the need to generate electricity through combustion of fuel oil. This type of power generation benefits Honolulu directly by reducing fuel costs and air emissions associated with burning fuel oil; and

- Materials recycling of wastepaper yields energy benefits because it provides alternative raw material to paper manufacturers, thereby reducing the need for logging and production of "virgin" pulp products. In contrast to the energy benefits of H-POWER, materials recycling energy benefits accrue off-island, where wood pulp and paper products are produced." [R.W. Beck (2007)]

"Materials recycling creates more on-island jobs than energy recycling (i.e., H-POWER). However, H-POWER generates greater overall economic value for the Honolulu economy, resulting in a larger increase in business activity from providing products and services to HPOWER." [R.W. Beck (2007)]

8.8 Transshipment Off-Island

The transshipment of waste involves securely containing the MSW, shipping it to the mainland and disposing of it at a mainland landfill. On August 23, 2006, the US Animal and Plant Health Inspection Services (APHIS) announced its decision to allow the transshipment of MSW to the continental United States from Hawaii.[31] Transshipment will be allowed only under certain circumstances. Wastes by federal regulation that would be restricted from transshipment are, hard-to-handle wastes, such as white goods, sewage sludge, auto fluff, and precluded materials such as green and agricultural wastes (more than three percent of the bale weight). The announcement is attached as Attachment A to Appendix F.

On January 22, 2008 the City provided a notice to bidders that it would entertain proposals for transshipping waste to the mainland for disposal as an interim measure for several years before the proposed Expansion is completed. The City has received bids from three transshipment firms: the cost was $99.83 per ton from Hawaiian Waste Systems, $184.47 per ton from Simcoe Environmental Services Inc., and $204.21 per ton from Off-Island Transfer.[32] The companies proposed sending O'ahu's waste to Washington State to the Roosevelt Landfill or to a landfill in Idaho. If the City were to begin transshipping O'ahu's waste, the vendors would have to comply with requirements for the handling and storage established by the federal government in the Compliance Orders, with state regulations for handling and processing the MSW, and with local land use permitting requirements. One of the potential transshipment vendors has approved Compliance Orders for the Hawaii and mainland operations and a permit for the transfer station

[31] Federal Register volume 71, number 163, published 23 August 2006.
[32] Laurie Au. "City Reviews Bids to Ship O'ahu Trash." Star Bulletin on the Web Vol. 13, Issue 171. 19 June 2008. (23 July 2008) http://starbulletin.com/2008/06/19/news/story08.html.

to shrink wrap and transfer the waste. The City would also need to look at the effects of transshipment on H-POWER over the long term. With the shipment of O'ahu's waste off-island, waste disposed in H-POWER may be reduced and revenue from the energy sold would diminish.

The City's review of the transshipment proposals was delayed due to a protest filed against Hawaiian Waste Systems. The other two bidders challenge the bid of Hawaiian Waste Systems, whose bid was half the cost of their proposals.[33] A statutorily-mandated stay on award of the bid is in effect while the City reviews the protests.

8.8.1 Other Jurisdictions Using Transshipment

Shipment of MSW using shrink-wrap has been used in New Jersey and other areas of the US. It has been used in Europe for as long as 10 years. The Roosevelt Landfill in Washington receives MSW, not only from Washington State, but also from Oregon, Canada, Idaho, and Alaska.[34] Canada has transshipped its MSW to Michigan landfills for many years, while New York is in the process of transshipping its MSW to North Carolina. Most of these operations do not use the shrink-wrap technology.

APHIS determined, with its acceptance of transshipment of MSW stateside from Hawaii, that transshipment could occur from both O'ahu and the island of Hawaii once contracts and compliance agreements have been set up in Hawaii.

8.8.2 Consistency with City Requirements

The City guidelines regarding the transshipment of MSW off-island are listed in section 4.7.1 in Appendix F, which were summarized from the Notice to Bidders released on January 22, 2008.

Not all waste can be shipped off-island. Items such as flocked Christmas trees, sewage sludge, auto fluff, out of date medicines, and other hard-to-handle wastes cannot be shipped without special arrangements to dispose of these materials. The shipping alternative only accepts materials from a specific waste stream and does not eliminate the need for a landfill.

8.9 Sites

This section discusses the project site. The site could be a new location (a Greenfield site), not currently used as a waste processing plant. The project location could be in Campbell Industrial Park. Since the space and access needs for an EfW plant site are similar to a landfill, the sites located as replacements for the Waimanalo Gulch Sanitary Landfill could be considered as potential sites for this Expansion.

[33] Peter Boylan. "Firm Claims City Pressured on Bids to Ship Trash." Honolulu Advertiser on the Web 11 July 2008. (23 July 2008)

[34] Washington State Department of Ecology, Solid Waste and Financial Assistance Program, "Solid Waste in Washington State Fifteenth Annual Status Report", December 2006.

The environmental, operational, and infrastructure considerations would be the same, whether the potential site were in Campbell Industrial Park or in another area of the island. Comparing a new site to use of the proposed location on the H–POWER property highlights important advantages in using the current H–POWER property rather than a new site.

8.10 Preferred Alternative

Several of the alternative technologies, the continued use of the Waimanalo Gulch landfill, and the transshipment alternative show promise to offer the City an alternative option to the Expansion of H-POWER at the project site.

A viable alternative must meet several considerations:

- It needs to provide for the health and safety of Honolulu residents and visitors by properly managing the waste produced on the island.
- Because of the complexity of the siting requirements in Hawaii, the high degree of public interest and input into any siting process, the environmental clearances needed, and the permitting process, a significant amount of time (some say up to 10 years for a new landfill site or new alternative technology) may be needed for an alternative to become operational.

Expanding the H-POWER facility with technology proven over the long-term shows the most promise in reducing the amount of waste sent to the landfill while producing electricity. Expansion of H-POWER at the existing project site is the Preferred Alternative.

8.10.1 Expansion of H-POWER at the Project Site

EfW, such as H-POWER, is a technology of choice due to the direct benefits of energy production and reduction in disposal. Approximately 90 percent of the residential garbage and 77 percent of the commercial waste collected on Oʻahu is disposed at the H-POWER facility and is converted into energy that powers approximately 45,000 homes.[35] Combusting 90 percent of the garbage that goes through the H-POWER facility means only one-tenth, by volume, remains to be landfilled. Expanding the H-POWER facility would be the most beneficial to the City in reducing the amount of waste sent to the landfill.

8.10.2 Landfill Disposal at Waimanalo Gulch Landfill

The Waimanalo Gulch Sanitary Landfill is the only alternative currently available to dispose of MSW and H–POWER ash and RDF processing residue. The Waimanalo Gulch Sanitary Landfill has capacity to handle MSW for at least 15 years. The site is providing that service today.

[35] City and County of Honolulu Department of Environmental Services. Solid Waste Integrated Management Plan. Updated: November 2007. Table 63a, Table 63b and Table 2-7.

However, reducing landfill disposal is one of the goals of the project. Continued use of the Waimanalo Gulch Sanitary Landfill does not accomplish that goal.

8.10.3 Transshipment

Transshipment of waste transfers the responsibility for stewardship of the land to the mainland landfill that disposes of the transshipped waste. However, transshipment does offer the City a short term alternative for reducing the material being sent to the Waimanalo Gulch Sanitary Landfill for disposal

While transshipment offers an alternative for some of the MSW, there are parts of the waste stream that cannot be shipped due to federal restrictions; some items cannot be accepted due to the process used, and financial and solid waste management considerations that may limit transshipment to a select portion of the waste stream. The expansion of H-POWER offers long term benefits of energy production and reduction in landfill disposal not offered by transshipment.

In addition to the other disadvantages of transshipment, that activity produces much higher greenhouse gas emissions than taking the waste to H–POWER. H–POWER results in a reduction in island-wide greenhouse gas emissions (or negative emissions) of 38,883 metric tons per year of CO_2 equivalent compared to a positive generation from transshipment of 48,120. See Appendix F for additional references and calculations.

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9.0 SUSTAINABILITY ANALYSIS

Consistent with HRS Chapter 343 and the rules for implementing the Hawaii environmental review process, CHRRV and the City and County of Honolulu have undertaken a sustainability analysis of the proposed Expansion. Sustainability is defined for the purpose of this analysis as an assessment of short-term uses versus long-term productivity. A similar definition is offered by the United Nation's Department of Economic and Social Affairs – Division for Sustainable Development: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (UN 2005) As discussed in Chapter 1 of this EIS, CHRRV and the City and County of Honolulu believe that there are substantial advantages to the construction of a third MWC at the existing H-POWER facility, with attention to both short-term uses and long-term productivity. These short-term and long-term uses, benefits, and productivity issues are discussed below.

9.1 Short-Term Uses and Long-Term Productivity

As described in greater detail within Section 5.6, the demand for suitable solid waste disposal options continues to increase, both on O'ahu and nationwide. Short-term, the options for increasing waste disposal capacity are very limited, consisting primarily of continuing to dispose of solid waste at existing landfills that are reaching capacity, and disposal of waste at the existing H-POWER facility, which is also operating at capacity. Thus, current disposal options are not sustainable for either the short-term or long-term and for these reasons the City and County of Honolulu began examining solid waste disposal options for the future. The analysis was, and continues to be, conducted in terms of an integrated approach, with the proposed Expansion representing one facet. That integrated approach includes:

- Expansion of landfill capacity;
- Expansion of the H-POWER facility; and
- Expansion of recycling and composting programs.

One additional "short-term" option, discussed in Chapter 8 as part of the detailed alternatives analysis, could involve the shipment of waste to off-island locations for disposal via landfilling. From a sustainability perspective this solution would bring greater uncertainty in ensuring disposal of solid waste, both short and long-term, and would decrease the amount of control that O'ahu has over its solid waste destiny, for the following reasons:

- As of the writing of this EIS, a transshipment contractor has not been selected by the city.
- Disposal would involve an added layer of transportation. This adds an element of uncertainty regarding the timely disposal of wastes, which would be subject to potential shipping issues, such as weather, future ports and harbors environmental or homeland security concerns, or labor agreements or disputes. Once again, decisions are tied and to, and ultimately made by, off-island decision-makers.
- Should problems beyond the control of O'ahu decision-makers occur, a back-up plan could be challenging and extremely costly. An on-island alternative would not be

available in the short-term due to the time needed for site acquisition proper permitting and engineering of solid waste disposal facilities.

The off-island option of waste disposal would therefore not ensure that O‘ahu residents could meet their future solid waste disposal needs. The proposed Expansion of H-POWER offers continued local control, reliable solid waste disposal and predictable disposal costs. In addition, the Expansion brings the added benefit of increasing the supply of reliable renewable energy available to the island. This is discussed in greater detail in Section 5.7, and represents a key factor in Hawaii’s ability to reach state-defined renewable energy goals, which is an important consideration in a sustainability analysis.

9.2 Conclusion

The short-term and long-term solid waste solution for O‘ahu will likely be a combination of the three existing on-island initiatives, along with continued examination of new technologies and other options. None of the current solutions is mutually exclusive; together they provide an integrated approach to solid waste management for the island of O‘ahu that meets the needs of the present without compromising the ability of future generations to meet their own needs. This tiered approach to managing O‘ahu’s solid waste consists primarily of:

- Reducing the quantities of waste generated, through source reduction, composting and recycling;
- Maximizing the reliable production of sustainable, renewable energy from waste, while minimizing the quantity of waste that is landfilled; and
- Maintaining an on-island landfill, to provide disposal options that are within local control to manage appropriately.

This integrated approach to solid waste management does not preclude the option of incorporating off-island options, or new technologies, once they are proven feasible and cost-effective.

10.0 CUMULATIVE AND SECONDARY IMPACTS

Consistent with HRS Chapter 343 and the rules for implementing the Hawaii environmental review process, CHRRV and the City and County of Honolulu have undertaken a review of the cumulative and secondary impacts that might result from the Expansion.
According to HRS Chapter 343:

> "Cumulative impact" means the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.
>
> "Secondary impact" or "secondary effect" or "indirect impact" or "indirect effect" means effects which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

To best present this information, the potential for cumulative or secondary impacts is evaluated for impact to the natural environment in section 10.1, and then for impact to the human environment in section 10.2.

10.1 Cumulative and Secondary Impacts to the Natural Environment

The Expansion is located on the existing H-POWER site, originally named the Honolulu Program of Waste Energy Recovery to reflect the intent of its design and construction and the purpose of current operations at H-POWER. The H-POWER facility has demonstrated its effectiveness and reliability in disposing of solid waste, minimizing the need to divert waste to landfill, and simultaneously providing a source of renewable electricity to Oʻahu. The Expansion is proposed to be co-located at the H-POWER site to minimize potential impact to the natural environment that might otherwise result from selection of an alternative site, particularly an undeveloped alternate site, or from increasing the landfilling of waste. By selecting the H-POWER site, the Expansion will utilize much of the existing facilities, further reducing potential impacts that might otherwise result from alternate sites or disposal options. Furthermore, the selection of the parcels to be used temporarily during construction also considered the fact that the parcels have previously been disturbed, are adjacent to H-POWER, and are currently owned by the City and County of Honolulu.

The primary consideration in assessing cumulative impacts is to assess the impacts of the proposed Expansion together with other past, present, and reasonably foreseeable future actions. The primary consideration in assessing secondary impacts is to assess impacts of the proposed Expansion on pattern of land use, population density or growth rate, etc;

The following is a brief summary of the potential cumulative and secondary impacts to the natural environment:

- Geology and Soils – Impacts, both temporary and permanent, are to previously disturbed areas. The cumulative effects of the proposed project in combination with other past, present, and reasonably foreseeable future actions not significant. No significant secondary impacts will result because the project will not significantly affect the pattern of land use, population density or growth rate.
- Climate and Air Quality – Emissions will result, but the Expansion will be in compliance with appropriate regulatory standards that consider potential cumulative effects and will utilize air pollution control equipment to mitigate potential impacts. With mitigation proposed, no significant cumulative air quality impacts will result from the proposed project in conjunction with other past, present, and reasonably foreseeable future actions. With regard to global climate, there are significant positive cumulative impacts of the proposed project when considered in conjunction with other past, present, and reasonably foreseeable future actions. By off-setting the need to combust fossil fuels to generate electric power, the proposed Expansion in conjunction with the actions HECO will cause a significant positive cumulative impact on global greenhouse gas emissions. No significant secondary impacts will result because the project will not significantly affect the pattern of land use, population density or growth rate.
- Groundwater Resources/Hydrology – Additional water use and re-injection of cooling waters will be required and existing permit thresholds will be modified and existing infrastructure will be utilized. No significant cumulative or secondary impacts are expected from these actions.
- Biological Resources – Existing resources will be safeguarded and will be buffered during the temporary construction period. Furthermore, biologists will be on-call should the potential for impact to even transient protected species arise. With mitigation proposed, no significant cumulative or secondary impacts will result.

10.2 Cumulative and Secondary Impacts to the Human Environment

As noted above, the Expansion project is designed to be co-located at the existing H-POWER facility. For this reason the Expansion minimizes the need to construct additional public facilities or structures, such as expanded or new landfills and the water, sewer and roadways necessary to support such developments. The Expansion will not require changes to land use, and as noted above will utilize existing water and sewer infrastructure, with modifications to the existing H-POWER permit limits. Though the Expansion and the H-POWER facility are public facilities, owned by the City and County of Honolulu, they are designed to safely and reliably dispose of solid waste that would otherwise need to be disposed of elsewhere.

The primary consideration in assessing cumulative impacts is to assess the impacts of the proposed Expansion together with other past, present, and reasonably foreseeable future actions. The primary consideration in assessing secondary impacts is to assess impacts of the proposed Expansion on pattern of land use, population density or growth rate, etc.

The following is a brief summary of the potential cumulative and secondary impacts to the human environment:

- Archaeology, Historic, and Cultural Resources – No impacts are anticipated, and with proposed mitigation implemented, no cumulative impacts will occur. No significant secondary impacts will result because the project will not significantly affect the pattern of land use, population density or growth rate.
- Roadways and Traffic – Temporary impacts are expected as well as a minor increment to operational levels, however no significant permanent impact to roadway levels-of-service are projected and, with appropriate mitigation, even temporary impacts can be reduced to acceptable levels. Because there is considerable growth in the JCIP area, the slight increase in traffic from the proposed Expansion in conjunction with the increase in local traffic due to other past, present, and reasonably foreseeable future projects, minor cumulative impacts anticipated. No significant secondary impacts will result because the project will not significantly affect the pattern of land use, population density or growth rate.
- Noise – Temporary and permanent noise increments are projected, but no significant impacts are expected due to the existing industrial nature of the site and surroundings. When the noise from the proposed Expansion is considered in conjunction with the noise from the existing H-POWER facility and the other industrial facilities in JCIP, minor cumulative impacts are anticipated. No significant secondary impacts will result because the project will not significantly affect the pattern of land use, population density or growth rate.
- Visual Resources – There will be the temporary presence of construction equipment, but viewsheds from potentially sensitive areas will experience minimal permanent impacts. Negligible cumulative or secondary impacts are anticipated.
- Socioeconomics – A temporary boost to the area economy during construction is anticipated, but not enough to require significant secondary impacts to schools, housing, etc. A permanent increase of employment is negligible to overall economic measures. Negligible cumulative and secondary impacts are expected.
- Solid Waste – The proposed Expansion will cause a substantial improvement in the City and County of Honolulu's ability to manage solid waste while minimizing landfill disposal. There will be significant positive cumulative effects of the proposed project on the lifetime of the Waimanalo Gulch Sanitary Landfill and the City's overall waste management program. No significant secondary impacts will result because the project will not significantly affect the pattern of land use and is planned to account for increased solid waste due to increases in population.
- Energy – The proposed Expansion will result in an increased supply and reliability of a renewable source of electricity. The proposed Expansion when considered in conjunction with the electric power generation plans of HECO will cause significant positive cumulative effects. No significant secondary impacts will result because the project will not significantly affect the pattern of land use, population density or growth rate.
- Human Health – Emissions will result, but the Expansion will be in compliance with appropriate regulatory standards and will utilize air pollution control equipment to mitigate potential impacts. With mitigation proposed, no significant cumulative impacts will result when the emissions from the proposed Expansion are considered along with the emissions from other past, present, and reasonably foreseeable future actions. No

significant secondary impacts will result because the project will not significantly affect the pattern of land use, population density or growth rate.

11.0 SUMMARY OF UNRESOLVED ISSUES

This section identifies those issues that remain unresolved at this time and discusses how such issues may be resolved in the future. This section also identifies the reasons for proceeding with the Expansion even in the event that all issues cannot be fully resolved.

11.1 Unresolved Issues and Potential Solutions

Review and analysis of the potential impacts and mitigation measures associated with the proposed Expansion indicates that the vast majority of potential impacts can and will be fully mitigated. This will be accomplished through the use of proper planning, construction mitigation, and compliance with the rules and regulatory policies that are in place to govern such impacts and to ensure protection of the natural and human environment. Accordingly, there are no unresolved issues.

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12.0 REFERENCES AND LIST OF PREPARERS

This chapter describes the sources of the information presented in this EIS, both in terms of authorship and bibliography. Section 12.1 is a summary of all references and citations and Section 12.2 identifies the people and firms responsible for preparation of the EIS.

12.1 References

The following information sources were used in the preparation of this EIS:

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12.2 List of Preparers

Table 12.2-1 lists the persons and firms who helped prepare the EIS.

TABLE 12.2-1 LIST OF PREPARERS

Name of Person	Firm	Qualifications	Responsibility
Brian Magee	AMEC	B.S. Chemistry M.S. Chemistry M.P.A. Public Administration Ph.D. Toxicology 25+ years experience	EIS Project Manager, Human Health Risk Assessment & Principal Author
Samuel Joshi	Covanta	B.S. Chemical Engineering M.S. Environmental Science M.B.A.; Public Policy Professional Engineer 16+ years of experience	Covanta Project Manager & Senior Reviewer
Robert Graham	Covanta	B.S. Mechanical Engineering M.B.A. 20+ years experience	Project Description & Engineering
Jeff Hahn	Covanta	B.S. Engineering M.S. Chemical Engineering PE 40 years experience	Covanta Project Manager & Senior Reviewer
Glen Kashiwabara	Covanta	B.S.C.E. Civil Engineering 20 years experience	Facility Coordinator & Peer Reviewer
Gary Thein	Covanta	B.S. Mechanical Engineering M.S. Mechanical Engineering 35 years experience	Project Description & Engineering, Senior Reviewer
Stephen Langham	City and County of Honolulu	B.S. Mechanical Engineering M. Finance 38 years experience	Senior Reviewer
Ahmad Sadri	City and County of Honolulu	B.S. Civil Engineering M.S. Environmental 2 years experience	Alternative Analysis
Kirk Dunbar	HDR	B.S. Aerospace Engineering 18 years experience	Owner's Engineer, Review on behalf of City and County of Honolulu
Greg Gesell	HDR	B.S. Mechanical Engineering MBA 20+ years experience	Owner's Engineer, Review on behalf of City and County of Honolulu

Name of Person	Firm	Qualifications	Responsibility
Russell Okoji	AMEC	B.S. Applied Ecology Ph.D. Toxicology 8 years experience	EIS Task Manager, Human Health and Local Coordination
Rachel Okoji	AMEC	B.S. Biology M.S. Industrial Hygiene 9 years of experience	EIS and Local Coordination
Vincent Yanagita	AMEC	B.S. Environmental Science 2 years experience	EIS, Human Health and Local Coordination
Lincoln King	AMEC	B.S. Geographical Information System 6 years experience	GIS and Graphics
Alissa Weaver	AMEC	B.S. Environmental Science 7 years experience	Human Health
Bruce Egan	AMEC	A.B. Engineering S.M. Mechanical Engineering S.M. Industrial Engineering Sc.D. Environmental Health Science – APC	Climate and Air Quality
Patrick Gwinn	AMEC	B.S. Industrial Chemistry M.S. Environmental Sciences 17 years experience	Climate and Air Quality Analysis
Kevin Jameson	AMEC	B.S. Chemical Engineering 24 years experience	Air Quality Analysis
Steffany Toma	AMEC	B.S. Zoology 10 years experience	Surface Water and Biological Resources
Katie Perry	AMEC	B.S. Geographical Information Systems 5 years experience	GIS and Graphics
Steve Clark	PCSI	B.S. Anthropology 32 years experience	Archaeology and Cultural Impacts
Pat McCoy	PCSI	B.A., M.A., Ph.D. Anthropology 34 years experience	Archaeology and Cultural Impacts
Mark White	Pacific Waste Consulting Group	B.S. Mechanical Engineering 30 years experience	Technology Alternatives

13.0 AGENCIES, ORGANIZATIONS, AND INDIVIDUALS CONSULTED IN THE PREPARATION OF THE EIS

Consistent with HRS 343 and the guidelines for implementing the Hawaii State Environmental Review Process, CHRRV and the City and County of Honolulu have undertaken an extensive public participation program. This has consisted of agency and stakeholder consultations as well as community outreach. The outreach program was designed to solicit, identify and better understand and address potential concerns about the Expansion. In addition, CHRRV and the City and County of Honolulu consulted with state and federal agencies in formulating plans for addressing the County's solid waste disposal needs, and in evaluating the potential environmental impacts and regulatory implications of the Expansion. The consultations and outreach activities conducted thus far, as well as those planned as part of the distribution of this EIS are described in the following sections.

13.1 EIS Preparation Notice

CHRRV and the City and County of Honolulu prepared an EIS Preparation Notice (EISPN) for the proposed Expansion, a copy of which is provided in Appendix G. The EISPN was filed with the State OEQC in July 2008 and OEQC published an announcement of its availability in the August 8, 2008 edition of the *Environmental Notice*. The public comment deadline was September 8, 2008. Comments and responses are discussed and attached in Chapter 14 of this EIS.

During development of the EISPN, CHRRV and the City and County of Honolulu conducted initial agency consultations as well as stakeholder outreach. The stakeholder outreach efforts are summarized in Section 13.2 below. Table 13.1-1 provides a list of the Initial Agency Consultations. Italicized organizations provided a response which are presented in Appendix B.

TABLE 13.1-1 INITIAL AGENCY CONSULTATION LIST

Contact Name	Business/Organization
Jeff Newman, Acting Field Supervisor	*U.S. Fish and Wildlife (USFW) Service*
Eileen Mark	Dept. of Planning and Permitting
LaDonna James	Federal Aviation Administration
Peter Young	Dept. of Land & Natural Resources
Kai Markell	*Office of Hawaiian Affairs*
Craig Tasaka	Office of Planning
Muffet Jourdane	State Historic Preservation District
Nathan Napoka	State Historic Preservation District
Eric Komori	State Historic Preservation District
Kana'i Kapeliela	State Historic Preservation District
Roy Kam	*~~Hawaii Natural Heritage Program~~* *Hawaii Biodiversity and Mapping Program*
John Nakagawa	*Office of Planning, CZMP*

Table 13.1-2, below, provides the list of agencies and stakeholders that received letters informing them of publication of the EISPN and of the Open House. Though not listed on Table 13.1-2, copies of the EISPN were available to the attendees of the Open House as described in Section 13.2 below.

TABLE 13.1-2 PARTIES INFORMED OF THE EISPN

Contact Name		Business/Organization
Pat	Murphy	AES Hawaii Inc.
William	Clark	Aiea NH board Chair
Miles	Eligado	Air Liquide
Anne	Stevens	Ala Moana/Kakaako NH board Chair
Steven	Glanstein	Aliamanu/Salt Lake NH board Chair
John	Polischeck	American Piping & Boiler Co
Keith	Teramae	American Piping & Boiler Co
Mel	Kakazu	American Piping & Boiler Co
Ray	Sweeney	Ameron
Fred	Kubota	BEI Hawaii
Grace	Moss	BEI Hawaii
Jim	Mistysyn	BEI Hawaii
Peter	Young	Board of Land and Natural Resources
Cliff	Jamile	Board of Water Supply
Keith	Shida	Board of Water Supply
Timothy	Hiu	Building Division Chief
Karen	Nakamura	Building Industry Assn of Hawaii
Buzzy	Hong	Building Trades Council
Nancy	Thomas	c/o Jane Sugimura
Mary	Emerson	Campbell Estate
Susan	Graham	Campbell Estate
Roy	Kam	Center for Conservation Research & Training
Marty	Gilles	Chevron
Tom	Shaffer	Chevron
Donovan	Dela Cruz	City Council Chairman
Mike	Gabbard	City Council Dist. 1
Barbara	Marshall	City Council Dist. 3
Charles	Djou	City Council Dist. 4
Ann	Kobayashi	City Council Dist. 5
Rod	Tam	City Council Dist. 6
Romy	Cachola	City Council Dist. 7
Gary	Okino	City Council Dist. 8
Nestor	Garcia	City Council Dist. 9

Contact Name		Business/Organization
Tim	Johnson	Cummins Hawaii Diesel Power
Daniel	Ford	Clayton Group Services
Denis	Lau	Clean Water Branch
Jane	Sugimura	Condo Associations
Ken	Kanehiro	Condo Associations
Clyde	Kaneshiro	CWR Hawaii Inc.
Mike	Ojeda	D & M Hydraulic Sales & Services
Bert	Narita	D.Head/Kapahulu NH board Chair
Frank	Doyle	Department of Environmental Services
Keith	Kawaoka	Hawaii Department of Health, HEER Office
Stuart	Yamada	Hawaii Department of Health, Safe Drinking Water Branch (UIC)
Lene	Ichinotsubo	Hawaii Department of Health, SHWB
Janice	Fujimoto	Hawaii Department of Health, SHWB
Laura	Thielen	Department of Land & Natural Resources
Eileen	Mark	Department of Planning and Permitting
Mike	Miyashiro	Diamond Head Petroleum Inc.
andy	Chang	Diversified Energy Services
John	Tanner	Diversified Energy Services
Ken C.	Kawahara	DLNR, Commission on Water Resource Management
Eric	Hirano	DLNR, Engineering Division
Lynne	Matusow	Downtown NH board Chair
Brian	McKenna	E&I Hawaii
Tom	Battisto	Earth Tech Inc
Dave	Williams	East Bay Tire Co
Ed	Clizbe	Engineered Systems
Richard	Hargrave	‘Ewa Neighborhood Board Chair
Karen	MacDonald	FAA, Air Traffic Division, AWP-520
Jake	Ford	Fastenal Company
Bill	Pierce	Ferguson Familian
Chuck	Drummond	Flowserve
Glenna	Couts	Foster Equipment Co
David	Figueira	G E Betz Inc
Kerwin	Chong	Hawaii Crane & Rigging, Ltd.
Nolan	Hirai	Hawaii Department of Health, Clean Air Branch
Steven	Chang	Hawaii Dept of Health
Peter	Crum	Hawaii Electro Power
Judy	Kaaiai	Hawaii Fluid System Tech
Greg	Knudsen	Hawaii Kai NH board Chair
Bill	Mann	Hawaiian Dredging Construction Co.
Daniel	Guinaugh	Hawaiian Dredging Construction Co.
Tom	Valentine	Hawaiian Dredging Construction Co.

Contact Name		Business/Organization
Ward	Saunders	Hawaiian Electric Company Inc.
William	Bonnet	Hawaiian Electric Company Inc.
Bob	Clague	Hawaiian Fluid Power
Donna	Wong	Hawaii's Thousand Friends
Mel	Arita	Heide & Cook Ltd.
Charlie	DePonte	Honomach
Francis	Santos	Honomach
Peter	Hakala	HSI Electric
James	Nutter	Island Recycling
Jim	Wolarey	Island Truck Parts
David	Henkin	Kahaluu NH board Chair
Charles	Prentiss	Kailua NH board Chair
Vernon	Tam	Kaimuki NH board Chair
Mike	Rossio	Kalaeloa Partners LP
Ruedi	Tobler	Kalaeloa Partners LP
Ziad	Khalaf	Kalaeloa Partners LP
Jory	Watland	Kalihi Valley NH board Chair
Bernie	Young	Kalihi/Palama NH board Chair
Peter	Anderson	Kaman Industrial Technologies
Bill	Sager	Kaneohe NH board
Roy	Yanagihara	Kaneohe NH board Chair
Michael	Miyamura	Kapolei Elementary School
Shad	Kane	Kapolei Hawn Civic Club
Al	Nagasako	Kapolei HS
Annette	Nishikawa	Kapolei Middle School
Mike	Golojuch	Kapolei NH board
Maeda	Timson	Kapolei NH board Chair
Bill	Reynolds	Kapolei Rotary Club
Dan	Fullenwider	Kapolei Rotary Club
Gale	Treiber	Kapolei Rotary Club
Keith	Briem	Kapolei Rotary Club
Keola	Lloyd	Kapolei Rotary Club
Larry	Howard	Kapolei Rotary Club
Robert	Singlehurst	Kapolei Rotary Club
Ross	Rolirad	Kapolei Rotary Club
Toni	Gonsalves	Kapolei Rotary Club
Van	McCrea	Kapolei Rotary Club
Jeff	Stone	Ko Olina Resort
Todd	Apo	Ko Olina Resort
Deedee	Letts	Koolauloa NH board Chair
Bob	Chuck	Kuliouou/Kalani Iki NH board Chair
Terry	Kaahaaina	Leeward Petroleum Inc.

Contact Name		Business/Organization
Bill	Carreira	Hawaiian Electric Company Inc.
Daniel	Ching	Hawaiian Electric Company Inc.
Maurene	Bishop	Hawaiian Electric Company Inc.
T Michael	May	Hawaiian Electric Company Inc.
Tom	Simmons	Hawaiian Electric Company Inc.
Henry	Curtis	Life of the Land
Kat	Brady	Life of the Land
Bob	Stubbs	Liliha NH board Chair
John	Steelquist	Makiki NH board Chair
Paul	Holtrop	Manoa NH board Chair
Mufi	Hannemann	City and County of Honolulu
Ron	Lockwood	McCully/Moiliili NH board Chair
Dean	Hazama	Mililani Mauka NH board Chair
Dick	Poirier	Mililani NH board
Gabe	Machado	Milo Nursery and Landscaping
Roxanne	Draxler	National Industrial Tire
Michael	Lyons	North Shore NH board Chair
Jack	Schweigert	Nuuanu/Punchbowl NH board Chair
Katherine	Kealoha	Office of Environmental Quality Control
John	Nakagawa	Office of Planning, Coastal Zone Management Program
Thelma	Higa	Pacific Machinery
Bruce	Coppa	Pacific Resource Partnership
Rachel	Orange	Palolo NH board Chair
James "Kimo"	Pickard	Pearl City NH board Chair
Gloria	Klein	Performance Contracting, Inc.
Joe	Morales	Petrochem Insulation Inc.
Chad	Harrison	Process Controls
Jim	Gates	PSC Industrial Outsourcing
Martin	Miller	RCI Construction Group
Harry	Kingery	RCI Environmental Inc.
Darryl	Barilla	Rd Technology of Hawaii
Wesley	Phillips	Safway Services Inc.
Robert	Bunda	Senate President
Donna	Kim	Senate Vice President
Clarence	Nishihara	Senator-Elect
Robin	Campeau	Siemens Industrial Services
Jeff	Mikulina	Sierra Club
Calvin	Say	Speaker, House of Representatives
Pua	Aiu	State Historic Preservation Division
Alex	Sonson	State House of Representatives
Lyla	Berg	State House of Representatives
Blake	Oshiro	State House of Representatives

Contact Name		Business/Organization
Tim	Brower	State House of Representatives
Rida T.R.	Cabanilla	State House of Representatives
Joey	Manahan	State House of Representatives
Glenn	Wakai	State House of Representatives
Barbara	Marumoto	State House of Representatives
Hermina	Morita	State House of Representatives
Jon	Karamatsu	State House of Representatives
Pono	Chong	State House of Representatives
Ken	Ito	State House of Representatives
Kirk	Caldwell	State House of Representatives
Lynn	Finnegan	State House of Representatives
Maile	Shimabukuro	State House of Representatives
Marcus	Oshiro	State House of Representatives
Marilyn	Lee	State House of Representatives
Colleen Rose	Meyer	State House of Representatives
Mark	Takai	State House of Representatives
John	Mizuno	State House of Representatives
Mike	Magaoay	State House of Representatives
Bob	Nakasone	State House of Representatives
Roy	Takumi	State House of Representatives
Scott	Nishimoto	State House of Representatives
Scott	Saiki	State House of Representatives
Sylvia	Luke	State House of Representatives
Tommy	Waters	State House of Representatives
Kymberly	Pine	State House of Representatives
Karl	Rhoads	State House of Representatives
Gene	Ward	State House of Representatives
Ryan	Yamane	State House of Representatives
Mike	Gabbard	State Senate
Clayton	Hee	State Senate
Brian	Taniguchi	State Senate
Clarence	Nishihara	State Senate
Carol	Fukunaga	State Senate
Colleen	Hanabusa	State Senate
David	Ige	State Senate
Fred	Hemmings	State Senate
Gordon	Trimble	State Senate
Lester	Ihara, Jr.	State Senate
Jill	Tokuda	State Senate
Norman	Sakamoto	State Senate
Ron	Menor	State Senate
Sam	Slom	State Senate

Contact Name		Business/Organization
Karen	Awana	State House of Representatives
Della Au	Belatti	State House of Representatives
Corrine	Ching	State House of Representatives
Cynthia	Thielen	State House of Representatives
Sharon	Har	State House of Representatives
Suzie	Chun-Oakland	State Senate
Willie	Espero	State Senate
Bob	Steinke	Steinke Brothers, Inc.
Wayne	Lu	Sun Home Metal Inc
Caleb	Yamanaka	Thyssenkrupp Elevator
Tom	Nance	Tom Nance Water Resource Engineering
Patrick	Leonard	U.S. Fish & Wildlife Service, U.S. Department of the Interior
Leon	Soong	Unitek Solvent Services, Inc.
Tony	Valdez	Valdez Painting Inc
Scott	Higa	Valve Service & Supply
Kevin	Vegas	W W Grainger Inc.
Ben	Acohido	Wahiawa NH board Chair
Kelley	Roberson	Waialae Kahala NH board Chair
Georgette	Jordan	Waianae NH board Chair
Bob	Finley	Waikiki NH board Chair
Wilson	Ho	Waimanalo NH board Chair
Darrlyn	Bunda	Waipahu Community Assn.
Stephen	Nakano	Waipahu High School
Richard	Oshiro	Waipahu NH board Chair
andy	anderson	Waipahu NH board
David	Fuiava	Waste Management
Joseph	Hernandez	Waste Management
Howard	Akagi	Water Resources International, Inc.
Shannon	Wood	Windward Ahapuaa Alliance
Georgette	Stevens	WOEDA/Grace Pacific
Nancy	Maeda	WOEDA/Haseko
Theodore	Metrose	WOEDA/Tesoro
Conchita	Malaqui	WOEDA/Waikele Outlets
Yuni	Shiramizu	Young Scale Company
Shane	Peters	

13.2 Community Outreach

As noted above, a comprehensive outreach program was conducted in order to solicit, identify and better understand and address potential concerns about the Expansion. The outreach program was designed to include residents, businesses and other stakeholders. It included neighborhood boards, community associations, condominium associations, State legislators, City council members, environmental organizations, Native Hawaiian organizations, labor organizations, economic development organizations, local public schools, and neighboring businesses. As part of the outreach program, the public was invited to learn more about the proposed Expansion of H-POWER at an Open House held at the Kapolei Hale on Saturday, August 21, 2008. Copies of the EISPN were available at the Open House. CHRRV and the City and County of Honolulu had representatives in attendance to answer questions regarding the Expansion of H-POWER as well as the ongoing operations at the facility.

13.3 Distribution of the Draft EIS

CHRRV and the City and County of Honolulu ~~will have~~ distributed copies of the Draft EIS ~~available~~ for review at various libraries on O‘ahu. Copies of the Draft EIS ~~will be~~ were also available to individuals who submitted a request. The 45-day public comment period ended on March 9, 2009.

14.0 COMMENTS ON THE EISPN AND DEIS AND THE APPLICANT'S RESPONSES

As described previously in Chapter 13, public outreach and participation is a key element of the Hawaii State Environmental Review Process. This Chapter provides both a list of the comments received on the EISPN and the DEIS, as well as copies of the comment letters. It also contains copies of the response letters prepared by CHRRV and the City and County of Honolulu to reply to the comments received.

14.1 List of Public Comments on the EISPN

Table 14.1-1 provides a list of the comment letter received on the EISPN. ~~The letters have been assigned a comment letter number for ease of reference, sequenced by date of letter with a corresponding C-1, C-2, etc. with the "C" denoting "Comment".~~

TABLE 14.1-1 EISPN COMMENT LETTERS

Person/Organization	Date of Letter
Mr. Shad Kane	August 11, 2008
Board of Water Supply, City and County of Honolulu	August 12, 2008
State of Hawaii – Office of Hawaiian Affairs	September 4, 2008

14.2 EISPN Comment Letters and the Applicants Response

The scanned copies of the comment letters received can be found in Appendix B. The letters are sequenced in alternating fashion, such that the response letter follows the comment letter it coincides with. In addition to responding via letter, each person or organization offering comment(s) will be added to the EIS distribution list.

14.3 DEIS Comment Letters and the Applicants Response

CHRRV and the City and County of Honolulu received comments on the DEIS from individuals and organizations listed below in Table 14.3-1. The scanned copies of the comment letters received can be found in Appendix H. The letters are sequenced in alternating fashion, such that the response letter follows the comment letter it addresses.

TABLE 14.3-1 DEIS COMMENT LETTERS

Person/Organization	Date of Letter
C&C Honolulu, Department of Parks and Recreation	February 5, 2009
State of Hawaii, Department of Accounting and General Services	February 5, 2009
C&C Honolulu, Board of Water Supply	February 5, 2009
C&C Honolulu, Department of Design and Construction	February 12, 2009
C&C Honolulu, Police Department	February 13, 2009
DLNR, Commission on Water Resources Management	February 19, 2009
C&C Honolulu, Department of Transportation Services	February 23, 2009
DLNR, Engineering Division	February 26, 2009
Ms. Kazue Yonaka	March 3, 2009
DLNR, Land Division	March 3, 2009
DLNR, Aquatic Resources	March 3, 2009
C&C Honolulu, Fire Department	March 3, 2009
C&C Honolulu, Department of Planning and Permitting	March 4, 2009
C&C Honolulu, Department of Facility Maintenance	March 4, 2009
C&C Honolulu, Department of Planning and Permitting	March 5, 2009
State of Hawaii – Office of Hawaiian Affairs	March 6, 2009
Hawaiian Electric Company (HECO)	March 6, 2009
State of Hawaii, Department of Transportation, Airports Division	March 9, 2009
State of Hawaii, Department of Transportation, Highways Division	March 9, 2009
University of Hawaii, Environmental Center	March 9, 2009
State of Hawaii, Department of Business, Economic Development and Tourism	March 9, 2009
State of Hawaii, Department of Health, Clean Water Branch	March 10, 2009

FINAL

Environmental Impact Statement (FEIS) Appendices

H-POWER Expansion Project
Kapolei, Oahu, Hawaii

Submitted to: Department of Environmental Services
City and County of Honolulu
1000 Uluohia Street, Suite 308
Kapolei, Hawaii 96707

Submitted by: The City and County of Honolulu

Prepared by: Covanta Honolulu Resource Recovery Venture
and AMEC Earth & Environmental, Inc.

May 2009

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Appendix A – Final Report Archaeological and Cultural Impact Assessments

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FINAL REPORT

ARCHAEOLOGICAL AND CULTURAL IMPACT ASSESSMENTS
FOR THE PROPOSED H-POWER EXPANSION PROJECT,
HONOULIULI AHUPUA`A, ʻEWA DISTRICT, ISLAND OF O`AHU
TMK: (1) 9-1-026:30, 33, AND 34

Prepared for
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September 2008

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FINAL REPORT

Archaeological and Cultural Impact Assessments
for the Proposed H-POWER Expansion Project,
Honuliuli Ahupua`a, ‘Ewa District, Island of O`ahu
TMK: (1) 9-1-026:30, 33, and 34

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INTRODUCTION

At the request of AMEC Earth & Environmental, Inc. (AMEC), Pacific Consulting Services, Inc. (PCSI) undertook an archaeological and cultural impact assessment study in support of the proposed expansion of the H-POWER facility located on 24.635 acres of industrially zoned land and designated by Tax Map Key (TMK) number 9-1-026:030 (Figure 1). The adjacent parcels, 9-1-026:033 and 9-1-026:034, consisting of vacant land and totaling an additional 14.205 acres, is proposed as construction laydown area. The current assessment evaluated both parcels listed above. The H-POWER site is located in the Campbell Industrial Park at Kalaeloa [formerly called Barbers Point or Barber's Point]. The H-POWER facility, which began operation in May 1990, is operated by Covanta Honolulu Resource Recovery Venture (CHRRV) on behalf of the City and County of Honolulu (the "City").

PROPOSED PROJECT

The City determined that an Environmental Impact Statement (EIS) is needed to fully assess the effects of the proposed project on the natural and cultural environment. The H-POWER Expansion Project will involve the addition of a 900 tons per day mass burn waterwall municipal waste combustor unit (MWC), associated air pollution control equipment, and other equipment needed to tie the addition into the existing facility. The proposed addition will be located on the northeast side of the existing H-POWER plant, within the already developed H-POWER parcel - Parcel 30 (Figure 2). Parcel 30 is bounded on the north by the Chevron USA oil refinery and HECO, on the east by the HECO substation, on the south by the AES Hawaii, Inc. plant, and on the west or makai side by three vacant parcels (TMK: 9-1-026:33, 34, and 35) of which Parcels 33 and 34 are also included in this assessment along Kaomi Loop (Figure 3) that were acquired by the City in 2002 (Shad Kane, personal communication).

SCOPE OF WORK

The Scope of Work (SOW) for this project, originally drafted in 2005 and reworked in 2008 for the latest iteration of the expansion project, included an archaeological assessment and a cultural impact assessment. The pertinent tasks associated with these two assessments included the following:

- Archival background research on the culture history and previous land uses of the project area;
- Literature review of previous archaeological studies within the project area and in areas near the H-POWER facility;
- Verbal and written consultation with the Office of Hawaiian Affairs (OHA);
- Interviews with community members recommended by the State Historic Preservation Division; and
- Archaeological reconnaissance survey of the parcels (TMK: 9-1-026:033 and 034) adjacent to the current H-POWER facility to determine the presence/absence of cultural resources.

These tasks are discussed in more detail below.

The archaeological assessment that was undertaken follows the draft guidelines for such studies developed by the State Historic Preservation Division (SHPD) in December 2002 and the requirements for archaeological assessments as described in Chapters 13-275 and 13-276 of the Hawaii Administrative Rules. Section 13-275 (a) 5 (A) states that:

> An archaeological assessment shall include the information on the property and the survey methodology as set forth in subsections 13-276-5(a) and (c), as well as a brief background section discussing the former land use and types of sites that might have been previously present.

The cultural impact assessment, which follows the State Office of Environmental Quality Control (OEQC) *Guidelines for Assessing Cultural Impact*, is designed to comply with the requirements of Chapter 343 (Hawaii Revised Statutes) as amended in 2000 and approved by the Governor as Act 50 that same year.

An archaeological reconnaissance survey and follow-up test excavations of possible historic sites in Parcel 30 (formerly Parcel 18) were undertaken as part of the environmental review process for the H-POWER facility in 1983-84 (Ahlo and Hommon 1983; Hommon and Ahlo 1984). No historic properties were found at that time. Human remains were found, however, during construction of the facility, in 1986 (Figure 4--see discussion of previous archaeological investigations below). There is a possibility that more burials might be found during the construction phase of the proposed project, although the area has already been landscaped and developed.

The current archaeological assessment did not include additional survey or excavations of Parcel 30, which will be monitored during the initial stages of excavation for the new addition (see Recommendations below). The SOW did include, however, archaeological and cultural impact assessments of the adjacent vacant parcels, Parcel 33 (6.041 acres) and Parcel 34 (8.164 acres). A portion of Parcels 33 and 34 will be needed for a laydown area for temporary staging areas and parking during construction, which is expected to take place over a period of approximately 30 months.

After an approximate 3-year hiatus where the H-POWER expansion project was temporarily delayed, the scope of work in 2008 was revised to include any additional archaeological studies not included in the draft report, additional consultation with community residents who participated in the 2005 cultural impact assessment, and brief reconnaissance surveys of the new location of the proposed third MWC and Parcels 33 and 34, which has since been selected for the proposed laydown area.

PROJECT AREA BACKGROUND

ENVIRONMENTAL SETTING

The project area is located on what is commonly known today as the ‘Ewa Plain, a vast expanse of land that is part of an emerged Pleistocene age coral reef that was subsequently covered to varying depths with a mantle of marine sediments, alluvium and a shallow calcareous soil mantle, except for a few places on or near the shoreline where the reef surface is still exposed. The surface of the reef is pock-marked with solution cavities or “sinkholes” of widely

Figure 1. Location of the H-POWER Facility on the U.S.G.S. Ewa Quandrangel Map (2000).

Backside Figure 1

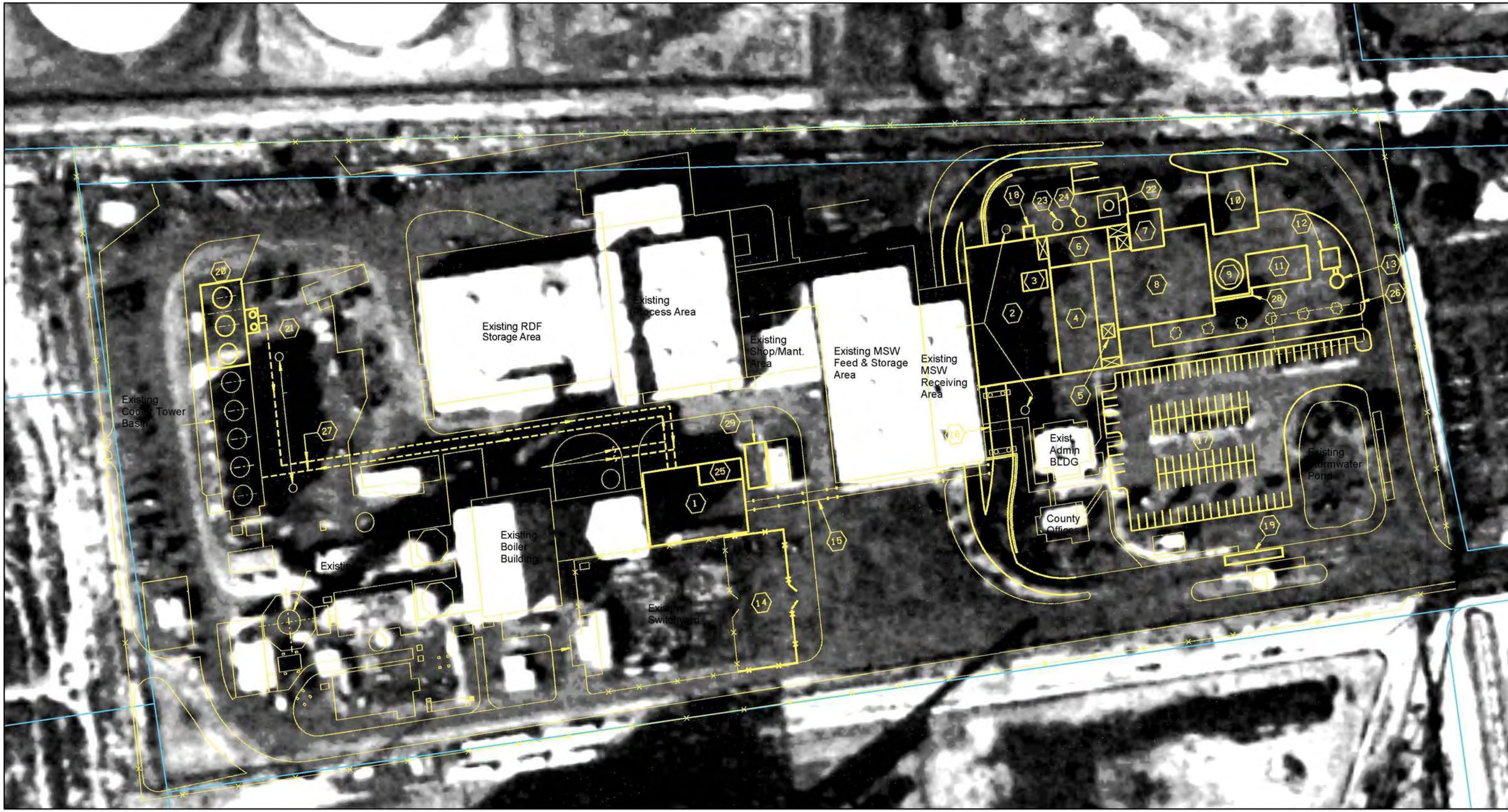

Figure 2. Aerial Photograph of the Existing H-POWER Facility with Overlay of Construction Plans for Proposed Third Municipal Waste Combuster Unit

Backside Figure 2

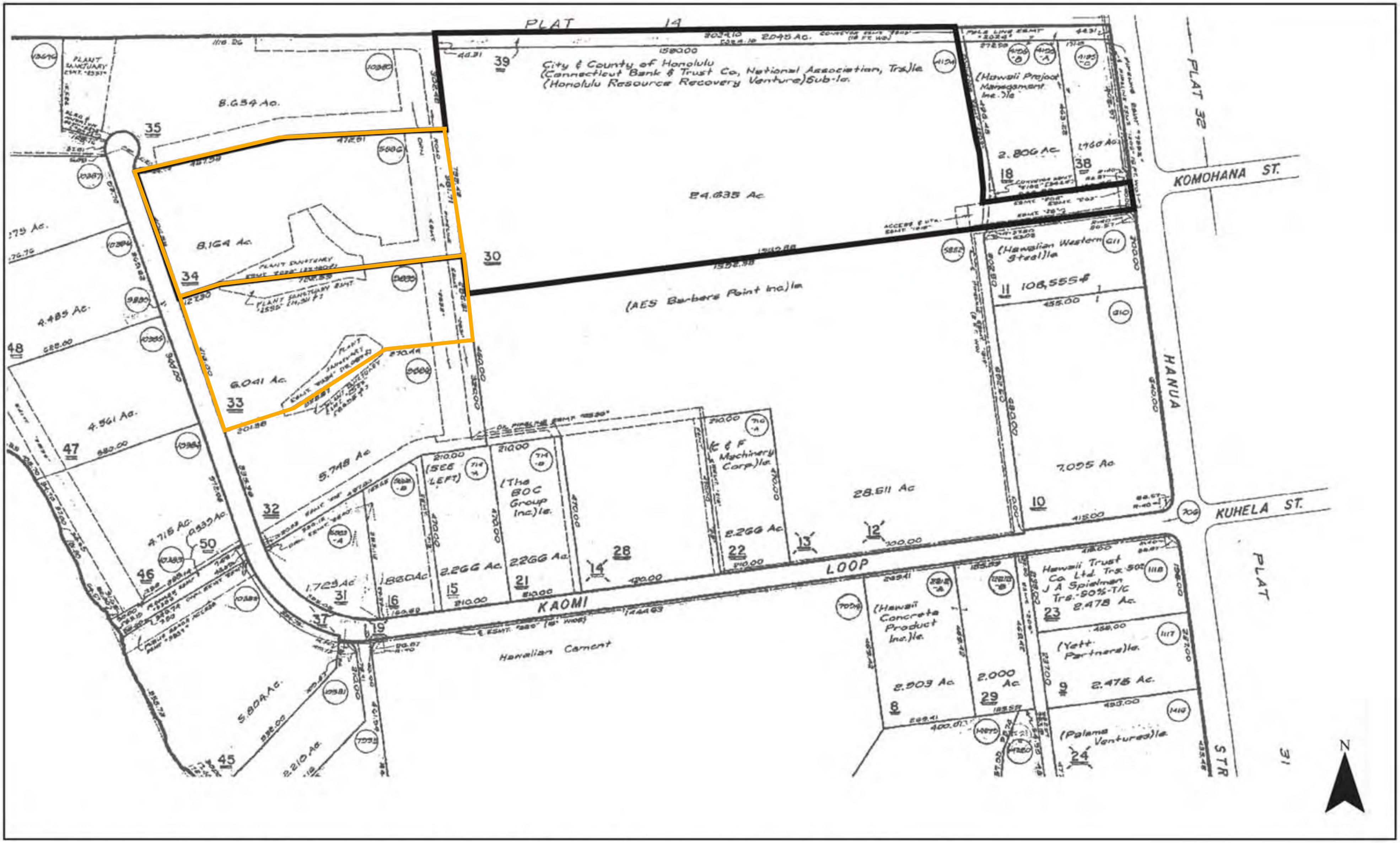

Figure 3. Portion of TMK: 9-1-26 Showing Project Area and Location of Construction Laydown Area (orange).

Backside Figure 3

Figure 4. 2000 USGS Aerial Photograph of the Existing H-POWER Facility Showing the Location of the Burial (Site 50-80-12-6684) Found in 1986.

Backside Figure 4

varying sizes. The soil survey map for O'ahu shows the project area as coral outcrop (Foote et al. 1972).

The 'Ewa Plain is one of the driest areas on O'ahu, with a median annual rainfall of less that 60 cm (Giambelluca et al. 1986). The area is so dry that it has commonly been characterized as "barren" and "desolate" and even referred to as a desert (Tuggle 1997:11).

Davis (1990a) provides a good characterization of the local environment:

> 'Ewa is a semiarid region of intense sunshine, warm tradewinds, and sparse rainfall. At the western end of the plain these conditions are all the more accentuated. Except for a few coastal marshlands and other favored localities, the vegetation is typically xeric and, where undisturbed by modern developments, is dominated by hardy exotics.

The dominant tree in the project area today is the *kiawe* (*Prosopis pallida*). Prior to the spread of the introduced *kiawe*, the dominant vegetation on the coralline 'Ewa coastal plain was a low- growing form of *naio* (*Myoporum sandwicense*) (Wagner et al. 1990:61).

Two plant sanctuaries, both of which contain endangered species, are located in the vicinity of the project area; one in Parcel 33-34 and another in Parcel 32-33 (see Figure 3).

CULTURE-HISTORICAL CONTEXT

Historical records indicate that the 'Ewa Plain, which is located in the *ahupua'a* of Honouliuli in the *moku* (district) of 'Ewa, was known to Hawaiians of an earlier time by various names, including Plain of Kaupe'a, Pu'uokapolei, and Kai'ona (Tuggle 1997:8, 30). In his recent synthesis of traditional histories and archaeological data for the 'Ewa Plain, Tuggle (1997:11) noted that "Following the Kamehameha conquest of O'ahu, the land was given to Kalanimoku as *panala'au,* conquered lands (Kame'eleihiwa 1992:58, 112). The *ahupua'a* was given by Kalanimoku to his sister Wahinepi'o, whose daughter, Kekau'onohi, (also a granddaughter of Kamehameha through Kina'u) was awarded the land in the Mahele." Levi Haalelea, the husband of Kekau'onohi, obtained the land on her death. The land was subsequently sold to J.H. Coney who later sold it to James Campbell in 1877 (Ahlo and Hommon 1983:10). The traditional subsistence base soon changed with the introduction of the *kiawe*, after which the 'Ewa Plain was used for cattle ranching. Sugarcane production began around 1890.

No individual claims were made for land on the 'Ewa Plain during the Mahele (or Mahele 'Aina—"Land Division"), in 1848, at which time lands were placed in one of three categories: (1) Crown Lands; (2) Government Lands; and (3) Konohiki Lands (Chinen 1958:vii). Despite the apparent lack of individual claims, some Hawaiian families apparently continued to live in small fishing villages on the coast (Tuggle 1997:11).

PRIOR ARCHAEOLOGICAL STUDIES

There have been numerous archaeological investigations conducted in the Kalaeloa area of the 'Ewa Plain, primarily since the 1970s and the development of the area for commercial uses. The project area is located approximately 0.7 miles south of the Barbers Point Harbor Archaeological District (Site 50-80-12-2888), which was determined eligible for the National Register of Historic Places in 1977 (Figure 5). For a comprehensive review of the archaeological and cultural resources of the ‘Ewa Plain the reader should consult *Synthesis of Cultural Resource Studies of the ‘Ewa Plain Task 1a: Archaeological Research Services for the Proposed Cleanup, Disposal and Reuse of Naval Air Station Barbers Point, O’ahu, Hawai’i,* (Tuggle and Tomonari-Tuggle 1997), and a shorter synopsis entitled “The ‘Ewa Plain” in *Hawaiian Archaeology* (Tuggle 1997). In both of these studies the ‘Ewa Plain is conveniently divided into the Pu’uloa region, the One’ula region, the Kualaka’i region, the Kalaeloa region, and the Ko’olina region (Tuggle and Tomonari-Tuggle (1997:45; Tuggle 1997: Figure 5).

One of the earliest projects in the Kalaeloa region involved the excavation/collection of human remains found during construction of the Standard Oil Refinery (now owned and operated by Chevron USA), located immediately adjacent to (north) of the current project area on TMK: 9-1-14:10 (see Figures 1 and 3), in 1959. The Bishop Museum, which was informed of the finds, made arrangements for the Anthropology Club of the University of Hawaii at Manoa to undertake excavations of the burial site, which was designated B6-10 in the Bishop Museum numbering system and Site 50-80-12-2315 in the Statewide Inventory of Historic Places at a later date. The results, which are described in a report dated December 1959 (Anthropology Club of UH-Manoa, 1959), indicate that approximately 12 to 16 incomplete skeletons and associated grave goods were found in what appears to have been cavities inside a limestone sinkhole.

Additional human remains were recovered from a site located on the Barbers Point Naval Air Station in 1962. Most of the bones, which were thought to represent a secondary burial, were apparently removed from the site. The report on this project, which is on file at the State Historic Preservation Division, is entitled “Barber’s Point Burial” (Soehren, Bowen and Kelly 1962). The report consists of a Bishop Museum site survey record form and contains a minimal amount of information. The survey form notes that structural remains, identified on the form as house sites and walled pits, were noted in the area of the burial which was designated Site B6-9 in the Bishop Museum numbering system. The Statewide Inventory of Historic Places site number is 50-80-12-2314.

Ernest Lewis of the University of Hawaii at Manoa, with the assistance of a number of volunteers, conducted an archaeological reconnaissance survey and limited subsurface testing of a small number of sites in the general vicinity of the Barber’s Point Harbor in 1969. Several sites were found in what was called the “Pond Area,” located near the intersection of Kalaeloa Boulevard and Malakole Road (see Figure 1), and in another area to the north that was called the “Coral Quarry Area” (Lewis 1970). More intensive investigations were undertaken in the Deep Draft Harbor area in the 1970s and 1980s (e.g., Barrera 1975; Davis 1990a, 1990b, 1995; Davis and Griffin 1978; Hammatt and Folk 1981; Kirch and Christensen 1981; Olson and James 1981; Sinoto 1976, 1978, 1979).

Beginning about 1976, with the discovery of extinct or extirpated avifauna and land snails, the archaeology of the Kalaeloa area has had a strong paleoenvironmental focus. Some of the earlier studies (e.g., Christensen and Kirch 1986; Kirch 1989) concluded that Polynesian colonization was the primary factor in these extinctions because of the effects of human

Figure 5. Location of the Barbers Point Harbor Archaeological District (Site 50-80-12-2888) and Nearby Historic Sites.

Backside Figure 5

habitation on the environment. Recent studies (Dye and Tuggle 1998; Athens et al. 2002) have reached quite different conclusions based on new data and a reanalysis of the earlier data. Dye and Tuggle (1998:138) have concluded that "the activities of Polynesians before the advent of European influence in A.D. 1778 contributed little, if anything, to the extinction process." The most likely explanation for the extinction process in their view was a drop in the water table after the advent of sugarcane cultivation and the ensuing drying out of the sinkholes. In the case of the avifaunal extinctions, paleoenvironmental coring data suggest that the extinctions took place prior to Polynesian colonization and that forest decline may have been the primary factor (Athens et al. 2002).

Two parcels in relatively close proximity to the current project area were investigated between 1988 and 1990. An archaeological inventory survey of the proposed Kaomi Loop Subdivision, located southwest of the H-POWER facility on TMK: 9-1-26:28, was carried out by PHRI (Carlson and Rosendahl 1990). No historic sites were found in the survey area, which like most places in the area did contain, however, a number of sinkholes with avifaunal skeletal remains. A sample of the faunal material collected in the survey was analyzed by the late Dr. Alan Ziegler (Ziegler 1990). In 1988 Bert Davis conducted the first of several studies of the HECO Generating Station at the corner of Olai Street and Kalaeloa Boulevard in TMK: 9-1-31:23 (Davis 1988). The 23-acre parcel was found to have been extensively disturbed prior to the survey. Davis did find, however, a number of sinkholes, some of which were recommended for further study based on the potential for finding evidence of human use or paleontological remains (Davis 1988). A second survey of the parcel was conducted by Davis in 1989 (Davis 1989). Data recovery excavations of four sinkholes were conducted later in 1989. Bird bones were found in three of the sinkholes. The fourth sinkhole contained a fully articulated human burial. The four sinkholes were designated Site 50-80-12-4099 (see Figure 5). A radiocarbon date of 350 plus or minus 70 years before present (B.P.) was obtained for the burial. Radiocarbon age-determinations on three bird bones yielded modern dates and were assessed as unreliable (Davis 1990).

An archaeological inventory survey was recently conducted for a proposed desalination facility on a 20-acre parcel just south of the H-POWER facility (Sinoto and Titchenal 2002a). This survey, conducted in early 2002, included a field survey and test excavations. The survey documented three sites, including Site 6373, a circular enclosure and a cyst-like structure comprised of semi-upright (leaning) limestone slabs covering a sinkhole, Site 6374, two adjacent sinkholes, and Site 6375, a paleontological site consisting of approximately 13 sinkholes.

Test excavations in one of the two large (4.0 meters in diameter) sinkholes at Site 6374 indicate that it had been used as a lime kiln in the late historical period. This is the only site type of its kind found on the karst ‘Ewa Plain. Seven of the 13 sinkholes at Site 6375 were tested and yielded large quantities of skeletal avifaunal remains. Thirteen species of birds were identified, including one prehistorically extinct species (Sinoto and Titchenal 2002a).

Later in 2002, archaeological monitoring during vegetation clearing within access corridors in the proposed desalination facility parcel was conducted in support of geotechnical drilling (Sinoto and Titchenal 2002b). No cultural materials were reported during monitoring.

In 2004, an archaeological inventory survey was conducted for the Honolulu Board of Water Supply well east (*mauka*) of the H-POWER facility, and just *mauka* of Farrington Highway (Monahan 2004). This survey was conducted prior to and in support of construction of a new water tank. Four historic sites associated with 19^{th} – 20^{th} century sugar cane agriculture and ranching were documented, including portions of a sugar flume, concrete bridge supports and ranch walls. These finds were documented and determined to be no longer significant (Monahan 2004).

A one day archaeological reconnaissance survey of the H-POWER parcel [formerly TMK: 9-1-26:18] was undertaken on June 7, 1983 by Science Management, Inc. (SMI) for Belt Collins & Associates as part of the Environmental Impact Statement for the facility (Ahlo and Hommon 1983). Eight "possible" site locations were found on the property, which was found to have been previously bulldozed and covered with modern rubbish. Information presented in the *Revised Environmental Impact Statement, S.W. Processing Resource Recovery Facility, Honolulu, Hawaii* (Belt Collins & Associates 1983) indicated that the H-POWER parcel was used by the Army during Word War II but that no permanent structures were constructed. The area was subsequently used for grazing, from the late 1940s through 1958. An interview with O.K Stender of Campbell Estate, the former landowner, confirmed that the property had been bulldozed in 1962 in anticipation of future development. Sheet 45 of the *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (Foote et al. 1972), based on aerial photographs taken in 1962, 1963 and 1965, show extensive land alteration of the subject property (Ahlo and Hommon 1983:9). Information presented in the Final Geotechnical Report for the H-POWER facility indicates that Parcel 30 varied between 7 and 16 feet above sea level prior to grading (Maguire 1986).

The eight "possible" site locations, designated T-1 through T-8 in the 1983 reconnaissance survey report (Ahlo and Hommon 1983: Figure 3), included four areas with one or more sinkholes (T-1, T-2, T-6, and T-7), three pits (T-3, T-4, and T-5), and one possible midden deposit containing charcoal (T-1). No cultural material was found in either the sinkholes or the possible cultural deposit, which was probed in several places. The pits were described as roughly rectangular in shape, with pieces of charcoal and burnt limestone inside, and single pieces of Douglas Fir lath outside along the edge. The function of these pits was not readily apparent. The 1983 report recommended test excavations of the possible midden deposit and the larger sinkholes, but not the pits, which at the time did not seem to hold any potential for containing either archaeological or paleontological materials.

Archaeological test excavations were undertaken in 1984 in two of the previously identified sinkholes (T-5 and T-7) and the possible midden deposit (T-1). No midden or artifacts were found in the sinkholes. The possible midden deposit was found to be a thin (5 to 10 centimeter thick) layer of soil with dispersed charcoal overlying a lighter colored limestone soil. The deposit, which lacked midden and artifacts and showed no evidence of any significant time depth, was interpreted as the probable result of a modern brushfire and subsequent bulldozing. The three pits found during the initial reconnaissance survey were inspected again and found to be devoid of cultural materials, except for T-3 which contained charcoal. It was concluded that the charcoal in this one pit was most likely the result of modern burning in the area, rather than any earlier event. The report suggested that the pits had been dug by a backhoe (Hommon and Ahlo 1984:6).

In summary, the archaeological reconnaissance survey of the H-POWER parcel in 1983 and follow-up test excavations in 1984 did not identify any significant historic properties. Human remains were found, however, during construction of the facility, in 1986. A letter dated September 12, 1986 from Ray Baray of Hawaiian Dredging & Construction Company to Mr. Albert A. Tuzes of Honolulu Resource Recovery Venture, indicates that the remains were found by a backhoe operator on September 5, 1986, approximately 11 feet below ground level. The Police Department was notified of the remains and conducted a site visit, at which time it was determined that the remains were "old." The bones, which were thought to be those of a single individual, were left in the custody of Hawaiian Dredging & Construction Company. Hawaiian Dredging & Construction Company then asked the Reverend David Kaupu, (then associated with Kamehameha Schools) to bless the remains prior to their removal and reburial north of the "MSW" Building Site. A short service was held on September 10, 1986. Excavations of the building foundation resumed the following day. There is no indication in the September 12, 1986 letter or other correspondence, including letters to the City and County of Honolulu, that the Division of State Parks, which at the time included historic preservation staff, was notified of the burial. The State Historic Preservation Division has no record of these remains (Kana'i Kapeliela, personal communication). AMFAC consulted with the Rev. Kaupu in 1989 regarding a formal memorial to mark the reinterrment site. Rev. Kaupu recommended the planting of a coconut tree on the south side of the burial spot. A memorial stone with a bronze plaque was also placed at the site of the burial (Figure 6). Rev. Kaupu performed a dedication ceremony for the newly planted tree and the plaque which reads:

IN MEMORY

> *These plants are in memory of the re-interred remains on this site and of those people who lived on the 'Ewa Plain years ago. We honor them for their life styles, culture and contributions to us today. May their aumakua be looking after them.*

While information exists concerning the circumstances of the burial find, there are no details concerning the provenience and presence/absence of associated remains. The depth of the burial indicates that it has to have come from a sinkhole, since there are no soil deposits that deep anywhere in the general vicinity. The sinkhole was one that was most likely covered over or buried with fill during the bulldozing of the property in 1962, which would explain why it was not identified in the 1983 archaeological reconnaissance survey. Site number 50-80-12-6684 was assigned to these remains during the current project (see Figure 4).

PRE-CONTACT SETTLEMENT PATTERN OF THE KALAELOA AREA

Archaeological investigations of the Deep Draft Harbor, the most intensively studied locale in the Kalaeloa area, suggest an earlier pattern of primarily short-term occupation of small camps by fishermen and bird collectors. Bert Davis has suggested that this settlement pattern dates to the end of the first millennium A.D. and that at least one fisherman's camp was utilized into the 18th century (Davis 1995:545). A settlement pattern shift may have occurred sometime around the 15th century. Davis (1995:545) noted that:

> Sites that were initially occupied as temporary camps now either became part of the expanding residence complexes or were abandoned altogether. For the most part site abandonment appears due to the increasing surface runoff noted above. This is suggested by the fact that the larger residence complexes are all situated on relatively high ground free from most of this flooding. The new complexes consist of several dwellings and associated activity areas representing individual households.

With the appearance of longer-term occupations came an apparent change in subsistence patterns, with an increasing emphasis on farming. Davis (1995:547) noted that "An effort was made to expand the local resource base by using many of the shallow sinkholes and sediment-filled depressions to create a system of dispersed, small-scale gardens. The use of the 'Ewa plain for agricultural purposes prior to European contact was earlier suggested by Gilbert McAllister during his survey of O'ahu in 1930. McAllister (1933:109) wrote:

> 'Ewa coral plains, throughout which are remains of many sites…It is probable that the holes and pits in the coral were formerly used by the Hawaiians. Frequently the soil in the larger pits was used for cultivation, and even today one comes upon bananas and Hawaiian sugar cane still growing in them. They afford shelter and protection, but I doubt if previous to the time of Cook there was ever a large population here.

ARCHAEOLOGICAL ASSESSMENT

PROJECT EXPECTATIONS

Review of selected aerial photographs, including Sheet 45 of the *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii* (Foote et al. 1972), suggested that Parcels 33 and 34 had probably been disturbed at the same time as Parcel 30, in 1962, and possibly again at a later date. An aerial photograph taken in 1972 (Figure 7) indicates that a large area south of the Chevron USA Oil refinery had been cleared sometime before. Some small patches of vegetation are evident in the area adjacent to Kaomi Loop in that photograph. An aerial photograph taken between 1991 and 1993 shows three patches of vegetation on Parcels 33, 34, and the parcel directly adjacent (Parcel 35, Figure 8). The two southernmost patches appear to be the existing plant sanctuaries. An aerial photograph from 2000 (Figure 9) shows a denser vegetative cover in some areas, in addition to the dune buggy roads described below. Comparison of the aerial photographs taken between 1972 and 2000, suggests that much of the vegetation in the proposed construction laydown area is secondary growth.

It was anticipated that no free-standing structural remains, such as enclosures or platforms, would be found given the amount of ground disturbance evidenced in the aerial photographs. It was expected that sinkholes with cultural and/or paleontological remains (the bones of extinct or extirpated birds and land snails) might be found given the widespread occurrence of such remains in sinkholes on the 'Ewa Plain. The recovery of a human burial from a sinkhole on the site of the existing H-POWER facility and from sinkholes in the Deep Draft Harbor and Barbers Point Naval Air Station, suggested that more human remains might be found in Parcels 33 and 34.

FIELD METHODS AND FINDINGS

A walk- through survey of Parcels 33, 34, and the surrounding areas was undertaken by the author and Stephan D. Clark on October 20, 2004. The survey was conducted over a period of 1 1/2 hours. The entire survey area was found to have been extensively disturbed, except for the fenced plant sanctuaries which were not surveyed since none of them will be utilized during the proposed expansion project.

5a. The burial reinterrment memorial.

5b. Detail of the burial reinterrment memorial plaque.

Figure 6. Burial Reinterment Memorial.

Backside Figure 6

Figure 7. Aerial Photograph of the Project Area (red) and Construction Laydown Area (orange)

Backside Figure 7

Figure 8. 1991-1993 Aerial Photograph of the Project Area (red) and Construction Laydown Area (orange)

Backside Figure 8

Figure 9. 2000 USGS Aerial Photograph of Project Area (red) and Construction Laydown Area (orange)

Backside Figure 9

There is evidence that large portions of Parcels 33 and 34 have been grubbed and graded (Figures 7-11). Clearing may have occurred on more than one occasion. As already noted, aerial photographs suggest that the land clearing project undertaken by Campbell Estate in the early 1960s on Parcel 30 and documented during the archaeological reconnaissance survey in 1983, also included Parcels 33 and 34. Mr. Shad Kane, one of the individuals interviewed for the cultural impact assessment (see below), noted that a number of sinkholes were buried at the time the land was bulldozed.

Mr. Colin Jones, former Energy Recovery Administrator of the Refuse Division of the City Department of Environmental Services, provided valuable information concerning the recent land use history of the subject parcels, which helped to explain the various kinds of land disturbance that we observed during the brief field survey. According to Mr. Jones (personal communication), the area below the H-POWER facility, along Kaomi Loop, was used for many years by dune buggy enthusiasts and for illegal dumping of all kinds of materials, including industrial waste. A maze of small roads or paths is still visible in many areas (see Figures 9 and 10). Mr. Jones recalls seeing, some years ago, piles of what appeared to be foundry slag, tools for the grinding of eye glasses, and other kinds of rubbish, primarily along the road, which for many years was unpaved. Some of the rubbish appears to have been removed, either by persons interested in salvaging certain items or citizens simply interested in cleaning up the area. Mr. Jones does not recall that there was ever any systematic cleanup of the area by the City after the land was purchased from Campbell Estate. Some trash remains in the area. Mr. Jones noted that the City erected a chain link fence along Kaomi Loop in 2004 to prevent further dumping and unauthorized use of the area. Installation of the fence appears to have involved the addition of some introduced reddish brown clayey soil, which was observed in the easement between the chain link fence and Kaomi Loop (see Figure 11) and on a small area of Parcel 34.

It appears that the eastern edge of Parcels 33, 34, and its adjacent parcels was also filled, most probably during the construction of the existing H-POWER facility in the 1980s. The land along the chain fence separating Parcel 30 from the adjacent parcels to the west (Parcels 33-34) and extending some 15 to 20 meters into the three parcels is raised roughly 1 meter or so above the adjoining land surface, which is flat. Situated on top of the fill is a roughly north-south oriented steam pipe that runs from the AES facility north to the Chevron USA Oil refinery (see Figure 10).

A brief reconnaissance of the proposed location of the third municipal waste combustor unit was conducted on August 13, 2008. This location, immediately east (mauka) of the existing H-POWER plant, includes the plant's existing parking lot and adjacent landscaped lawn areas (Figure 12). While the karst landscape of the ‘Ewa Plain no longer exists in the proposed building site, Burial Site 6684 is located nearby (see Figure 3).

A reconnaissance survey of Parcels 33 and 34, the proposed equipment laydown area, was also conducted on August 13, 2008. While the vegetation in these parcels has grown denser, little else has changed in these parcels since the 2005 reconnaissance survey. It was noted that the chain link fence that marks the west (*makai*) boundary of the Parcels 33-34 along Kaomi Loop is broken in two areas and tire tracks were observed in the area of the fence breaks.

CULTURAL IMPACT ASSESSMENT

METHODS

The cultural impact assessment for this project involved: (1) a literature search prior to the archaeological field assessment to determine the presence/absence of Traditional Cultural Properties; (2) verbal and written consultation with the Office of Hawaiian Affairs (OHA), and (3) field interviews with two individuals from the Kapeolei area, Ms. Lynette ("Auntie Nettie") Tiffany and Mr. Shad Kane, who were recommended by Muffet Jourdane (Assistant O'ahu Archaeologist) and Nathan Napoka (History and Culture Branch Chief) of the State Historic Preservation Division (SHPD). Auntie Nettie, who is employed by the Estate of James Campbell, is the supervisor (*kahu*) for Lanikuhonua. She is also a member of the O'ahu Island Burial Council. Mr. Kane, who is actively involved in community affairs in the 'Ewa area, also manages the plant sanctuaries on Parcels 32-33 and 33-34 for the City. He was hired by the City to assist in the preparation of a habitat preservation plan and the establishment of "wild sites" for the endangered species contained within the sanctuaries.

The site visit with Auntie Nettie and Shad Kane took place on November 16, 2004. After an initial meeting in the office of Colin Jones, which included an overview of the proposed project and examination of the aerial photographs showing recent changes to the project area, Mr. Rodney Smith (Covanta) accompanied us to the site of the re-interred burial.

RESULTS

Following a brief discussion about the burial, we proceeded to the proposed construction laydown area in Parcels 33 and 34. Mr. Kane took us into the plant sanctuary on Parcels 33-34, which contains *Achyranthes splenden* var. *rotundata*, *naio* (*Myoporum sandwicense*) and various other plants. Mr. Kane noted the presence of an endemic shrimp *('opae'ula*) in the brackish water located in the sinkholes within the enclosure. According to Mr. Kane, the sinkholes fill up with water after heavy rains. There are two species of *'ōpae'ula* (*Halocaridina rubra* and *Metabetaeus lohena*). It is unclear which of the two species occur in these particular sinkholes. The *'ōpae'ula* was used in traditional times as bait for *'ōpelu* fishing (Pukui and Elbert 1986:291). Mr. Kane expressed a concern that the *'ōpae'ula* population could be adversely affected by contaminants entering the water table, depending on what kinds of equipment and supplies will be temporarily placed in the laydown area. Both Mr. Kane and Auntie Nettie emphasized the importance of preserving more sinkholes in the Kalaeloa area and other areas because of the native plants, human remains, and other evidence of past human uses that are often found in and around them. The sinkholes, which once numbered in the thousands and formed part of a vast natural and cultural landscape in the Kalaeloa area, are now restricted to a small number of undeveloped or undisturbed properties. The sinkholes contained within the two plant enclosures represent some of the last remaining examples of this landscape in the local area. Auntie Nettie and Mr. Kane also expressed a concern that more attention be given to protecting the shoreline area across the road from the proposed laydown area.

Figure 10. View of the Eastern Edge of the Proposed Laydown Area Adjacent to the Pipeline Looking South Toward the AES Facility (in Background).

Backside Figure 10

Figure 11. View North Toward the Chevron USA Oil Refinery Showing the Western Edge of the Proposed Laydown Area Inside the Chain Link Fence Along the Shoulder of Kaomi Loop.

Backside Figure 11

View to West.

View to South.

View to North.

Figure 12. Photographs of Proposed Location of Third Municipal Waste Combustor Unit.

Backside Figure 12

No information on beliefs, cultural practices, or culturally important places within the boundaries of the proposed project area or adjacent areas was provided, except for a story Auntie Nettie related about her mother, Leilani Fernandez, exchanging dried fish and salted meat for *'ōkole hao*, a liquor made from ti plants, that was made by a man who lived somewhere nearby. No response has been received from OHA to a letter dated October 14, 2004 requesting information on traditional Hawaiian beliefs, cultural practices, and culturally significant sites (now commonly referred to in the Cultural Resource Management (CRM) literature as Traditional Cultural Properties) in or near the proposed project area. A second letter was sent to OHA on August 13, 2008 requesting information concerning traditional cultural practices and places. OHA's response to the second letter sent is attached to this report as Appendix A. In this letter, dated September 4, 2008, OHA requested that burials and plant sanctuaries be protected during Expansion activities and reiterated the elevated potential of additional undiscovered subsurface burial sites existing in the area.

On current evidence, there are no known Traditional Cultural Properties or on-going cultural practices within or near the Area of Potential Effect (APE) based on a review of the pertinent literature for the area and the consultation with Auntie Nettie and Mr. Kane. While it is likely that culturally significant sites did exist at one time within or in close proximity to the H-POWER plant, the nearest (approximately 2.7 miles) known surviving site with cultural significance is Pu'uokapolei, a small cinder cone that is the most prominent landmark on the 'Ewa Plain and the former site of Fort Barrette. In their synthesis of cultural resource studies on the 'Ewa Plain, Tuggle and Tomonari-Tuggle (1997:21) noted that Pu'uokapolei was the sacred center of that part of O'ahu:

> Probably the most important of all traditional locales on the 'Ewa Plain is the hill known as Pu'uokapolei. This volcanic cone at the inland edge of the 'Ewa Plain was the location of a temple, (of unknown affiliation), a residence of the family of the demi-god Kamapua'a, a reference point for solar observation, and a traveller's landmark (McAllister 1933:108; Kamakau 1976:14; Ii 1959:27; Thrum 1907:46).

Additional information on Pu'uokapolei is summarized in *Sites of Oahu* (Sterling and Summers 1978:33-34).

In 2008, follow-up consultation was conducted in the form of contacting Mr. Shad Kane and Ms. Lynette (Auntie Nettie) Tiffany, as well as the Office of Hawaiian Affairs. When Auntie Nettie was contacted, she indicated that she did not have any further concerns regarding the H-POWER project.

Mr. Kane shared that he wrote a letter commenting on the City's compliance with its mandated responsibilities as indicated in the covenants and an existing Memorandum of Agreement attached to the deed in the City's purchase of the property that includes Parcels 33 and 34. His concerns are listed in the letter and pertain to care and maintenance of the plant sanctuaries.

SUMMARY AND RECOMMENDATIONS

An archaeological assessment and cultural impact assessment were undertaken for the proposed expansion of the H-POWER facility in the Campbell Industrial Park. The archaeological assessment included a review of previous work in and near the proposed project area, including the existing H-POWER parcel, and a field survey of the adjacent parcels (TMK: 9-1-026:033 and 034) that may be utilized as a temporary construction laydown area. These parcels had not been previously surveyed based on a review of reports on file in the State Historic Preservation Division. Research undertaken prior to the survey indicated that these parcels had probably been cleared in the early 1960s. The field survey confirmed that the proposed laydown area is in fact highly disturbed, except for the plant sanctuaries. The cultural impact assessment, which included a literature search, consultation with the Office of Hawaiian Affairs, and interviews with two individuals from the ‘Ewa area, did not result in the identification of any Traditional Cultural Properties or on-going cultural practices in the Area of Potential Effect (APE).

While no historic properties were identified in the APE during the current project, there is a possibility that subsurface cultural and paleontological deposits and human remains might be found in some areas of the proposed project area in sinkholes, some of which are still partially open and others that were undoubtedly covered (filled) when the land was cleared. The possibility of subsurface historic sites in the proposed project area points to the need for on-call monitoring of selected areas and/or phases of work and other precautionary measures. We recommend the following precautionary measures be implemented:

(1) Although the area of the proposed additions to the H-POWER facility has been cleared, graded and covered with gravel, there is a slight possibility that additional burials might be found in sinkholes during construction of the third combustor foundation given the close proximity to the burial found in a previously unidentified sinkhole in 1986. Excavations in this area, below the level of previous disturbance, should be subjected to on-call monitoring by a qualified archaeologist.

(2) The plant sanctuary in Parcels 32-33 and 33-34, though protected by chain-link fences, should be protected with an additional 20-25 foot buffer because of the unknown extent of the sinkholes within each of the two areas.

(3) The plans for the laydown area call for: (a) the use of compactors to identify areas suitable for fabrication and storage areas; (b) grading of usable areas to a depth of approximately 1 to 1.5 feet, and (c) burial of the steam pipe at least 3 feet below grade. The latter two ground altering activities should be subjected to on-call monitoring by a qualified archaeologist.

ACKNOWLEDGMENTS

The author is grateful for the assistance of a number of individuals in completing the current study. Ms. Rachel Okoji, Senior Scientist for AMEC Earth & Environmental, Inc. in Honolulu, Hawaii provided project information. Muffet Jourdane, Eric Komori, Nathan Napoka, and Kana'i Kapeliela of the State Historic Preservation Division assisted in locating reports, aerial photographs, and providing the names of persons to contact for the cultural impact assessment study. Kai Markell, Office of Hawaiian Affairs (OHA), also provided some names of persons that might be interviewed.

Craig Tasaka of the Office of Planning and a member of the Hawaii Board on Geographic Names provided information relating to the change in the place name Barbers Point to Kalaeloa. The U.S. Board on Geographic Names now lists Kalaeloa, the traditional Hawaiian name for the cape or point of land and Barbers Point and other iterations as variant names. An article that appeared in the Honolulu Advertiser in 1995 indicated that the Hawaii House of Representatives voted to restore the name Kalaeloa to this area of O'ahu.

Special thanks (*mahalo*) are given to Lynette ("Auntie Nettie") Tiffany and Shad Kane, who took time out of their busy schedules and willingly agreed to be interviewed for the cultural impact assessment study.

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ARCHAEOLOGICAL AND CULTURAL IMPACT ASSESSMENTS
FOR THE PROPOSED H-POWER EXPANSION PROJECT

APPENDIX A
OHA RESPONSE LETTER

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PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD08/

September 4, 2008

Stephan Clark
Pacific Consulting Services, Inc.
720 Iwilei Road, Suite 424
Honolulu, Hawai'i 96817

RE: Request for comments on the proposed expansion of the HPOWER facility at Kapolei, Land of Honouliuli, 'Ewa District, O'ahu TMKs: 9-1-026:30, 33, 34 and 35.

Aloha e Stephan Clark,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated August 14, 2008. OHA has reviewed the project and offers the following comments.

Our January 12, 2005 comment letter for the same proposal stated concerns for historic and cultural sites in the area. We specifically asked that the 1986 burial discovery and reinternment site be adequately protected. We further noted that the 'Ewa plain has historically been known to contain sinkholes in which human skeletal remains as well as avi-faunal remains and that these sinkholes can continue to exist in areas that have been graded or heavily cultivated for agricultural uses. There would appear to be a higher than normal probability of unmarked burial sites existing in the project area given the previous find during construction and the possibility of other burials being associated with this burial, either proximally or distally.

According to records at the Bishop Museum pertaining to inventories conducted for compliance with the Native American Graves Protection and Repatriation Act of 1990, burial sites in Honouliuli and in 'Ewa in general have been documented in the past including:

> In 1938, human remains representing six individuals from Honouliuli, 'Ewa, O'ahu were collected by Kenneth P. Emory and William A. Lessa and acquired by the Bishop Museum. Museum documentation indicates these remains were in a shallow crypt burial one mile from the coast;

In 1933, human remains representing three individuals form stone pits at 'Ewa, O'ahu were collected by J.W. Barrington and Edwin H. Bryan;

In 1942, human remains representing two individuals from Kualakai, 'Ewa Beach, O'ahu were donated to the Bishop Museum;

In 1959, human remains representing seven individuals from 'Ewa, O'ahu were donated to the Bishop Museum by the Anthropology Club of the University of Hawaii (from Standard Oil Refinery land);

In 1980, human remains representing nine individuals from Honouliuli, O'ahu were collected and donated to the Bishop Museum by Albert, Borthwick and Folk. Donor information indicates these human remains were recovered from coral sinkholes.

In the last decade, unmarked burial sites have been found in the area of St. Francis West, West Loch Estates, Old Fort Weaver Road, Kalaeloa, One'ula Beach, Campbell Estate, Ko'Olina and other areas in the vicinity of this project.

Native Hawaiian burial sites have been found just on and under the surface to depths of eight or nine feet depending upon the nature of the terrain. Furthermore, the nature of documented interments in the 'Ewa area (stone pits, sinkholes, crypts, etc.) could lead to the survival of these sites despite intensive agricultural activities on the surface. OHA notes that the applicant has proposed on-call monitoring by a qualified archeologist as a result of the probable presence of subsurface sites in the project area.

OHA asks if the three plant sanctuaries that contain endangered species have been designated as critical habitat and if they are part of a habitat conservation plan. We are supportive of the idea that these areas should be removed from the proposed construction area and additionally protected by buffer areas.

Thank you for the opportunity to comment and we look forward to further review. If you have additional questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Administrator

Appendix B – Agency Correspondence

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AMEC Earth & Environmental
Airport Industrial Center
3375 Koapaka Street, Suite F251
Honolulu, Hawaii 96819
Telephone: (808) 545-2462

November 5, 2008

Mr. Roy Kam
Hawai‘i Natural Heritage Program
University of Hawai‘i
Center for Conservation Research and Training
677 Ala Moana Boulevard, Suite 705
Honolulu, Hawai‘i 96813

Re: H-POWER Expansion Project, Kapolei, Hawai‘i

Dear Mr. Kam,

AMEC Earth & Environmental, Inc. (AMEC) is a Consulting and Engineering Firm engaged in environmental review and documentation of potential environmental impacts for the proposed Expansion of the existing H-POWER Waste-to-Energy Facility in Kapolei, Hawai‘i on the island of O‘ahu. The proposed Expansion consists of the addition to the Facility of a third combustor unit. The new unit will be a 900 ton per day (TPD) Mass Burn waterwall municipal waste combustor (MWC), its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER facility. It includes modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu. The Expansion does not include any changes to the two existing Refuse Derived Fuel (RDF) combustors.

The Expansion is needed to address the solid waste disposal needs of the island of O‘ahu. As a result of the additional waste disposal capacity, the City will benefit from increased energy production and recovered metals recycling and reductions in the landfilling of municipal solid waste in Honolulu. While the Expansion and increased recycling will not eliminate the need for landfill disposal of Municipal Solid Waste (MSW), it will extend the life of the Waimanalo Gulch Sanitary Landfill and reduce the capacity needs of landfills yet to be developed.

The Expansion Project will fully comply with federal, state and local permits and programs designed for the protection and stewardship of Hawai‘i’s environmental resources. Following the completion of the permitting process, construction is expected to commence in the second half of 2009 with commercial operation planned for the second half of 2012.

AMEC requests inventory information concerning the occurrence of rare, threatened, or endangered species. Electronic GIS database data is also requested. AMEC requires information at the Site, but would also like to be attentive to potential resources within the proximity of the Site. Additional information about the presence of significant natural communities or other unique natural resources in this area would also be helpful. AMEC is also consulting with the United States Fish and Wildlife Service. Additional required or recommended consultations with state wildlife and natural resource agencies, or information regarding recommended contacts or referrals would also be appreciated.

If you have any additional questions or concerns or would like additional information prior to making a determination, please feel free to contact me at 808-391-9906. AMEC appreciates your timely consideration of this matter.

Sincerely,

Russell Okoji, Ph.D.
Associate
AMEC Earth and Environmental

Enclosures:

Site Location Map

AMEC Earth & Environmental
Airport Industrial Center
3375 Koapaka Street, Suite F251
Honolulu, Hawaii 96819
Telephone: (808) 545-2462

November 5, 2008

Ms. Eileen Marks
Land Use Approval Branch
City and County of Honolulu
Department of Planning and Permitting
650 South King Street
Honolulu, Hawaiʻi 96813

Re: H-POWER Expansion Project, Kapolei, Hawaiʻi

Dear Ms. Marks,

AMEC Earth & Environmental, Inc. (AMEC) is a Consulting and Engineering Firm engaged in environmental review and documentation of potential environmental impacts for the proposed Expansion of the existing H-POWER Waste-to-Energy Facility in Kapolei, Hawaiʻi on the island of Oʻahu. The proposed Expansion consists of the addition to the Facility of a third combustor unit. The new unit will be a 900 ton per day (TPD) Mass Burn waterwall municipal waste combustor (MWC), its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER facility. It includes modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu. The Expansion does not include any changes to the two existing Refuse Derived Fuel (RDF) combustors.

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The Expansion Project will fully comply with federal, state and local permits and programs designed for the protection and stewardship of Hawaiʻi's environmental resources. Following the completion of the permitting process, construction is expected to commence in the second half of 2009 with commercial operation planned for the second half of 2012.

AMEC desires to ensure that all necessary information is made available to your office and to document the City and County of Honolulu, Department of Planning and Permitting (DPP) finding for the purposes of the Draft Environmental Impact Statement

(EIS) now being prepared. Specifically, AMEC formally requests a determination by the DPP as to whether the H-POWER Facility site and temporary construction equipment laydown and parking areas are not within the Special Management Area or Shoreline Setback Area. AMEC has confirmed that the proposed Expansion does not include areas within the SMA or Shoreline Setback Area. Included with this letter is a site location map.

If you have any additional questions or concerns or would like additional information prior to making a determination, please feel free to contact me at 808-391-9906. AMEC appreciates your timely consideration of this matter.

Sincerely,

Russell Okoji, Ph.D.
Associate
AMEC Earth and Environmental

Enclosures:

Site Location Map

AMEC Earth & Environmental
Airport Industrial Center
3375 Koapaka Street, Suite F251
Honolulu, Hawaii 96819
Telephone: (808) 545-2462

November 5, 2008

Mr. Peter Young
Chairperson
State of Hawai‘i
Department of Land and Natural Resources
Land Division
1151 Punchbowl Street, Room 220
Honolulu, Hawai‘i 96813

Re: H-POWER Expansion Project, Kapolei, Hawai‘i

Dear Mr. Young,

AMEC Earth & Environmental, Inc. (AMEC) is a Consulting and Engineering Firm engaged in environmental review and documentation of potential environmental impacts for the proposed Expansion of the existing H-POWER Waste-to-Energy Facility in Kapolei, Hawai‘i on the island of O‘ahu. The proposed Expansion consists of the addition to the Facility of a third combustor unit. The new unit will be a 900 ton per day (TPD) Mass Burn waterwall municipal waste combustor (MWC), its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER facility. It includes modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu. The Expansion does not include any changes to the two existing Refuse Derived Fuel (RDF) combustors.

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AMEC requests inventory information concerning the occurrence of rare, threatened, or endangered species. Electronic GIS database data is also requested. AMEC requires information at the Site, but would also like to be attentive to potential resources within the proximity of the Site. AMEC is consulting with the United States Fish and Wildlife Service and the Hawaiʻi Natural Heritage Program. Additional information about the presence of significant natural communities or other unique natural resources in this area would also be helpful. Additional required or recommended consultations with state wildlife and natural resource agencies, or information regarding recommended contacts or referrals would also be appreciated.

If you have any additional questions or concerns or would like additional information prior to making a determination, please feel free to contact me at 808-391-9906. AMEC appreciates your timely consideration of this matter.

Sincerely,

Russell Okoji, Ph.D.
Associate
AMEC Earth and Environmental

Enclosures:

Site Location Map
`

AMEC Earth & Environmental
Airport Industrial Center
3375 Koapaka Street, Suite F251
Honolulu, Hawaii 96819
Telephone: (808) 545-2462

November 5, 2008

Mr. John Nakagawa, CZMP
State of Hawai‘i
Department of Business, Economic Development & Tourism
Office of Planning
P.O. Box 2359
Honolulu, Hawai‘i 96804

Re: H-POWER Expansion Project, Kapolei, Hawai‘i

Dear Mr. Nakagawa,

AMEC Earth & Environmental, Inc. (AMEC) is a Consulting and Engineering Firm engaged in environmental review and documentation of potential environmental impacts for the proposed Expansion of the existing H-POWER Waste-to-Energy Facility in Kapolei, Hawai‘i on the island of O‘ahu. The proposed Expansion consists of the addition to the Facility of a third combustor unit. The new unit will be a 900 ton per day (TPD) Mass Burn waterwall municipal waste combustor (MWC), its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER facility. It includes modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu. The Expansion does not include any changes to the two existing Refuse Derived Fuel (RDF) combustors.

The Expansion is needed to address the solid waste disposal needs of the island of O‘ahu. As a result of the additional waste disposal capacity, the City will benefit from increased energy production and recovered metals recycling and reductions in the landfilling of municipal solid waste in Honolulu. While the Expansion and increased recycling will not eliminate the need for landfill disposal of Municipal Solid Waste (MSW), it will extend the life of the Waimanalo Gulch Sanitary Landfill and reduce the capacity needs of landfills yet to be developed.

The Expansion Project will fully comply with federal, state and local permits and programs designed for the protection and stewardship of Hawai‘i’s environmental resources. Following the completion of the permitting process, construction is expected to commence in the second half of 2009 with commercial operation planned for the second half of 2012.

AMEC desires to ensure that all necessary information is made available to your office and to document the Coastal Zone Management Program (CZMP) finding for the purposes of the Draft Environmental Impact Statement (EIS) now being prepared. Specifically, AMEC formally requests a determination by the CZMP as to whether a CZM federal consistency review is required. Previously in 2004, a similar request was made by AMEC where the Hawai‘i CZMP determined that a CZM federal consistency review was not required for this project. This determination was based on the fact that the project has no federal involvement, requires no federal license or permit that is identified by the Hawaii CZM Program as requiring review and will not be receiving any federal funds from sources that require CZM review. Included with this letter is a site location map and the November 9, 2004 Office of Planning determination.

The Hawaii CZM Program did note however, that the project may be subject to Special Management Area (SMA) requirements administered by the City and County of Honolulu Department of Planning and Permitting (DPP). AMEC has confirmed that the proposed Expansion does not include areas within the SMA or Shoreline Setback Area. AMEC will be sending a similar request to the City and County of Honolulu DPP for concurrence in our finding that the H-POWER site and temporary construction equipment laydown and parking areas are not within the SMA or Shoreline Setback Area. A copy of the request is provided as an enclosure.

If you have any additional questions or concerns or would like additional information prior to making a determination, please feel free to contact me at 808-391-9906. AMEC appreciates your timely consideration of this matter.

Sincerely,

Russell Okoji, Ph.D.
Associate
AMEC Earth and Environmental

Enclosures:

Site Location Map
CZM Program November 9, 2004 Determination
AMEC SMA Determination Request to the City and County of Honolulu DPP

AMEC Earth & Environmental
Airport Industrial Center
3375 Koapaka Street, Suite F251
Honolulu, Hawaii 96819
Telephone: (808) 545-2462

November 5, 2008

Mr. Jeff Newman
United States Department of the Interior
Fish and Wildlife Service
300 Ala Moana Boulevard, Suite 3-122
Box 50088
Honolulu, Hawai‘i 96850

Re: H-POWER Expansion Project, Kapolei, Hawai‘i

Dear Mr. Newman,

AMEC Earth & Environmental, Inc. (AMEC) is a Consulting and Engineering Firm engaged in environmental review and documentation of potential environmental impacts for the proposed Expansion of the existing H-POWER Waste-to-Energy Facility in Kapolei, Hawai‘i on the island of O‘ahu. The proposed Expansion consists of the addition to the Facility of a third combustor unit. The new unit will be a 900 ton per day (TPD) Mass Burn waterwall municipal waste combustor (MWC), its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER facility. It includes modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu. The Expansion does not include any changes to the two existing Refuse Derived Fuel (RDF) combustors.

The Expansion is needed to address the solid waste disposal needs of the island of O‘ahu. As a result of the additional waste disposal capacity, the City will benefit from increased energy production and recovered metals recycling and reductions in the landfilling of municipal solid waste in Honolulu. While the Expansion and increased recycling will not eliminate the need for landfill disposal of Municipal Solid Waste (MSW), it will extend the life of the Waimanalo Gulch Sanitary Landfill and reduce the capacity needs of landfills yet to be developed.

The Expansion Project will fully comply with federal, state and local permits and programs designed for the protection and stewardship of Hawai‘i's environmental resources. Following the completion of the permitting process, construction is expected to commence in the second half of 2009 with commercial operation planned for the second half of 2012.

AMEC requests inventory information concerning the occurrence of rare, threatened, or endangered species. Electronic GIS database data is also requested. AMEC requires information at the Site, but would also like to be attentive to potential resources within the proximity of the Site. Additional information about the presence of significant natural communities or other unique natural resources in this area would also be helpful. Additional required or recommended consultations with state wildlife and natural resource agencies, or information regarding recommended contacts or referrals would also be appreciated.

If you have any additional questions or concerns or would like additional information prior to making a determination, please feel free to contact me at 808-391-9906. AMEC appreciates your timely consideration of this matter.

Sincerely,

Russell Okoji, Ph.D.
Associate
AMEC Earth and Environmental

Enclosures:

Site Location Map
`

Shad Kane

From Glenn 225-2456

August 11, 2008

Covanta Honolulu Resource Recovery Venture
91-174 Hanua Street
Kapolei, HI 96707

Attention: S. Samuel Joshi

Dear Mr. Joshi,

Thank you for the opportunity to comment. This is not just an issue of mitigating the effects of the proposed expansion of the H-POWER Energy-from-Waste Facility but also the City's compliance with its mandated responsibilities as indicated in the covenants and MOA attached to the deed in the City's purchase of the 23 acre property.

The property to the proposed expansion is a raised fossil reef characterized by large coralline outcrops and sinkholes which are formed by dissolution of the limestone as fresh water passes through its porous structure. Almost no true soils are found. Small amounts of organic matter accumulate in cracks and crevasses in the coral but most of the vegetation grows out of seemingly solid coral.

The subject property is a 23-acre parcel on the makai side of the existing H-POWER facility. It was purchased by the City in October of 2002 to serve as the site of the City's planned Alternative Technology Park. When purchased it had 2 fenced in enclosures in the middle of the parcel. In October of 2003 the City fenced in the entire parcel and placed a gate fronting Kaomi Loop. These 2 enclosed plant sanctuaries have the last remaining natural plant populations of the Endangered Species the Achyranthes Splendens Rotunda surviving in their natural habitat. The entire 23-acre parcel had been cleared and grubbed by the previous landowner with the exception of the areas within the plant sanctuaries. Attached to the deed of purchase were covenants defined in a Mitigation Plan for the Achyranthes Splendens Rotunda. It is these plant sanctuaries that I raise concerns regarding the proposed expansion.

The common name of this plant is the Ewa Hinahina. Its scientific name is the Achyranthes splendens var.rotundata. It is of the Amarantaceae (Kulu'i family). The Achyranthes is a low coastal shrub growing to an average height of 3 feet. It is an extremely salt and drought tolerant plant. It has silvery leaves and spiky flowers. Its silvery leaves have what seem to be traces of silvery hair that may be used to collect water on humid days. It does extremely well growing in close proximity to open sinkholes. I have

92-1309 Uahanai Street, Kapolei, Hawai'i 96707 808-672-4765 H 808-429-7175 C kiha@hawaii.rr.com

noticed beads of water on its leaves on hot humid days. I have also noticed a distinct rise in the humidity as one approaches healthy plants growing in close proximity to sinkholes. The Achyranthes Splenden Rotunda grows very well from seeds and cuttings. It is on the Federal list of endangered plants and thus requires the proper permits to be grown commercially. Such permits can be acquired from the State of Hawaii's Department of Forestry and Wildlife.

Hawaii Revised Statutes Chapter 195D is the State law regarding the treatment and conservation of the endangered species plants such as the Achyranthes Splenden Rotunda. It was drafted in cooperation with the federal Endangered Species Act of 1973 which provides federal protection for plants listed as endangered on the U. S. Endangered Species Plant List.

The Endangered Species Act, which was first passed in 1973, is a federal statute designated to protect plant and animal resources from adverse effects due to developmental projects, and requires consultation with wildlife authorities before committing resources to certain types of projects. **THE ACT PROVIDES FOR THE DESIGNATION AND PROTECTION OF INVERTEBRATES, WILDLIFE, FISH, AND PLANT SPECIES THAT ARE IN DANGER OF BECOMING EXTINCT THROUGHOUT ALL OR A SIGNIFICANT PORTION OF THEIR RANGE AND CONSERVES THE ECOSYSTEM ON WHICH SUCH SPECIES DEPEND.** The Act also makes it illegal for any individual to kill, collect, remove, harass, import, or export an endangered or threatened species without a permit from the Secretary of the Department of the Interior.

The proposed expansion of the H-POWER Energy-from-Waste Facility will adversely affect the endangered Achyranthes Splendon and requires consultation. The proposed expansion however is needed in the interest of solving Hawaii's waste problems and reducing the amount of trash going to landfills. As important, is the survival of this endangered species. It depends on the integrity of the geology of the region. This plant depends on the water that passes beneath it in the porous coral limestone. Any excavation or discharges into the coral substrata will adversely affect these federally protected plants.

Negligence will also adversely affect the survival of these protected plants. With the purchase of this 23 acre property the City was informed and acknowledged the existence of these plant sanctuaries and their responsibilities in the required care and maintenance of the sanctuaries.

I submitted a report to the City on November 24, 2004 referred to as the "Preliminary Report to the H-POWER Achyranthes Splendon Rotunda Habitat Conservation Plan". Attached to this report is the Mitigation Plan agreed upon by the City in the purchase of this property. The last page of this report are the recommendations to the City in an effort to fulfill their mandate:

RECOMMENDATIONS

It is critically important that the deteriorating condition of both plant sanctuaries including the C. Brewer site be stabilized. Following is a list of recommendations that need to be followed:

1. Hire contractor to remove alien vegetation by cutting. Most kiawe trees need to be removed completely with the exception of a few trees that would provide some shade. These few trees will be marked after consultation with the State of Hawaii Botanist and U. S. Fish and Wildlife. No heavy equipment. Hand removal per Mitigation Plan.

2. Hire contractor to remove debris and coral stones from sinkholes per Mitigation Plan. The open sinkholes is important to the survival of the Achyranthes Splenden Rotunda. It has been determined and documented that those parent plants growing in close proximity to sinkholes are doing better than those adjacent to sinkholes filled in with trash and coral stones. These plants survive the long hot seasons from the condensation and humidity within the moist sinkholes.

3. Hire contractor to cut back alien shrubs 5' back from fences per Mitigation Plan. Clear a 5' path on both sides of the fence line.

4. Mulch or remove all green waste.

5. Shad Kane to be notified and present when contractor is on site to monitor cleanup effort.

The last maintenance, care and thinning of invasive species from the sanctuary was done in 2004 as part of the preliminary report. Since 2004 a substantial number of the federally protected Achyranthes Splendon Rotunda in the H-POWER plant sanctuary has been lost due to neglect.

As part of the Mitigation Plan for the Proposed Expansion of the H-POWER Energy-from-Waste Facility I highly suggest that these recommendations as part of the 2004 report be integrated into your plan and Environmental Impact Statement.

Mahalo a me Aloha nō,

Shad Kane
Cultural Consultant

cc: Vickie Caraway, State Botanist
Division of Forestry and Wildlife

James Kwon, Botanist
U. S. Fish and Wildlife

Frank Doyle, Chief of Refuse
City and County of Honolulu
Environmental Services Department

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. Shad Kane
92-1309 Uahanai Street
Kapolei, Hawaii 96707

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Kane,

Thank you for your letter dated August 11, 2008, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *It is critically important that the deteriorating condition of both plant sanctuaries including the C. Brewer site be stabilized. Following is a list of recommendations that need to be followed:*

1. Hire contractor to remove alien vegetation by cutting. Most kiawe trees need to be removed completely with the exception of a few trees that would provide some shade. These few trees will be marked after consultation with the State of Hawaii Botanist and U. S. Fish and Wildlife. No heavy equipment. Hand removal per Mitigation Plan.
2. Hire contractor to remove debris and coral stones from sinkholes per Mitigation Plan. The open sinkholes is important to the survival of the Achyranthes Splenden Rotunda. It has been determined and documented that those parent plants growing in close proximity to sinkholes are doing better than those adjacent to sinkholes filled in with trash and coral stones. These plants survive the long hot seasons from the condensation and humidity within the moist sinkholes.
3. Hire contractor to cut back alien shrubs 5' back from fences per Mitigation Plan_ Clear a 5' path on both sides of the fence line.
4. Mulch or remove all green waste.
5. Shad Kane to be notified and present when contractor is on site to monitor cleanup effort.

Response 1: The City and County of Honolulu have taken steps to address your recommendations and are in the process of procuring services to stabilize the conditions at both plant sanctuaries and at the C. Brewer site. Specifically, the City has prepared a bid package to secure a contractor to perform the above-listed activities. The City is also requesting that you be present to monitor the cleanup effort.

Comment 2: *As part of the Mitigation Plan for the Proposed Expansion of the H-POWER Energy-from-Waste Facility I highly suggest that these recommendations as part of the 2004 report be integrated into your plan and Environmental Impact Statement.*

Response 2: The Final EIS will note your recommendations and the City's plans to protect the plant sanctuaries. Additionally, your comment letter and our subsequent response will be incorporated into the Final EIS.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR
ABBEY SETH MAYER
DIRECTOR
OFFICE OF PLANNING

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

OFFICE OF PLANNING
235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824

Ref. No. P-12319

November 17, 2008

Russell Okoji, Ph.D.
AMEC Earth & Environmental
Airport Industrial Center
3375 Koapaka Street, Suite F251
Honolulu, Hawaii 96819

Dear Dr. Okoji:

Subject: Hawaii Coastal Zone Management (CZM) Program Federal Consistency Requirements for the HPOWER Facility Expansion, Kapolei, Oahu, Hawaii

This responds to your letter dated November 5, 2008, requesting a determination whether a CZM federal consistency review is required for the expansion of the HPOWER facility, involving the addition of a third combustor unit. According to the information you provided, the project does not involve a federal agency activity, does not require a federal license or permit that is subject to consistency review by the Hawaii CZM Program, and will not be receiving any federal funds from sources that require CZM review. On this basis, we confirm that a CZM federal consistency review is not required for this project.

This determination is not an endorsement of the project nor does it convey approval with any other regulations administered by any State or County agency. Thank you for your cooperation in complying with Hawaii's CZM Program. If you have any questions, please call John Nakagawa of our CZM Program at 587-2878.

Sincerely,

Abbey Seth Mayer
Director

c: Department of Planning and Permitting, City and County of Honolulu

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BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843

August 12, 2008

RECEIVED
AUG 14 2008
CHRRV

Mr. S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Honolulu Resource Recovery Venture
91-174 Hanua Street
Kapolei, Hawaii 96707

Dear Mr. Joshi:

Subject: Your Letter Dated August 5, 2008 Regarding Environmental Impact Statement for the Proposed Expansion of the H-POWER Energy-from-Waste Facility, TMK: 9-1-26:30

Thank you for the opportunity to comment on the proposed expansion improvements at the H-POWER site.

The existing water system is presently adequate to accommodate the proposed improvements. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

The project is subject to Board of Water Supply Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the building permit.

The on-site fire protection requirement should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Robert Chun at 748-5443.

Very truly yours,

K. Shida

KEITH S. SHIDA
Program Administrator
Customer Care Division

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PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD08/

September 4, 2008

Stephan Clark
Pacific Consulting Services, Inc.
720 Iwilei Road, Suite 424
Honolulu, Hawai'i 96817

RE: Request for comments on the proposed expansion of the HPOWER facility at Kapolei, Land of Honouliuli, 'Ewa District, O'ahu TMKs: 9-1-026:30, 33, 34 and 35.

Aloha e Stephan Clark,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated August 14, 2008. OHA has reviewed the project and offers the following comments.

Our January 12, 2005 comment letter for the same proposal stated concerns for historic and cultural sites in the area. We specifically asked that the 1986 burial discovery and reinternment site be adequately protected. We further noted that the 'Ewa plain has historically been known to contain sinkholes in which human skeletal remains as well as avi-faunal remains and that these sinkholes can continue to exist in areas that have been graded or heavily cultivated for agricultural uses. There would appear to be a higher than normal probability of unmarked burial sites existing in the project area given the previous find during construction and the possibility of other burials being associated with this burial, either proximally or distally.

According to records at the Bishop Museum pertaining to inventories conducted for compliance with the Native American Graves Protection and Repatriation Act of 1990, burial sites in Honouliuli and in 'Ewa in general have been documented in the past including:

> In 1938, human remains representing six individuals from Honouliuli, 'Ewa, O'ahu were collected by Kenneth P. Emory and William A. Lessa and acquired by the Bishop Museum. Museum documentation indicates these remains were in a shallow crypt burial one mile from the coast;

In 1933, human remains representing three individuals form stone pits at ‘Ewa, O’ahu were collected by J.W. Barrington and Edwin H. Bryan;

In 1942, human remains representing two individuals from Kualakai, ‘Ewa Beach, O’ahu were donated to the Bishop Museum;

In 1959, human remains representing seven individuals from ‘Ewa, O’ahu were donated to the Bishop Museum by the Anthropology Club of the University of Hawaii (from Standard Oil Refinery land);

In 1980, human remains representing nine individuals from Honouliuli, O’ahu were collected and donated to the Bishop Museum by Albert, Borthwick and Folk. Donor information indicates these human remains were recovered from coral sinkholes.

In the last decade, unmarked burial sites have been found in the area of St. Francis West, West Loch Estates, Old Fort Weaver Road, Kalaeloa, One‘ula Beach, Campbell Estate, Ko‘Olina and other areas in the vicinity of this project.

Native Hawaiian burial sites have been found just on and under the surface to depths of eight or nine feet depending upon the nature of the terrain. Furthermore, the nature of documented interments in the ‘Ewa area (stone pits, sinkholes, crypts, etc.) could lead to the survival of these sites despite intensive agricultural activities on the surface. OHA notes that the applicant has proposed on-call monitoring by a qualified archeologist as a result of the probable presence of subsurface sites in the project area.

OHA asks if the three plant sanctuaries that contain endangered species have been designated as critical habitat and if they are part of a habitat conservation plan. We are supportive of the idea that these areas should be removed from the proposed construction area and additionally protected by buffer areas.

Thank you for the opportunity to comment and we look forward to further review. If you have additional questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

‘O wau iho nō me ka ‘oia‘i‘o,

Clyde W. Nāmu‘o
Administrator

Appendix C – Highway Capacity Software Input and Output Spreadsheets

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	18	0	267	378	8	103	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	0	290	411	9	112	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	420			20			1017	1020	20	1015	1015	415
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	420			20			1017	1020	20	1015	1015	415
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			82			34	100	100	99	98	100
cM capacity (veh/h)	1150			1577			171	195	1064	188	177	642

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	20	0	710	112	0	5
Volume Left	0	0	290	112	0	1
Volume Right	0	0	9	0	0	0
cSH	1150	1700	1577	171	1700	179
Volume to Capacity	0.00	0.00	0.18	0.66	0.00	0.03
Queue Length 95th (ft)	0	0	17	94	0	2
Control Delay (s)	0.0	0.0	4.3	59.2	0.0	25.7
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		4.3	59.2		25.7
Approach LOS				F		D

Intersection Summary			
Average Delay	11.6		
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	108	1325	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	117	1440	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1558	1440	1440			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1558	1440	1440			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	125	157	477			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	2	0	117	1440
Volume Left	2	0	0	0
Volume Right	0	0	0	0
cSH	125	1700	1700	1700
Volume to Capacity	0.02	0.00	0.07	0.85
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	34.3	0.0	0.0	0.0
Lane LOS	D	A		
Approach Delay (s)	34.3		0.0	0.0
Approach LOS	D			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	29	459	93	5	458	218	1677
v/c Ratio	0.05	1.03	0.16	0.04	0.48	0.52	1.13
Control Delay	11.3	72.9	4.2	8.2	10.4	13.0	84.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	72.9	4.2	8.2	10.4	13.0	84.3
Queue Length 50th (ft)	5	~149	0	1	33	31	~227
Queue Length 95th (ft)	18	#290	22	4	66	62	#488
Internal Link Dist (ft)	181	306			6282		1128
Turn Bay Length (ft)				150			
Base Capacity (vph)	534	446	584	128	946	418	1485
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	1.03	0.16	0.04	0.48	0.52	1.13

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	22	0	386	36	86	5	284	137	201	1488	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1638			1703	1509	902	2449		1719	3314	
Flt Permitted		0.93			0.72	1.00	0.22	1.00		0.41	1.00	
Satd. Flow (perm)		1539			1288	1509	207	2449		750	3314	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	24	0	420	39	93	5	309	149	218	1617	60
RTOR Reduction (vph)	0	0	0	0	0	63	0	94	0	0	5	0
Lane Group Flow (vph)	0	29	0	0	459	30	5	364	0	218	1672	0
Heavy Vehicles (%)	20%	14%	0%	6%	14%	7%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.1			16.1	16.1	19.2	18.4		23.8	20.7	
Effective Green, g (s)		16.1			16.1	16.1	19.2	18.4		23.8	20.7	
Actuated g/C Ratio		0.32			0.32	0.32	0.39	0.37		0.48	0.42	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		500			418	490	91	909		420	1383	
v/s Ratio Prot							0.00	0.15		c0.03	c0.50	
v/s Ratio Perm		0.02			c0.36	0.02	0.02			0.22		
v/c Ratio		0.06			1.10	0.06	0.05	0.40		0.52	1.21	
Uniform Delay, d1		11.5			16.7	11.5	24.1	11.5		8.2	14.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			73.2	0.1	0.3	1.3		1.1	101.1	
Delay (s)		11.6			90.0	11.6	24.4	12.8		9.3	115.6	
Level of Service		B			F	B	C	B		A	F	
Approach Delay (s)		11.6			76.8			13.0			103.4	
Approach LOS		B			E			B			F	

Intersection Summary			
HCM Average Control Delay	83.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	166	23	18	52	16	197	276	865	570
v/c Ratio	0.58	0.07	0.07	0.14	0.07	0.26	0.47	0.49	0.53
Control Delay	20.3	5.9	10.7	5.0	8.3	11.9	10.7	10.8	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	5.9	10.7	5.0	8.3	11.9	10.7	10.8	3.5
Queue Length 50th (ft)	25	0	2	0	1	15	29	54	0
Queue Length 95th (ft)	82	11	14	17	9	38	#82	#197	54
Internal Link Dist (ft)	415		485			678		6282	
Turn Bay Length (ft)		100		80	100				100
Base Capacity (vph)	379	445	345	494	244	927	587	1784	1085
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.05	0.05	0.11	0.07	0.21	0.47	0.48	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	8	21	9	7	48	15	170	11	254	796	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1355	1170		1095	1252	1289	2246		1719	3252	1509
Flt Permitted		0.72	1.00		0.83	1.00	0.33	1.00		0.51	1.00	1.00
Satd. Flow (perm)		1028	1170		937	1252	445	2246		928	3252	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	157	9	23	10	8	52	16	185	12	276	865	570
RTOR Reduction (vph)	0	0	18	0	0	40	0	7	0	0	0	303
Lane Group Flow (vph)	0	166	5	0	18	12	16	190	0	276	865	267
Heavy Vehicles (%)	33%	50%	38%	44%	100%	29%	40%	59%	63%	5%	11%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		9.1	9.1		9.1	9.1	16.2	15.6		23.2	19.1	19.1
Effective Green, g (s)		9.1	9.1		9.1	9.1	16.2	15.6		23.2	19.1	19.1
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.40	0.38		0.57	0.47	0.47
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		229	261		209	279	189	859		607	1522	706
v/s Ratio Prot							0.00	0.08		c0.05	c0.27	
v/s Ratio Perm		c0.16	0.00		0.02	0.01	0.03			0.21		0.18
v/c Ratio		0.72	0.02		0.09	0.04	0.08	0.22		0.45	0.57	0.38
Uniform Delay, d1		14.7	12.4		12.6	12.4	7.5	8.5		4.7	7.9	7.0
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		10.8	0.0		0.2	0.1	0.2	0.1		0.5	0.5	0.3
Delay (s)		25.5	12.4		12.7	12.5	7.7	8.6		5.3	8.4	7.4
Level of Service		C	B		B	B	A	A		A	A	A
Approach Delay (s)		23.9			12.6			8.6			7.5	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	40.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	40	0	138	752	0	315	0	0	1	8	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	43	0	150	817	0	342	0	0	1	9	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	817			43			1166	1161	43	1161	1161	817
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	817			43			1166	1161	43	1161	1161	817
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			90			0	100	100	99	95	100
cM capacity (veh/h)	820			1503			150	177	1027	161	159	379

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	43	0	967	342	0	11
Volume Left	0	0	150	342	0	1
Volume Right	0	0	0	0	0	1
cSH	820	1700	1503	150	1700	169
Volume to Capacity	0.00	0.00	0.10	2.28	0.00	0.06
Queue Length 95th (ft)	0	0	8	713	0	5
Control Delay (s)	0.0	0.0	2.4	645.1	0.0	27.7
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		2.4	645.1		27.7
Approach LOS				F		D

Intersection Summary			
Average Delay	163.9		
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	5	0	0	63	437	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	0	68	475	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	543	475	475			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	543	475	475			
tC, single (s)	6.8	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.4	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	441	576	1098			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	5	0	68	475
Volume Left	5	0	0	0
Volume Right	0	0	0	0
cSH	441	1700	1700	1700
Volume to Capacity	0.01	0.00	0.04	0.28
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	13.3	0.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	13.3		0.0	0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	24	139	542	5	1706	217	364
v/c Ratio	0.06	0.40	0.86	0.02	1.41	0.74	0.28
Control Delay	11.4	16.4	25.5	7.6	207.5	28.5	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.4	16.4	25.5	7.6	207.5	28.5	9.1
Queue Length 50th (ft)	4	29	74	1	~355	31	27
Queue Length 95th (ft)	16	66	#229	4	#475	#123	68
Internal Link Dist (ft)	181	306			6282		1128
Turn Bay Length (ft)				150			
Base Capacity (vph)	450	385	672	322	1213	294	1300
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.36	0.81	0.02	1.41	0.74	0.28

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	7	0	125	3	499	5	1129	441	200	328	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1558			1544	1568	1289	3227		1770	2642	
Flt Permitted		0.84			0.71	1.00	0.53	1.00		0.18	1.00	
Satd. Flow (perm)		1349			1155	1568	726	3227		330	2642	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	8	0	136	3	542	5	1227	479	217	357	7
RTOR Reduction (vph)	0	0	0	0	0	161	0	78	0	0	2	0
Lane Group Flow (vph)	0	24	0	0	139	381	5	1628	0	217	362	0
Heavy Vehicles (%)	20%	14%	0%	17%	33%	3%	40%	8%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		13.8			13.8	13.8	20.2	19.4		26.6	22.6	
Effective Green, g (s)		13.8			13.8	13.8	20.2	19.4		26.6	22.6	
Actuated g/C Ratio		0.28			0.28	0.28	0.41	0.39		0.54	0.46	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		378			324	440	307	1272		295	1214	
v/s Ratio Prot							0.00	c0.50		c0.06	0.14	
v/s Ratio Perm		0.02			0.12	c0.24	0.01			0.34		
v/c Ratio		0.06			0.43	0.87	0.02	1.28		0.74	0.30	
Uniform Delay, d1		13.0			14.5	16.8	8.6	14.9		23.7	8.3	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.9	16.1	0.0	132.1		9.2	0.6	
Delay (s)		13.0			15.4	32.9	8.6	147.0		32.8	9.0	
Level of Service		B			B	C	A	F		C	A	
Approach Delay (s)		13.0			29.4			146.6			17.9	
Approach LOS		B			C			F			B	

Intersection Summary			
HCM Average Control Delay	93.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	49.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	397	22	18	270	5	758	61	243	152
v/c Ratio	0.83	0.04	0.05	0.36	0.01	0.68	0.29	0.24	0.26
Control Delay	35.3	6.0	11.4	4.0	7.4	16.6	10.6	9.7	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.3	6.0	11.4	4.0	7.4	16.6	10.6	9.7	3.8
Queue Length 50th (ft)	105	0	3	2	1	92	8	17	0
Queue Length 95th (ft)	#246	11	14	40	4	142	22	47	29
Internal Link Dist (ft)	415		485			678		6282	
Turn Bay Length (ft)		100		80	100				100
Base Capacity (vph)	484	528	392	749	434	1222	209	1094	613
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.04	0.05	0.36	0.01	0.62	0.29	0.22	0.25

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	361	5	20	6	10	248	5	688	9	56	224	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1686	1346		1149	1538	1805	3356		1280	2542	1223
Flt Permitted		0.72	1.00		0.88	1.00	0.60	1.00		0.24	1.00	1.00
Satd. Flow (perm)		1266	1346		1026	1538	1142	3356		319	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	392	5	22	7	11	270	5	748	10	61	243	152
RTOR Reduction (vph)	0	0	14	0	0	169	0	2	0	0	0	96
Lane Group Flow (vph)	0	397	8	0	18	101	5	756	0	61	243	56
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	33%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		16.0	16.0		16.0	16.0	16.2	15.5		19.0	16.9	16.9
Effective Green, g (s)		16.0	16.0		16.0	16.0	16.2	15.5		19.0	16.9	16.9
Actuated g/C Ratio		0.35	0.35		0.35	0.35	0.36	0.34		0.42	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		444	472		360	540	416	1141		177	942	453
v/s Ratio Prot							0.00	c0.23		c0.02	0.10	
v/s Ratio Perm		c0.31	0.01		0.02	0.07	0.00			0.13		0.05
v/c Ratio		0.89	0.02		0.05	0.19	0.01	0.66		0.34	0.26	0.12
Uniform Delay, d1		14.0	9.7		9.8	10.3	9.5	12.8		8.6	10.0	9.5
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		19.9	0.0		0.1	0.2	0.0	1.5		1.2	0.1	0.1
Delay (s)		33.9	9.7		9.8	10.4	9.5	14.3		9.8	10.1	9.6
Level of Service		C	A		A	B	A	B		A	B	A
Approach Delay (s)		32.6			10.4			14.3			9.9	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	45.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	18	0	269	380	8	106	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	0	292	413	9	115	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	422			20			1024	1026	20	1022	1022	417
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	422			20			1024	1026	20	1022	1022	417
tC, single (s)	4.1			4.2			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			81			31	100	100	99	98	100
cM capacity (veh/h)	1148			1571			166	193	1064	185	175	640

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	20	0	714	115	0	5
Volume Left	0	0	292	115	0	1
Volume Right	0	0	9	0	0	0
cSH	1148	1700	1571	166	1700	177
Volume to Capacity	0.00	0.00	0.19	0.69	0.00	0.03
Queue Length 95th (ft)	0	0	17	103	0	2
Control Delay (s)	0.0	0.0	4.3	64.8	0.0	26.0
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		4.3	64.8		26.0
Approach LOS				F		D

Intersection Summary			
Average Delay	12.5		
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	112	1346	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	122	1463	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1585	1463	1463			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1585	1463	1463			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	121	151	468			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	2	0	122	1463
Volume Left	2	0	0	0
Volume Right	0	0	0	0
cSH	121	1700	1700	1700
Volume to Capacity	0.02	0.00	0.07	0.86
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	35.4	0.0	0.0	0.0
Lane LOS	E	A		
Approach Delay (s)	35.4		0.0	0.0
Approach LOS	E			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	29	463	95	5	485	221	1698
v/c Ratio	0.06	1.08	0.17	0.04	0.54	0.53	1.11
Control Delay	11.3	89.3	4.2	8.2	11.3	13.8	75.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.3	89.3	4.2	8.2	11.3	13.8	75.3
Queue Length 50th (ft)	5	~152	0	1	36	32	~250
Queue Length 95th (ft)	18	#293	23	4	72	#70	#498
Internal Link Dist (ft)	181	306			6282		1128
Turn Bay Length (ft)				150			
Base Capacity (vph)	509	428	562	125	901	415	1536
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	1.08	0.17	0.04	0.54	0.53	1.11

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	5	22	0	389	37	87	5	305	141	203	1505	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1626			1700	1495	902	2396		1703	3281	
Flt Permitted		0.93			0.72	1.00	0.21	1.00		0.38	1.00	
Satd. Flow (perm)		1526			1286	1495	198	2396		682	3281	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	24	0	423	40	95	5	332	153	221	1636	62
RTOR Reduction (vph)	0	0	0	0	0	65	0	96	0	0	5	0
Lane Group Flow (vph)	0	29	0	0	463	30	5	389	0	221	1694	0
Heavy Vehicles (%)	20%	15%	0%	6%	16%	8%	100%	53%	23%	6%	9%	21%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Effective Green, g (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Actuated g/C Ratio		0.31			0.31	0.31	0.39	0.37		0.52	0.44	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		477			402	467	88	899		431	1435	
v/s Ratio Prot							0.00	0.16		c0.04	c0.52	
v/s Ratio Perm		0.02			c0.36	0.02	0.02			0.22		
v/c Ratio		0.06			1.15	0.06	0.06	0.43		0.51	1.18	
Uniform Delay, d1		12.3			17.6	12.3	24.9	11.9		7.2	14.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			93.2	0.1	0.3	1.5		1.0	88.6	
Delay (s)		12.4			110.8	12.4	25.2	13.5		8.2	103.0	
Level of Service		B			F	B	C	B		A	F	
Approach Delay (s)		12.4			94.0			13.6			92.1	
Approach LOS		B			F			B			F	

Intersection Summary			
HCM Average Control Delay	78.8	HCM Level of Service	E
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	175	24	20	54	17	214	278	879	576
v/c Ratio	0.62	0.07	0.08	0.14	0.07	0.29	0.49	0.50	0.53
Control Delay	22.6	5.7	10.8	5.0	8.6	12.3	11.7	11.4	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.6	5.7	10.8	5.0	8.6	12.3	11.7	11.4	3.6
Queue Length 50th (ft)	28	0	3	0	2	17	31	60	0
Queue Length 95th (ft)	#91	12	15	17	9	42	#87	#204	54
Internal Link Dist (ft)	415		485			678		6282	
Turn Bay Length (ft)		100		80	100				100
Base Capacity (vph)	356	452	338	484	233	893	571	1756	1077
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.49	0.05	0.06	0.11	0.07	0.24	0.49	0.50	0.53

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	152	9	22	10	8	50	16	185	12	256	809	530
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1280	1188		1072	1223	1253	2205		1703	3223	1495
Flt Permitted		0.72	1.00		0.83	1.00	0.32	1.00		0.51	1.00	1.00
Satd. Flow (perm)		970	1188		919	1223	421	2205		906	3223	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	165	10	24	11	9	54	17	201	13	278	879	576
RTOR Reduction (vph)	0	0	18	0	0	41	0	8	0	0	0	309
Lane Group Flow (vph)	0	175	6	0	20	13	17	206	0	278	879	267
Heavy Vehicles (%)	41%	55%	36%	50%	100%	32%	44%	62%	66%	6%	12%	8%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		9.6	9.6		9.6	9.6	16.3	15.7		23.3	19.2	19.2
Effective Green, g (s)		9.6	9.6		9.6	9.6	16.3	15.7		23.3	19.2	19.2
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.39	0.38		0.56	0.46	0.46
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		225	275		213	284	178	836		589	1495	693
v/s Ratio Prot							0.00	0.09		c0.05	c0.27	
v/s Ratio Perm		c0.18	0.00		0.02	0.01	0.04			0.22		0.18
v/c Ratio		0.78	0.02		0.09	0.04	0.10	0.25		0.47	0.59	0.39
Uniform Delay, d1		14.9	12.3		12.5	12.3	7.7	8.8		4.9	8.2	7.2
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		15.5	0.0		0.2	0.1	0.2	0.2		0.6	0.6	0.4
Delay (s)		30.4	12.3		12.7	12.4	7.9	9.0		5.5	8.8	7.6
Level of Service		C	B		B	B	A	A		A	A	A
Approach Delay (s)		28.2			12.5			8.9			7.9	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	41.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	40	0	140	755	0	317	0	0	1	8	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	43	0	152	821	0	345	0	0	1	9	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	821			43			1174	1168	43	1168	1168	821
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	821			43			1174	1168	43	1168	1168	821
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			90			0	100	100	99	94	100
cM capacity (veh/h)	817			1497			147	175	1027	158	157	378

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	43	0	973	345	0	11
Volume Left	0	0	152	345	0	1
Volume Right	0	0	0	0	0	1
cSH	817	1700	1497	147	1700	167
Volume to Capacity	0.00	0.00	0.10	2.34	0.00	0.07
Queue Length 95th (ft)	0	0	8	727	0	5
Control Delay (s)	0.0	0.0	2.5	671.7	0.0	28.0
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		2.5	671.7		28.0
Approach LOS				F		D

Intersection Summary			
Average Delay	170.7		
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	5	0	0	64	455	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	0	70	495	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	564	495	495			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	564	495	495			
tC, single (s)	6.8	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.4	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	428	557	1080			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	5	0	70	495
Volume Left	5	0	0	0
Volume Right	0	0	0	0
cSH	428	1700	1700	1700
Volume to Capacity	0.01	0.00	0.04	0.29
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	13.5	0.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	13.5		0.0	0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	24	142	545	5	1724	217	383
v/c Ratio	0.06	0.41	0.87	0.02	1.43	0.74	0.30
Control Delay	11.4	16.7	25.8	7.6	219.8	28.7	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.4	16.7	25.8	7.6	219.8	28.7	9.4
Queue Length 50th (ft)	4	29	75	1	~362	31	29
Queue Length 95th (ft)	16	68	#232	4	#483	#123	73
Internal Link Dist (ft)	181	306			6282		1128
Turn Bay Length (ft)				150			
Base Capacity (vph)	449	379	671	317	1202	293	1260
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.37	0.81	0.02	1.43	0.74	0.30

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	15	7	0	128	3	501	5	1142	444	200	346	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1554			1518	1568	1289	3206		1770	2568	
Flt Permitted		0.84			0.71	1.00	0.52	1.00		0.18	1.00	
Satd. Flow (perm)		1345			1136	1568	712	3206		330	2568	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	8	0	139	3	545	5	1241	483	217	376	7
RTOR Reduction (vph)	0	0	0	0	0	160	0	78	0	0	2	0
Lane Group Flow (vph)	0	24	0	0	142	385	5	1646	0	217	381	0
Heavy Vehicles (%)	20%	15%	0%	19%	33%	3%	40%	9%	5%	2%	40%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		13.9			13.9	13.9	20.2	19.4		26.6	22.6	
Effective Green, g (s)		13.9			13.9	13.9	20.2	19.4		26.6	22.6	
Actuated g/C Ratio		0.28			0.28	0.28	0.41	0.39		0.54	0.46	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		379			320	442	301	1262		295	1177	
v/s Ratio Prot							0.00	c0.51		c0.06	0.15	
v/s Ratio Perm		0.02			0.13	c0.25	0.01			0.34		
v/c Ratio		0.06			0.44	0.87	0.02	1.30		0.74	0.32	
Uniform Delay, d1		12.9			14.5	16.8	8.6	15.0		23.7	8.5	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			1.0	16.8	0.0	142.9		9.2	0.7	
Delay (s)		13.0			15.5	33.7	8.6	157.9		32.9	9.2	
Level of Service		B			B	C	A	F		C	A	
Approach Delay (s)		13.0			29.9			157.4			17.8	
Approach LOS		B			C			F			B	

Intersection Summary			
HCM Average Control Delay	99.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	49.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Lane Group	EBT	EBR	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	402	23	19	272	5	767	64	259	160
v/c Ratio	0.84	0.05	0.05	0.37	0.01	0.70	0.32	0.27	0.28
Control Delay	36.2	5.9	11.5	4.1	7.4	17.1	11.2	9.9	3.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	5.9	11.5	4.1	7.4	17.1	11.2	9.9	3.9
Queue Length 50th (ft)	107	0	4	2	1	94	8	18	0
Queue Length 95th (ft)	#251	11	14	41	4	144	23	51	30
Internal Link Dist (ft)	415		485			678		6282	
Turn Bay Length (ft)		100		80	100				100
Base Capacity (vph)	479	508	390	742	427	1199	203	1055	602
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.05	0.05	0.37	0.01	0.64	0.32	0.25	0.27

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	365	5	21	6	11	250	5	696	9	59	238	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1670	1292		1138	1524	1805	3326		1253	2473	1196
Flt Permitted		0.72	1.00		0.88	1.00	0.59	1.00		0.24	1.00	1.00
Satd. Flow (perm)		1253	1292		1022	1524	1124	3326		312	2473	1196
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	397	5	23	7	12	272	5	757	10	64	259	160
RTOR Reduction (vph)	0	0	15	0	0	167	0	2	0	0	0	101
Lane Group Flow (vph)	0	402	8	0	19	105	5	765	0	64	259	59
Heavy Vehicles (%)	8%	40%	25%	50%	72%	6%	0%	8%	33%	44%	46%	35%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		16.4	16.4		16.4	16.4	16.2	15.5		19.0	16.9	16.9
Effective Green, g (s)		16.4	16.4		16.4	16.4	16.2	15.5		19.0	16.9	16.9
Actuated g/C Ratio		0.36	0.36		0.36	0.36	0.35	0.34		0.41	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		447	461		364	543	406	1121		172	909	439
v/s Ratio Prot							0.00	c0.23		c0.02	0.10	
v/s Ratio Perm		c0.32	0.01		0.02	0.07	0.00			0.14		0.05
v/c Ratio		0.90	0.02		0.05	0.19	0.01	0.68		0.37	0.28	0.13
Uniform Delay, d1		14.0	9.6		9.7	10.2	9.7	13.1		8.8	10.3	9.7
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		20.4	0.0		0.1	0.2	0.0	1.7		1.4	0.2	0.1
Delay (s)		34.4	9.6		9.8	10.4	9.7	14.9		10.2	10.5	9.8
Level of Service		C	A		A	B	A	B		B	B	A
Approach Delay (s)		33.1			10.4			14.8			10.2	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	46.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	18	0	267	378	8	103	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	0	290	411	9	112	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	420			20			1017	1020	20	1015	1015	415
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	420			20			1017	1020	20	1015	1015	415
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			82			34	100	100	99	98	100
cM capacity (veh/h)	1150			1577			171	195	1064	188	177	642

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	20	0	710	112	0	5
Volume Left	0	0	290	112	0	1
Volume Right	0	0	9	0	0	0
cSH	1150	1700	1577	171	1700	179
Volume to Capacity	0.00	0.00	0.18	0.66	0.00	0.03
Queue Length 95th (ft)	0	0	17	94	0	2
Control Delay (s)	0.0	0.0	4.3	59.2	0.0	25.7
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		4.3	59.2		25.7
Approach LOS				F		D

Intersection Summary			
Average Delay	11.6		
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	108	1339	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	117	1455	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1573	1455	1455			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1573	1455	1455			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	123	154	471			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	2	0	117	1455
Volume Left	2	0	0	0
Volume Right	0	0	0	0
cSH	123	1700	1700	1700
Volume to Capacity	0.02	0.00	0.07	0.86
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	34.9	0.0	0.0	0.0
Lane LOS	D	A		
Approach Delay (s)	34.9		0.0	0.0
Approach LOS	D			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	22	0	386	36	92	5	284	137	201	1516	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1588			1703	1509	902	2449		1719	3314	
Flt Permitted		0.91			0.72	1.00	0.22	1.00		0.41	1.00	
Satd. Flow (perm)		1459			1285	1509	207	2449		750	3314	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	24	0	420	39	100	5	309	149	218	1648	60
RTOR Reduction (vph)	0	0	0	0	0	68	0	94	0	0	5	0
Lane Group Flow (vph)	0	31	0	0	459	32	5	364	0	218	1703	0
Heavy Vehicles (%)	33%	14%	0%	6%	14%	7%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.1			16.1	16.1	19.2	18.4		23.8	20.7	
Effective Green, g (s)		16.1			16.1	16.1	19.2	18.4		23.8	20.7	
Actuated g/C Ratio		0.32			0.32	0.32	0.39	0.37		0.48	0.42	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		474			417	490	91	909		420	1383	
v/s Ratio Prot							0.00	0.15		c0.03	c0.51	
v/s Ratio Perm		0.02			c0.36	0.02	0.02			0.22		
v/c Ratio		0.07			1.10	0.07	0.05	0.40		0.52	1.23	
Uniform Delay, d1		11.6			16.7	11.6	24.1	11.5		8.2	14.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			74.2	0.1	0.3	1.3		1.1	110.7	
Delay (s)		11.6			90.9	11.6	24.4	12.8		9.3	125.2	
Level of Service		B			F	B	C	B		A	F	
Approach Delay (s)		11.6			76.7			13.0			112.1	
Approach LOS		B			E			B			F	

Intersection Summary			
HCM Average Control Delay	89.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	8	21	9	7	48	15	170	11	254	824	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1308	1214		1095	1568	1289	2245		1719	3282	1509
Flt Permitted		0.72	1.00		0.84	1.00	0.31	1.00		0.51	1.00	1.00
Satd. Flow (perm)		993	1214		940	1568	424	2245		929	3282	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	157	9	23	10	8	52	16	185	12	276	896	570
RTOR Reduction (vph)	0	0	18	0	0	40	0	7	0	0	0	304
Lane Group Flow (vph)	0	166	5	0	18	12	16	190	0	276	896	266
Heavy Vehicles (%)	38%	50%	33%	44%	100%	3%	40%	59%	64%	5%	10%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		9.3	9.3		9.3	9.3	16.3	15.7		23.3	19.2	19.2
Effective Green, g (s)		9.3	9.3		9.3	9.3	16.3	15.7		23.3	19.2	19.2
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.40	0.38		0.57	0.47	0.47
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		225	275		213	355	181	858		605	1533	705
v/s Ratio Prot							0.00	0.08		c0.05	c0.27	
v/s Ratio Perm		c0.17	0.00		0.02	0.01	0.03			0.21		0.18
v/c Ratio		0.74	0.02		0.08	0.03	0.09	0.22		0.46	0.58	0.38
Uniform Delay, d1		14.8	12.4		12.5	12.4	7.6	8.6		4.8	8.0	7.1
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		11.9	0.0		0.2	0.0	0.2	0.1		0.5	0.6	0.3
Delay (s)		26.7	12.4		12.7	12.4	7.8	8.7		5.3	8.6	7.4
Level of Service		C	B		B	B	A	A		A	A	A
Approach Delay (s)		24.9			12.5			8.6			7.7	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	41.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	40	0	138	752	0	328	0	0	1	8	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	43	0	150	817	0	357	0	0	1	9	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	817			43			1166	1161	43	1161	1161	817
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	817			43			1166	1161	43	1161	1161	817
tC, single (s)	4.1			4.2			7.1	6.5	6.4	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.5	3.5	4.2	3.3
p0 queue free %	100			90			0	100	100	99	95	100
cM capacity (veh/h)	820			1503			150	177	970	161	159	379

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	43	0	967	357	0	11
Volume Left	0	0	150	357	0	1
Volume Right	0	0	0	0	0	1
cSH	820	1700	1503	150	1700	169
Volume to Capacity	0.00	0.00	0.10	2.37	0.00	0.06
Queue Length 95th (ft)	0	0	8	756	0	5
Control Delay (s)	0.0	0.0	2.4	686.5	0.0	27.7
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		2.4	686.5		27.7
Approach LOS				F		D

Intersection Summary			
Average Delay	179.5		
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	5	0	0	85	437	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	0	92	475	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	567	475	475			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	567	475	475			
tC, single (s)	6.8	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	426	588	1098			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	5	0	92	475
Volume Left	5	0	0	0
Volume Right	0	0	0	0
cSH	426	1700	1700	1700
Volume to Capacity	0.01	0.00	0.05	0.28
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	13.6	0.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	13.6		0.0	0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	7	0	125	3	499	5	1147	441	200	328	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1565			1544	1568	1289	3250		1770	2642	
Flt Permitted		0.83			0.71	1.00	0.53	1.00		0.18	1.00	
Satd. Flow (perm)		1348			1154	1568	726	3250		330	2642	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	8	0	136	3	542	5	1247	479	217	357	7
RTOR Reduction (vph)	0	0	0	0	0	160	0	76	0	0	2	0
Lane Group Flow (vph)	0	25	0	0	139	382	5	1650	0	217	362	0
Heavy Vehicles (%)	19%	14%	0%	17%	33%	3%	40%	7%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		13.8			13.8	13.8	20.2	19.4		26.6	22.6	
Effective Green, g (s)		13.8			13.8	13.8	20.2	19.4		26.6	22.6	
Actuated g/C Ratio		0.28			0.28	0.28	0.41	0.39		0.54	0.46	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		378			324	440	307	1282		295	1214	
v/s Ratio Prot							0.00	c0.51		c0.06	0.14	
v/s Ratio Perm		0.02			0.12	c0.24	0.01			0.34		
v/c Ratio		0.07			0.43	0.87	0.02	1.29		0.74	0.30	
Uniform Delay, d1		13.0			14.5	16.8	8.6	14.9		23.7	8.3	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.9	16.3	0.0	135.1		9.2	0.6	
Delay (s)		13.1			15.4	33.1	8.6	150.0		32.8	9.0	
Level of Service		B			B	C	A	F		C	A	
Approach Delay (s)		13.1			29.5			149.6			17.9	
Approach LOS		B			C			F			B	

Intersection Summary			
HCM Average Control Delay	96.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	49.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	361	5	20	6	10	248	5	706	9	56	224	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1686	1346		1149	1538	1805	3358		1280	2542	1223
Flt Permitted		0.72	1.00		0.88	1.00	0.60	1.00		0.24	1.00	1.00
Satd. Flow (perm)		1266	1346		1026	1538	1142	3358		317	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	392	5	22	7	11	270	5	767	10	61	243	152
RTOR Reduction (vph)	0	0	14	0	0	168	0	2	0	0	0	95
Lane Group Flow (vph)	0	397	8	0	18	102	5	775	0	61	243	57
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	30%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		16.0	16.0		16.0	16.0	16.3	15.6		19.1	17.0	17.0
Effective Green, g (s)		16.0	16.0		16.0	16.0	16.3	15.6		19.1	17.0	17.0
Actuated g/C Ratio		0.35	0.35		0.35	0.35	0.36	0.34		0.42	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		443	471		359	538	417	1146		177	946	455
v/s Ratio Prot							0.00	c0.23		c0.02	0.10	
v/s Ratio Perm		c0.31	0.01		0.02	0.07	0.00			0.13		0.05
v/c Ratio		0.90	0.02		0.05	0.19	0.01	0.68		0.34	0.26	0.12
Uniform Delay, d1		14.1	9.7		9.8	10.3	9.5	12.9		8.6	10.0	9.4
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		20.2	0.0		0.1	0.2	0.0	1.6		1.2	0.1	0.1
Delay (s)		34.2	9.7		9.9	10.5	9.5	14.5		9.8	10.1	9.6
Level of Service		C	A		A	B	A	B		A	B	A
Approach Delay (s)		33.0			10.5			14.5			9.9	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	16.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	45.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	18	0	267	378	8	103	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	0	290	411	9	112	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	420			20			1017	1020	20	1015	1015	415
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	420			20			1017	1020	20	1015	1015	415
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			82			34	100	100	99	98	100
cM capacity (veh/h)	1150			1577			171	195	1064	188	177	642

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	20	0	710	112	0	5
Volume Left	0	0	290	112	0	1
Volume Right	0	0	9	0	0	0
cSH	1150	1700	1577	171	1700	179
Volume to Capacity	0.00	0.00	0.18	0.66	0.00	0.03
Queue Length 95th (ft)	0	0	17	94	0	2
Control Delay (s)	0.0	0.0	4.3	59.2	0.0	25.7
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		4.3	59.2		25.7
Approach LOS				F		D

Intersection Summary			
Average Delay	11.6		
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	108	1341	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	117	1458	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1575	1458	1458			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1575	1458	1458			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	122	154	470			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	2	0	117	1458
Volume Left	2	0	0	0
Volume Right	0	0	0	0
cSH	122	1700	1700	1700
Volume to Capacity	0.02	0.00	0.07	0.86
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	35.0	0.0	0.0	0.0
Lane LOS	D	A		
Approach Delay (s)	35.0		0.0	0.0
Approach LOS	D			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	22	0	386	36	99	5	284	137	201	1543	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1664			1703	1524	902	2449		1719	3315	
Flt Permitted		0.86			0.72	1.00	0.22	1.00		0.41	1.00	
Satd. Flow (perm)		1453			1279	1524	207	2449		750	3315	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	24	0	420	39	108	5	309	149	218	1677	60
RTOR Reduction (vph)	0	0	0	0	0	73	0	94	0	0	5	0
Lane Group Flow (vph)	0	36	0	0	459	35	5	364	0	218	1732	0
Heavy Vehicles (%)	9%	14%	0%	6%	14%	6%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.1			16.1	16.1	19.2	18.4		23.8	20.7	
Effective Green, g (s)		16.1			16.1	16.1	19.2	18.4		23.8	20.7	
Actuated g/C Ratio		0.32			0.32	0.32	0.39	0.37		0.48	0.42	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		472			415	495	91	909		420	1383	
v/s Ratio Prot							0.00	0.15		c0.03	c0.52	
v/s Ratio Perm		0.02			c0.36	0.02	0.02			0.22		
v/c Ratio		0.08			1.11	0.07	0.05	0.40		0.52	1.25	
Uniform Delay, d1		11.6			16.7	11.6	24.1	11.5		8.2	14.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			76.1	0.1	0.3	1.3		1.1	119.8	
Delay (s)		11.7			92.8	11.6	24.4	12.8		9.3	134.2	
Level of Service		B			F	B	C	B		A	F	
Approach Delay (s)		11.7			77.4			13.0			120.3	
Approach LOS		B			E			B			F	

Intersection Summary			
HCM Average Control Delay	94.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	49.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	8	21	9	7	48	15	170	11	254	847	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1308	1214		1095	1568	1289	2245		1719	3252	1509
Flt Permitted		0.72	1.00		0.84	1.00	0.30	1.00		0.51	1.00	1.00
Satd. Flow (perm)		993	1214		940	1568	405	2245		929	3252	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	157	9	23	10	8	52	16	185	12	276	921	570
RTOR Reduction (vph)	0	0	18	0	0	40	0	7	0	0	0	304
Lane Group Flow (vph)	0	166	5	0	18	12	16	190	0	276	921	266
Heavy Vehicles (%)	38%	50%	33%	44%	100%	3%	40%	59%	64%	5%	11%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		9.3	9.3		9.3	9.3	16.3	15.7		23.3	19.2	19.2
Effective Green, g (s)		9.3	9.3		9.3	9.3	16.3	15.7		23.3	19.2	19.2
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.40	0.38		0.57	0.47	0.47
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		225	275		213	355	174	858		605	1519	705
v/s Ratio Prot							0.00	0.08		c0.05	c0.28	
v/s Ratio Perm		c0.17	0.00		0.02	0.01	0.04			0.21		0.18
v/c Ratio		0.74	0.02		0.08	0.03	0.09	0.22		0.46	0.61	0.38
Uniform Delay, d1		14.8	12.4		12.5	12.4	7.6	8.6		4.8	8.1	7.1
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		11.9	0.0		0.2	0.0	0.2	0.1		0.5	0.7	0.3
Delay (s)		26.7	12.4		12.7	12.4	7.8	8.7		5.3	8.8	7.4
Level of Service		C	B		B	B	A	A		A	A	A
Approach Delay (s)		24.9			12.5			8.6			7.8	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	41.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	40	0	138	752	0	346	0	0	1	8	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	43	0	150	817	0	376	0	0	1	9	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	817			43			1166	1161	43	1161	1161	817
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	817			43			1166	1161	43	1161	1161	817
tC, single (s)	4.1			4.2			7.1	6.5	6.4	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.5	3.5	4.2	3.3
p0 queue free %	100			90			0	100	100	99	95	100
cM capacity (veh/h)	820			1503			150	177	970	161	159	379

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	43	0	967	376	0	11
Volume Left	0	0	150	376	0	1
Volume Right	0	0	0	0	0	1
cSH	820	1700	1503	150	1700	169
Volume to Capacity	0.00	0.00	0.10	2.50	0.00	0.06
Queue Length 95th (ft)	0	0	8	814	0	5
Control Delay (s)	0.0	0.0	2.4	744.0	0.0	27.7
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		2.4	744.0		27.7
Approach LOS				F		D

Intersection Summary			
Average Delay	202.1		
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	5	0	0	85	437	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	0	92	475	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	567	475	475			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	567	475	475			
tC, single (s)	6.8	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	426	588	1098			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	5	0	92	475
Volume Left	5	0	0	0
Volume Right	0	0	0	0
cSH	426	1700	1700	1700
Volume to Capacity	0.01	0.00	0.05	0.28
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	13.6	0.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	13.6		0.0	0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	7	0	125	3	499	5	1165	441	200	328	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1593			1544	1568	1289	3252		1770	2642	
Flt Permitted		0.83			0.71	1.00	0.53	1.00		0.18	1.00	
Satd. Flow (perm)		1372			1154	1568	726	3252		330	2642	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	8	0	136	3	542	5	1266	479	217	357	7
RTOR Reduction (vph)	0	0	0	0	0	160	0	75	0	0	2	0
Lane Group Flow (vph)	0	25	0	0	139	382	5	1671	0	217	362	0
Heavy Vehicles (%)	16%	14%	0%	17%	33%	3%	40%	7%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		13.8			13.8	13.8	20.2	19.4		26.6	22.6	
Effective Green, g (s)		13.8			13.8	13.8	20.2	19.4		26.6	22.6	
Actuated g/C Ratio		0.28			0.28	0.28	0.41	0.39		0.54	0.46	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		385			324	440	307	1282		295	1214	
v/s Ratio Prot							0.00	c0.51		c0.06	0.14	
v/s Ratio Perm		0.02			0.12	c0.24	0.01			0.34		
v/c Ratio		0.06			0.43	0.87	0.02	1.30		0.74	0.30	
Uniform Delay, d1		13.0			14.5	16.8	8.6	14.9		23.7	8.3	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.9	16.3	0.0	142.2		9.2	0.6	
Delay (s)		13.0			15.4	33.1	8.6	157.1		32.8	9.0	
Level of Service		B			B	C	A	F		C	A	
Approach Delay (s)		13.0			29.5			156.6			17.9	
Approach LOS		B			C			F			B	

Intersection Summary			
HCM Average Control Delay	100.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	49.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	361	5	20	6	10	248	5	724	9	56	224	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1686	1346		1149	1538	1805	3358		1280	2542	1223
Flt Permitted		0.72	1.00		0.88	1.00	0.60	1.00		0.23	1.00	1.00
Satd. Flow (perm)		1266	1346		1026	1538	1142	3358		315	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	392	5	22	7	11	270	5	787	10	61	243	152
RTOR Reduction (vph)	0	0	14	0	0	166	0	2	0	0	0	95
Lane Group Flow (vph)	0	397	8	0	18	104	5	795	0	61	243	57
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	30%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		16.0	16.0		16.0	16.0	16.4	15.7		19.2	17.1	17.1
Effective Green, g (s)		16.0	16.0		16.0	16.0	16.4	15.7		19.2	17.1	17.1
Actuated g/C Ratio		0.35	0.35		0.35	0.35	0.36	0.34		0.42	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		442	470		358	537	419	1151		176	949	457
v/s Ratio Prot							0.00	c0.24		c0.02	0.10	
v/s Ratio Perm		c0.31	0.01		0.02	0.07	0.00			0.13		0.05
v/c Ratio		0.90	0.02		0.05	0.19	0.01	0.69		0.35	0.26	0.12
Uniform Delay, d1		14.1	9.8		9.9	10.4	9.5	13.0		8.6	9.9	9.4
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		20.5	0.0		0.1	0.2	0.0	1.8		1.2	0.1	0.1
Delay (s)		34.6	9.8		9.9	10.6	9.5	14.8		9.8	10.1	9.6
Level of Service		C	A		A	B	A	B		A	B	A
Approach Delay (s)		33.3			10.5			14.7			9.9	
Approach LOS		C			B			B			A	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	45.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	18	0	267	378	8	103	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	0	290	411	9	112	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	420			20			1017	1020	20	1015	1015	415
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	420			20			1017	1020	20	1015	1015	415
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			82			34	100	100	99	98	100
cM capacity (veh/h)	1150			1577			171	195	1064	188	177	642

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	20	0	710	112	0	0	5
Volume Left	0	0	290	112	0	0	1
Volume Right	0	0	9	0	0	0	0
cSH	1150	1700	1577	171	1700	1700	179
Volume to Capacity	0.00	0.00	0.18	0.66	0.00	0.00	0.03
Queue Length 95th (ft)	0	0	17	94	0	0	2
Control Delay (s)	0.0	0.0	4.3	59.2	0.0	0.0	25.7
Lane LOS			A	F	A	A	D
Approach Delay (s)	0.0		4.3	59.2			25.7
Approach LOS				F			D

Intersection Summary			
Average Delay	11.6		
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	108	1339	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	117	1455	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1495	485	1455			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1495	485	1455			
tC, single (s)	6.8	7.1	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	116	512	471			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	0	39	39	39	485	485	485
Volume Left	2	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	116	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.00	0.02	0.02	0.02	0.29	0.29	0.29
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	36.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	A						
Approach Delay (s)	36.6		0.0			0.0		
Approach LOS	E							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	22	0	386	36	92	5	284	137	201	1516	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1588			1703	1524	902	3518		1719	4762	
Flt Permitted		0.92			0.72	1.00	0.14	1.00		0.40	1.00	
Satd. Flow (perm)		1480			1285	1524	134	3518		726	4762	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	24	0	420	39	100	5	309	149	218	1648	60
RTOR Reduction (vph)	0	0	0	0	0	62	0	96	0	0	4	0
Lane Group Flow (vph)	0	31	0	0	459	38	5	362	0	218	1704	0
Heavy Vehicles (%)	33%	14%	0%	6%	14%	6%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		29.9			29.9	29.9	29.2	28.4		41.7	36.9	
Effective Green, g (s)		29.9			29.9	29.9	29.2	28.4		41.7	36.9	
Actuated g/C Ratio		0.38			0.38	0.38	0.37	0.36		0.52	0.46	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		556			483	572	57	1255		496	2208	
v/s Ratio Prot							0.00	0.10		c0.05	c0.36	
v/s Ratio Perm		0.02			c0.36	0.02	0.03			0.18		
v/c Ratio		0.06			0.95	0.07	0.09	0.29		0.44	0.77	
Uniform Delay, d1		15.8			24.1	15.9	16.7	18.4		10.6	17.8	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			28.7	0.0	0.7	0.6		0.6	2.7	
Delay (s)		15.9			52.8	16.0	17.4	18.9		11.2	20.5	
Level of Service		B			D	B	B	B		B	C	
Approach Delay (s)		15.9			46.2			18.9			19.5	
Approach LOS		B			D			B			B	

Intersection Summary			
HCM Average Control Delay	24.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	79.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	8	21	9	7	48	15	170	11	254	824	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1308	1214		1095	1568	1289	2245		1719	3282	1509
Flt Permitted		0.72	1.00		0.84	1.00	0.32	1.00		0.51	1.00	1.00
Satd. Flow (perm)		993	1214		946	1568	431	2245		931	3282	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	157	9	23	10	8	52	16	185	12	276	896	570
RTOR Reduction (vph)	0	0	18	0	0	41	0	7	0	0	0	277
Lane Group Flow (vph)	0	166	5	0	18	11	16	190	0	276	896	293
Heavy Vehicles (%)	38%	50%	33%	44%	100%	3%	40%	59%	64%	5%	10%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		10.1	10.1		10.1	10.1	18.7	18.1		28.6	24.0	24.0
Effective Green, g (s)		10.1	10.1		10.1	10.1	18.7	18.1		28.6	24.0	24.0
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.40	0.39		0.61	0.51	0.51
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		215	263		205	339	184	870		680	1687	776
v/s Ratio Prot							0.00	0.08		c0.06	c0.27	
v/s Ratio Perm		c0.17	0.00		0.02	0.01	0.03			0.19		0.19
v/c Ratio		0.77	0.02		0.09	0.03	0.09	0.22		0.41	0.53	0.38
Uniform Delay, d1		17.2	14.4		14.6	14.4	8.5	9.6		4.4	7.6	6.8
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		15.7	0.0		0.2	0.0	0.2	0.1		0.4	0.3	0.3
Delay (s)		32.9	14.4		14.8	14.5	8.7	9.7		4.8	7.9	7.2
Level of Service		C	B		B	B	A	A		A	A	A
Approach Delay (s)		30.7			14.6			9.6			7.2	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	46.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	40	0	138	752	0	328	0	0	1	8	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	43	0	150	817	0	357	0	0	1	9	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	817			43			1166	1161	43	1161	1161	817
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	817			43			1166	1161	43	1161	1161	817
tC, single (s)	4.1			4.2			7.1	6.5	6.4	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.5	3.5	4.2	3.3
p0 queue free %	100			90			0	100	100	99	95	100
cM capacity (veh/h)	820			1503			150	177	970	161	159	379

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	43	0	967	357	0	0	11
Volume Left	0	0	150	357	0	0	1
Volume Right	0	0	0	0	0	0	1
cSH	820	1700	1503	150	1700	1700	169
Volume to Capacity	0.00	0.00	0.10	2.37	0.00	0.00	0.06
Queue Length 95th (ft)	0	0	8	756	0	0	5
Control Delay (s)	0.0	0.0	2.4	686.5	0.0	0.0	27.7
Lane LOS			A	F	A	A	D
Approach Delay (s)	0.0		2.4	686.5			27.7
Approach LOS				F			D

Intersection Summary			
Average Delay	179.5		
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	5	0	0	85	437	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	0	92	475	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	506	158	475			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	506	158	475			
tC, single (s)	7.6	7.0	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	412	856	1098			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	5	0	31	31	31	158	158	158
Volume Left	5	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	412	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.00	0.02	0.02	0.02	0.09	0.09	0.09
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B	A						
Approach Delay (s)	13.9		0.0			0.0		
Approach LOS	B							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	7	0	125	3	499	5	1147	441	200	328	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1565			1544	1568	1289	4670		1770	3795	
Flt Permitted		0.84			0.71	1.00	0.53	1.00		0.14	1.00	
Satd. Flow (perm)		1356			1154	1568	715	4670		261	3795	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	8	0	136	3	542	5	1247	479	217	357	7
RTOR Reduction (vph)	0	0	0	0	0	130	0	117	0	0	3	0
Lane Group Flow (vph)	0	25	0	0	139	412	5	1609	0	217	361	0
Heavy Vehicles (%)	19%	14%	0%	17%	33%	3%	40%	7%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.0			16.0	16.0	26.1	25.3		32.5	28.5	
Effective Green, g (s)		16.0			16.0	16.0	26.1	25.3		32.5	28.5	
Actuated g/C Ratio		0.28			0.28	0.28	0.46	0.44		0.57	0.50	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		379			322	438	334	2062		253	1888	
v/s Ratio Prot							0.00	0.34		c0.06	0.10	
v/s Ratio Perm		0.02			0.12	c0.26	0.01			c0.43		
v/c Ratio		0.07			0.43	0.94	0.01	0.78		0.86	0.19	
Uniform Delay, d1		15.2			16.9	20.2	8.5	13.6		9.8	8.0	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.9	28.0	0.0	3.0		23.8	0.2	
Delay (s)		15.2			17.9	48.2	8.5	16.6		33.5	8.2	
Level of Service		B			B	D	A	B		C	A	
Approach Delay (s)		15.2			42.0			16.6			17.7	
Approach LOS		B			D			B			B	

Intersection Summary			
HCM Average Control Delay	22.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	57.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	361	5	20	6	10	248	5	706	9	56	224	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1686	1346		1149	1538	1805	3358		1280	2542	1223
Flt Permitted		0.72	1.00		0.89	1.00	0.60	1.00		0.22	1.00	1.00
Satd. Flow (perm)		1266	1346		1039	1538	1142	3358		296	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	392	5	22	7	11	270	5	767	10	61	243	152
RTOR Reduction (vph)	0	0	13	0	0	137	0	1	0	0	0	96
Lane Group Flow (vph)	0	397	9	0	18	133	5	776	0	61	243	56
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	30%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		19.9	19.9		19.9	19.9	18.3	17.6		20.9	18.9	18.9
Effective Green, g (s)		19.9	19.9		19.9	19.9	18.3	17.6		20.9	18.9	18.9
Actuated g/C Ratio		0.39	0.39		0.39	0.39	0.36	0.34		0.41	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		489	520		401	594	415	1148		158	933	449
v/s Ratio Prot							0.00	c0.23		c0.01	0.10	
v/s Ratio Perm		c0.31	0.01		0.02	0.09	0.00			0.14		0.05
v/c Ratio		0.81	0.02		0.04	0.22	0.01	0.68		0.39	0.26	0.12
Uniform Delay, d1		14.1	9.8		9.9	10.6	10.7	14.5		10.1	11.4	10.8
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		9.9	0.0		0.0	0.2	0.0	1.6		1.6	0.1	0.1
Delay (s)		24.0	9.8		9.9	10.8	10.7	16.1		11.7	11.6	10.9
Level of Service		C	A		A	B	B	B		B	B	B
Approach Delay (s)		23.3			10.7			16.1			11.4	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	51.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	18	0	267	378	8	103	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	20	0	290	411	9	112	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	420			20			1017	1020	20	1015	1015	415
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	420			20			1017	1020	20	1015	1015	415
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			82			34	100	100	99	98	100
cM capacity (veh/h)	1150			1577			171	195	1064	188	177	642

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	20	0	710	112	0	0	5
Volume Left	0	0	290	112	0	0	1
Volume Right	0	0	9	0	0	0	0
cSH	1150	1700	1577	171	1700	1700	179
Volume to Capacity	0.00	0.00	0.18	0.66	0.00	0.00	0.03
Queue Length 95th (ft)	0	0	17	94	0	0	2
Control Delay (s)	0.0	0.0	4.3	59.2	0.0	0.0	25.7
Lane LOS			A	F	A	A	D
Approach Delay (s)	0.0		4.3	59.2			25.7
Approach LOS				F			D

Intersection Summary			
Average Delay	11.6		
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	108	1341	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	117	1458	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1497	486	1458			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1497	486	1458			
tC, single (s)	6.8	7.1	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	116	512	470			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	0	39	39	39	486	486	486
Volume Left	2	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	116	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.00	0.02	0.02	0.02	0.29	0.29	0.29
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	36.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	A						
Approach Delay (s)	36.8		0.0			0.0		
Approach LOS	E							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	35.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	22	0	386	36	99	5	284	137	201	1543	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1664			1703	1524	902	3518		1719	4763	
Flt Permitted		0.88			0.72	1.00	0.18	1.00		0.39	1.00	
Satd. Flow (perm)		1480			1279	1524	167	3518		698	4763	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	24	0	420	39	108	5	309	149	218	1677	60
RTOR Reduction (vph)	0	0	0	0	0	65	0	99	0	0	4	0
Lane Group Flow (vph)	0	36	0	0	459	43	5	359	0	218	1733	0
Heavy Vehicles (%)	9%	14%	0%	6%	14%	6%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		29.2			29.2	29.2	23.4	22.7		35.9	31.2	
Effective Green, g (s)		29.2			29.2	29.2	23.4	22.7		35.9	31.2	
Actuated g/C Ratio		0.40			0.40	0.40	0.32	0.31		0.49	0.43	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		591			511	609	60	1092		471	2033	
v/s Ratio Prot							0.00	0.10		c0.06	c0.36	
v/s Ratio Perm		0.02			c0.36	0.03	0.03			0.17		
v/c Ratio		0.06			0.90	0.07	0.08	0.33		0.46	0.85	
Uniform Delay, d1		13.5			20.6	13.6	17.7	19.3		11.1	18.9	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			18.3	0.0	0.6	0.8		0.7	4.8	
Delay (s)		13.6			38.9	13.6	18.3	20.2		11.8	23.6	
Level of Service		B			D	B	B	C		B	C	
Approach Delay (s)		13.6			34.1			20.1			22.3	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM Average Control Delay	24.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	73.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	8	21	9	7	48	15	170	11	254	847	524
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1308	1214		1095	1568	1289	2245		1719	3252	1509
Flt Permitted		0.72	1.00		0.84	1.00	0.31	1.00		0.52	1.00	1.00
Satd. Flow (perm)		993	1214		944	1568	421	2245		933	3252	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	157	9	23	10	8	52	16	185	12	276	921	570
RTOR Reduction (vph)	0	0	18	0	0	41	0	7	0	0	0	275
Lane Group Flow (vph)	0	166	5	0	18	11	16	190	0	276	921	295
Heavy Vehicles (%)	38%	50%	33%	44%	100%	3%	40%	59%	64%	5%	11%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		10.0	10.0		10.0	10.0	19.0	18.4		28.9	24.3	24.3
Effective Green, g (s)		10.0	10.0		10.0	10.0	19.0	18.4		28.9	24.3	24.3
Actuated g/C Ratio		0.21	0.21		0.21	0.21	0.41	0.39		0.62	0.52	0.52
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		212	259		201	334	182	881		684	1685	782
v/s Ratio Prot							0.00	0.08		c0.06	c0.28	
v/s Ratio Perm		c0.17	0.00		0.02	0.01	0.03			0.19		0.20
v/c Ratio		0.78	0.02		0.09	0.03	0.09	0.22		0.40	0.55	0.38
Uniform Delay, d1		17.4	14.6		14.8	14.6	8.4	9.5		4.3	7.6	6.8
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		17.0	0.0		0.2	0.0	0.2	0.1		0.4	0.4	0.3
Delay (s)		34.4	14.6		15.0	14.7	8.6	9.6		4.7	8.0	7.1
Level of Service		C	B		B	B	A	A		A	A	A
Approach Delay (s)		32.0			14.7			9.5			7.2	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	46.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	40	0	138	752	0	346	0	0	1	8	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	43	0	150	817	0	376	0	0	1	9	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	817			43			1166	1161	43	1161	1161	817
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	817			43			1166	1161	43	1161	1161	817
tC, single (s)	4.1			4.2			7.1	6.5	6.4	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.5	3.5	4.2	3.3
p0 queue free %	100			90			0	100	100	99	95	100
cM capacity (veh/h)	820			1503			150	177	970	161	159	379

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	43	0	967	376	0	0	11
Volume Left	0	0	150	376	0	0	1
Volume Right	0	0	0	0	0	0	1
cSH	820	1700	1503	150	1700	1700	169
Volume to Capacity	0.00	0.00	0.10	2.50	0.00	0.00	0.06
Queue Length 95th (ft)	0	0	8	814	0	0	5
Control Delay (s)	0.0	0.0	2.4	744.0	0.0	0.0	27.7
Lane LOS			A	F	A	A	D
Approach Delay (s)	0.0		2.4	744.0			27.7
Approach LOS				F			D

Intersection Summary			
Average Delay	202.1		
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	5	0	0	89	437	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	0	0	97	475	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	507	158	475			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	507	158	475			
tC, single (s)	7.6	7.0	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.2			
p0 queue free %	99	100	100			
cM capacity (veh/h)	411	856	1098			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	5	0	32	32	32	158	158	158
Volume Left	5	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	411	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.01	0.00	0.02	0.02	0.02	0.09	0.09	0.09
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	13.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B	A						
Approach Delay (s)	13.9		0.0			0.0		
Approach LOS	B							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	16	7	0	125	3	499	5	1165	441	200	328	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1565			1544	1568	1289	4672		1770	3795	
Flt Permitted		0.84			0.71	1.00	0.53	1.00		0.14	1.00	
Satd. Flow (perm)		1352			1154	1568	715	4672		253	3795	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	8	0	136	3	542	5	1266	479	217	357	7
RTOR Reduction (vph)	0	0	0	0	0	129	0	117	0	0	3	0
Lane Group Flow (vph)	0	25	0	0	139	413	5	1628	0	217	361	0
Heavy Vehicles (%)	19%	14%	0%	17%	33%	3%	40%	7%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		15.7			15.7	15.7	27.0	26.2		33.4	29.4	
Effective Green, g (s)		15.7			15.7	15.7	27.0	26.2		33.4	29.4	
Actuated g/C Ratio		0.27			0.27	0.27	0.47	0.45		0.58	0.51	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		367			313	425	341	2114		251	1927	
v/s Ratio Prot							0.00	0.35		c0.06	0.10	
v/s Ratio Perm		0.02			0.12	c0.26	0.01			c0.44		
v/c Ratio		0.07			0.44	0.97	0.01	0.77		0.86	0.19	
Uniform Delay, d1		15.7			17.5	20.9	8.3	13.3		9.7	7.8	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			1.0	36.1	0.0	2.8		25.1	0.2	
Delay (s)		15.7			18.5	57.0	8.3	16.1		34.9	8.0	
Level of Service		B			B	E	A	B		C	A	
Approach Delay (s)		15.7			49.1			16.1			18.0	
Approach LOS		B			D			B			B	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	57.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	361	5	20	6	10	248	5	724	9	56	224	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1686	1346		1149	1538	1805	3358		1280	2542	1223
Flt Permitted		0.72	1.00		0.89	1.00	0.60	1.00		0.21	1.00	1.00
Satd. Flow (perm)		1266	1346		1038	1538	1142	3358		289	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	392	5	22	7	11	270	5	787	10	61	243	152
RTOR Reduction (vph)	0	0	14	0	0	136	0	1	0	0	0	95
Lane Group Flow (vph)	0	397	8	0	18	134	5	796	0	61	243	57
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	30%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		19.8	19.8		19.8	19.8	18.9	18.2		21.5	19.5	19.5
Effective Green, g (s)		19.8	19.8		19.8	19.8	18.9	18.2		21.5	19.5	19.5
Actuated g/C Ratio		0.38	0.38		0.38	0.38	0.36	0.35		0.41	0.38	0.38
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		482	513		395	586	424	1175		158	953	459
v/s Ratio Prot							0.00	c0.24		c0.01	0.10	
v/s Ratio Perm		c0.31	0.01		0.02	0.09	0.00			0.15		0.05
v/c Ratio		0.82	0.02		0.05	0.23	0.01	0.68		0.39	0.25	0.12
Uniform Delay, d1		14.5	10.0		10.1	10.9	10.6	14.4		10.0	11.2	10.7
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		10.9	0.0		0.0	0.2	0.0	1.6		1.6	0.1	0.1
Delay (s)		25.4	10.0		10.2	11.1	10.6	16.0		11.6	11.4	10.8
Level of Service		C	B		B	B	B	B		B	B	B
Approach Delay (s)		24.6			11.1			15.9			11.2	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	16.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	52.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	23	0	343	485	10	135	0	0	1	5	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	25	0	373	527	11	147	0	0	1	5	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	538			25			1306	1309	25	1303	1303	533
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	538			25			1306	1309	25	1303	1303	533
tC, single (s)	4.1			4.2			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			76			0	100	100	99	95	100
cM capacity (veh/h)	1040			1564			99	122	1057	113	110	551

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	25	0	911	147	0	7
Volume Left	0	0	373	147	0	1
Volume Right	0	0	11	0	0	0
cSH	1040	1700	1564	99	1700	111
Volume to Capacity	0.00	0.00	0.24	1.49	0.00	0.06
Queue Length 95th (ft)	0	0	23	275	0	5
Control Delay (s)	0.0	0.0	4.9	341.9	0.0	39.6
Lane LOS			A	F	A	E
Approach Delay (s)	0.0		4.9	341.9		39.6
Approach LOS				F		E

Intersection Summary			
Average Delay	50.4		
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	3	0	0	143	1718	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	0	0	155	1867	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	2023	1867	1867			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2023	1867	1867			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	95	100	100			
cM capacity (veh/h)	65	86	327			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	3	0	155	1867
Volume Left	3	0	0	0
Volume Right	0	0	0	0
cSH	65	1700	1700	1700
Volume to Capacity	0.05	0.00	0.09	1.10
Queue Length 95th (ft)	4	0	0	0
Control Delay (s)	63.8	0.0	0.0	0.0
Lane LOS	F	A		
Approach Delay (s)	63.8		0.0	0.0
Approach LOS	F			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	28	0	496	47	111	6	389	180	259	1921	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1623			1700	1495	902	2396		1703	3281	
Flt Permitted		0.71			0.72	1.00	0.21	1.00		0.30	1.00	
Satd. Flow (perm)		1156			1276	1495	198	2396		539	3281	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	30	0	539	51	121	7	423	196	282	2088	79
RTOR Reduction (vph)	0	0	0	0	0	83	0	106	0	0	5	0
Lane Group Flow (vph)	0	37	0	0	590	38	7	513	0	282	2163	0
Heavy Vehicles (%)	20%	15%	0%	6%	16%	8%	100%	53%	23%	6%	9%	21%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Effective Green, g (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Actuated g/C Ratio		0.31			0.31	0.31	0.39	0.37		0.52	0.44	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		361			399	467	88	899		369	1435	
v/s Ratio Prot							0.00	0.21		c0.06	c0.66	
v/s Ratio Perm		0.03			c0.46	0.03	0.03			0.33		
v/c Ratio		0.10			1.48	0.08	0.08	0.57		0.76	1.51	
Uniform Delay, d1		12.5			17.6	12.4	11.9	12.7		8.8	14.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			228.5	0.1	0.4	2.6		9.1	231.8	
Delay (s)		12.6			246.1	12.5	12.2	15.3		17.9	246.2	
Level of Service		B			F	B	B	B		B	F	
Approach Delay (s)		12.6			206.4			15.3			219.9	
Approach LOS		B			F			B			F	

Intersection Summary			
HCM Average Control Delay	181.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	105.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	194	11	28	13	10	64	20	236	15	327	1033	676
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1280	1188		1075	1223	1253	2206		1703	3223	1495
Flt Permitted		0.72	1.00		0.82	1.00	0.26	1.00		0.47	1.00	1.00
Satd. Flow (perm)		964	1188		905	1223	343	2206		844	3223	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	12	30	14	11	70	22	257	16	355	1123	735
RTOR Reduction (vph)	0	0	22	0	0	52	0	9	0	0	0	384
Lane Group Flow (vph)	0	223	8	0	25	18	22	264	0	355	1123	351
Heavy Vehicles (%)	41%	55%	36%	50%	100%	32%	44%	62%	66%	6%	12%	8%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		10.6	10.6		10.6	10.6	16.0	15.4		23.4	19.1	19.1
Effective Green, g (s)		10.6	10.6		10.6	10.6	16.0	15.4		23.4	19.1	19.1
Actuated g/C Ratio		0.25	0.25		0.25	0.25	0.38	0.36		0.55	0.45	0.45
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		242	298		227	306	143	803		554	1455	675
v/s Ratio Prot							0.00	0.12		c0.07	c0.35	
v/s Ratio Perm		c0.23	0.01		0.03	0.01	0.06			0.29		0.23
v/c Ratio		0.92	0.03		0.11	0.06	0.15	0.33		0.64	0.77	0.52
Uniform Delay, d1		15.4	12.0		12.2	12.1	8.5	9.7		5.9	9.8	8.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		37.1	0.0		0.2	0.1	0.5	0.2		2.5	2.6	0.7
Delay (s)		52.6	12.0		12.4	12.1	9.0	10.0		8.5	12.4	9.0
Level of Service		D	B		B	B	A	A		A	B	A
Approach Delay (s)		47.8			12.2			9.9			10.6	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	42.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	23	0	343	485	10	135	0	0	1	5	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	25	0	373	527	11	147	0	0	1	5	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	538			25			1306	1309	25	1303	1303	533
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	538			25			1306	1309	25	1303	1303	533
tC, single (s)	4.1			4.2			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			76			0	100	100	99	95	100
cM capacity (veh/h)	1040			1564			99	122	1057	113	110	551

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	25	0	911	147	0	0	7
Volume Left	0	0	373	147	0	0	1
Volume Right	0	0	11	0	0	0	0
cSH	1040	1700	1564	99	1700	1700	111
Volume to Capacity	0.00	0.00	0.24	1.49	0.00	0.00	0.06
Queue Length 95th (ft)	0	0	23	275	0	0	5
Control Delay (s)	0.0	0.0	4.9	341.9	0.0	0.0	39.6
Lane LOS			A	F	A	A	E
Approach Delay (s)	0.0		4.9	341.9			39.6
Approach LOS				F			E

Intersection Summary			
Average Delay	50.4		
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	143	1718	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	155	1867	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1919	622	1867			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1919	622	1867			
tC, single (s)	6.8	7.1	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	96	100	100			
cM capacity (veh/h)	60	410	327			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	0	52	52	52	622	622	622
Volume Left	2	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	60	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.00	0.03	0.03	0.03	0.37	0.37	0.37
Queue Length 95th (ft)	3	0	0	0	0	0	0	0
Control Delay (s)	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	A						
Approach Delay (s)	66.7		0.0			0.0		
Approach LOS	F							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	28	0	496	47	111	6	389	180	259	1921	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1623			1700	1495	902	3443		1703	4714	
Flt Permitted		0.92			0.72	1.00	0.15	1.00		0.28	1.00	
Satd. Flow (perm)		1509			1276	1495	144	3443		510	4714	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	30	0	539	51	121	7	423	196	282	2088	79
RTOR Reduction (vph)	0	0	0	0	0	71	0	88	0	0	4	0
Lane Group Flow (vph)	0	37	0	0	590	50	7	531	0	282	2163	0
Heavy Vehicles (%)	20%	15%	0%	6%	16%	8%	100%	53%	23%	6%	9%	21%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		37.0			37.0	37.0	27.2	26.4		44.5	39.7	
Effective Green, g (s)		37.0			37.0	37.0	27.2	26.4		44.5	39.7	
Actuated g/C Ratio		0.41			0.41	0.41	0.30	0.29		0.50	0.44	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		624			528	618	51	1016		442	2091	
v/s Ratio Prot							0.00	0.15		c0.10	c0.46	
v/s Ratio Perm		0.02			c0.46	0.03	0.04			0.22		
v/c Ratio		0.06			1.12	0.08	0.14	0.52		0.64	1.03	
Uniform Delay, d1		15.8			26.2	15.9	24.6	26.3		14.3	24.9	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			75.5	0.1	1.2	1.9		3.0	29.1	
Delay (s)		15.8			101.8	16.0	25.8	28.2		17.3	54.0	
Level of Service		B			F	B	C	C		B	D	
Approach Delay (s)		15.8			87.2			28.2			49.8	
Approach LOS		B			F			C			D	

Intersection Summary			
HCM Average Control Delay	52.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	89.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	194	11	28	13	10	64	20	236	15	327	1033	676
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1280	1188		1075	1223	1253	2206		1703	3223	1495
Flt Permitted		0.72	1.00		0.84	1.00	0.25	1.00		0.47	1.00	1.00
Satd. Flow (perm)		964	1188		933	1223	328	2206		838	3223	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	12	30	14	11	70	22	257	16	355	1123	735
RTOR Reduction (vph)	0	0	21	0	0	50	0	8	0	0	0	346
Lane Group Flow (vph)	0	223	9	0	25	20	22	265	0	355	1123	389
Heavy Vehicles (%)	41%	55%	36%	50%	100%	32%	44%	62%	66%	6%	12%	8%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		15.7	15.7		15.7	15.7	16.8	16.1		30.3	25.6	25.6
Effective Green, g (s)		15.7	15.7		15.7	15.7	16.8	16.1		30.3	25.6	25.6
Actuated g/C Ratio		0.29	0.29		0.29	0.29	0.31	0.30		0.56	0.47	0.47
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		280	345		271	356	114	658		634	1528	709
v/s Ratio Prot							0.00	0.12		c0.11	c0.35	
v/s Ratio Perm		c0.23	0.01		0.03	0.02	0.06			0.21		0.26
v/c Ratio		0.80	0.03		0.09	0.06	0.19	0.40		0.56	0.73	0.55
Uniform Delay, d1		17.7	13.7		14.0	13.8	13.0	15.1		6.8	11.5	10.1
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		14.5	0.0		0.1	0.1	0.8	0.4		1.1	1.9	0.9
Delay (s)		32.1	13.7		14.1	13.9	13.9	15.5		7.9	13.3	11.0
Level of Service		C	B		B	B	B	B		A	B	B
Approach Delay (s)		30.0			13.9			15.4			11.7	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	54.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	49	0	170	918	0	385	0	0	1	10	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	53	0	185	998	0	418	0	0	1	11	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	998			53			1427	1421	53	1421	1421	998
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	998			53			1427	1421	53	1421	1421	998
tC, single (s)	4.1			4.2			7.1	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			88			0	100	100	99	90	100
cM capacity (veh/h)	702			1485			93	121	1014	104	107	299

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	53	0	1183	418	0	13
Volume Left	0	0	185	418	0	1
Volume Right	0	0	0	0	0	1
cSH	702	1700	1485	93	1700	113
Volume to Capacity	0.00	0.00	0.12	4.50	0.00	0.12
Queue Length 95th (ft)	0	0	11	Err	0	10
Control Delay (s)	0.0	0.0	3.2	Err	0.0	41.1
Lane LOS			A	F	A	E
Approach Delay (s)	0.0		3.2	Err		41.1
Approach LOS				F		E

Intersection Summary			
Average Delay	2512.1		
Intersection Capacity Utilization	99.0%	ICU Level of Service	F
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	0	0	78	553	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	0	0	85	601	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	686	601	601			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	686	601	601			
tC, single (s)	6.8	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	361	484	986			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	7	0	85	601
Volume Left	7	0	0	0
Volume Right	0	0	0	0
cSH	361	1700	1700	1700
Volume to Capacity	0.02	0.00	0.05	0.35
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	15.2	0.0	0.0	0.0
Lane LOS	C	A		
Approach Delay (s)	15.2		0.0	0.0
Approach LOS	C			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	39.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	9	0	156	4	609	6	1388	540	243	421	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1554			1518	1568	1289	3206		1770	2569	
Flt Permitted		0.83			0.71	1.00	0.48	1.00		0.18	1.00	
Satd. Flow (perm)		1327			1129	1568	657	3206		333	2569	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	10	0	170	4	662	7	1509	587	264	458	8
RTOR Reduction (vph)	0	0	0	0	0	151	0	80	0	0	2	0
Lane Group Flow (vph)	0	30	0	0	174	511	7	2016	0	264	464	0
Heavy Vehicles (%)	20%	15%	0%	19%	33%	3%	40%	9%	5%	2%	40%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Effective Green, g (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Actuated g/C Ratio		0.31			0.31	0.31	0.39	0.37		0.52	0.44	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		415			353	490	267	1202		284	1124	
v/s Ratio Prot							0.00	c0.63		c0.07	0.18	
v/s Ratio Perm		0.02			0.15	c0.33	0.01			0.41		
v/c Ratio		0.07			0.49	1.04	0.03	1.68		0.93	0.41	
Uniform Delay, d1		12.4			14.3	17.6	9.6	16.0		11.7	9.9	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			1.1	52.1	0.0	308.4		34.8	1.1	
Delay (s)		12.5			15.4	69.7	9.6	324.4		46.5	11.0	
Level of Service		B			B	E	A	F		D	B	
Approach Delay (s)		12.5			58.4			323.4			23.8	
Approach LOS		B			E			F			C	

Intersection Summary			
HCM Average Control Delay	201.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	106.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	444	6	26	7	13	304	6	846	11	72	289	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1670	1292		1138	1524	1805	3326		1253	2473	1196
Flt Permitted		0.71	1.00		0.86	1.00	0.56	1.00		0.22	1.00	1.00
Satd. Flow (perm)		1249	1292		999	1524	1066	3326		287	2473	1196
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	483	7	28	8	14	330	7	920	12	78	314	195
RTOR Reduction (vph)	0	0	18	0	0	157	0	2	0	0	0	119
Lane Group Flow (vph)	0	490	10	0	22	173	7	930	0	78	314	76
Heavy Vehicles (%)	8%	40%	25%	50%	72%	6%	0%	8%	33%	44%	46%	35%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		16.2	16.2		16.2	16.2	17.6	16.9		20.6	18.4	18.4
Effective Green, g (s)		16.2	16.2		16.2	16.2	17.6	16.9		20.6	18.4	18.4
Actuated g/C Ratio		0.34	0.34		0.34	0.34	0.37	0.36		0.44	0.39	0.39
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		428	443		342	522	408	1188		170	962	465
v/s Ratio Prot							0.00	c0.28		c0.02	0.13	
v/s Ratio Perm		c0.39	0.01		0.02	0.11	0.01			0.18		0.06
v/c Ratio		1.14	0.02		0.06	0.33	0.02	0.78		0.46	0.33	0.16
Uniform Delay, d1		15.6	10.3		10.5	11.5	9.4	13.6		9.0	10.1	9.4
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		89.4	0.0		0.1	0.4	0.0	3.4		2.0	0.2	0.2
Delay (s)		105.0	10.3		10.5	11.9	9.4	17.0		11.0	10.3	9.6
Level of Service		F	B		B	B	A	B		B	B	A
Approach Delay (s)		99.9			11.8			16.9			10.2	
Approach LOS		F			B			B			B	

Intersection Summary			
HCM Average Control Delay	32.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	47.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
1: Farrington Way & Kalaeloa Blvd 4/22/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	23	0	343	485	10	135	0	0	1	5	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	25	0	373	527	11	147	0	0	1	5	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	538			25			1306	1309	25	1303	1303	533
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	538			25			1306	1309	25	1303	1303	533
tC, single (s)	4.1			4.2			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			76			0	100	100	99	95	100
cM capacity (veh/h)	1040			1564			99	122	1057	113	110	551

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	25	0	911	147	0	0	7
Volume Left	0	0	373	147	0	0	1
Volume Right	0	0	11	0	0	0	0
cSH	1040	1700	1564	99	1700	1700	111
Volume to Capacity	0.00	0.00	0.24	1.49	0.00	0.00	0.06
Queue Length 95th (ft)	0	0	23	275	0	0	5
Control Delay (s)	0.0	0.0	4.9	341.9	0.0	0.0	39.6
Lane LOS			A	F	A	A	E
Approach Delay (s)	0.0		4.9	341.9			39.6
Approach LOS				F			E

Intersection Summary			
Average Delay	50.4		
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	143	1718	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	155	1867	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1919	622	1867			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1919	622	1867			
tC, single (s)	6.8	7.1	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	96	100	100			
cM capacity (veh/h)	60	410	327			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	0	52	52	52	622	622	622
Volume Left	2	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	60	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.04	0.00	0.03	0.03	0.03	0.37	0.37	0.37
Queue Length 95th (ft)	3	0	0	0	0	0	0	0
Control Delay (s)	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	A						
Approach Delay (s)	66.7		0.0			0.0		
Approach LOS	F							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	28	0	496	47	111	6	389	180	259	1921	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1623			1700	1495	902	3443		1703	4714	
Flt Permitted		0.92			0.72	1.00	0.15	1.00		0.28	1.00	
Satd. Flow (perm)		1509			1276	1495	144	3443		510	4714	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	7	30	0	539	51	121	7	423	196	282	2088	79
RTOR Reduction (vph)	0	0	0	0	0	71	0	88	0	0	4	0
Lane Group Flow (vph)	0	37	0	0	590	50	7	531	0	282	2163	0
Heavy Vehicles (%)	20%	15%	0%	6%	16%	8%	100%	53%	23%	6%	9%	21%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		37.0			37.0	37.0	27.2	26.4		44.5	39.7	
Effective Green, g (s)		37.0			37.0	37.0	27.2	26.4		44.5	39.7	
Actuated g/C Ratio		0.41			0.41	0.41	0.30	0.29		0.50	0.44	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		624			528	618	51	1016		442	2091	
v/s Ratio Prot							0.00	0.15		c0.10	c0.46	
v/s Ratio Perm		0.02			c0.46	0.03	0.04			0.22		
v/c Ratio		0.06			1.12	0.08	0.14	0.52		0.64	1.03	
Uniform Delay, d1		15.8			26.2	15.9	24.6	26.3		14.3	24.9	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			75.5	0.1	1.2	1.9		3.0	29.1	
Delay (s)		15.8			101.8	16.0	25.8	28.2		17.3	54.0	
Level of Service		B			F	B	C	C		B	D	
Approach Delay (s)		15.8			87.2			28.2			49.8	
Approach LOS		B			F			C			D	

Intersection Summary			
HCM Average Control Delay	52.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	89.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	194	11	28	13	10	64	20	236	15	327	1033	676
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1280	1188		1075	1223	1253	2206		1703	3223	1495
Flt Permitted		0.72	1.00		0.84	1.00	0.25	1.00		0.47	1.00	1.00
Satd. Flow (perm)		964	1188		933	1223	328	2206		838	3223	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	12	30	14	11	70	22	257	16	355	1123	735
RTOR Reduction (vph)	0	0	21	0	0	50	0	8	0	0	0	346
Lane Group Flow (vph)	0	223	9	0	25	20	22	265	0	355	1123	389
Heavy Vehicles (%)	41%	55%	36%	50%	100%	32%	44%	62%	66%	6%	12%	8%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		15.7	15.7		15.7	15.7	16.8	16.1		30.3	25.6	25.6
Effective Green, g (s)		15.7	15.7		15.7	15.7	16.8	16.1		30.3	25.6	25.6
Actuated g/C Ratio		0.29	0.29		0.29	0.29	0.31	0.30		0.56	0.47	0.47
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		280	345		271	356	114	658		634	1528	709
v/s Ratio Prot							0.00	0.12		c0.11	c0.35	
v/s Ratio Perm		c0.23	0.01		0.03	0.02	0.06			0.21		0.26
v/c Ratio		0.80	0.03		0.09	0.06	0.19	0.40		0.56	0.73	0.55
Uniform Delay, d1		17.7	13.7		14.0	13.8	13.0	15.1		6.8	11.5	10.1
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		14.5	0.0		0.1	0.1	0.8	0.4		1.1	1.9	0.9
Delay (s)		32.1	13.7		14.1	13.9	13.9	15.5		7.9	13.3	11.0
Level of Service		C	B		B	B	B	B		A	B	B
Approach Delay (s)		30.0			13.9			15.4			11.7	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	54.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	20	0	294	417	9	114	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	22	0	320	453	10	124	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	463			22			1121	1124	22	1119	1119	458
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	463			22			1121	1124	22	1119	1119	458
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			80			12	100	100	99	97	100
cM capacity (veh/h)	1109			1575			142	165	1061	157	150	607

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	22	0	783	124	0	5
Volume Left	0	0	320	124	0	1
Volume Right	0	0	10	0	0	0
cSH	1109	1700	1575	142	1700	151
Volume to Capacity	0.00	0.00	0.20	0.88	0.00	0.04
Queue Length 95th (ft)	0	0	19	145	0	3
Control Delay (s)	0.0	0.0	4.5	106.2	0.0	29.7
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		4.5	106.2		29.7
Approach LOS				F		D

Intersection Summary			
Average Delay	18.1		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	119	1478	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	129	1607	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1736	1607	1607			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1736	1607	1607			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	97	125	412			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	2	0	129	1607
Volume Left	2	0	0	0
Volume Right	0	0	0	0
cSH	97	1700	1700	1700
Volume to Capacity	0.02	0.00	0.08	0.95
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	42.8	0.0	0.0	0.0
Lane LOS	E	A		
Approach Delay (s)	42.8		0.0	0.0
Approach LOS	E			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	24	0	426	40	109	6	313	151	222	1701	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1664			1703	1524	902	2449		1719	3315	
Flt Permitted		0.76			0.72	1.00	0.21	1.00		0.37	1.00	
Satd. Flow (perm)		1292			1275	1524	198	2449		666	3315	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	26	0	463	43	118	7	340	164	241	1849	66
RTOR Reduction (vph)	0	0	0	0	0	81	0	103	0	0	5	0
Lane Group Flow (vph)	0	39	0	0	506	37	7	402	0	241	1911	0
Heavy Vehicles (%)	9%	14%	0%	6%	14%	6%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Effective Green, g (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Actuated g/C Ratio		0.31			0.31	0.31	0.39	0.37		0.52	0.44	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		404			398	476	88	918		426	1450	
v/s Ratio Prot							0.00	0.16		c0.04	c0.58	
v/s Ratio Perm		0.03			c0.40	0.02	0.03			0.25		
v/c Ratio		0.10			1.27	0.08	0.08	0.44		0.57	1.32	
Uniform Delay, d1		12.5			17.6	12.4	11.9	12.0		7.3	14.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			140.5	0.1	0.4	1.5		1.7	147.9	
Delay (s)		12.6			158.1	12.5	12.2	13.5		9.1	162.3	
Level of Service		B			F	B	B	B		A	F	
Approach Delay (s)		12.6			130.6			13.5			145.2	
Approach LOS		B			F			B			F	

Intersection Summary			
HCM Average Control Delay	120.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	159	9	23	10	8	53	17	187	12	280	934	578
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1308	1214		1093	1568	1289	2246		1719	3252	1509
Flt Permitted		0.72	1.00		0.83	1.00	0.26	1.00		0.50	1.00	1.00
Satd. Flow (perm)		991	1214		934	1568	353	2246		904	3252	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	10	25	11	9	58	18	203	13	304	1015	628
RTOR Reduction (vph)	0	0	19	0	0	44	0	8	0	0	0	338
Lane Group Flow (vph)	0	183	6	0	20	14	18	208	0	304	1015	290
Heavy Vehicles (%)	38%	50%	33%	44%	100%	3%	40%	59%	64%	5%	11%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		9.6	9.6		9.6	9.6	16.0	15.4		23.2	19.0	19.0
Effective Green, g (s)		9.6	9.6		9.6	9.6	16.0	15.4		23.2	19.0	19.0
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.39	0.37		0.56	0.46	0.46
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		231	283		218	365	151	840		592	1500	696
v/s Ratio Prot							0.00	0.09		c0.05	c0.31	
v/s Ratio Perm		c0.18	0.00		0.02	0.01	0.04			0.24		0.19
v/c Ratio		0.79	0.02		0.09	0.04	0.12	0.25		0.51	0.68	0.42
Uniform Delay, d1		14.9	12.2		12.4	12.2	7.9	8.9		5.0	8.7	7.4
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		16.8	0.0		0.2	0.0	0.4	0.2		0.8	1.2	0.4
Delay (s)		31.6	12.2		12.6	12.3	8.2	9.1		5.7	9.9	7.8
Level of Service		C	B		B	B	A	A		A	A	A
Approach Delay (s)		29.3			12.3			9.0			8.6	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	41.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	20	0	294	417	9	114	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	22	0	320	453	10	124	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	463			22			1121	1124	22	1119	1119	458
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	463			22			1121	1124	22	1119	1119	458
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			80			12	100	100	99	97	100
cM capacity (veh/h)	1109			1575			142	165	1061	157	150	607

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	22	0	783	124	0	0	5
Volume Left	0	0	320	124	0	0	1
Volume Right	0	0	10	0	0	0	0
cSH	1109	1700	1575	142	1700	1700	151
Volume to Capacity	0.00	0.00	0.20	0.88	0.00	0.00	0.04
Queue Length 95th (ft)	0	0	19	145	0	0	3
Control Delay (s)	0.0	0.0	4.5	106.2	0.0	0.0	29.7
Lane LOS			A	F	A	A	D
Approach Delay (s)	0.0		4.5	106.2			29.7
Approach LOS				F			D

Intersection Summary			
Average Delay	18.1		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	119	1478	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	129	1607	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1650	536	1607			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1650	536	1607			
tC, single (s)	6.8	7.1	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	92	474	412			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	0	43	43	43	536	536	536
Volume Left	2	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	92	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.00	0.03	0.03	0.03	0.32	0.32	0.32
Queue Length 95th (ft)	2	0	0	0	0	0	0	0
Control Delay (s)	45.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	A						
Approach Delay (s)	45.3		0.0			0.0		
Approach LOS	E							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	38.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	12	24	0	426	40	109	6	313	151	222	1701	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.98			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1664			1703	1524	902	3518		1719	4763	
Flt Permitted		0.86			0.72	1.00	0.15	1.00		0.36	1.00	
Satd. Flow (perm)		1457			1275	1524	140	3518		660	4763	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	26	0	463	43	118	7	340	164	241	1849	66
RTOR Reduction (vph)	0	0	0	0	0	72	0	104	0	0	4	0
Lane Group Flow (vph)	0	39	0	0	506	46	7	400	0	241	1911	0
Heavy Vehicles (%)	9%	14%	0%	6%	14%	6%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0			32.0	32.0	28.0	27.2		42.1	37.3	
Effective Green, g (s)		32.0			32.0	32.0	28.0	27.2		42.1	37.3	
Actuated g/C Ratio		0.39			0.39	0.39	0.34	0.33		0.51	0.45	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		568			497	594	55	1166		479	2164	
v/s Ratio Prot							0.00	0.11		c0.07	c0.40	
v/s Ratio Perm		0.03			c0.40	0.03	0.04			0.19		
v/c Ratio		0.07			1.02	0.08	0.13	0.34		0.50	0.88	
Uniform Delay, d1		15.7			25.0	15.8	19.3	20.7		11.7	20.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			45.0	0.1	1.0	0.8		0.8	5.7	
Delay (s)		15.8			70.1	15.8	20.3	21.5		12.5	26.1	
Level of Service		B			E	B	C	C		B	C	
Approach Delay (s)		15.8			59.8			21.5			24.6	
Approach LOS		B			E			C			C	

Intersection Summary			
HCM Average Control Delay	30.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	82.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	159	9	23	10	8	53	17	187	12	280	934	578
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1308	1214		1093	1568	1289	2246		1719	3252	1509
Flt Permitted		0.72	1.00		0.84	1.00	0.28	1.00		0.50	1.00	1.00
Satd. Flow (perm)		991	1214		941	1568	383	2246		906	3252	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	10	25	11	9	58	18	203	13	304	1015	628
RTOR Reduction (vph)	0	0	20	0	0	45	0	8	0	0	0	296
Lane Group Flow (vph)	0	183	5	0	20	13	18	208	0	304	1015	332
Heavy Vehicles (%)	38%	50%	33%	44%	100%	3%	40%	59%	64%	5%	11%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		10.7	10.7		10.7	10.7	17.9	17.3		30.4	25.8	25.8
Effective Green, g (s)		10.7	10.7		10.7	10.7	17.9	17.3		30.4	25.8	25.8
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.36	0.35		0.62	0.53	0.53
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		216	265		205	342	151	791		712	1709	793
v/s Ratio Prot							0.00	0.09		c0.08	c0.31	
v/s Ratio Perm		c0.18	0.00		0.02	0.01	0.04			0.19		0.22
v/c Ratio		0.85	0.02		0.10	0.04	0.12	0.26		0.43	0.59	0.42
Uniform Delay, d1		18.4	15.1		15.3	15.1	10.1	11.4		4.5	8.0	7.1
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		25.2	0.0		0.2	0.0	0.4	0.2		0.4	0.6	0.4
Delay (s)		43.6	15.1		15.6	15.2	10.4	11.5		5.0	8.6	7.4
Level of Service		D	B		B	B	B	B		A	A	A
Approach Delay (s)		40.2			15.3			11.4			7.7	
Approach LOS		D			B			B			A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	49.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	20	0	294	417	9	114	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	22	0	320	453	10	124	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	463			22			1121	1124	22	1119	1119	458
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	463			22			1121	1124	22	1119	1119	458
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			80			12	100	100	99	97	100
cM capacity (veh/h)	1109			1575			142	165	1061	157	150	607

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	22	0	783	124	0	5
Volume Left	0	0	320	124	0	1
Volume Right	0	0	10	0	0	0
cSH	1109	1700	1575	142	1700	151
Volume to Capacity	0.00	0.00	0.20	0.88	0.00	0.04
Queue Length 95th (ft)	0	0	19	145	0	3
Control Delay (s)	0.0	0.0	4.5	106.2	0.0	29.7
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		4.5	106.2		29.7
Approach LOS				F		D

Intersection Summary			
Average Delay	18.1		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	119	1476	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	129	1604	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1734	1604	1604			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1734	1604	1604			
tC, single (s)	6.4	6.3	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	98	126	413			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	2	0	129	1604
Volume Left	2	0	0	0
Volume Right	0	0	0	0
cSH	98	1700	1700	1700
Volume to Capacity	0.02	0.00	0.08	0.94
Queue Length 95th (ft)	2	0	0	0
Control Delay (s)	42.7	0.0	0.0	0.0
Lane LOS	E	A		
Approach Delay (s)	42.7		0.0	0.0
Approach LOS	E			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	24	0	426	40	101	6	313	151	222	1671	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1585			1703	1509	902	2449		1719	3314	
Flt Permitted		0.85			0.72	1.00	0.21	1.00		0.37	1.00	
Satd. Flow (perm)		1365			1281	1509	198	2449		666	3314	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	26	0	463	43	110	7	340	164	241	1816	66
RTOR Reduction (vph)	0	0	0	0	0	76	0	103	0	0	5	0
Lane Group Flow (vph)	0	34	0	0	506	34	7	402	0	241	1878	0
Heavy Vehicles (%)	33%	14%	0%	6%	14%	7%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Effective Green, g (s)		16.0			16.0	16.0	20.0	19.2		26.4	22.4	
Actuated g/C Ratio		0.31			0.31	0.31	0.39	0.37		0.52	0.44	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		427			400	472	88	918		426	1450	
v/s Ratio Prot							0.00	0.16		c0.04	c0.57	
v/s Ratio Perm		0.02			c0.39	0.02	0.03			0.25		
v/c Ratio		0.08			1.26	0.07	0.08	0.44		0.57	1.29	
Uniform Delay, d1		12.4			17.6	12.4	11.9	12.0		7.3	14.4	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			137.8	0.1	0.4	1.5		1.7	137.9	
Delay (s)		12.5			155.4	12.4	12.2	13.5		9.1	152.3	
Level of Service		B			F	B	B	B		A	F	
Approach Delay (s)		12.5			129.9			13.5			136.1	
Approach LOS		B			F			B			F	

Intersection Summary			
HCM Average Control Delay	114.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	51.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	159	9	23	10	8	53	17	187	12	280	908	578
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1308	1214		1093	1568	1289	2246		1719	3282	1509
Flt Permitted		0.72	1.00		0.83	1.00	0.26	1.00		0.50	1.00	1.00
Satd. Flow (perm)		991	1214		933	1568	359	2246		902	3282	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	10	25	11	9	58	18	203	13	304	987	628
RTOR Reduction (vph)	0	0	19	0	0	45	0	8	0	0	0	339
Lane Group Flow (vph)	0	183	6	0	20	13	18	208	0	304	987	289
Heavy Vehicles (%)	38%	50%	33%	44%	100%	3%	40%	59%	64%	5%	10%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		9.5	9.5		9.5	9.5	15.8	15.2		23.0	18.8	18.8
Effective Green, g (s)		9.5	9.5		9.5	9.5	15.8	15.2		23.0	18.8	18.8
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.39	0.37		0.56	0.46	0.46
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		230	282		217	364	152	835		591	1509	694
v/s Ratio Prot							0.00	0.09		c0.05	c0.30	
v/s Ratio Perm		c0.18	0.00		0.02	0.01	0.04			0.24		0.19
v/c Ratio		0.80	0.02		0.09	0.04	0.12	0.25		0.51	0.65	0.42
Uniform Delay, d1		14.8	12.1		12.3	12.2	7.8	8.9		5.0	8.5	7.4
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		17.1	0.0		0.2	0.0	0.3	0.2		0.8	1.0	0.4
Delay (s)		31.9	12.1		12.5	12.2	8.2	9.1		5.7	9.6	7.8
Level of Service		C	B		B	B	A	A		A	A	A
Approach Delay (s)		29.5			12.3			9.0			8.4	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	40.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
1: Farrington Way & Kalaeloa Blvd

4/22/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	20	0	294	417	9	114	0	0	1	4	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	22	0	320	453	10	124	0	0	1	4	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	463			22			1121	1124	22	1119	1119	458
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	463			22			1121	1124	22	1119	1119	458
tC, single (s)	4.1			4.1			7.3	6.5	6.2	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.7	4.0	3.3	3.5	4.2	3.3
p0 queue free %	100			80			12	100	100	99	97	100
cM capacity (veh/h)	1109			1575			142	165	1061	157	150	607

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	22	0	783	124	0	0	5
Volume Left	0	0	320	124	0	0	1
Volume Right	0	0	10	0	0	0	0
cSH	1109	1700	1575	142	1700	1700	151
Volume to Capacity	0.00	0.00	0.20	0.88	0.00	0.00	0.04
Queue Length 95th (ft)	0	0	19	145	0	0	3
Control Delay (s)	0.0	0.0	4.5	106.2	0.0	0.0	29.7
Lane LOS			A	F	A	A	D
Approach Delay (s)	0.0		4.5	106.2			29.7
Approach LOS				F			D

Intersection Summary			
Average Delay	18.1		
Intersection Capacity Utilization	65.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	2	0	0	119	1476	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2	0	0	129	1604	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1647	535	1604			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1647	535	1604			
tC, single (s)	6.8	7.1	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.4	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	92	475	413			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	2	0	43	43	43	535	535	535
Volume Left	2	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	92	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.00	0.03	0.03	0.03	0.31	0.31	0.31
Queue Length 95th (ft)	2	0	0	0	0	0	0	0
Control Delay (s)	45.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	A						
Approach Delay (s)	45.1		0.0			0.0		
Approach LOS	E							

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	38.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	24	0	426	40	101	6	313	151	222	1671	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.95		1.00	0.99	
Flt Protected		0.99			0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1585			1703	1524	902	3518		1719	4762	
Flt Permitted		0.91			0.72	1.00	0.15	1.00		0.36	1.00	
Satd. Flow (perm)		1460			1281	1524	140	3518		660	4762	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	8	26	0	463	43	110	7	340	164	241	1816	66
RTOR Reduction (vph)	0	0	0	0	0	67	0	104	0	0	4	0
Lane Group Flow (vph)	0	34	0	0	506	43	7	400	0	241	1878	0
Heavy Vehicles (%)	33%	14%	0%	6%	14%	6%	100%	50%	20%	5%	8%	18%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		32.0			32.0	32.0	28.0	27.2		42.1	37.3	
Effective Green, g (s)		32.0			32.0	32.0	28.0	27.2		42.1	37.3	
Actuated g/C Ratio		0.39			0.39	0.39	0.34	0.33		0.51	0.45	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		569			499	594	55	1166		479	2163	
v/s Ratio Prot							0.00	0.11		c0.07	c0.39	
v/s Ratio Perm		0.02			c0.39	0.03	0.04			0.19		
v/c Ratio		0.06			1.01	0.07	0.13	0.34		0.50	0.87	
Uniform Delay, d1		15.7			25.0	15.7	19.1	20.7		11.7	20.2	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.0			43.9	0.1	1.0	0.8		0.8	5.0	
Delay (s)		15.7			68.9	15.8	20.2	21.5		12.5	25.2	
Level of Service		B			E	B	C	C		B	C	
Approach Delay (s)		15.7			59.4			21.5			23.8	
Approach LOS		B			E			C			C	

Intersection Summary			
HCM Average Control Delay	30.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	82.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	159	9	23	10	8	53	17	187	12	280	908	578
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1308	1214		1093	1568	1289	2246		1719	3282	1509
Flt Permitted		0.72	1.00		0.84	1.00	0.29	1.00		0.50	1.00	1.00
Satd. Flow (perm)		991	1214		940	1568	394	2246		899	3282	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	173	10	25	11	9	58	18	203	13	304	987	628
RTOR Reduction (vph)	0	0	20	0	0	45	0	7	0	0	0	299
Lane Group Flow (vph)	0	183	5	0	20	13	18	209	0	304	987	329
Heavy Vehicles (%)	38%	50%	33%	44%	100%	3%	40%	59%	64%	5%	10%	7%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		10.6	10.6		10.6	10.6	17.2	16.6		29.7	25.1	25.1
Effective Green, g (s)		10.6	10.6		10.6	10.6	17.2	16.6		29.7	25.1	25.1
Actuated g/C Ratio		0.22	0.22		0.22	0.22	0.36	0.34		0.61	0.52	0.52
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		217	266		206	344	151	772		707	1706	784
v/s Ratio Prot							0.00	0.09		c0.08	c0.30	
v/s Ratio Perm		c0.18	0.00		0.02	0.01	0.04			0.18		0.22
v/c Ratio		0.84	0.02		0.10	0.04	0.12	0.27		0.43	0.58	0.42
Uniform Delay, d1		18.1	14.8		15.0	14.8	10.2	11.5		4.6	8.0	7.1
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		24.6	0.0		0.2	0.0	0.4	0.2		0.4	0.5	0.4
Delay (s)		42.7	14.8		15.2	14.9	10.5	11.7		5.0	8.4	7.5
Level of Service		D	B		B	B	B	B		A	A	A
Approach Delay (s)		39.3			15.0			11.6			7.6	
Approach LOS		D			B			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	48.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	44	0	152	829	0	381	0	0	1	9	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	48	0	165	901	0	414	0	0	1	10	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	901			48			1285	1279	48	1279	1279	901
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	901			48			1285	1279	48	1279	1279	901
tC, single (s)	4.1			4.2			7.1	6.5	6.4	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.5	3.5	4.2	3.3
p0 queue free %	100			89			0	100	100	99	93	100
cM capacity (veh/h)	763			1497			121	149	965	132	133	340

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	48	0	1066	414	0	12
Volume Left	0	0	165	414	0	1
Volume Right	0	0	0	0	0	1
cSH	763	1700	1497	121	1700	141
Volume to Capacity	0.00	0.00	0.11	3.41	0.00	0.08
Queue Length 95th (ft)	0	0	9	Err	0	7
Control Delay (s)	0.0	0.0	2.7	Err	0.0	32.9
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		2.7	Err		32.9
Approach LOS				F		D

Intersection Summary			
Average Delay	2690.7		
Intersection Capacity Utilization	93.1%	ICU Level of Service	F
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	0	0	94	482	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	0	0	102	524	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	626	524	524			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	626	524	524			
tC, single (s)	6.8	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	392	551	1053			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	7	0	102	524
Volume Left	7	0	0	0
Volume Right	0	0	0	0
cSH	392	1700	1700	1700
Volume to Capacity	0.02	0.00	0.06	0.31
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	14.3	0.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	14.3		0.0	0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	8	0	138	3	550	6	1284	486	221	362	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1592			1544	1568	1289	3252		1770	2641	
Flt Permitted		0.83			0.71	1.00	0.52	1.00		0.18	1.00	
Satd. Flow (perm)		1359			1148	1568	700	3252		331	2641	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	9	0	150	3	598	7	1396	528	240	393	8
RTOR Reduction (vph)	0	0	0	0	0	155	0	75	0	0	2	0
Lane Group Flow (vph)	0	29	0	0	153	443	7	1849	0	240	399	0
Heavy Vehicles (%)	16%	14%	0%	17%	33%	3%	40%	7%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		15.1			15.1	15.1	20.1	19.3		26.5	22.5	
Effective Green, g (s)		15.1			15.1	15.1	20.1	19.3		26.5	22.5	
Actuated g/C Ratio		0.30			0.30	0.30	0.40	0.38		0.53	0.45	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		407			344	470	289	1245		288	1179	
v/s Ratio Prot							0.00	c0.57		c0.07	0.15	
v/s Ratio Perm		0.02			0.13	c0.28	0.01			0.37		
v/c Ratio		0.07			0.44	0.94	0.02	1.48		0.83	0.34	
Uniform Delay, d1		12.6			14.3	17.2	9.2	15.6		10.5	9.1	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.9	27.6	0.0	222.6		18.3	0.8	
Delay (s)		12.7			15.2	44.8	9.2	238.1		28.7	9.9	
Level of Service		B			B	D	A	F		C	A	
Approach Delay (s)		12.7			38.8			237.3			16.9	
Approach LOS		B			D			F			B	

Intersection Summary			
HCM Average Control Delay	148.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	50.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	398	6	22	7	11	273	6	798	10	62	247	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1684	1346		1150	1538	1805	3358		1280	2542	1223
Flt Permitted		0.72	1.00		0.86	1.00	0.59	1.00		0.22	1.00	1.00
Satd. Flow (perm)		1264	1346		1011	1538	1114	3358		299	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	433	7	24	8	12	297	7	867	11	67	268	167
RTOR Reduction (vph)	0	0	16	0	0	160	0	2	0	0	0	103
Lane Group Flow (vph)	0	440	8	0	20	137	7	876	0	67	268	64
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	30%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		16.2	16.2		16.2	16.2	17.2	16.5		20.2	18.0	18.0
Effective Green, g (s)		16.2	16.2		16.2	16.2	17.2	16.5		20.2	18.0	18.0
Actuated g/C Ratio		0.35	0.35		0.35	0.35	0.37	0.35		0.43	0.38	0.38
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		437	465		349	531	419	1181		175	976	469
v/s Ratio Prot							0.00	c0.26		c0.02	0.11	
v/s Ratio Perm		c0.35	0.01		0.02	0.09	0.01			0.15		0.05
v/c Ratio		1.01	0.02		0.06	0.26	0.02	0.74		0.38	0.27	0.14
Uniform Delay, d1		15.3	10.1		10.3	11.0	9.4	13.3		8.8	10.0	9.4
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		44.8	0.0		0.1	0.3	0.0	2.6		1.4	0.2	0.1
Delay (s)		60.1	10.1		10.3	11.3	9.5	15.9		10.2	10.1	9.5
Level of Service		E	B		B	B	A	B		B	B	A
Approach Delay (s)		57.5			11.2			15.8			9.9	
Approach LOS		E			B			B			A	

Intersection Summary			
HCM Average Control Delay	22.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	46.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	44	0	152	829	0	381	0	0	1	9	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	48	0	165	901	0	414	0	0	1	10	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	901			48			1285	1279	48	1279	1279	901
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	901			48			1285	1279	48	1279	1279	901
tC, single (s)	4.1			4.2			7.1	6.5	6.4	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.5	3.5	4.2	3.3
p0 queue free %	100			89			0	100	100	99	93	100
cM capacity (veh/h)	763			1497			121	149	965	132	133	340

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	48	0	1066	414	0	0	12
Volume Left	0	0	165	414	0	0	1
Volume Right	0	0	0	0	0	0	1
cSH	763	1700	1497	121	1700	1700	141
Volume to Capacity	0.00	0.00	0.11	3.41	0.00	0.00	0.08
Queue Length 95th (ft)	0	0	9	Err	0	0	7
Control Delay (s)	0.0	0.0	2.7	Err	0.0	0.0	32.9
Lane LOS			A	F	A	A	D
Approach Delay (s)	0.0		2.7	Err			32.9
Approach LOS				F			D

Intersection Summary			
Average Delay	2690.7		
Intersection Capacity Utilization	93.1%	ICU Level of Service	F
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	0	0	94	482	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	0	0	102	524	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	558	175	524			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	558	175	524			
tC, single (s)	7.6	7.0	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	379	835	1053			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	7	0	34	34	34	175	175	175
Volume Left	7	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	379	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.00	0.02	0.02	0.02	0.10	0.10	0.10
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B	A						
Approach Delay (s)	14.7		0.0			0.0		
Approach LOS	B							

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	19.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	8	0	138	3	550	6	1284	486	221	362	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1564			1544	1568	1289	4672		1770	3795	
Flt Permitted		0.83			0.71	1.00	0.51	1.00		0.14	1.00	
Satd. Flow (perm)		1338			1148	1568	688	4672		264	3795	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	9	0	150	3	598	7	1396	528	240	393	8
RTOR Reduction (vph)	0	0	0	0	0	127	0	117	0	0	3	0
Lane Group Flow (vph)	0	29	0	0	153	471	7	1807	0	240	398	0
Heavy Vehicles (%)	19%	14%	0%	17%	33%	3%	40%	7%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		17.0			17.0	17.0	25.0	24.2		33.2	28.4	
Effective Green, g (s)		17.0			17.0	17.0	25.0	24.2		33.2	28.4	
Actuated g/C Ratio		0.29			0.29	0.29	0.43	0.42		0.57	0.49	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		391			335	458	304	1943		280	1852	
v/s Ratio Prot							0.00	0.39		c0.07	0.10	
v/s Ratio Perm		0.02			0.13	c0.30	0.01			c0.42		
v/c Ratio		0.07			0.46	1.03	0.02	0.93		0.86	0.21	
Uniform Delay, d1		14.9			16.8	20.6	9.5	16.2		11.4	8.5	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			1.0	49.3	0.0	9.5		21.9	0.3	
Delay (s)		15.0			17.8	69.9	9.6	25.7		33.2	8.8	
Level of Service		B			B	E	A	C		C	A	
Approach Delay (s)		15.0			59.3			25.6			17.9	
Approach LOS		B			E			C			B	

Intersection Summary			
HCM Average Control Delay	31.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	58.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	398	6	22	7	11	273	6	798	10	62	247	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1684	1346		1150	1538	1805	3358		1280	2542	1223
Flt Permitted		0.72	1.00		0.88	1.00	0.59	1.00		0.20	1.00	1.00
Satd. Flow (perm)		1264	1346		1027	1538	1114	3358		263	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	433	7	24	8	12	297	7	867	11	67	268	167
RTOR Reduction (vph)	0	0	15	0	0	128	0	1	0	0	0	105
Lane Group Flow (vph)	0	440	9	0	20	169	7	877	0	67	268	62
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	30%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		21.6	21.6		21.6	21.6	19.8	19.1		22.6	20.5	20.5
Effective Green, g (s)		21.6	21.6		21.6	21.6	19.8	19.1		22.6	20.5	20.5
Actuated g/C Ratio		0.39	0.39		0.39	0.39	0.36	0.35		0.41	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		498	531		405	606	411	1170		147	951	458
v/s Ratio Prot							0.00	c0.26		c0.02	0.11	
v/s Ratio Perm		c0.35	0.01		0.02	0.11	0.01			0.17		0.05
v/c Ratio		0.88	0.02		0.05	0.28	0.02	0.75		0.46	0.28	0.14
Uniform Delay, d1		15.4	10.1		10.3	11.3	11.2	15.7		11.0	12.0	11.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		16.8	0.0		0.1	0.3	0.0	2.7		2.2	0.2	0.1
Delay (s)		32.2	10.1		10.3	11.5	11.2	18.4		13.2	12.2	11.4
Level of Service		C	B		B	B	B	B		B	B	B
Approach Delay (s)		31.1			11.5			18.4			12.1	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	18.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	54.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	44	0	152	829	0	362	0	0	1	9	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	48	0	165	901	0	393	0	0	1	10	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	901			48			1285	1279	48	1279	1279	901
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	901			48			1285	1279	48	1279	1279	901
tC, single (s)	4.1			4.2			7.1	6.5	6.4	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.5	3.5	4.2	3.3
p0 queue free %	100			89			0	100	100	99	93	100
cM capacity (veh/h)	763			1497			121	149	965	132	133	340

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	SB 1
Volume Total	48	0	1066	393	0	12
Volume Left	0	0	165	393	0	1
Volume Right	0	0	0	0	0	1
cSH	763	1700	1497	121	1700	141
Volume to Capacity	0.00	0.00	0.11	3.24	0.00	0.08
Queue Length 95th (ft)	0	0	9	Err	0	7
Control Delay (s)	0.0	0.0	2.7	Err	0.0	32.9
Lane LOS			A	F	A	D
Approach Delay (s)	0.0		2.7	Err		32.9
Approach LOS				F		D

Intersection Summary			
Average Delay	2591.3		
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	0	0	94	482	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	0	0	102	524	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	626	524	524			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	626	524	524			
tC, single (s)	6.8	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	392	551	1053			

Direction, Lane #	EB 1	EB 2	NB 1	SB 1
Volume Total	7	0	102	524
Volume Left	7	0	0	0
Volume Right	0	0	0	0
cSH	392	1700	1700	1700
Volume to Capacity	0.02	0.00	0.06	0.31
Queue Length 95th (ft)	1	0	0	0
Control Delay (s)	14.3	0.0	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	14.3		0.0	0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	35.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	8	0	138	3	550	6	1265	486	221	362	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1564			1544	1568	1289	3250		1770	2641	
Flt Permitted		0.83			0.71	1.00	0.52	1.00		0.18	1.00	
Satd. Flow (perm)		1335			1148	1568	700	3250		331	2641	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	9	0	150	3	598	7	1375	528	240	393	8
RTOR Reduction (vph)	0	0	0	0	0	155	0	77	0	0	2	0
Lane Group Flow (vph)	0	29	0	0	153	443	7	1826	0	240	399	0
Heavy Vehicles (%)	19%	14%	0%	17%	33%	3%	40%	7%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		15.1			15.1	15.1	20.1	19.3		26.5	22.5	
Effective Green, g (s)		15.1			15.1	15.1	20.1	19.3		26.5	22.5	
Actuated g/C Ratio		0.30			0.30	0.30	0.40	0.38		0.53	0.45	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		400			344	470	289	1245		288	1179	
v/s Ratio Prot							0.00	c0.56		c0.07	0.15	
v/s Ratio Perm		0.02			0.13	c0.28	0.01			0.37		
v/c Ratio		0.07			0.44	0.94	0.02	1.47		0.83	0.34	
Uniform Delay, d1		12.6			14.3	17.2	9.2	15.6		10.5	9.1	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			0.9	27.6	0.0	214.4		18.3	0.8	
Delay (s)		12.7			15.2	44.8	9.2	230.0		28.7	9.9	
Level of Service		B			B	D	A	F		C	A	
Approach Delay (s)		12.7			38.8			229.1			16.9	
Approach LOS		B			D			F			B	

Intersection Summary			
HCM Average Control Delay	143.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	50.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	398	6	22	7	11	273	6	778	10	62	247	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1684	1346		1150	1538	1805	3358		1280	2542	1223
Flt Permitted		0.72	1.00		0.86	1.00	0.59	1.00		0.22	1.00	1.00
Satd. Flow (perm)		1264	1346		1011	1538	1114	3358		301	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	433	7	24	8	12	297	7	846	11	67	268	167
RTOR Reduction (vph)	0	0	16	0	0	161	0	2	0	0	0	103
Lane Group Flow (vph)	0	440	8	0	20	136	7	855	0	67	268	64
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	30%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		16.3	16.3		16.3	16.3	17.1	16.4		20.1	17.9	17.9
Effective Green, g (s)		16.3	16.3		16.3	16.3	17.1	16.4		20.1	17.9	17.9
Actuated g/C Ratio		0.35	0.35		0.35	0.35	0.36	0.35		0.43	0.38	0.38
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		439	468		351	535	416	1174		175	970	467
v/s Ratio Prot							0.00	c0.25		c0.02	0.11	
v/s Ratio Perm		c0.35	0.01		0.02	0.09	0.01			0.15		0.05
v/c Ratio		1.00	0.02		0.06	0.25	0.02	0.73		0.38	0.28	0.14
Uniform Delay, d1		15.3	10.0		10.2	10.9	9.5	13.3		8.8	10.0	9.5
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		43.5	0.0		0.1	0.3	0.0	2.3		1.4	0.2	0.1
Delay (s)		58.8	10.1		10.3	11.2	9.5	15.6		10.2	10.2	9.6
Level of Service		E	B		B	B	A	B		B	B	A
Approach Delay (s)		56.3			11.1			15.5			10.0	
Approach LOS		E			B			B			A	

Intersection Summary			
HCM Average Control Delay	22.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	46.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	44	0	152	829	0	362	0	0	1	9	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	48	0	165	901	0	393	0	0	1	10	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	901			48			1285	1279	48	1279	1279	901
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	901			48			1285	1279	48	1279	1279	901
tC, single (s)	4.1			4.2			7.1	6.5	6.4	7.1	6.8	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.3			3.5	4.0	3.5	3.5	4.2	3.3
p0 queue free %	100			89			0	100	100	99	93	100
cM capacity (veh/h)	763			1497			121	149	965	132	133	340

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	SB 1
Volume Total	48	0	1066	393	0	0	12
Volume Left	0	0	165	393	0	0	1
Volume Right	0	0	0	0	0	0	1
cSH	763	1700	1497	121	1700	1700	141
Volume to Capacity	0.00	0.00	0.11	3.24	0.00	0.00	0.08
Queue Length 95th (ft)	0	0	9	Err	0	0	7
Control Delay (s)	0.0	0.0	2.7	Err	0.0	0.0	32.9
Lane LOS			A	F	A	A	D
Approach Delay (s)	0.0		2.7	Err			32.9
Approach LOS				F			D

Intersection Summary			
Average Delay	2591.3		
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	0	0	94	482	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	7	0	0	102	524	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	558	175	524			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	558	175	524			
tC, single (s)	7.6	7.0	4.1			
tC, 2 stage (s)						
tF (s)	3.9	3.3	2.2			
p0 queue free %	98	100	100			
cM capacity (veh/h)	379	835	1053			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	7	0	34	34	34	175	175	175
Volume Left	7	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0	0	0
cSH	379	1700	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.02	0.00	0.02	0.02	0.02	0.10	0.10	0.10
Queue Length 95th (ft)	1	0	0	0	0	0	0	0
Control Delay (s)	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	B	A						
Approach Delay (s)	14.7		0.0			0.0		
Approach LOS	B							

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	19.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	18	8	0	138	3	550	6	1265	486	221	362	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00	1.00	1.00	0.91		1.00	0.91	
Frt		1.00			1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.97			0.95	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1564			1544	1568	1289	4670		1770	3795	
Flt Permitted		0.83			0.71	1.00	0.51	1.00		0.14	1.00	
Satd. Flow (perm)		1338			1148	1568	688	4670		264	3795	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	9	0	150	3	598	7	1375	528	240	393	8
RTOR Reduction (vph)	0	0	0	0	0	128	0	119	0	0	3	0
Lane Group Flow (vph)	0	29	0	0	153	470	7	1784	0	240	398	0
Heavy Vehicles (%)	19%	14%	0%	17%	33%	3%	40%	7%	5%	2%	36%	50%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Actuated Green, G (s)		17.0			17.0	17.0	25.0	24.2		33.2	28.4	
Effective Green, g (s)		17.0			17.0	17.0	25.0	24.2		33.2	28.4	
Actuated g/C Ratio		0.29			0.29	0.29	0.43	0.42		0.57	0.49	
Clearance Time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		391			335	458	304	1942		280	1852	
v/s Ratio Prot							0.00	0.38		c0.07	0.10	
v/s Ratio Perm		0.02			0.13	c0.30	0.01			c0.42		
v/c Ratio		0.07			0.46	1.03	0.02	0.92		0.86	0.21	
Uniform Delay, d1		14.9			16.8	20.6	9.5	16.1		11.3	8.5	
Progression Factor		1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.1			1.0	48.8	0.0	8.5		21.9	0.3	
Delay (s)		15.0			17.8	69.4	9.6	24.6		33.1	8.8	
Level of Service		B			B	E	A	C		C	A	
Approach Delay (s)		15.0			58.9			24.5			17.9	
Approach LOS		B			E			C			B	

Intersection Summary			
HCM Average Control Delay	30.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	58.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	398	6	22	7	11	273	6	778	10	62	247	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1684	1346		1150	1538	1805	3358		1280	2542	1223
Flt Permitted		0.72	1.00		0.88	1.00	0.59	1.00		0.20	1.00	1.00
Satd. Flow (perm)		1264	1346		1028	1538	1114	3358		266	2542	1223
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	433	7	24	8	12	297	7	846	11	67	268	167
RTOR Reduction (vph)	0	0	15	0	0	129	0	1	0	0	0	105
Lane Group Flow (vph)	0	440	9	0	20	168	7	856	0	67	268	62
Heavy Vehicles (%)	7%	40%	20%	50%	70%	5%	0%	7%	30%	41%	42%	32%
Turn Type	Perm		Perm	Perm		Perm	pm+pt			pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8	2			6		6
Actuated Green, G (s)		21.6	21.6		21.6	21.6	19.6	18.9		22.4	20.3	20.3
Effective Green, g (s)		21.6	21.6		21.6	21.6	19.6	18.9		22.4	20.3	20.3
Actuated g/C Ratio		0.40	0.40		0.40	0.40	0.36	0.35		0.41	0.37	0.37
Clearance Time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		500	532		407	608	409	1162		148	945	455
v/s Ratio Prot							0.00	c0.25		c0.02	0.11	
v/s Ratio Perm		c0.35	0.01		0.02	0.11	0.01			0.17		0.05
v/c Ratio		0.88	0.02		0.05	0.28	0.02	0.74		0.45	0.28	0.14
Uniform Delay, d1		15.3	10.0		10.2	11.2	11.3	15.7		10.9	12.0	11.3
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		16.4	0.0		0.1	0.2	0.0	2.5		2.2	0.2	0.1
Delay (s)		31.7	10.1		10.2	11.4	11.3	18.1		13.1	12.2	11.5
Level of Service		C	B		B	B	B	B		B	B	B
Approach Delay (s)		30.5			11.4			18.1			12.1	
Approach LOS		C			B			B			B	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	54.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Appendix D – Noise Data

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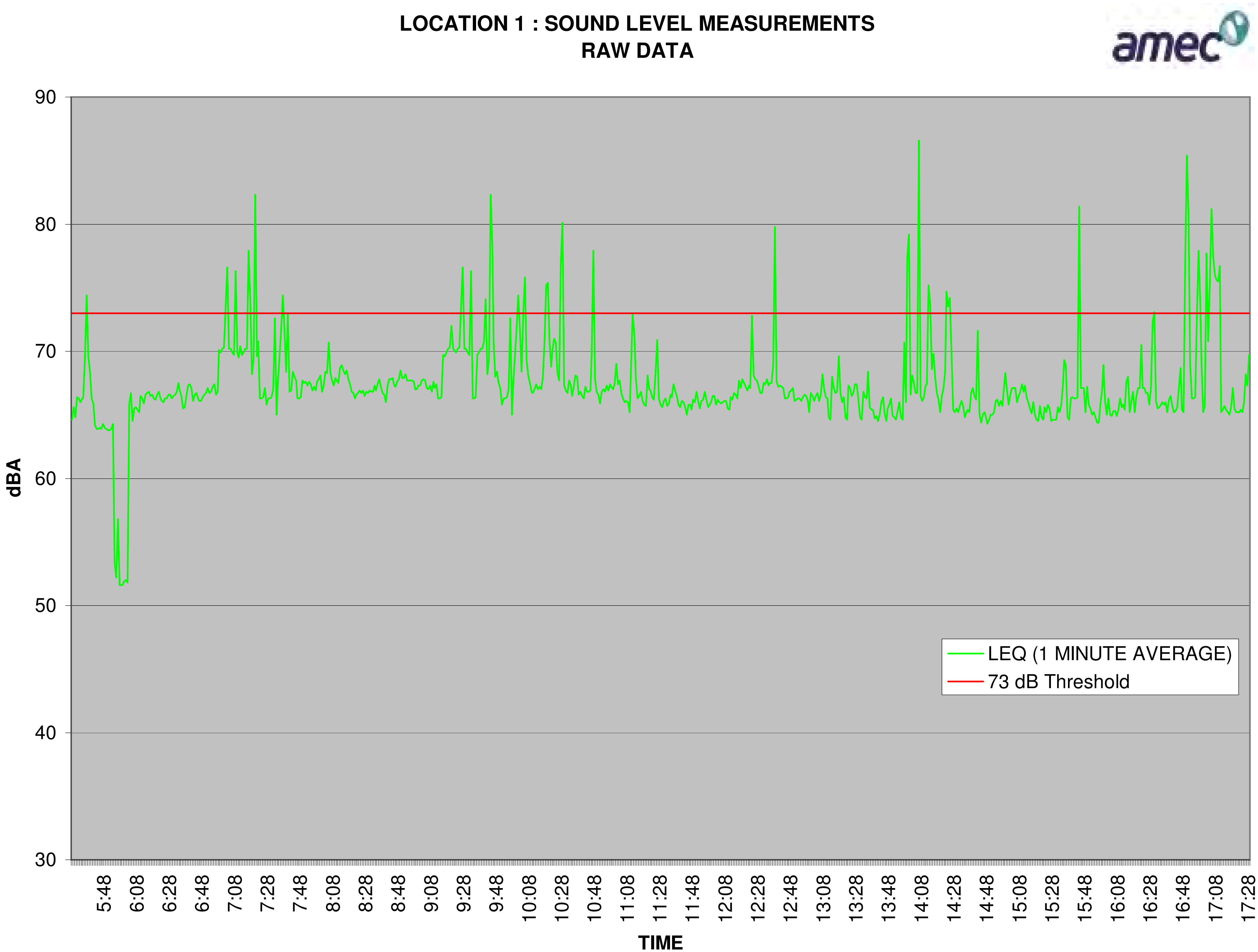
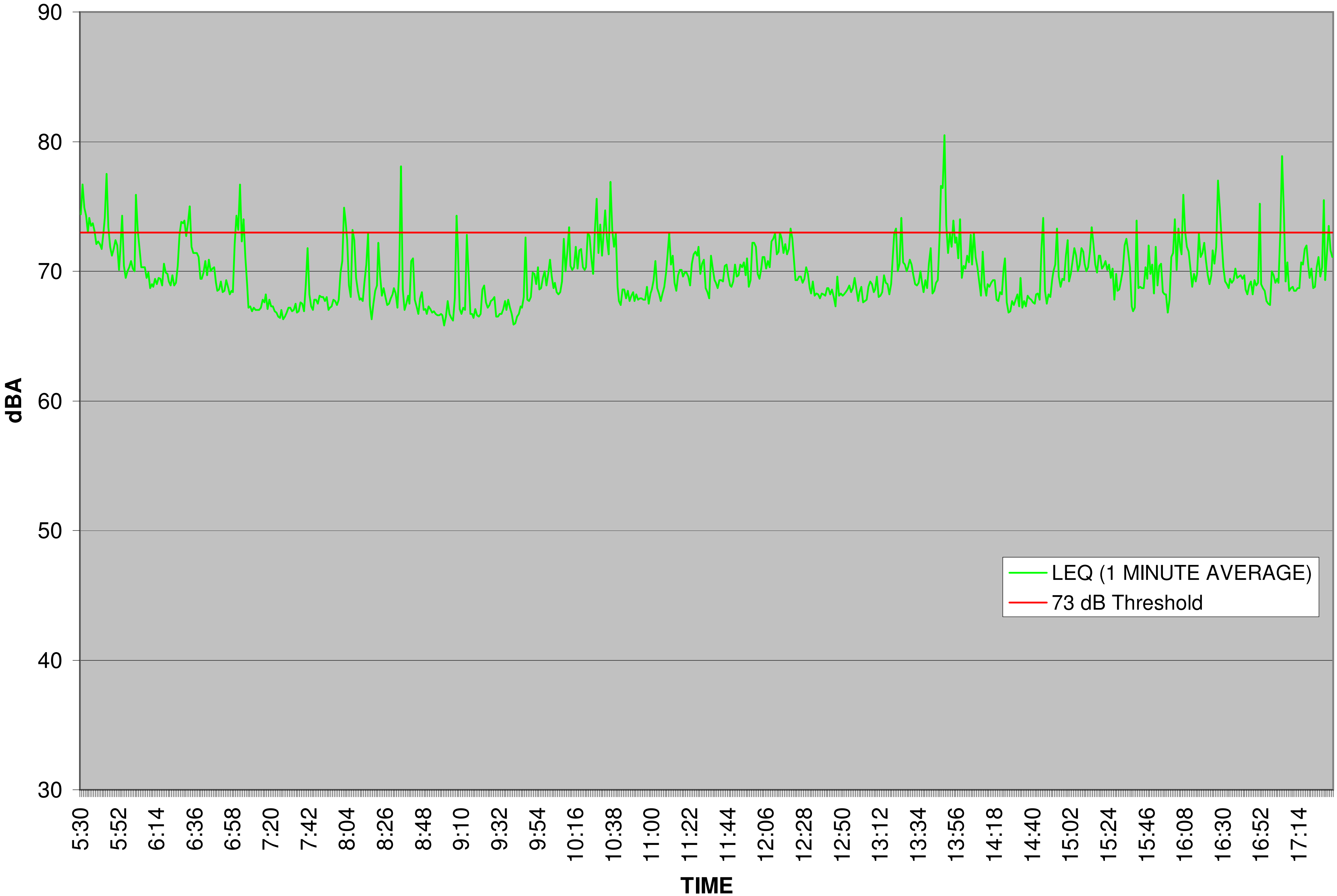
LOCATION 1 : SOUND LEVEL MEASUREMENTS
RAW DATA



LOCATION 2 : SOUND LEVEL MEASUREMENTS
RAW DATA



LOCATION 3 : SOUND LEVEL MEASUREMENTS
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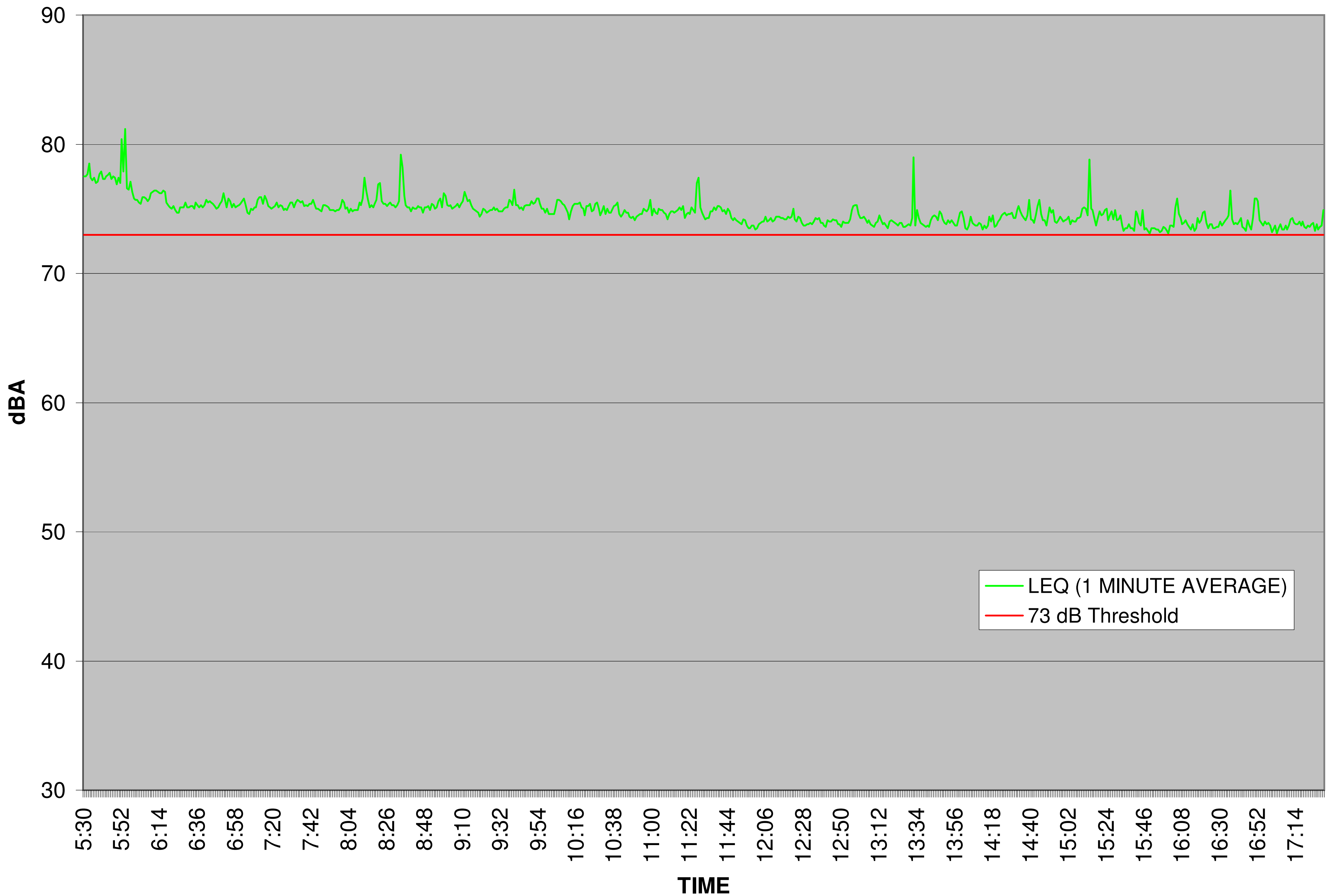
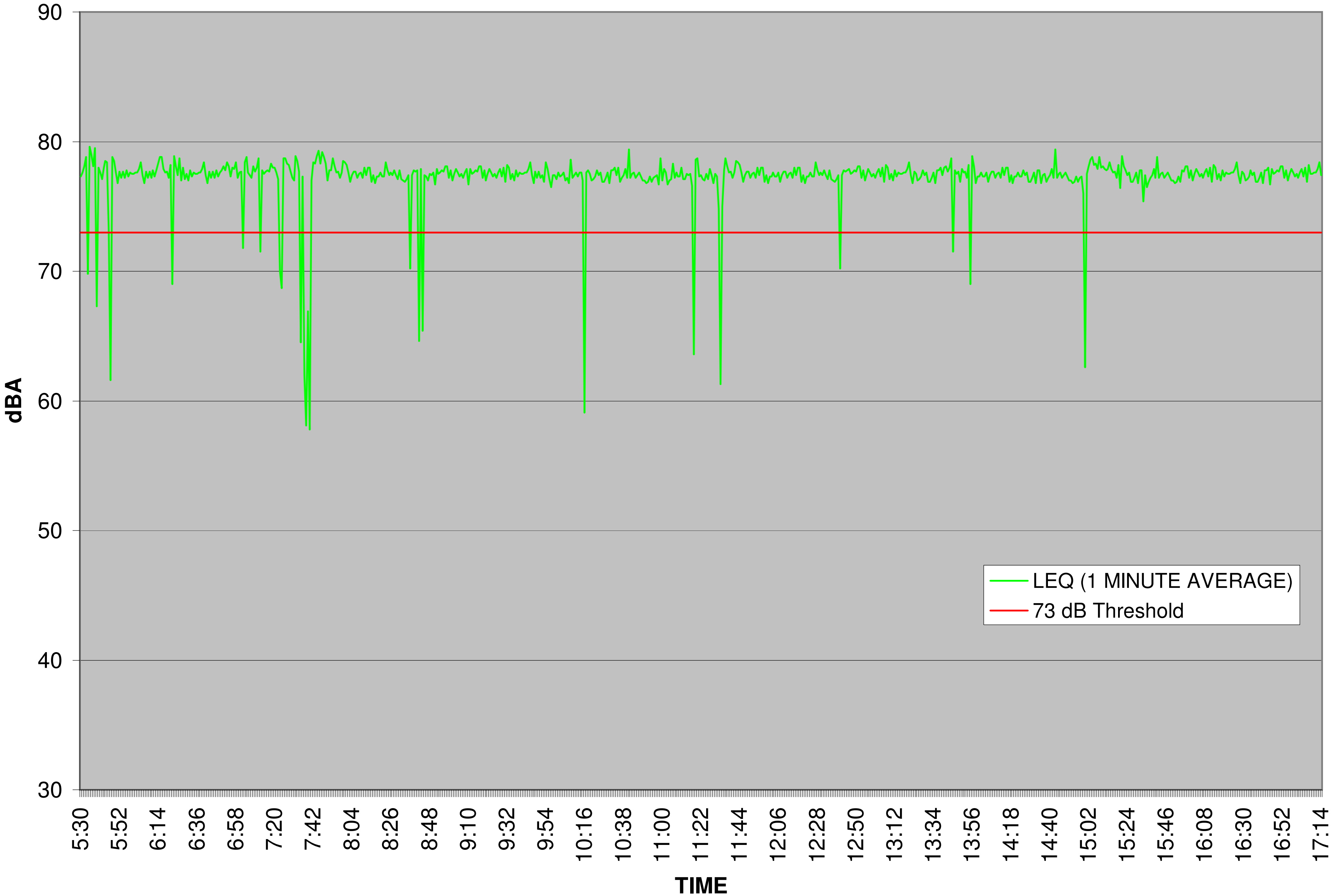
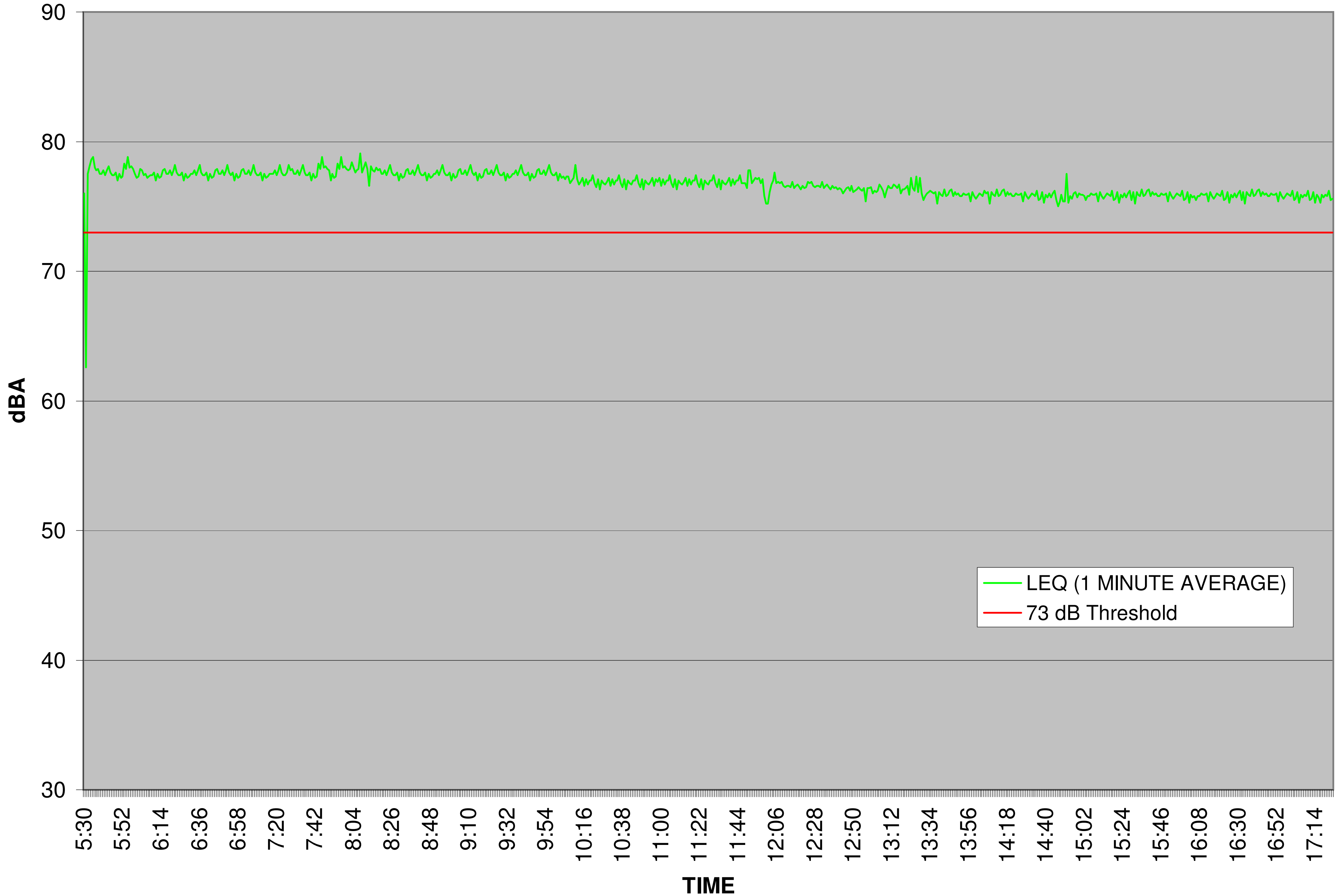


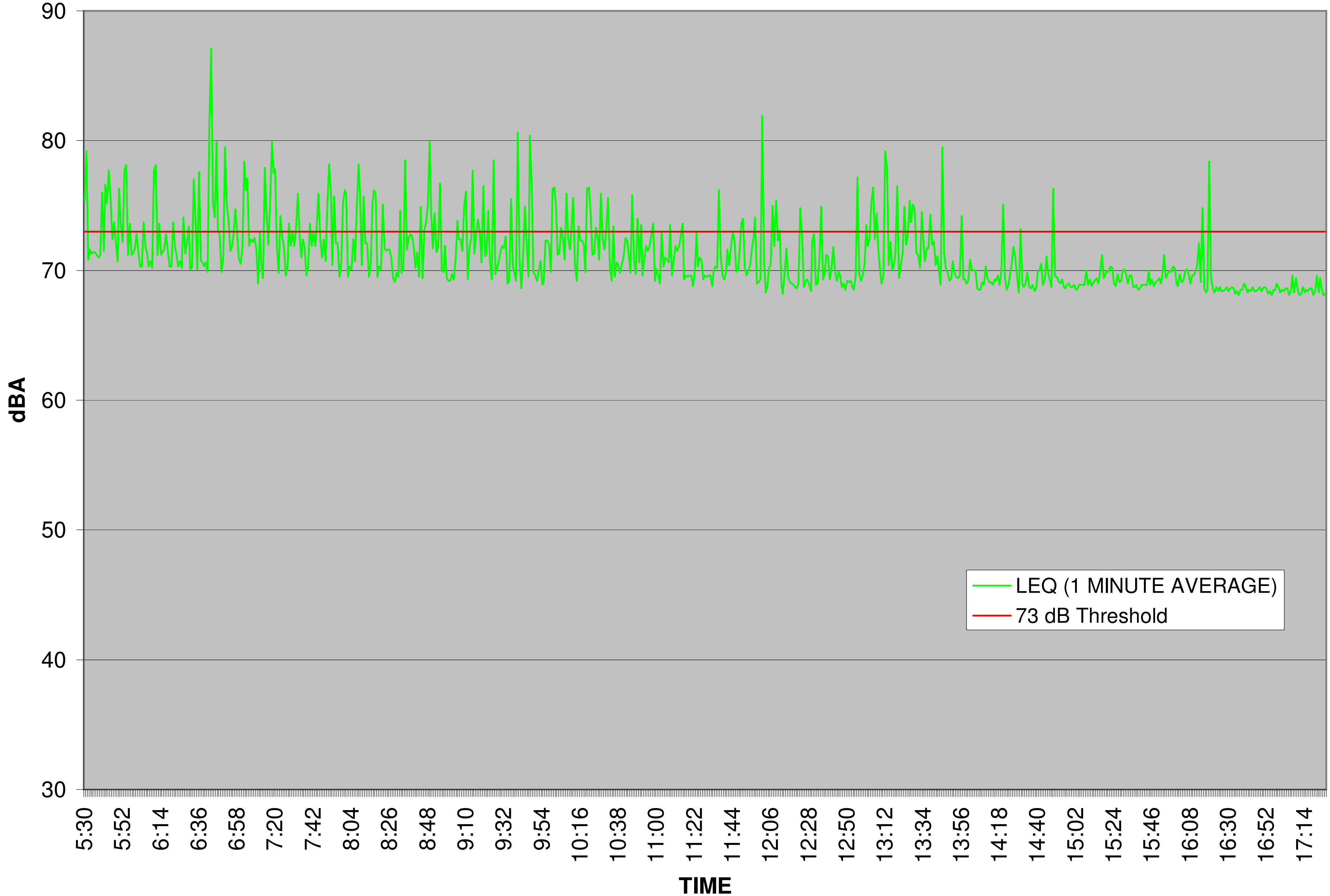
LOCATION 4 : SOUND LEVEL MEASUREMENTS
RAW DATA



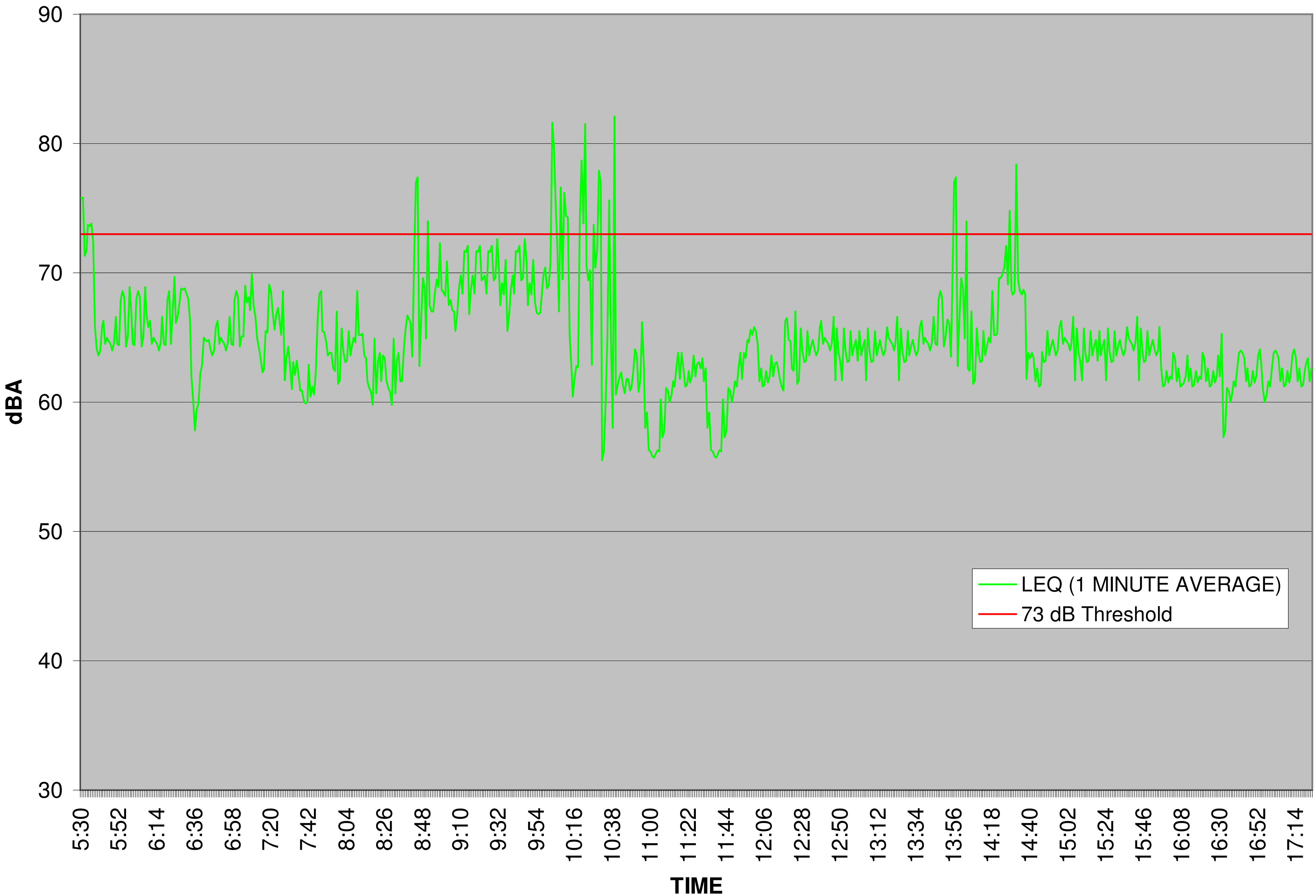
LOCATION 5 : SOUND LEVEL MEASUREMENTS
RAW DATA



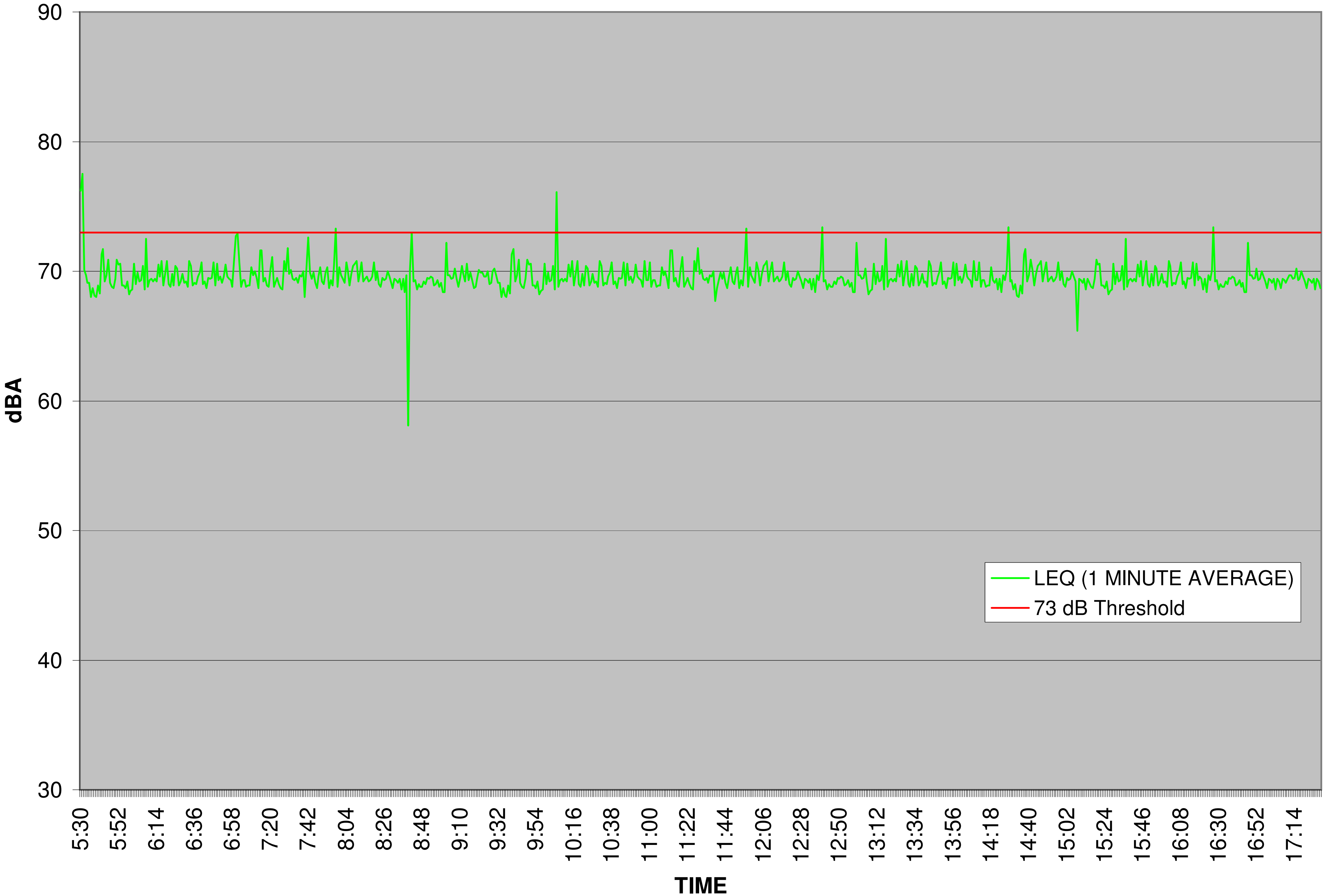
LOCATION 6 : SOUND LEVEL MEASUREMENTS
RAW DATA



LOCATION 7 : SOUND LEVEL MEASUREMENTS
RAW DATA



LOCATION 8 : SOUND LEVEL MEASUREMENTS
RAW DATA



Appendix E – Human Health Risk Assessment

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HUMAN HEALTH RISK ASSESSMENT REPORT
H-POWER EXPANSION PROJECT
KAPOLEI, O'AHU, HAWAII

SUBMITTED TO:

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU

SUBMITTED BY:

CITY AND COUNTY OF HONOLULU

PREPARED BY:

COVANTA HONOLULU RESOURCE VENTURE
AND
AMEC EARTH & ENVIRONMENTAL

October 2008
776350000

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ABSTRACT

A human health risk assessment of the H-POWER Facility (Facility) was conducted to estimate the hypothetical health risk to the local population due to emissions from the expanded Facility. The health risk assessment is a quantitative tool that estimates the exposure of various groups of people by different pathways including respiration and consumption of food products (produce, fish, dairy, etc.). The overall conclusion of the risk assessment is that potential health risks from facility emissions do not exceed levels of concern established by the EPA and the Hawaii Department of Health for carcinogenic and noncarcinogenic risk. The risks associated with the expansion of the Facility with the addition of the third unit comprise a fraction of the risk estimated for the expanded Facility.

The approach adopted in this risk assessment is consistent with the approach recommended by the United States National Research Council, a group established by the National Academy of Sciences to further scientific knowledge and to advise the U.S. Federal government. This risk assessment estimates both potential carcinogenic risks (that is, the chance of developing cancer) and noncarcinogenic risks (that is, the likelihood that toxic health effects other than cancer may occur). USEPA has established a benchmark cancer risk level for combustion Facilities of $1x10^{-5}$, or one extra cancer case in one hundred thousand exposed people, and a benchmark noncancer hazard index of 1.

USEPA guidance (2005) for conducting risk assessments of combustion facilities requires evaluation of risks for three hypothetical groups of people (residents, farmers, and fishers) so that all of the ways that Facility emissions could affect human health are evaluated. These groups of people (called "receptors") must be assumed to be located in areas of maximum Facility impact where it is reasonable to anticipate that they could be exposed to facility emissions. Assuming people are located in the areas of maximum Facility impact is a worst-case assumption. People may not actually live in the locations evaluated in the risk assessment or engage in the activities assumed in the risk assessment, in which case their actual risks would be lower than those estimated here.

The potential carcinogenic and noncarcinogenic risks associated with Facility emissions are less than the USEPA benchmarks for all receptors. The cancer risk for the receptor with maximum risk (an adult farmer) is $2x10^{-7}$, which is 50 times lower than the USEPA benchmark. The cancer risk for the receptor assumed to be closest to the Facility (the resident) is $1x10^{-8}$ for the child and $2x10^{-8}$ for the adult, which are 1,000 times and 500 times lower than the USEPA benchmark, respectively.

Because of the many conservative assumptions used in the risk assessment, it is most likely that the risk assessment overestimates any actual risks associated with Facility emissions. For example, the evaluation assumes that chemicals will be emitted from the expansion at the maximum limit allowed by USEPA regulations. Actual emissions are expected to be lower than these levels. Also, the groups of people evaluated in the risk assessment are assumed to be present continuously in the maximum impact area for up to 30 years, which almost certainly overestimates actual exposures.

In conclusion, a human health risk assessment for the H-POWER facility including the third unit expansion was conducted in accordance with EPA requirements. The estimated risks are 50 to 3,333 times lower than the USEPA's combustion facility benchmark for cancer risk and 50 to 5,000 times lower than USEPA's noncancer risk benchmark.

EXECUTIVE SUMMARY

This human health risk assessment of the H-POWER Facility evaluates the hypothetical health risk to the local population due to emissions from the expanded Facility. The health risk assessment is a quantitative tool that estimates the exposures of various groups of people who may be exposed to compounds emitted from the Facility both in the air and after they have deposited on surfaces. The overall conclusion of the risk assessment is that potential health risks from Facility emissions do not exceed levels of concern established by the EPA and the Hawaii Department of Health for carcinogenic and noncarcinogenic risk.

Introduction

This document presents a Multipathway Human Health Risk Assessment of the H-POWER Facility located in Honolulu, Hawaii and operated by Covanta Honolulu Resource Recovery Venture (CHRRV). H-POWER generates electricity by burning municipal solid waste (MSW) as an energy source in two municipal waste combustors (MWCs). This comprehensive risk assessment estimates potential risks to human health associated with direct and indirect exposure to emissions from the Facility assuming that a third MWC is added to the Facility. The addition of the third MWC will allow the Facility to operate 24 hours per day, 365 days per year.

The health risk assessment evaluates risks assuming that the Facility operates continuously at 100% of maximum operating capacity. This is done intentionally to ensure that health risks are overestimated and the results are health protective. Actual operating conditions may be lower because of power demand requirements and the need for periodic maintenance activities.

Estimates of the potential carcinogenic risks (that is, the chance of developing cancer) and noncarcinogenic risks (that is, the likelihood that toxic health effects other than cancer may occur) are made and presented for several types of exposures to emissions from the Facility.

The risk assessment guidance requires that risks be evaluated for three groups of people (residents, farmers, and fishers) who may or may not actually live in the study area around the Facility that is the subject of the risk assessment. This is required so that all of the ways that Facility emissions could affect human health are evaluated. The guidance requires that these groups of people are assumed to be located in areas defined as locations of maximum impact where it is reasonable to anticipate that they could be exposed to Facility emissions.

After evaluating the results of the air dispersion and deposition modeling, AMEC identified a location northeast of the Facility, in the northwestern corner of the Barber's Point Naval Air Station, as the closest residential area in the direction most affected by Facility emissions. An agricultural area northeast of the Facility was also identified as the closest farming area in the direction of Facility emissions. Additionally, two specialized areas were identified north of the Facility: a composting area that may supply soil to local residents and gardeners, and an area where poultry and eggs are raised. The following potential receptors were assumed to be exposed to Facility emissions:

- Resident living at the residential area most affected by the Facility;

- Resident living at the residential area most affected by the Facility and using compost from the composting area north of the Facility;
- Resident living at the poultry area;
- Resident living at the residential area most affected by the Facility who fishes recreationally at one of three locations (Pearl Harbor, the West Loch of Pearl Harbor, and the Wahiawa Reservoir); and
- Farmer living at the farm most affected by the Facility.

For each of these receptors, both adults and children were separately evaluated. It was assumed that each of the receptors could be exposed through various direct pathways (such as inhalation of air containing emissions from the Facility) and indirect pathways (such as consumption of food products or water that have been exposed to Facility emissions).

Exposures to Facility emissions were calculated using numerous conservative (upper-bound) exposure assumptions that tend to overstate potential risks. Therefore, the potential risks calculated in this risk assessment do not represent actual risks to people living near the Facility, but rather represent the reasonable upper-bound estimates of risk to hypothetical receptors assumed to engage in all activities that may result in exposures to Facility emissions.

Risk Assessment Methodology

This risk assessment followed the four step method developed by the National Research Council of the U.S. National Academy of Sciences. The four steps are:

1. Hazard Identification;
2. Toxicity Assessment;
3. Exposure Assessment; and
4. Risk Characterization.

The methods and results of each of the four steps of the risk assessment are summarized in the following paragraphs. The methodology used to estimate potential exposures and risks is consistent with guidance from U.S. EPA (2005).

Hazard Identification

The compounds to be quantitatively assessed in the risk assessment are selected in the Hazard Identification step. The compounds evaluated in the risk assessment are those which have been measured in emissions from the Facility. Each compound was evaluated for its potential to pose a threat to human health.

With the addition of a third boiler, the Facility will have the capacity to operate continuously. In order to estimate air concentrations of the compounds of potential concern in the region around the Facility, air dispersion modeling was conducted using computer models. These models take into account emission rates, physical properties of the emitted compounds and local weather data to predict the average air concentrations. The results were used to provide the air concentration data used to evaluate the various receptor locations.

Deposition modeling was performed using the results of the air dispersion modeling and meteorological data to describe the behavior of compounds associated with particles and vapors in the air that deposit on soils or water bodies. Additional modeling was performed to predict compound concentrations in soils and surface waters resulting from deposition, runoff, and other environmental fate and transport processes.

Toxicity Assessment

In order to determine if exposures to the compounds of potential concern may potentially result in adverse human health effects, it is necessary to have a numerical estimate of the toxicity of each compound of potential concern. The toxicity assessment identifies the types of adverse health effects a compound of potential concern may potentially cause and defines the relationship between the dose of a compound and the likelihood or magnitude of an adverse effect (dose-response). Adverse effects are characterized as carcinogenic or noncarcinogenic. Dose-response relationships are defined for oral exposure and for exposure by inhalation.

In this risk assessment, the relationship between the dose of a compound and the likelihood and magnitude of an adverse effect was determined for each compound included in the quantitative risk assessment. Both potential carcinogenic and potential noncarcinogenic effects were considered in the risk assessment. Dose-response information used in the risk assessment was identified from U.S. EPA sources.

Exposure Assessment

The results of the various modeling tasks performed in the Hazard Identification step provide estimates of the concentrations of the compounds of potential concern in air, soil, surface water, and food products as a result of Facility emissions. These concentrations are used to predict receptor exposure to the compounds.

To estimate potential human exposure to compounds of potential concern, potential exposure pathways were defined for each receptor. Potential exposure pathways describe ways in which receptors may be exposed to compounds of potential concern in the various environmental media. For each of the receptors identified in this risk assessment, it was assumed that exposure could occur through the following direct and indirect pathways:

- inhalation of emissions from the Facility;
- incidental ingestion of soil while working or playing outdoors;
- ingestion of produce grown in backyard gardens or farms;
- ingestion of fish caught from Pearl Harbor, the West Loch, and the Wahiawa Reservoir; and
- consumption of locally grown food products (beef, dairy, pork, poultry, and eggs).

Compound concentrations at each receptor location (residential area, farm, poultry area, compost area, and water bodies) were estimated using conservative (health-protective) assumptions. In addition, conservative assumptions were also made about the magnitude of each exposure, such as the quantity of soil or fish that is ingested on a daily basis. The use of many upper-bound factors in calculating potential risks results in an estimate that tends to overstate actual risks, if any, which may occur as a result of receptors' potential exposure to Facility emissions.

Risk Characterization

The potential exposure dose for each receptor from each compound via each route of exposure was combined with the appropriate dose-response value for that compound in order to estimate the potential for adverse health effects.

In the risk characterization process, to evaluate if potential noncarcinogenic effects may occur due to exposure to compounds of potential concern, the ratio of the receptor's exposure dose to the noncarcinogenic dose-response value is calculated for each compound of potential concern. This ratio is termed the hazard quotient. If the hazard quotient ratio is less than one, no adverse noncarcinogenic health effects are expected to occur as a result of exposure to that compound via that route of exposure. The hazard quotient for each pathway by which each receptor is assumed to be exposed are summed to yield a hazard index for that compound. A total hazard index is then calculated for each receptor by summing the compound-specific hazard indices for that receptor for each toxicity endpoint for which it is appropriate to sum the effects of several compounds of potential concern. A total hazard index of less than one for a given receptor for each toxicity endpoint provides further evidence that no adverse noncarcinogenic health effects are expected to occur as a result of that receptor's potential exposure to environmental media given the emission rates and exposures assumed in the risk assessment. As a screening step, hazard indices for all compounds are summed to determine if it is necessary to calculate toxicity endpoint-specific hazard indices. If the total hazard index is less than one, then hazard indices for each toxicity endpoint are not necessary.

The purpose of carcinogenic risk characterization is to estimate the likelihood, over and above the background cancer rate, that a receptor will develop cancer in his or her lifetime as a result of exposures to compounds of potential concern in environmental media due to Facility emissions. The product of the exposure dose of a compound via a particular pathway times the cancer slope factor for that compound is a unitless value. It provides an estimate of the potential carcinogenic risk associated with a receptor's exposure to that compound via that pathway. This value is termed the excess lifetime cancer risk. The excess lifetime cancer risk for each compound is calculated by summing the excess lifetime cancer risk values for each pathway by which the receptor is assumed to be exposed. The total excess lifetime cancer risk for each receptor is calculated by summing the compound- and pathway-specific excess lifetime cancer risks. Excess lifetime cancer risks are compared to a target risk range of $1x10^{-6}$ to $1x10^{-4}$, or one to 100 excess cancer cases per 1,000,000 people exposed. In addition, the U.S. EPA has designated $1x10^{-5}$ as the acceptable risk benchmark for the siting of combustor facilities. An excess lifetime cancer risk for a compound that is less than the target risk of $1x10^{-5}$ is less than the regulatory level of concern. A total excess lifetime cancer risk for a receptor that is less than the target risk of $1x10^{-5}$ provides further evidence that the receptor's potential exposure to Facility emissions will not result in unacceptable cancer risk.

Potential risks were estimated for each receptor. The total hazard index for all compounds of potential concern is also below 1 for each receptor, and the total carcinogenic risk for all compounds of potential concern is less than $1x10^{-5}$ for each receptor.

The following table shows the estimated total excess lifetime cancer risk and total hazard index for each receptor.

SUMMARY OF CARCINOGENIC AND NONCARCINOGENIC RISK ESTIMATES

Receptor	Total Excess Lifetime Cancer Risk	Total Hazard Index
Child Resident	1E-08	0.003
Adult Resident	2E-08	0.0009
Child Resident Using Compost from the Compost Area	4E-08	0.01
Adult Resident Using Compost from the Compost Area	4E-08	0.003
Child Fisher (Pearl Harbor)	1E-08	0.006
Adult Fisher (Pearl Harbor)	2E-08	0.004
Child Fisher (West Loch)	1E-08	0.008
Adult Fisher (West Loch)	2E-08	0.008
Child Fisher (Wahiawa Reservoir)	1E-08	0.01
Adult Fisher (Wahiawa Reservoir)	2E-08	0.02
Child Farmer	5E-08	0.005
Adult Farmer	2E-07	0.003
Child Resident at Poultry Area	3E-09	0.0006
Adult Resident at Poultry Area	4E-09	0.0002

Note that the maximum estimated lifetime cancer risk of 2×10^{-7} is 50 times lower than the USEPA benchmark. The estimated lifetime cancer risk for a child resident of 1×10^{-8} is 1,000 times lower and the estimated lifetime cancer risk for an adult of 2×10^{-8} is 500 times lower than the USEPA benchmark.

Because of the many conservative assumptions used in the risk assessment, it is most likely that the risk assessment overestimates any actual risks associated with Facility emissions. For example, the evaluation assumes that chemicals will be emitted from the expansion at the maximum limit allowed by USEPA regulations. Actual emissions are expected to be lower than these levels. Also, the groups of people evaluated in the risk assessment are assumed to be present continuously in the maximum impact area for up to 30 years, which almost certainly overestimates actual exposures.

In conclusion, a human health risk assessment for the H-POWER facility including the third unit expansion was conducted in accordance with EPA requirements. The estimated risks are 50 to 3,333 lower than the USEPA's combustion facility benchmark for cancer risk and 50 to 5,000 times lower than USEPA's noncancer risk benchmark.

1.0 INTRODUCTION

This document presents a Human Health Risk Assessment of the H-POWER municipal solid waste combustor Facility in Kapolei, O'ahu, Hawai'i, operated by the Covanta Honolulu Resource Recovery Venture Inc. (Covanta). The Facility, located approximately 15 miles west of Honolulu, receives MSW from the City and County of Honolulu. The Facility location and surrounding area are depicted in Figure 1-1.

The Facility is designed to burn refuse-derived fuel (RDF), which is produced by removing non-combustibles from municipal solid waste (MSW) prior to burning. The H-POWER Facility consists of two systems: the power block facility (currently two RDF boilers [Units 1 and 2]) and the waste processing facility. The two RDF-fired boilers have separate flues within one reinforced, self-supporting cement stack that is 88.4 m high. This risk assessment assumes the addition of a third boiler to the Facility. This new boiler will be a Mass Burn unit. The addition of this third boiler would ensure that the Facility would be fully functional 24 hours per day and 365 days per year.

Risks were estimated for key receptors who are potentially exposed to emissions from the Facility. The risk assessment uses state-of-the-art methodologies that are consistent with guidance from U.S. EPA (2005). Estimates of the potential carcinogenic risks (the chance of developing cancer) and noncarcinogenic risks (the likelihood that toxic health effects other than cancer may occur) are made and presented for several types of exposures to emissions from the Facility. U.S. EPA guidance (2005) requires that risks be evaluated for three groups of people (residents, farmers, and fishers) who may or may not actually live in the study area around the Facility that is the subject of the risk assessment. This is required so that all of the ways that Facility emissions could affect human health are evaluated. The guidance requires that these groups of people are assumed to be located in areas defined as locations of maximum impact where it is reasonable to anticipate that they could be exposed to Facility emissions.

1.1 Project Summary

This risk assessment estimates potential health risks associated with stack emissions from the two existing and the proposed third boiler. As stated above, three boilers will allow the Facility to be operational 24 hours per day, 365 days per year.

Chemical-specific emission rates have been estimated using various information sources. To calculate metal emission rates for the existing boilers, the average emission data from testing conducted in 1991, 1992, and 2006 through 2008 were used. EPA's Cb standards for existing boilers was used for the dioxin and furan emission rate for Units 1 and 2. Congener-specific emission rates were derived using the dioxin and furan congener distribution from 2006-2008 stack tests from Units 1 and 2. EPA's Eb standards for new construction, as well as emissions data measured from similar Covanta Mass Burn facilities with pulse jet fabric filter baghouses were used to estimate emissions from the proposed third boiler.

The compounds evaluated in the risk assessment are defined in the Hazard Identification process. Environmental concentrations of these compounds are estimated for the Facility using atmospheric dispersion and deposition modeling and fate and transport modeling techniques. These concentrations are combined with receptor-specific intakes to determine potential risks to human health.

1.2 Risk Assessment Approach

The approach adopted in this risk assessment is consistent with the approach recommended by the United States’ National Research Council. The NRC, established by the National Academy of Sciences to further scientific knowledge and to advise the U.S. Federal government, has established a four-step paradigm for conducting health-based risk assessments (NAS, 1983). In accordance with the NRC recommendations, this risk assessment is organized into the following four steps:

- Hazard Identification;
- Toxicity Assessment;
- Exposure Assessment; and
- Risk Characterization.

Each of these steps is described below.

<u>Hazard Identification</u>

In this step, compounds which are anticipated to be emitted from the Facility are identified. From the list of compounds expected to be emitted, those compounds which are expected to be the most toxic, mobile, persistent and/or prevalent in the environment are selected for inclusion in the quantitative risk assessment. These compounds are designated as Compounds of Potential Concern (CPC). The rates at which these compounds are currently or are predicted to be emitted from the Facility are then estimated.

<u>Toxicity Assessment</u>

The purpose of the Toxicity Assessment is to determine the relationship between the magnitude of exposure for each CPC (dose) and the occurrence of specific health effects for a receptor (response). This risk assessment includes an evaluation of both potentially carcinogenic and potentially noncarcinogenic effects. Dose-response criteria were obtained from U.S. Environmental Protection Agency (U.S. EPA) sources.

<u>Exposure Assessment</u>

In the Exposure Assessment, the magnitude and frequency of receptors' exposure to CPCs is quantified. Potential human receptors are identified based on characteristics of the site and surrounding area. All relevant indirect and direct routes of exposure to environmental media are examined for each receptor.

Risk Characterization

The Risk Characterization combines the results of the Exposure Assessment with the results of the Toxicity Assessment to derive quantitative estimates of the potential for adverse health effects to occur as a result of potential exposure to predicted emissions from the Facility. The potential for both noncarcinogenic and carcinogenic effects is estimated for each receptor for each potential exposure pathway identified in the Exposure Assessment.

1.3 Organization of Report

The Human Health Risk Assessment for the Facility is organized as follows: Section 2.0 presents the Hazard Identification. The Toxicity Assessment is described in Section 3.0, and the Exposure Assessment is presented in Section 4.0. Section 5.0 presents the Risk Characterization and Summary and Conclusions. Uncertainties associated with this risk assessment are discussed in Section 6.0.

2.0 HAZARD IDENTIFICATION

2.1 Constituent of Potential Concern Selection Process

The constituents to be quantitatively assessed in the risk assessment are selected in the Hazard Identification step. Based on emissions data collected at the H-POWER Facility, seven metals (arsenic, beryllium, cadmium, chromium, lead, mercury, and nickel), and seventeen 2,3,7,8-substituted polychlorinated dibenzodioxins and furans were designated as compounds of potential concern (CPCs) for the risk assessment (Table 2-1).

2.2 Emissions Estimation

Recent emissions test data (collected during 2006 through 2008 for most compounds) were used to characterize emissions from boilers 1 and 2 at the H-POWER Facility, as shown in Table 2-2 for metals. For dioxin and furan congeners, the Cb standard of 30 ng/dscm was used as the emission factor. This concentration was converted to emission rates of 1.69×10^{-6} g/sec total PCDD/PCDF assuming a flow rate of 3,378 dscm/minute for Unit 1 and 2.02×10^{-6} g/sec total PCDD/PCDF assuming a flow rate of 4,046 dscm/minute for Unit 2. Congener-specific emission rates were defined using the congener distribution from 2006-2008 stack test data, as shown in Table 2-3. During the June 2001 sampling event information about the speciation of mercury emissions (elemental vapor, ionic vapor and ionic particles) was collected to provide site-specific information useful for the risk assessment. These data were used to parameterize the risk assessment models to accurately represent the Facility-specific speciation of mercury (Table 2-4). When more recent emission data were unavailable, as was the case for arsenic, chromium and nickel, older emission data were used. Two years of data were available for arsenic and nickel (1991 and 1992); thus the two-year data were averaged for each existing boiler. Only one year of emissions data was available for chromium (1991) making it necessary to use these data directly.

To model potential emissions from a newly constructed boiler that reflects current industry emission standards, the emission rates were based on EPA's Eb standards when available (cadmium, lead, mercury, and total dioxins and furans). For compounds with no Eb standards (arsenic, beryllium, chromium, and nickel), emissions tests from similarly designed Mass Burn facilities with pulse jet fabric filter baghouses (Stanislaus California and Alexandria Virginia) were used as shown in Table 2-5. For dioxins and furans, EPA provides an Eb standard (13 ng/dscm) for total PCDD/PCDF. This concentration was converted to an emission rate of 6.84×10^{-7} g/sec total PCDD/PCDF assuming a flow rate of 3,157 dscm/minute @ 7% oxygen for the proposed boiler. Congener-specific emission rates were defined using the congener distribution from 2004-2007 stack test data from the Covanta Alexandria Virginia Mass Burn facility, as shown in Table 2-6. Emission rates for all three boilers are summarized in Table 2-7.

2.3 Air Quality and Deposition Modeling

Air dispersion and deposition modeling has been performed in this risk assessment to quantify the level of compounds in ambient air and other environmental media to which potential receptors may be exposed as a result of emissions from the Facility. Compound concentrations in ambient air, predicted using air quality dispersion models, are used to evaluate potential human exposures via inhalation. Deposition algorithms estimate the magnitude of compound deposition onto soil, waterbody, and vegetation surfaces. This information can then be used to evaluate potential human exposures via direct and indirect pathways. This section describes the methodologies used in the dispersion and deposition modeling, identifies and discusses the source input parameters used in the modeling, and presents the results of the modeling analysis.

2.3.1 Air Quality Modeling Approach

In order to estimate air concentrations and deposition rates of the compounds of potential concern in the region around the H-POWER Facility, AMEC conducted air dispersion modeling. In the past, this type of modeling was conducted using U.S. EPA’s Industrial Source Model (ISC) model, and this model is discussed in EPA’s risk assessment guidance (EPA, 2005). However, in 2006, U.S. EPA promulgated a replacement for the ISC, which has outdated capabilities. The replacement model is AERMOD, and it has been shown by U.S. EPA to be more universally applicable and to have greater technical accuracy. Therefore, AERMOD (version 07026) was selected to predict ambient concentrations in simple, complex, and intermediate terrain. AERMOD is the recommended sequential model in USEPA’s Guideline on Air Quality Models (40 CFR Part 51, Appendix W). The regulatory default option was used for all COPC. The default option commands AERMOD to:

- use the elevated terrain algorithms requiring input of terrain height data for receptors and emission sources;
- use stack tip downwash (building downwash automatically overrides);
- use the calms processing routines;
- use buoyancy-induced dispersion; and
- use the missing meteorological data processing routines.

In addition, the non-regulatory defaults were enabled so the model could compute wet- and dry-particle and gaseous deposition rates.

2.3.2 Operational Scenario Modeled

Two types of data are required for multi-pathway risk assessments: (1) compound-specific emission rates and (2) air concentration and deposition rate estimates from air dispersion modeling. Units 1 and 2 have an individual flue within the existing stack. Because more than one unit is operational at a time and because the flues from these units are immediately adjacent to one another within the same stack, it is appropriate to model the emissions as a single virtual emission point. The characteristics of the virtual emission point are defined by the combined characteristics of the individual flues in operation. In addition, the proposed Unit 3 will have a separate stack source. Table 2-8 summarizes the physical characteristics of the stack emission point sources.

2.3.3 Meteorological Data

According to the AERMIC Committee (the developers of AERMOD), AERMOD was designed to run with a minimum of observed meteorological parameters (Cimorelli, et al, 1998). AERMOD requires at least one surface measurement of wind speed and direction (generally at a height of 10 meters) and ambient temperature (generally at a height of 2 meters). The reference wind speed must be greater than seven times the surface roughness height and less than 100 meters. The model also requires observed cloud cover data and the morning sounding from an upper air station. The user must specify surface characteristics (surface roughness, Bowen ratio, and albedo) for the model to construct the boundary layer profiles needed to predict wind speed and temperature as a function of height above the surface.

USEPA recommends that AERMOD be run with a minimum of 5 years of National Weather Service (NWS) data or one year of on-site meteorological data. The meteorological data used in the sequential modeling presented in this document consist of one year of multi-level data collected from the Campbell Industrial Park (CIP). From October 1, 1992 through September 30, 1993, a meteorological tower gathered the hourly weather data at several levels. The location of the meteorological tower in relationship to the H-POWER facility is shown in Figure 2-1.

The latest version of the AERMET meteorological data preprocessing program was used with the Lihue upper air data and with surface data as recommended for AERMOD to generate the required meteorological data input files.

Upper air data was obtained from the NWS at Lihue, Kauai for use with AERMOD. The data used in AERMET for input to AERMOD is concurrent with the CIP surface data.

2.3.4 Surface Characteristics

In January 2008, EPA released new guidance on how to determine appropriate surface characteristic values for use in AERMET (USEPA, 2008). The three surface characteristics that have to be determined are the noon-time albedo, Bowen ratio, and the surface roughness length. EPA also released the AERSURFACE model which computes values for albedo, Bowen ratio, and surface roughness length using algorithms consistent with the AERSURFACE guidance. Because the AERSURFACE model is currently configured to assess land use characteristics for the contiguous United States only, it cannot be used for this project. However, the procedures detailed in the AERSURFACE guidance document can be implemented using Geographic Information Systems (GIS) software. AMEC used GIS software with appropriate land use data input to develop the following values for this project.

To determine the representative noon-time albedo and Bowen ratio, the location of interest (i.e., the meteorological collection site or the application site) is placed at the center of a 10-kilometer by 10-kilometer square. The land use within the square is determined. From these data, a single surface area weighted albedo and Bowen ratio are determined.

For the surface roughness length, the site of interest is placed at the center of a 1-kilometer circle. In this case, the circle was also divided into 12 sections, each representing 30 degrees of the circle. Land use within each pie slice is determined and the area representing each land use is inverse distance weighted. From these data, a surface roughness length is determined for each of the 12 sections.

Table 2-9 summarizes the representative albedo, Bowen ratio and wind direction-specific surface roughness length for the CIP location.

2.3.4.1 Receptor Locations and Terrain

Four land-use specific receptor grids and one general receptor grid were input into AERMOD. The four land-use receptor grids used consist of the following:

1. Agricultural land use – 100 receptor location defined by a 4500 X 4500 meter grid with grid nodes spaced at 500 meter intervals.
2. Poultry land use – 36 receptor locations defined by a 2500 x 2500 meter grid with grid nodes spaced at 500 meter intervals.
3. Composting land use – 36 receptor locations defined by a 2500 x 2500 meter grid with grid nodes spaced at 500 meter intervals.
4. Watershed – 2880 receptor locations defined by a 24000 x 30000 meter grid with grid nodes spaced at 500 meter intervals.

These land-use receptor grids are shown on Figure 2-2.

The general receptor grid is a truncated polar receptor grid that is centered on the stack with 15 concentric circles spaced 100 meters apart between 100 m and 1500 m from the stack; 6 concentric circles spaced every 250 meters between 1750 and 3000 m from the stack; 4 concentric circles spaced every 500 meters between 3500 and 5000 m from the stack; and 5 concentric circles spaced every 1000 meters between 4000 and 8000 m from the stack. Thirty-six radii emanate from the center of polar grid, spaced evenly at 10 degrees, beginning with 0 degrees. A receptor is placed at the intersection of the radii and the concentric circles.

The grid is truncated to the west and south because the untruncated receptor grid goes beyond the geographic limits of the USGS digital elevation model files used by AERMOD for determining receptor elevations and hill heights. Nevertheless, the truncated receptor grid covers the all of the island of land Oahu to the west and south of the H-POWER Facility, and extends over the ocean approximately 3400 meters to the west and 6200 meters to the south. As a result, the polar receptor grid provides adequate coverage of both the land and water. The polar receptor grid is shown in Figure 2-3.

2.3.4.2 AERMOD Setup

Using the meteorological data and receptor grid information described above, AMEC ran the AERMOD model a total of five times to generate the data necessary to conduct the multipathway risk assessment. A description of each run is provided below.

Particle-Phase - The particle-phase run was conducted to generate predicted concentrations and wet and dry deposition rates of particle-phase compounds from the H-POWER Facility. The term particle-phase refers to those compounds that are emitted as particles, such as metals (except mercury). Table 2-10 summarizes the particle size distribution data used in this analysis. The data were measured data from the Wurtzburg, Germany Mass Burn unit (Hahn and Sussman, 1986.)

Particle-Bound - The particle-bound run was conducted to generate predicted concentrations and wet and dry deposition rates of particle-bound compounds from the H-POWER Facility. The term particle-bound refers to the mass of compound that is sorbed onto the surface of a particle, such as dioxin and furan congeners and particle-bound mercury. Because this run is used to analyze compounds that are sorbed to particle surfaces, the model uses a distribution based on the fraction of particle surface area available for sorption rather than particle size. Table-10 summarizes the surface area weighted particle size distribution data used in this analysis.

Elemental Mercury Vapor – This run is specific for elemental mercury and estimates the concentrations and wet and dry deposition rates of gaseous elemental mercury. The chemical-physical parameters used to define elemental mercury are summarized in Table 2-11.

Divalent Mercury Vapor – This run is specific for divalent mercury vapor and estimates the concentrations and wet and dry deposition rates of gaseous divalent mercury. The chemical-physical parameters used to define divalent mercury are summarized in Table 2-11.

Dioxin and Furan Vapor – This run is specific for dioxin and furan vapor and estimates the concentrations and wet and dry deposition rates of gaseous dioxin and furan vapors. The chemical-physical parameters used to define divalent mercury are summarized in Table 2-11.

The information needed by AERMOD to evaluate gaseous wet deposition (Henry's law constant, air and water diffusivities, and cuticular resistance term) was input in the particle-bound run. Because there are 17 different dioxin and furan congeners each with compound-specific values for Henry's law constants, air- and water-phase diffusivities, and cuticular resistance terms, a sensitivity analysis was conducted to assess the affect the differing congener-specific values on the final deposition results. The sensitivity analysis showed that the influence of the differing compound-specific values had a negligible effect on the deposition rate results, and that particle deposition accounted for all the deposition estimated by AERMOD. Accordingly, wet and dry deposition of dioxin and furan vapors was represented by the most conservative of the congeners, 1,2,3,7,8-PeCDF.

AERMOD was set up to generate annual average concentrations and deposition rates for each of the aforementioned modeling runs. Output was generated for each receptor for processing in the terrestrial and aquatic fate and transport models described in Section 4.0.

2.3.5 Transport and Deposition of Mercury

Much research recently has focused upon the special deposition characteristics of mercury emissions from combustor stacks. There are many remaining questions concerning the behavior of mercury in the atmosphere and at the point of deposition and uptake into plants or soil. U.S. EPA (2005) recognizes that stack emissions contain mercury in both vapor and particulate form. Further, vapor emissions are believed to include both elemental (Hg^0) and oxidized (e.g., Hg^{2+}) species, while particulate emissions are believed to be primarily oxidized species. The speciation of mercury likely depends upon the fuel source, operating conditions, and emission controls.

The majority of mercury emissions are in the vapor form, although some particle-bound mercury is believed to be emitted. All mercury emitted is believed to be emitted either as Hg^0 or Hg^{2+}. Among the total mercury emissions, a majority of total emissions of mercury are not deposited and are considered to be vertically diffused to the free atmosphere to become part of the global cycle (U.S. EPA, 2005). U.S. EPA (2005) recommends assuming that 48% of total emitted mercury is emitted as Hg^{2+} and 0.2% of total emitted mercury is emitted as Hg^0. These fractions account for the majority of total emitted mercury that is lost to the global cycle. Methylmercury is not assumed to be emitted from the stack.

The fraction of total mercury emissions that is assumed to be emitted as Hg^{2+} (48%) is evaluated via both inhalation and indirect exposure (deposition onto surfaces and uptake into plants and animal products). The fraction of total mercury emissions that is assumed to be emitted as vapor Hg^0 is evaluated via inhalation only.

EPA (2005) lists default assumptions for mercury speciation for use when site-specific data are not available. The default assumptions are: 20% elemental vapor, 60% divalent vapor, and 20% divalent particle-bound. During the June 2001 sampling event, information about the speciation of mercury emissions (elemental vapor, ionic vapor and ionic particles) was collected by AirKinetics. It was found that the site-specific speciation is as follows: 3% elemental vapor, 96.6% divalent vapor, and 0.3% divalent particle-bound (see Table 2-4). This results in a site-specific change in the assumption of percentage of total mercury deposited from 48% (EPA default) to 66% (site-specific value). Similar testing performed in June 2002 yielded similar results: 2.2% elemental vapor, 97.1% divalent vapor, and 0.6% divalent particle-bound. The resulting fraction deposited is also 66%.

U.S. EPA (2005) recommends assuming that a fraction of the Hg^{2+} that deposits on surfaces may become methylated. In soil, 98% of deposited Hg^{2+} remains as Hg^{2+}, while the remaining 2% of deposited Hg^{2+} becomes methylmercury (U.S. EPA, 2005). Among the total mercury that deposits on water bodies, 85% is assumed to remain Hg2+, and 15% is assumed to be converted to methylmercury. Mercury can also enter water bodies via runoff and erosion. U.S. EPA (2005) recommends that 2% of the mercury in this watershed soil is converted to methylmercury and enters the water body as such. Additionally, U.S. EPA (2005) 15% of the Hg^{2+} in watershed soil that enters the water body as a result of runoff and erosion becomes methylated in the water body. In recommending that 15% of Hg^{2+} entering the waterbody becomes methylated, U.S. EPA (2005) refers to the Mercury Study Report to Congress (U.S. EPA, 1997b), as a source for the "typical" amount of methylmercury, as a proportion of total mercury concentration in various media. The 2% methylmercury content of soils is consistent with that reported in U.S. EPA (1997b). However, the 15% default for the fraction of the mercury concentration in surface water that becomes methylated is not supported by the reference cited in U.S. EPA (1998a). U.S. EPA (1997b) derives proportional methylmercury content of surface water bodies from reports on individual water bodies and (on page 3-10 of Volume III of the Report) states: "*levels around 10% being the most common.*"

This section of U.S. EPA (1997b) contains a Table (Table 3-7) containing a summary of five original studies reporting methylmercury as a fraction of total mercury concentration. No percentage listed on the Table exceeds 14%. Appendix B to Volume III of U.S. EPA (1997b), which contains the methodology for derivation of the BAFs cited in the draft U.S. EPA (2005), provides a statistical analysis of the proportional water concentration of methylmercury in the epilimnion (the epilimnion is that portion of the water column above a point of temperature change, or thermocline) and report on page D-22 that the most appropriate point estimate from the data collected is 7.8%.

Because U.S. EPA (2005) has mis-cited the data and conclusions of the Mercury Study Report to Congress (U.S. EPA, 1997b), this risk assessment will use a value of 7.8% as the appropriate value for proportional methylmercury concentration for freshwater.

2.4 Air Modeling Results

The following sections describe the output from AERMOD air modeling. Appendix A contains the complete output from all dispersion and deposition modeling for all nodes. Summary tables in this Section show the average results for all locations evaluated in the risk assessment (for example, the farm, the maximum residence, Pearl Harbor, etc.). However, because of the large volume of individual AERMOD runs, the output is displayed on figures for only those runs that contribute significantly to estimated potential risks.

2.4.1 Normalized Air Concentrations

The annual average normalized ambient air concentrations (in ug/m^3 for a source strength of 1 g/sec) calculated by the AERMOD model are averaged over the receptor locations described in Section 4.0, as shown in Tables 2-12 and 2-13. Appendix A contains the complete output from dispersion and deposition modeling for all receptor nodes.

Figure 2-4 shows the normalized air concentrations of compounds emitted in particle-bound form (dioxin and furan congeners). Figure 2-5 shows the normalized air concentrations of compounds emitted in particle-phase form. Figure 2-6 shows the normalized air concentrations of elemental mercury emitted in vapor form. Figure 2-7 shows the normalized air concentrations for divalent mercury emitted in vapor form. Figure 2-8 shows the normalized air concentrations for dioxin and furan vapor.

2.4.2 Deposition Fluxes

The comparable normalized particle deposition fluxes are presented for the two size distributions utilized to represent the different types of emitted constituents: those that adhere to the surface (surface-weighted), and those which make up the volume (mass-weighted) of the depositing particles. Additionally, deposition fluxes are also presented for vapor-phase deposition. Appendix A contains the complete output from dispersion and deposition modeling for all receptor nodes.

Normalized deposition rates are presented for these specific receptor locations in Tables 2-12 and 2-13.

Figure 2-9 shows the normalized total (wet plus dry) deposition rates of compounds emitted in particle-bound form (dioxin and furan congeners). Normalized total deposition rates of compounds emitted in particle-phase form (metals except mercury) are shown on Figure 2-10. Figures 2-11 shows the normalized total deposition rates of elemental mercury emitted in vapor form while figure 2-12 shows the normalized total deposition rates of divalent mercury emitted in vapor form. Figure 2-13 shows the normalized total deposition rates of dioxin and furan congeners emitted in vapor form.

3.0 TOXICITY ASSESSMENT

The purpose of the Toxicity Assessment is to identify both the types of adverse health effects a CPC may potentially cause as well as the relationship between the magnitude of CPCs to which receptors may be exposed (dose) and the likelihood of an adverse health effect (response). Adverse health effects are characterized as carcinogenic or noncarcinogenic. Dose-response relationships are defined for oral and inhalation routes of exposure. The results of the Toxicity Assessment, when combined with the results of the Exposure Assessment (Section 4.0), provides a conservative estimate of potential risk.

Section 3.1 describes the approach for developing noncarcinogenic dose-response values and presents the oral and inhalation noncarcinogenic dose-response values used in this risk assessment. The carcinogenic dose-response relationships are discussed in Section 3.2, and the carcinogenic dose-response values used in this risk assessment are presented. Dose-response information used in this risk assessment was obtained from the U.S. EPA (2005), U.S. EPA's Integrated Risk Information System (U.S. EPA, 2008b-), or the Health Effects Assessment Summary Tables (U.S. EPA, 1997).

For compounds that do not have dose-response values listed in these sources, other methods were used to derive dose-response values.

3.1 Noncarcinogenic Dose-Response

Compounds with known or potential noncarcinogenic effects are assumed to have a dose below which no adverse effect occurs, or conversely, above which an effect may be seen. This dose is called the threshold dose. In the laboratory experiments, this dose is known as the No Observed Adverse Effect Level (NOAEL). The lowest dose at which an adverse effect is seen is called the Lowest Observed Adverse Effect Level (LOAEL). U.S. EPA has used these values to develop Reference Doses (RfDs) and Reference Concentrations (RfCs) for chronic exposures to compounds with potential noncarcinogenic effects. For compounds with potential noncarcinogenic effects, the RfD or RfC provides reasonable certainty that if the specified exposure dose is below the threshold, then no noncarcinogenic health effects are expected to occur even if daily exposure were to occur for a lifetime. RfDs are expressed in terms of milligrams of compound per kilogram of body weight per day (mg/kg-day), and RfCs are expressed in terms of milligrams of compound per cubic meter of air (mg/m^3). Table 3-1 summarizes the dose-response information for CPCs with potential noncarcinogenic effects via the inhalation and oral routes of exposure.

3.2 Carcinogenic Dose-Response

The underlying assumption of regulatory risk assessment for compounds with known or assumed potential carcinogenic effects is that no threshold dose exists. In other words, it is assumed that a finite level of risk is associated with any dose above zero, theoretically even a single molecule could cause some level of risk. For carcinogenic effects, a two-step evaluation is used, in which the compound is assigned a weight-of-evidence classification, and then a cancer slope factor (CSF) is calculated. The weight-of-evidence classification is based on the likelihood of the compound being a human carcinogen.

In the second part of the evaluation, CSFs are calculated for compounds that are known or probable human carcinogens. The U.S. EPA has developed computerized models that extrapolate observed responses at high doses used in animal studies to predicted responses in humans at the low doses encountered in environmental situations. The models developed by the EPA assume no threshold and use animal as well as human data to develop an estimate of the carcinogenic potency of a compound. This numerical estimate is referred to as the cancer slope factor. The computerized models assume that carcinogenic dose-response is linear at low doses.

Table 3-1 summarizes the dose-response information for CPCs for this risk assessment assumed to produce potential carcinogenic effects through the oral and inhalation routes of exposure. Carcinogenic dose-response values are expressed in terms of $(mg/kg\text{-}day)^{-1}$.

4.0 EXPOSURE ASSESSMENT

This section identifies the type and magnitude of potential exposures to CPCs that receptors may experience as a result of exposure to emissions from the Facility. First, potential receptors are identified, based on conditions present at the Facility and surrounding area. Next, potential routes of exposure are identified for each receptor, based on information about activities that typically occur in the area.

Section 4.1 of the Exposure Assessment describes the study area. Based on this information, receptors are identified in Section 4.2. The potential exposure pathways by which these receptors may be exposed are identified in Section 4.3. Section 4.4 describes the methodology used to estimate exposure point concentrations, or the magnitude of compounds which a receptor may contact in a given environmental medium. Finally, a discussion of the methodology used to estimate exposure doses is explained in Section 4.5. This section also includes a discussion of the exposure parameters assumed for each receptor and exposure pathway.

4.1 Description of the Study Area

The risk assessment study area was defined as a zone with a radius of approximately 30 km around the Facility. Prior to conducting air dispersion and deposition modeling, AMEC identified several locations to be included as "exposure areas" for various receptors in the risk assessment. These were based on site-specific reconnaissance and included a composting facility, located just to the north of the H-POWER Facility, which sells compost for home gardening, a few homes in Nanakuli where people appear to raise poultry or eggs, and an agricultural area just west of Honouliuli (see Figure 4-1). Air modeling was conducted for these specific locations, as well as for three water bodies and watersheds potentially used by fishermen: Pearl Harbor, the West Loch of Pearl Harbor, and Wahiawa Reservoir (see Figure 4-1). AMEC also identified a location to the northeast of the Facility as the location for the maximally affected hypothetical resident (a residential portion of the former Barbers Point Naval Air Station) (see Figure 4-1).

4.2 Identification of Receptors

The risk assessment guidance requires that risks be evaluated for three groups of people (residents, farmers, and fishers) who may or may not actually live in the study area around the Facility that is the subject of the risk assessment. This is required so that all of the ways that Facility emissions could affect human health are evaluated. The guidance requires that these groups of people are assumed to be located in areas defined as locations of maximum impact where it is reasonable to anticipate that they could be exposed to Facility emissions.

After evaluating the results of the air dispersion and deposition modeling, AMEC identified a location northeast of the Facility on the property of the former Barber's Point Naval Air Station as the location for the maximally affected hypothetical resident (and recreational fisher) and a location northeast of the Facility as the location for the maximally affected hypothetical farmer. Each of these groups of people is called a "receptor" in this risk assessment. The receptors identified are summarized as follows:

- Resident living at the residential area most affected by the Facility;
- Resident living at the residential area most affected by the Facility who uses compost from the composting facility in his or her home garden and yard;
- Farmer living in the farming area most affected by the Facility;
- Nanakuli resident who raises poultry and eggs at that location;
- Resident living at the residential area most affected by the Facility who fishes recreationally in Pearl Harbor;
- Resident living at the residential area most affected by the Facility who fishes recreationally in the West Loch of Pearl Harbor; and
- Resident living at the residential area most affected by the Facility who fishes recreationally in Wahiawa Reservoir.

As mentioned above, the land immediately surrounding the Facility in the direction of highest impact (northeast) is part of the former Barber's Point Naval Air Station. Housing units exist in the northwestern corner of the former Naval Air Station. However, no plans exist for any other portion of the western edge of the former Naval Air Station to be developed for residential use, as indicated by City and County planning documents and the Kapolei Area Long Range Master Plan. Therefore, the local resident was assumed to live in the currently residential area portion of the former Barber's Point Naval Air Station, located approximately three km northeast of the Facility. To estimate the unitized air concentrations and deposition rates necessary for modeling exposure point concentrations, the results of air quality modeling at the receptor nodes covering the area were averaged to represent conditions at this location.

The Kapolei Area Long Range Master Plan shows that there are also plans for residential, low density apartment, and medium density apartment developments to the north and northwest of the facility. These locations are not in the direct of the highest impact from the facility, and air concentrations and deposition rates are lower in these areas. Consequently, the estimated risks for residents in these areas are less than the risk estimates presented in this report for the resident receptor.

The farmer was assumed to reside in the area of the closest actual farming location in the direction of maximum Facility impacts. A review of current land use and County Planning documents for the study area and visual observations of the study area indicate that an area northeast of the Facility is the closest agricultural area. This location is approximately 4.5 km northeast of the Facility. To estimate the unitized air concentrations and deposition rates necessary for modeling exposure point concentrations, the results of air quality modeling at the receptor nodes covering the farming location were averaged to represent conditions at this location. According to the Kapolei Area Long Range Master Plan, this area is planned to transition from agricultural to residential and other land uses in the future. As such, the designation of this current farming location for the farmer receptor is conservative and overestimates actual risks.

The recreational fisher was assumed to reside either at the residential area northeast of the Facility, and to catch fish from one of three locations: Pearl Harbor, the West Loch of Pearl Harbor, or the Wahiawa Reservoir. To estimate the unitized air concentrations and deposition rates necessary for modeling concentrations in these water bodies and their corresponding watersheds, the results of air quality modeling at the receptor nodes "covering" each watershed and the water body were averaged to represent conditions at each location.

Both child and adult receptors were evaluated for all scenarios. Though recreational fishers were evaluated in the risk assessment for three water bodies within or near the study area, there is an active fishing advisory for all fish and shellfish in Pearl Harbor. As a result, it is unlikely that residents would fish there. However, the West Loch of Pearl Harbor and Pearl Harbor itself were conservatively included in the assessment.

4.3 Description of Potential Exposure Pathways

Potential exposure pathways are the mechanisms by which the receptors in the study area may be exposed to compounds emitted from the Facility. According to U.S. EPA (1989), four elements must be present in order for a potential human exposure pathway to be complete:

- a source and mechanism of compound release to the environment (in this case, emissions from the stack);
- an environmental transport medium (in this case, air);
- an exposure point, or point of potential contact with the potentially impacted medium; and
- a receptor (i.e., a person) with a route of exposure at the point of contact.

Both direct and indirect exposure pathways were evaluated. Direct exposure pathways involve a receptor's direct contact with a compound in an environmental medium such as air, water or soil. The direct pathways examined in this risk assessment include:

- inhalation of particulate and gaseous compounds; and
- incidental ingestion of soil.

Indirect exposure pathways involve exposure to compounds through the food chain. For example, people may be indirectly exposed to compounds by eating fish that have been exposed to compounds in water or sediments. The indirect pathways evaluated in this risk assessment include:

- consumption of produce;
- consumption of fish;
- consumption of beef;
- consumption of pork;
- consumption of poultry;
- consumption of eggs; and
- consumption of dairy products.

The risk assessment assumed that exposure could occur through the following direct and indirect pathways:

- inhalation of emissions from the Facility;
- contact with soil while outdoors;

- consumption of produce grown in backyard gardens or farms;
- consumption of fish caught from Pearl Harbor, the West Loch of Pearl Harbor, or Wahiawa Reservoir;
- consumption of beef from the farm located northeast of the Facility;
- consumption of dairy products from the farm located northeast of the Facility;
- consumption of pork from the farm located northeast of the Facility;
- consumption of poultry from the farm located northeast of the Facility or the Nanakuli residence; and
- consumption of eggs from the farm located northeast of the Facility or the Nanakuli residence.

However, not all pathways are evaluated for all receptors. Potential pathways evaluated for the resident receptors included:

- Inhalation of emissions from the Facility;
- Incidental ingestion of soil while working or playing outdoors; and
- Ingestion of produce grown in backyard gardens.

Potential exposure pathways for the resident adult and child who use compost from the local composting facility include:

- Inhalation of emissions from the Facility;
- Incidental ingestion of soil presumed to be purchased compost while working or playing outdoors; and
- Ingestion of produce grown in composted backyard gardens.

Potential pathways evaluated for the fisher receptors included:

- Inhalation of emissions from the Facility;
- Incidental ingestion of soil while working or playing outdoors;
- Ingestion of produce grown in backyard gardens; and
- Ingestion of fish caught from Pearl Harbor, the West Loch of Pearl Harbor, or Wahiawa Reservoir.

Potential exposure pathways for the farmer adult and child include:

- Inhalation of emissions from the Facility;
- Incidental ingestion of soil while working or playing outdoors;
- Ingestion of produce grown on the hypothetical farm; and
- Consumption of food products (beef, dairy, pork, poultry, and eggs) grown on the hypothetical farm.

Potential exposure pathways for the resident adult and child who live in Nanakuli include:

- Inhalation of emissions from the Facility;
- Incidental ingestion of soil while working or playing outdoors;

- Ingestion of produce grown in backyard gardens; and
- Consumption of poultry and eggs from backyard facilities.

Because drinking water on O'ahu comes from groundwater, drinking water is not significantly exposed to Facility emissions. As a result, that exposure pathway was not evaluated in this risk assessment.

It should be noted that, while some of the scenarios outlined above are likely to occur as outlined, some of them are hypothetical scenarios that have a low likelihood of occurrence. For example, the farmer scenario assumes that the hypothetical farm family will consume homegrown produce, beef, dairy products, eggs, poultry, and pork, all of which have been raised on their farm. The likelihood that an individual farm family would grow and consume all of these different food items on a single farm is very low. As a result, the scenario evaluated is very conservative and is likely to substantially overstate actual exposures to farmers in the vicinity of the Facility who might be exposed through some of these pathways. However, in order to be consistent with U.S. EPA guidance for risk assessment of combustion facilities (U.S. EPA, 2005), this theoretical farming scenario has been constructed to provide a worst-case analysis that ensures that risks will not be underestimated for any farm families who might live near the Facility.

The amount of exposure through different pathways varies depending on the receptor's location and activities (discussed in Sections 4.4 and 4.5). Certain pathways, such as consumption of fish, do not depend on the location where a receptor is assumed to reside. The extent of exposure via other pathways (inhalation, soil ingestion, consumption of produce) depends on the location where the receptor is assumed to reside. Only the farmer was assumed to be exposed via consumption of beef, dairy products, and pork. The resident in Nanakuli, however, was assumed to be exposed to homegrown poultry and eggs. Only the fisher was assumed to be exposed via consumption of fish.

The input parameters used to quantify each exposure pathway are described in Section 4.5.

4.4 Estimation of Exposure Point Concentrations

This section describes the mechanisms by which compounds emitted from the Facility are transported through the environment (air, soil, and water) to points of exposure where receptors may contact them. The modeling techniques used to estimate exposure point concentrations in environmental media affected by Facility emissions are also summarized in this section.

Compound concentrations in each medium at each location are also presented in this section.

4.4.1 Ambient Air

The receptors evaluated in this risk assessment may be exposed via inhalation to compounds emitted from the Facility. Receptors are assumed to be exposed to all compounds expected to be emitted from the Facility via the inhalation route of exposure. In addition, receptors are also assumed to be exposed to all compounds, including all metals and semivolatile organic compounds, as a result of deposition onto soil, water, or vegetation in the study area. All compounds may be available for human consumption via the food chain.

Concentrations of gaseous, particle-phase, and particle-bound compounds in air have been determined using air dispersion modeling. Section 2.3 describes the methodology used to estimate the concentrations of compounds in ambient air. Concentrations of compounds in ambient air were predicted for the following locations:

- Residential area northeast of the H-POWER Facility;
- Local agricultural area northeast of the H-POWER Facility;
- Local composting facility north of the H-POWER Facility;
- Local backyard poultry operations north of the H-POWER Facility;
- West Loch of Pearl Harbor and its watershed;
- Pearl Harbor and its watershed, and;
- Wahiawa Reservoir and its watershed.

Deposition modeling has been performed using the modeling approach, as described in Section 2.3. As previously stated, all compounds (except elemental mercury) are assumed to deposit on available surfaces. Predicted concentrations in air at the identified locations resulting from emissions from the Facility are derived using emission rates provided in Table 2-7 and air modeling results provided in Tables 2-12 and 2-13.

Table 4-1 shows compound-specific parameter values used to calculate EPCs, including the fraction of the air concentration in vapor phase. As all of the receptors were assumed to live either at the residential area, in Nanakuli, or at the agricultural area to the northeast of the Facility, air concentrations at these three locations were used as the air exposure point concentrations in the risk assessment models (Table 4-2).

4.4.2 Soil

Many of the compounds emitted from the Facility are assumed to be bound to particulates or are assumed to be emitted in particulate phase, and deposition of these particulates onto the soil surface is assumed to take place during the entire lifespan of the Facility. Vapor phase compounds are also subject to deposition phenomena.

Soil concentrations due to CPC emissions were calculated at several locations in the vicinity of the Facility. These included the residential area, Nanakuli, the agricultural area, and the composting area, and the watersheds for Pearl Harbor, the West Loch, and the Wahiawa Reservoir.

The calculation of soil concentration at a location depends on the deposition rate of each compound at that location, as well as the properties of each compound that control its loss from the soil. Loss of concentration from soil can be from chemical degradation, volatilization, as well as from leaching due to infiltration.

Chemical concentrations in soil were estimated from predicted deposition rates using U.S. EPA methodology (U.S. EPA, 2005). The guidance materials were used to estimate CPC concentrations in soil. As recommended by U.S. EPA, different algorithms were used to estimate CPC concentrations for the purposes of estimating potential carcinogenic and noncarcinogenic risk. The algorithms for estimating CPC concentrations for estimating potential carcinogenic effects calculated the concentration averaged over the exposure duration (30 years), and the algorithm for estimating potential noncancer effects calculated the maximum annual soil concentration.

Estimated CPC concentrations in soil assume annual average deposition rates and loss of CPC from the soil via leaching, runoff, erosion, degradation, and volatilization. U.S. EPA (2005) provides estimates of biotic and abiotic degradation in soil. CPC loss via surface runoff, erosion, and leaching are estimated using equations supplied in U.S. EPA (2005).

The calculations assume that the Facility is operating for 30 years. Concentrations were calculated for two compound mixing depths (1 cm and 20 cm). The 1 cm depth is referred to as surface soil and used to estimate exposure via incidental soil ingestion, uptake into forage vegetation, and for estimating erosion and runoff. The 20 cm depth is referred to as subsurface soil and used to estimate compound concentrations in garden produce, grain, and silage vegetation.

Table 4-3 shows the predicted concentrations of compounds in 1 cm and 20 cm soil used to evaluate both noncancer and cancer risks for all relevant locations.

4.4.3 Surface Water

Just as emitted compounds may deposit on soil surfaces, compounds may also deposit onto the surface of a water body, such as Pearl Harbor, the West Loch of Pearl Harbor, or Wahiawa Reservoir. Soil in the designated watershed area of each surface water body onto which compounds have deposited may be eroded from nearby hillsides. Individuals who live within the study area may catch and eat fish from one of the water bodies, which have taken up compounds that have deposited on the surface of the water bodies or runoff into the water bodies. U.S. EPA guidance (2005) was used to estimate concentrations of compounds in surface water in each water body as a result of direct deposit onto the water surface and loading via soil erosion.

U.S. EPA's 2005 guidance calculates the amount of soil runoff into waterbodies using the area of only the pervious land within the corresponding watershed, but using the total deposition onto both the pervious and impervious portions of the watershed. AMEC modified that method to allow the use of the actual deposition rates onto the pervious portions of the three watersheds. A geographic information system was used to determine the pervious and impervious portions of each watershed. Impervious land was assumed equal to the sum of conservation land with slopes greater than 45 degrees, urban land with slopes greater than 45 degrees, and 75% of urban land with slopes less than 45 degrees (to account for paved flat areas). Pervious area was assumed equal to the sum of all agricultural land regardless of slope, conservation land with slopes less than or equal to 45 degrees, and 25% of urban land with slopes less than or equal to 45 degrees. Deposition rates were calculated for each of these land use types (e.g., conservation, urban, agricultural) to determine the total deposition onto the pervious land within each separate watershed. While this is a variation from U.S. EPA methodology, it is a logical refinement.

The average annual precipitation rate of 132.1 cm per year is the average of eight weather stations reporting rain data during the years 1980 through 2002 (Aiea Heights, Aloha Stadium, Ewa Plantation, Honolulu Observatory, Kaheohe Mauka, Moanalua, Upper Wahiawa, Waiawa, and Waipahu). This is a conservative estimate of precipitation in the study area because some of the weather stations are considered rainforest locations. The value of 132.1 cm per year is three times higher than statewide average precipitation rate and six times higher than average Honolulu Airport precipitation rate. The average annual surface runoff at the Facility was estimated to be 39.6 cm per year, or 30% of the average annual precipitation (Oki, Gingerich and Whitehead, 1999). The average annual evapotranspiration value of 88.9 cm/year was estimated assuming 70% of the pan evaporation rate of 127 cm per year given by Ekern and Chang (1985.) This evapotranspiration rate likely overestimates actual evapotranspiration in the three watersheds. The factor of 70% is given by Western Regional Climate Center to "more closely estimate the evaporation from naturally existing surfaces" (www.wrcc.dri.edu/htmlfiles/westevap.final.htm). The irrigation rate of 39 cm per year is 10% of the average irrigation rate for the whole Island from Water Atlas of the United States. This value refers only to pervious watershed areas, which are 18-50% agricultural. However, these areas receive more rain that other agricultural areas.

The Universal Soil Loss Equation (USLE) and a sediment delivery ratio were employed to estimate rates of erosion. The calculation of surface water concentrations assumed a sediment mass balance (that is, sediments do not accumulate and are not lost from the water body) and equilibrium conditions between surficial sediments and the water column. Concentrations of CPCs in the water column and in benthic sediments were calculated, based upon the estimated concentrations in the total water body and the fraction of water body concentration in the water column and benthic sediments, respectively. CPC loads to the water body were based on average deposition rates to land and water surfaces in each watershed.

The USLE requires several area-specific input values to predict soil loss. The rainfall-erosivity factor is a measure of the energy from a storm event and the associated sediment erosion generated. The rainfall-erosivity factor is 75.16, which corresponds to 12 storms per year.

Compound concentrations in surface water were estimated from predicted deposition rates using U.S. EPA methodology (U.S. EPA, 2005). The calculations assume that the Facility is operating for 30 years. Table 4-4 shows the predicted concentrations of compounds in 1 cm soil in each watershed and the predicted concentrations of compounds in the corresponding water body used to evaluate both noncancer and cancer risks.

4.4.4 Concentrations in Produce and Vegetation

CPCs emitted from the Facility may be deposited onto soil surfaces. Deposition may also occur directly onto vegetation. Uptake by plants of compounds in the vapor state can also occur. Above-ground crops can, therefore, potentially be exposed to compounds by deposition, by root uptake from the soil, or by direct vapor uptake. Below-ground crops are assumed to be exposed to compounds via root uptake from the soil. Uptake in plants through deposition, root uptake, and vapor uptake are discussed in the following sections.

<u>Uptake into Plants via Direct Deposition</u>

The compound concentration due to direct deposition onto the plant is a function of the rate of deposition onto the edible surfaces of the plant, the interception fraction, the weathering half-life, the crop yield, and the time until harvest. The compound concentration due to deposition is calculated for each produce type using unitized deposition rates resulting from emissions from the Facility (Tables 2-12 and 2-13) and compound emission rates (Table 2-7). Table 4-1 shows the compound-specific parameters necessary for estimating concentrations of CPCs in all media, including the fraction of emitted compounds assumed to be in the vapor form (U.S. EPA, 2005). According to U.S. EPA guidance (2005), some of the particle-bound compounds that deposit onto plants during rain events (wet deposition) can be expected to wash off of the plant as rain drops fall off the plant and onto the soil. U.S. EPA (2005) recommends a value of 0.6 for the fraction of wet deposition adhering to plant surfaces for organics and cations.

Produce type-specific interception factors are a measure of the fraction of the plant which is available for deposition. These factors are obtained from U.S. EPA (2005) and are presented in Table 4-5.

The particulate weathering halflife denotes the length of time assumed for one-half of the particulates deposited onto the surface of the plant to be removed via weathering (e.g., precipitation, dew, wind). U.S. EPA (2005) recommends a particulate weathering half-life of 14 days, corresponding to a plant surface loss coefficient of 18 yr^{-1}.

The produce-specific time until harvest is a measure of the length of time required for the plant to grow to full maturity, at which time it is assumed to be harvested. This risk assessment assumes that deposition of particulates onto the surfaces of the plant occurs every day prior to harvesting. The values for harvest time used in this risk assessment are obtained from U.S. EPA (2005). These values are presented in Table 4-5.

The produce-specific crop yield is a measure of the density of plants grown in a given area. Produce-specific crop yields used in this risk assessment are derived from U.S. EPA (2005) and are shown in Table 4-5.

Root Uptake

The compound concentration due to root uptake is calculated for all produce types using compound concentrations in soil resulting from Facility emissions presented in Table 4-6.

U.S. EPA (2005) provides soil-plant bioconcentration factors for above-ground and below-ground crops. The soil-plant bioconcentration factors used in this risk assessment are shown in Table 4-1. U.S. EPA (2005) recommends using an empirical correction factor of 0.01 to estimate concentrations of compounds with log K_{ow} greater than 4 in below-ground crops. For above-ground crops and for compounds with log K_{ow} less than 4 in below-ground crops, U.S. EPA (2005) recommends an empirical correction factor of 1.

Vapor-Phase Absorption

The compound concentration in plants due to vapor transfer into plants is estimated using compound emission rates due to Facility emissions (Table 2-7) and unitized air concentrations shown in Table 2-12 and 2-13. Air-to-plant transfer factors are provided in U.S. EPA (2005) and are shown in Table 4-1. U.S. EPA (2005) recommends using an empirical correction factor of 0.01 for compounds with a log Kow greater than 4 to estimate concentrations in above-ground plants due to uptake of vapors. To estimate concentrations of compounds with log Kow less than 4, U.S. EPA (2005) recommends an empirical correction factor of 1. No empirical correction factor is needed for below-ground crops because below-ground crops are not assumed to be exposed via uptake of vapors.

Above-ground produce, forage, and silage are assumed to be exposed to Facility emissions via direct deposition, root uptake, and uptake of vapors. Grains and below-ground produce are assumed to be exposed to Facility emissions via root uptake only. When the compound concentration due to these pathways have been determined for each produce type, the total compound concentration in each produce type can be estimated by summing the concentrations in produce due to root uptake, deposition, and vapor uptake. Table 4-6 shows the predicted concentrations of compounds in all produce types used to evaluate both noncancer and cancer risks.

4.4.5 Concentrations in Fish

Compounds in surface water as a result of deposition of particles onto Pearl Harbor, the West Loch of Pearl Harbor, and the Wahiawa Reservoir and their corresponding watersheds may be taken up into fish. Compound concentrations in fish are a function of the concentration of a compound in the water and the tendency of a compound to accumulate in fish tissue. The methodology used to estimate compound concentrations in fish is consistent with U.S. EPA (2005).

Compound Concentrations in Surface Water

Section 4.4.3 describes the methodology used to estimate concentrations of compounds in surface water in the each water body. Table 4-4 presents the concentrations of compounds in surface water from each water body.

Fish Bioconcentration Factors and Fish Bioaccumulation Factors

The fish bioconcentration factor (BCF) and the fish bioaccumulation factor (BAF) each represent the ratio of the concentration of compound in the fish tissue to the concentration of dissolved compound in the water body. This value represents the tendency for a compound to accumulate in the fish tissue after the fish has been exposed to the compound in the water body. EPA (2005) recommends using BCFs for certain metals and organics with a log Kow less than 4. For organic compounds with log Kow greater than 4 and for other metals (lead and mercury), U.S. EPA (2005) recommends using BAFs. BCFs and BAFs were obtained from U.S. EPA (2005). The product of the compound concentration in the water body and the BCF or BAF provides an estimate of the compound concentration in the fish tissue. The BCFs and BAFs used in this risk assessment are shown in Table 4-1.

Table 4-7 presents the concentrations of compounds in fish from Pearl Harbor, the West Loch, and Wahiawa Reservoir used to evaluate both noncancer and cancer risks.

4.4.6 Concentrations in Animal Products

Compounds in soil and produce as a result of deposition of particles may be taken up into animals as a result of consumption of vegetation and incidental ingestion of soil. Compound concentrations in beef, dairy, pork, poultry, and eggs are a function of the concentration of the compound in the soil, the concentration of the compound in the animal's feed, the animal's soil ingestion rate, the consumption rate of feed, and the tendency of a compound to accumulate in animal tissue. The methodology used to estimate compound concentrations in animal products is consistent with U.S. EPA (2005).

In this approach, the amount of various dietary components and the amount of soil ingested by the animal is estimated. Next, the concentration of the compound in each medium to which that animal is exposed is estimated. Then, a biotransfer factor is employed to estimate the amount of compound in the animal product. Biotransfer factors are calculated from bioconcentration factors by taking into account the amount of diet and soil ingested by the animal.

Beef and dairy cattle are assumed to ingest forage, silage, and grain. Pigs are assumed to ingest silage and grain. Poultry are assumed to ingest grain. The compound concentration in each crop type (forage, grain, silage) is calculated using the approach described above for estimating concentrations of compounds in above-ground and below ground produce (Section 4.4.4). Concentrations of compounds in silage were estimated assuming that silage is exposed to Facility emissions via direct deposition, root uptake from subsurface soil, and vapor uptake. Compound concentrations in forage are assumed to be due to direct deposition, root uptake from surface soil, and vapor uptake. Compound concentrations in grain are due to root uptake from subsurface soil. Plant-specific factors used to estimate compound concentrations in plant types are shown in Table 4-1 and were obtained from U.S. EPA (2005).

Compound concentrations in soil resulting from Facility emissions are presented in Table 4-3. Soil and plant ingestion rates for animals are presented in Table 4-5 and were obtained from U.S. EPA (2005). Root uptake factors used in this risk assessment are presented in Table 4-1 and are discussed in Section 4.5.4.

The biotransfer factor (BTF) estimates the extent to which certain compounds are transferred from the feed and soil ingested by the animal to the animal tissue. The values used in this risk assessment are presented in Table 4-1 and were obtained from U.S. EPA (2005).

4.5 Methodology for Calculating Exposure Doses

This section describes the equations and assumptions used to evaluate receptors' potential exposures to compounds in media affected by emissions from the Facility. The equations used to evaluate potential exposures in this risk assessment are consistent with equations presented in U.S. EPA (2005).

The equation used to calculate Chronic Average Daily Dose (CADD) is used to estimate a receptor's potential daily intake from exposure to compounds with potential noncarcinogenic effects. According to U.S. EPA (1989), the exposure dose should be calculated by averaging over the period of time for which the receptor is assumed to be exposed. The CADD for each compound via each route of exposure is compared to the noncarcinogenic reference dose for that compound in order to estimate the potential noncarcinogenic hazard index due to exposure to that compound via that route of exposure (see Section 5.1).

For compounds with potential carcinogenic effects, however, the equation for Lifetime Average Daily Dose (LADD) is employed to estimate potential exposures. In accordance with U.S. EPA (1989), the LADD is calculated by averaging the assumed exposure over the receptor's entire lifetime (assumed to be 70 years). The LADD for each compound via each route of exposure is combined with the cancer slope factor for that compound in order to estimate the potential carcinogenic risk due to exposure to that compound via that route of exposure (see Section 5.2).

Two age groups were evaluated for each receptor scenario. The Child age group was assumed to comprise a six-year duration from ages 1-6. The Adult age group was assumed to have a duration of 30 years. Both carcinogenic and noncarcinogenic risks were estimated for each age group.

The equations for estimating a receptor's average daily dose (both lifetime and chronic) are presented in the following subsections. The exposure parameters used in each potential exposure pathway are also discussed in the following subsections, and are shown in Table 4-9.

4.5.1 Estimation of Potential Exposure via Inhalation

Receptors assumed to live near the Facility may inhale compounds emitted from the Facility in a gaseous state, in a particulate state, or bound to particulates in the air. The Chronic Average Daily Dose (CADD) and the Lifetime Average Daily Dose (LADD) calculations estimating potential inhalation exposure are presented in Appendix B. The equation used to calculate the CADD and LADD due to inhalation exposure is as follows:

$$A = \frac{B \times C \times D \times E}{F \times G}$$

where:

A = CADD or LADD following Inhalation (mg/kg-day)
B = Compound Concentration in Ambient Air (mg/m^3)
C = Inhalation Rate (m^3/day)
D = Exposure Frequency (days/year)
E = Exposure Duration (years)
F = Body Weight (kg)
G = Averaging Time (days)

Inhalation exposure is a function of the ambient concentration of the air concentration, inhalation rate, exposure frequency, exposure duration, and human body weight. Each of the parameters in these equations is described below.

Compound Concentration in Ambient Air

The methodology for calculating compound concentrations in ambient air is presented in Section 2.3. Predicted compound concentrations in ambient air for the various locations are shown in Table 4-2.

Inhalation Rate

The inhalation rates assumed for the receptors in this risk assessment are presented in Table 4-9. Daily inhalation rates for children and adults were obtained from U.S. EPA (2005). An inhalation rate of 15.2 m^3/day was used for the adult, and an inhalation rate of 8.1 m^3/day was used for the child. The calculation of average daily doses of compounds via inhalation assumes that emissions will be continuous for a 30-year operating period.

Body Weight

As shown in Table 4-9, the body weights assumed in this risk assessment are 15 kg for the child and 70 kg for the adult receptors (U.S. EPA, 2005).

Exposure Duration

The exposure durations are presented in Table 4-9. It was assumed that the child is exposed for six years and the resident and fisher adults are exposed for 30 years. The adult farmer is assumed to be exposed for 40 years (U.S. EPA, 2005).

Averaging Time

The average daily dose of compounds used to calculate noncarcinogenic risks must be averaged over the duration which the receptor is assumed to be exposed (U.S. EPA, 1989). For the child receptor, this is 2,190 days (six years). For the adult receptor, the noncancer averaging time is 10,950 days (30 years).

The average daily dose used to determine potential carcinogenic effects, however, must be averaged over the entire lifetime (70 years, or 25,550 days), regardless of the length of time which the receptor is assumed to be exposed (U.S. EPA, 1989). The Averaging Time values for the receptors are presented in Table 4-9.

4.5.2 Estimation of Potential Exposure via Contact with Soil

For purposes of this study it was assumed that CPCs may be deposited onto soil surfaces within the study area. Children can incidentally ingest soil while playing outdoors, while adults may incidentally ingest soil while engaged in outdoor activities such as gardening or sports. This approach is consistent with EPA guidance on performing risk assessments for combustor facilities (U.S. EPA, 2005).

The Chronic Average Daily Dose (CADD) and the Lifetime Average Daily Dose (LADD) calculations estimating potential soil ingestion and dermal contact exposure are presented in Appendix B. The equation used to calculate the CADD and LADD due to soil ingestion and dermal contact is as follows:

$$A = \frac{B \times C \times D \times E}{F \times G}$$

where:

A = CADD or LADD following Incidental Ingestion of Soil (mg/kg-day);
B = Compound Concentration in Surface Soil (mg/kg);
C = Soil Ingestion Rate (mg/day);
D = Exposure Frequency (days/year);
E = Exposure Duration (years)
F = Body Weight (kg);
G = Averaging Time (years).

Each of the parameters used in these equations is described below.

Compound Concentration in Surface Soil

Receptors are assumed to contact soil from the top one centimeter (defined as surface soil). The methodology used to determine concentrations of compounds in soil is presented in Section 4.4.2. Surface soil concentrations at the various receptor locations resulting from emissions from the Facility are presented in Table 4-3.

Soil Ingestion Rate

The soil ingestion rates used in this risk assessment are 100 mg/day for the child and 50 mg/day for the adult. The soil ingestion rates are from U.S. EPA (2005). These values are presented in Table 4-9.

Exposure Frequency

The risk assessment assumes that receptors can contact soil outdoors at an exposure frequency of 350 days per year. This frequency assumes that receptors take two weeks of vacation each year. These values are presented in Table 4-9 for the various receptors.

Body Weight

As shown in Table 4-9, the body weights assumed in this risk assessment are 15 kg for the child and 70 kg for the adult receptors (U.S. EPA, 2005).

Exposure Duration

The exposure durations are presented in Table 4-9. It was assumed that the child is exposed for six years and the resident and fisher adults are exposed for 30 years. The farmer adult is assumed to be exposed for 40 years (U.S. EPA, 2005).

Averaging Time

The average daily dose of compounds used to calculate noncarcinogenic risks must be averaged over the duration which the receptor is assumed to be exposed (U.S. EPA, 1989). For the child receptor, this is 2,190 days (six years). For the adult receptor, the noncancer averaging time is 10,950 days (30 years) or 14,600 days (40 years).

The average daily dose used to determine potential carcinogenic effects, however, must be averaged over the entire lifetime (70 years, or 25,550 days), regardless of the length of time which the receptor is assumed to be exposed (U.S. EPA, 1989). The Averaging Time values for the receptors are presented in Table 4-9.

4.5.3 Estimation of Potential Exposure via Consumption of Produce

Potential exposure is a function of the amount of produce ingested per day, concentration of compounds associated with the produce, percentage of ingested produce that is home-grown, growing season, weathering removal, and human body weight. This approach is consistent with EPA guidance on performing risk assessments for combustor facilities (U.S. EPA, 2005).

The Chronic Average Daily Dose (CADD) and the Lifetime Average Daily Dose (LADD) calculations estimating potential exposure via produce consumption are presented in Appendix B. The equation used to calculate the CADD and LADD due to produce consumption is as follows:

$$A = \frac{B \times C \times D \times E \times F}{G \times H}$$

where:

A = CADD or LADD following Ingestion of Produce (Above-ground or Below-ground) (mg/kg-day);
B = Compound Concentration in Produce (Above-ground or Below-ground) (mg/g);
C = Consumption Rate for Produce (Above-ground or Below-ground) (g/day);
D = Fraction of Produce which is Homegrown;
E = Exposure Frequency (days/year)
F = Exposure Duration (years); and
G = Body Weight (kg);
H = Averaging Time (days)

Each of the parameters used in these equations is described below.

Compound Concentration in Produce Type

Concentrations were predicted in above-ground plants by assuming root uptake of compounds in soil, direct deposition of compounds in the air, and vapor uptake into leaves. Concentrations in below-ground plants were predicted by assuming root uptake of compounds in soil. Compound concentrations in produce types are shown in Table 4-6.

Consumption Rate for Produce Type

Consumption rates for each produce type for the receptor were obtained from U.S. EPA (2005) and are presented in Table 4-9. As shown in Table 4-9, the produce type consumption rates are identical for each of the receptors. The farmer is assumed to grow produce for personal consumption. This receptor is not assumed to grow large quantities of produce to sell commercially.

Fraction of Produce that is Homegrown

As shown in Table 4-9, it was assumed that 100% of the produce consumed originates from the garden or farm for all receptors (EPA, 2005).

Body Weight

As shown in Table 4-9, the body weights assumed in this risk assessment are 15 kg for the child and 70 kg for the adult receptors (U.S. EPA, 2005).

Exposure Duration

The exposure durations are presented in Table 4-9. It was assumed that the child is exposed for six years and the resident and fisher adults are exposed for 30 years. The farmer adult is assumed to be exposed for 40 years (U.S. EPA, 2005).

Averaging Time

The average daily dose of compounds used to calculate noncarcinogenic risks must be averaged over the duration which the receptor is assumed to be exposed (U.S. EPA, 1989). For the child receptor, this is 2,190 days (six years). For the adult receptor, the noncancer averaging time is 10,950 days (30 years) or 14.600 days (40 years).

The average daily dose used to determine potential carcinogenic effects, however, must be averaged over the entire lifetime (70 years, or 25,550 days), regardless of the length of time which the receptor is assumed to be exposed (U.S. EPA, 1989). The Averaging Time values for the receptors are presented in Table 4-9.

4.5.4 Estimation of Potential Exposure via Consumption of Fish

As described in Section 4.2, residents who live in the study area may fish in the Lakes complex. Receptors may be exposed to compounds in the Lakes complex via consumption of fish which have taken up compounds from the water. Exposure to compounds via consumption of fish which have taken up compounds from the surface water is a function of the concentration of compound in the surface water, the tendency of the compound to bioconcentrate in the fish tissue, the receptor's fish consumption rate, and the receptor's body weight. The Chronic Average Daily Dose (CADD) and the Lifetime Average Daily Dose (LADD) calculations estimating potential exposure via consumption of fish which have taken up compounds from surface water are presented in Appendix B. The equation used to calculate the CADD and LADD due to consumption of fish which have taken up compounds from surface water is as follows:

$$A = \frac{B \times C \times D \times E}{F \times G}$$

where:

A = Chronic Average Daily Dose due to Consumption of Fish (mg/kg-day);
B = Compound Concentration in Fish (mg/kg);
C = Fish Consumption Rate (kg/day);
D = Exposure Frequency (days/year)
E = Exposure Duration (years);
F = Body Weight (kg); and
G = Averaging Time (years)

Each of the parameters used in these equations is described below:

Compound Concentrations in Fish

Compounds in surface water in Pearl Harbor, the West Loch, and Wahiawa Reservoir as a result of direct deposition, runoff, and erosion may be taken up by fish. Compound concentrations in fish are discussed in Section 4.4.5 and are presented in Table 4-7.

Fish Consumption Rate

Only recreational fishers were assumed to be exposed via consumption of fish. The fish consumption rates assumed for the receptors are shown in Table 4-9. For children, a fish consumption rate of 13.2 g/day was used, and a consumption rate of 87.5 g/day was used for adults. The values are derived from U.S. EPA (2005). These consumption rates are high-end consumption rates that likely overestimate actual consumption rates for freshwater recreational fishers in Hawaii.

The Hawaii Department of Health issued an advisory in 1998, cautioning against the consumption of fish and crabs collected from Pearl Harbor. ATSDR (2005) evaluated the level of contaminants found in the fish and crab samples and concluded that the polychlorinated biphenyl (PCB) concentrations were elevated. Therefore, ATSDR (2005) supports the Hawaii Department of Health advisory to avoid eating fish and shellfish from Pearl Harbor. Pearl Harbor is also a controlled area to which people do not have access.

Wahiawa Reservoir is a waterbody in which fishing is allowed, but there are limitations on fishing in this waterbody. Largemouth bass, small mouth bass, and tucunare are all species that cannot be consumed from Wahiawa reservoir. Only catch-and-release fishing is allowed for these species. It is unlawful to keep, retain, hold, or kill any bass or tucunare taken from this waterbody. In addition, there are special provisions for oscar. The normal bag limit in Hawaii for this species is three per day. In Wahiawa Reservoir, the bag limit is reduced to one.

This risk assessment assumes that the amount of fish consumed by a typical person on Oahu from each specific waterbody is 25% of their total fish ingestion. This assumption is reasonable for several reasons. First, fishing is not allowed in West Loch and other portions of Pearl Harbor, and there is a fish advisory in effect. People essentially have to trespass and ignore the advisory to catch and consume fish. Second, the size of Wahiawa Reservoir is limited and fishing is restricted as noted above. Third, most fish consumed on Oahu are marine species caught from the nearby ocean waters.

Body Weight

As shown in Table 4-9, the body weights assumed in this risk assessment are 15 kg for the child and 70 kg for the adult receptors (U.S. EPA, 2005).

Exposure Duration

The exposure durations are presented in Table 4-9. It was assumed that the child is exposed for six years and the resident and fisher adults are exposed for 30 years.

Averaging Time

The average daily dose of compounds used to calculate noncarcinogenic risks must be averaged over the duration which the receptor is assumed to be exposed (U.S. EPA, 1989). For the child receptor, this is 2,190 days (six years). For the adult receptor, the noncancer averaging time is 10,950 days (30 years).

The average daily dose used to determine potential carcinogenic effects, however, must be averaged over the entire lifetime (70 years, or 25,550 days), regardless of the length of time which the receptor is assumed to be exposed (U.S. EPA, 1989). The Averaging Time values for the receptors are presented in Table 4-9.

4.5.5 Estimation of Potential Exposure via Consumption of Animal Products

A review of land use patterns within a 20-km radius of the Facility indicates that farming activities have taken place in an area along the H1 Highway northeast of the Facility. A farmer living in this area may be exposed to Facility emissions via consumption of animal products (beef, dairy products, pork, poultry, eggs) which have been exposed to compounds emitted from the Facility. Exposure to animal products is a function of the concentration of compounds in the animal tissue, the receptor's consumption rate of that product, and the receptor's body weight.

The Chronic Average Daily Dose (CADD) and the Lifetime Average Daily Dose (LADD) calculations estimating potential exposure via consumption of animal products are presented in

Appendix B. The equation used to calculate the CADD and LADD due to consumption of animal products is as follows:

$$A = \frac{B \times C \times D \times E}{F \times G}$$

where:

A = Chronic Average Daily Dose due to Consumption of Animal Product (mg/kg-day);
B = Compound Concentration in Animal Product (mg/kg);
C = Animal Product Consumption Rate (kg/day);
D = Exposure Duration (days/year);
E = Exposure Duration (years);
F = Body Weight (kg); and
G = Averaging Time (days)

The parameters used in these equations are described below.

Compound Concentration in Animal Products

Compound concentration in the animal tissue is a function of the animal's daily intake of compounds and the tendency of compounds to bioconcentrate in the animal tissue. The concentrations of compounds in animal products are described in Section 4.4.6 and are presented in Table 4-8.

Animal Product Consumption Rates

Consumption of animal products was evaluated only for the farmer receptor. A beef consumption rate of 85 g/day was used for the adult farmer, and a beef consumption rate of 11 g/day was used for the child farmer (U.S. EPA, 2005). A dairy consumption rate of 957 g/day was used for the adult farmer, and a dairy consumption rate of 340 g/day was used for the child farmer (U.S. EPA, 2005). A poultry consumption rate of 46 g/day was used for the adult farmer, and a poultry consumption rate of 7 g/day was used for the child farmer (U.S. EPA, 2005). An egg consumption rate of 53 g/day was used for the adult farmer, and an egg consumption rate of 8 g/day was used for the child farmer (U.S. EPA, 2005). A pork consumption rate of 39 g/day was used for the adult farmer, and a pork consumption rate of 6 g/day was used for the child farmer (U.S. EPA, 2005). Table 4-9 shows the animal product consumption rates for the farmer adult and child.

Body Weight

As shown in Table 4-9, the body weights assumed in this risk assessment are 15 kg for the child and 70 kg for the adult receptors (U.S. EPA, 2005).

Exposure Duration

The exposure durations are presented in Table 4-9. It was assumed that the child is exposed for six years and the resident and fisher adults are exposed for 30 years.

Averaging Time

The average daily dose of compounds used to calculate noncarcinogenic risks must be averaged over the duration which the receptor is assumed to be exposed (U.S. EPA, 1989). For the child receptor, this is 2,190 days (six years). For the adult receptor, the noncancer averaging time is 10,950 days (30 years).

The average daily dose used to determine potential carcinogenic effects, however, must be averaged over the entire lifetime (70 years, or 25,550 days), regardless of the length of time which the receptor is assumed to be exposed (U.S. EPA, 1989). The Averaging Time values for the receptors are presented in Table 4-9.

5.0 RISK CHARACTERIZATION

Risk characterization is the step in the risk assessment process that combines the results of the exposure assessment and the toxicity assessment for each compound of concern (CPC) in order to estimate the potential for carcinogenic and noncarcinogenic human health effects from chronic exposure to that compound. This section summarizes the results of the risk characterization for each receptor evaluated in the risk assessment.

The noncarcinogenic risk characterization process is discussed in Section 5.1, and Section 5.2 presents the carcinogenic risk characterization process. Section 5.3 presents the risk characterization results.

5.1 Noncarcinogenic Risk Characterization

The potential for exposures to CPCs at the CCGS to result in adverse noncarcinogenic health effects is estimated for each combination of compound/exposure pathway/receptor by comparing the Chronic Average Daily Dose (CADD) for that compound/exposure pathway/receptor (derived in Section 4.0) with the Reference Dose (RfD) or Reference Concentration (RfC) for that compound (presented in Section 3.0). The resulting ratio, which is unitless, is known as the Hazard Quotient (HQ) for that compound. The HQ is calculated using the following formula:

$$A = \frac{B}{C}$$

where:

A = Hazard Quotient (unitless);
B = Chronic Average Daily Dose (mg/kg-day) or Chronic Average Daily Intake (mg/m^3); and
C = Reference Dose (mg/kg-day) or Reference Concentration (mg/m^3).

When the Hazard Quotient for a given compound does not exceed 1, the RfD or RfC has not been exceeded, and no adverse noncarcinogenic health effects are expected to occur as a result of that receptor's potential exposure to that compound via that exposure pathway. The HQs for each pathway are summed to yield the Hazard Index (HI) for that compound for that receptor. A Total Hazard Index (HI) is then calculated for each receptor for each toxic endpoint by summing the compound-specific His for all compounds that have the same toxic endpoint. An endpoint-specific HI for a compound that does not exceed 1 for a given receptor indicates that no adverse noncarcinogenic health effects are expected to occur as a result of that receptor's potential exposure to that compound in the environmental media potentially affected by the Facility. As a screening measure, all compound-specific His are summed regardless of toxic endpoint. If this value does not exceed 1, then it is not necessary to perform the endpoint-specific analysis.

Hazard Quotients calculated for each compound/exposure pathway/receptor are presented in Appendix B. The HIs associated with each receptor's exposure to the compounds in emissions from the Facility are discussed in Section 5.3.

5.2 Carcinogenic Risk Characterization

The purpose of carcinogenic risk characterization is to estimate the likelihood, over and above the background cancer rate, that a receptor will develop cancer in his or her lifetime as a result of Facility-related exposures to CPCs in various environmental media. This likelihood is a function of the dose of a compound and the Cancer Slope Factor (CSF) for that compound. The relationship between the Excess Lifetime Cancer Risk (ELCR) and the estimated Lifetime Average Daily Dose (LADD) of a compound may be expressed as:

$$A = 1 - e^{-BC}$$

where:

A = Excess Lifetime Cancer Risk (unitless);
B = Cancer Slope Factor (1/(mg/kg-day)); and
C = Lifetime Average Daily Dose (mg/kg-day).

When the product of the CSF and the LADD is much greater than 1, the ELCR approaches 1 (i.e., 100% probability). When the product is less than 0.01 ($1x10^{-2}$), the equation can be closely approximated by:

$$A = BxC$$

where:

A = Excess Lifetime Cancer Risk (unitless);
B = Cancer Slope Factor (1/(mg/kg-day)); and
C = Lifetime Average Daily Dose (mg/kg-day).

For each combination of compound/exposure pathway/receptor, the product of the CSF and the LADD is unitless and provides an estimate of the potential carcinogenic risk associated with that receptor's exposure to that compound via that pathway. ELCRs are calculated for each potentially carcinogenic compound. For each receptor, the ELCRs for each compound is calculated by summing the potential risks derived for each pathway. A Total Excess Lifetime Cancer Risk for the receptor is then calculated by summing the compound-specific ELCRs. In accordance with risk assessment policy for emissions from combustion sources, if the ELCR for a receptor is less than a target risk of $1x10^{-5}$, then the risk assessment will conclude that the ELCR for that compound falls within the acceptable range of potential risks.

Excess Lifetime Cancer Risks calculated for each compound/exposure pathway/receptor are presented in Appendix B. The ELCRs associated with each receptor's exposure to the compounds in emissions from the Facility are discussed in Section 5.3.

5.3 Risk Characterization Results

Potential receptors evaluated in the risk assessment include a resident living at the residential area in the highest impact direction from the Facility, a recreational fisher living at the residential area in the highest impact direction from the Facility, and a farmer living at a farm northeast of the Facility.

5.3.1 Resident at the Residential Location

The hazard indices associated with the resident's exposure to compounds emitted from the expanded Facility as proposed are shown in Table 5-1. The Total HI is 0.003 for the child resident and 0.0009 for the adult resident. The compound-specific hazard indices (as a sum of all the pathways) are less than 1 for all compounds. These results indicate that the Facility emissions will not result in noncarcinogenic adverse health effects for this receptor. The total HI summed over all compounds regardless of toxicity endpoint is also less than 1.0, again indicating that noncarcinogenic health effects are not likely to occur for this receptor.

The ELCRs associated with exposure of the resident to CPCs emitted from the Facility are shown in Table 5-1. The compound-specific ELCRs (as a sum of all the pathways) are less than the target risk of 1×10^{-5} for all compounds. The total ELCR (which combines all compounds and all pathways) is $1x10^{-8}$ for the child resident and $2x10^{-8}$ for the adult resident. Both are also less than the target risk of $1x10^{-5}$.

5.3.2 Resident at the Residential Location Using Compost from Near the Facility

The hazard indices associated with exposure of the resident who uses compost from near the Facility to compounds emitted from the Facility are shown in Table 5-1. The Total HI is 0.01 for the child resident and 0.003 for the adult resident. The compound-specific hazard indices (as a sum of all the pathways) are less than 1 for all compounds. These results indicate that the Facility emissions will not result in noncarcinogenic adverse health effects for this receptor. The total HI summed over all compounds regardless of toxicity endpoint is also less than 1.0, again indicating that noncarcinogenic health effects are not likely to occur for this receptor.

The ELCRs associated with exposure of the resident who uses compost from near the Facility to CPCs emitted from the Facility are shown in Table 5-1. The compound-specific ELCRs (as a sum of all the pathways) are less than the target risk of 1×10^{-6} for all compounds. The total ELCR (which combines all compounds and all pathways) is $4x10^{-8}$ for the child resident and $4x10^{-8}$ for the adult resident. Both are also less than the target risk of $1x10^{-5}$.

5.3.3 Recreational Fisher Living at the Residential Location

The hazard indices associated with the exposures of the recreational fisher at the maximum hypothetical residence to compounds emitted from the Facility are shown in Table 5-1. The compound-specific hazard indices (as a sum of all the pathways) are less than 1 for all compounds for fishers at all three locations (Pearl Harbor, West Loch of Pearl Harbor, and the Wahiawa Reservoir). For the recreational fisher who obtains fish from Pearl Harbor, the total HI is 0.006 for the child and 0.004 for the adult. The total HI for the recreational fisher who obtains fish from the West Loch is 0.008 for the child and 0.008 for the adult. For the recreational fisher who obtains fish from the Wahiawa Reservoir, the total HI is 0.01 for the child and 0.02 for the adult. These results indicate that the Facility emissions will not result in noncarcinogenic adverse health effects for this receptor.

The ELCRs associated with the recreational fisher's exposure to CPCs emitted from the Facility are shown in Table 5-1. The compound-specific ELCRs (as a sum of all the pathways) are less than the target risk of 1×10^{-5} for all compounds for fishers at all three locations (Pearl Harbor, the West Loch of Pearl Harbor, and the Wahiawa Reservoir). The total ELCR (which combines all compounds and all pathways) is $1x10^{-8}$ for the child fisher and $2x10^{-8}$ for the adult fisher at Pearl Harbor; $1x10^{-8}$ for the child fisher and $2x10^{-8}$ for the adult fisher at the West Loch of Pearl Harbor, and $1x10^{-8}$ for the child fisher and $2x10^{-8}$ for the adult fisher at the Wahiawa Reservoir. All total ELCR values are also less than the target risk of $1x10^{-5}$.

5.3.4 Farmer

The hazard indices associated with the farmer's exposure to compounds emitted from the Facility are shown in Table 5-1. The Total HI is 0.005 or the child farmer and 0.003 for the adult farmer. The compound-specific hazard indices (as a sum of all the pathways) are less than 1 for all compounds. These results indicate that the Facility emissions will not result in noncarcinogenic adverse health effects for this receptor. The total HI summed over all compounds regardless of toxicity endpoint is also less than 1.0, again indicating that noncarcinogenic health effects are not likely to occur for this receptor.

The ELCRs associated with the farmer's exposure to CPCs emitted from the Facility are shown in Table 5-1. The compound-specific ELCRs (as a sum of all the pathways) are less than the target risk of 1×10^{-5} for all compounds. The total ELCR (which combines all compounds and all pathways) is $5x10^{-8}$ for the child farmer and $2x10^{-7}$ for the adult farmer. Both are also less than the target risk of $1x10^{-5}$.

5.3.5 Resident Raising Poultry and Eggs at the Nanakuli Area

The hazard indices associated with exposure of the resident who raises poultry and eggs in the Nanakuli area to compounds emitted from the Facility are shown in Table 5-1. The Total HI is 0.0006 for the child farmer and 0.0002 for the adult farmer. The compound-specific hazard indices (as a sum of all the pathways) are less than 1 for all compounds. These results indicate that the Facility emissions will not result in noncarcinogenic adverse health effects for this receptor. The total HI summed over all compounds regardless of toxicity endpoint is also less than 1.0, again indicating that noncarcinogenic health effects are not likely to occur for this receptor.

The ELCRs associated with exposure of the poultry and egg farmer in the Nanakuli area to CPCs emitted from the Facility are shown in Table 5-1. The compound-specific ELCRs (as a sum of all the pathways) are less than the target risk of 1×10^{-5} for all compounds. The total ELCR (which combines all compounds and all pathways) is $3x10^{-9}$ for the child poultry and egg farmer and $4x10^{-9}$ for the adult poultry and egg farmer. Both are also less than the target risk of $1x10^{-5}$.

5.3.6 Risk Characterization of Lead

EPA does not provide quantitative toxicity information for lead. For this reason, the risk characterization described above cannot be used to assess potential health risks associated with exposure to lead in emissions.

EPA evaluates lead exposure by using blood-lead modeling using the Integrated Exposure-Uptake Biokinetic Model (IEUBK). EPA recommends that soil lead levels less than 400 mg/kg are safe for residential exposures. Above that level, the document suggests collecting data and modeling blood-lead levels with the IEUBK model. For the purposes of screening, therefore, 400 mg/kg is recommended for residential soils. To evaluate potential exposures to lead in emissions from the Facility, estimated concentrations of lead in soil are compared to EPA's recommended safe level of 400 mg/kg. As shown in Table 4-3, estimated concentrations of lead in soil are $3x10^{-6}$ mg/kg at the farm location, $3x10^{-6}$ mg/kg at the Nanakuli poultry area, $2x10^{-5}$ mg/kg at the hypothetical residential area, and $7x10^{-5}$ mg/kg at the compost area. Since all estimated concentrations of lead in soil are much lower than EPA's recommended safe level of 400 mg/kg, no health effects are expected to occur as a result of potential exposure to lead in soil from Facility emissions.

On October 15, 2008, EPA signed the final rule to lower the National Ambient Air Quality Standard (NAAQS) for lead in air to 0.15 ug/m^3 on a three-month rolling average. The rule is not effective until 60 days after publication in the Federal Register. To evaluate potential exposures to lead in emissions from the Facility, estimated concentrations of lead in air are compared to the newly proposed NAAQS of 0.15 ug/m^3. As shown in Table 4-2, estimated concentrations of lead in air are $8x10^{-5}$ ug/m^3 at the hypothetical residential area and $2x10^{-5}$ ug/m^3 at the farm location and the Nanakuli poultry area. Since all estimated concentrations of lead in air are much lower than EPA's NAAQS, no health effects are expected to occur as a result of potential exposure to lead in air from Facility emissions.

5.4 Summary and Conclusions of Risk Characterization

The results of the noncarcinogenic risk characterization indicate that both total and compound-specific hazard indices for the various receptors are less than 1. Therefore, no noncarcinogenic adverse health effects are expected to occur for any receptors as a result of potential exposure to emissions from the Facility.

The results of the carcinogenic risk characterization indicate that both total and compound-specific ELCRs are less than $1x10^{-5}$. Therefore, the total ELCRs fall within acceptable risk ranges and do not exceed any regulatory levels of concern, which are the Hawaii Department of Health's acceptable risk range of $1x10^{-6}$ to $1x10^{-4}$, and the U.S. EPA's target risk level of combustors of $1x10^{-5}$.

6.0 UNCERTAINTY ASSESSMENT

Within any of the four steps of the risk assessment process, assumptions must be made due to a lack of absolute scientific knowledge. Some of the assumptions are supported by considerable scientific evidence, while others have less support. Every assumption introduces some degree of uncertainty into the risk assessment process. Conservative assumptions are made throughout the risk assessment to ensure that the health of local residents is protected. Therefore, when all of the assumptions are combined, it is much more likely that actual risks, if any, are overestimated rather than underestimated.

The assumptions that introduce the greatest amount of uncertainty in this risk assessment are discussed in this section. They are discussed in general terms, because for most of the assumptions there is not enough information to assign a numerical value that can be factored into the calculation of risk.

6.1 Hazard Identification

During the Hazard Identification step, compounds are selected for inclusion in the quantitative risk assessment from a list of compounds known or expected to be emitted from the Facility. Uncertainty is introduced in three principal areas during this step: (1) estimation of emissions; (2) air quality modeling; and (3) selection of compounds for inclusion in the quantitative risk assessment based on emissions and modeling results.

6.1.1 Development of Emissions Estimates

Emissions estimates represent the foundation upon which this risk assessment is built. Uncertainties associated with emissions estimation can result in uncertainties in all subsequent risk calculations. Because the emissions estimates are critical to the resulting risk estimates, it is important to acknowledge that a level of uncertainty is associated with them.

Emissions from the Facility were estimated using actual measurements from the H-POWER Facility for metals and the EPA's Cb standard for dioxins and furans. For the third unit, emissions of dioxins and furans and cadmium, lead and mercury were estimated from EPA's Eb standards. Emissions of other metals were estimated from actual measurements from similarly operating Mass Burn MWC units with pulse jet fabric filter baghouses. The measurements from the Facility are good estimates of future emissions from the existing units. The emissions estimates of dioxins and furans, cadmium, lead and mercury for the third unit, however, are likely to be overestimates, because Covanta's operating experience is these emissions from newly constructed facilities is substantially lower than the Eb standards.

6.1.2 Air Quality Modeling

A computerized air dispersion model has been used to estimate the levels of compounds in air following emission from the Facility. The dispersion model provides information regarding how particulates and gases emitted from the Facility disperse, or spread, after they are released from the stack. Deposition algorithms are applied to the results of the dispersion modeling to estimate deposition rates.

6.1.3 Particle Size Uncertainty

Section 2.3.2 discussed the fact that the particle size distribution data shown in Table 2-10 is derived from site-specific measurements from a Mass Burn facility with similar air pollution control equipment. The fact that site-specific data from a similar facility were used in this risk assessment reduces the uncertainty inherent in the use of a particle size distribution in air dispersion and deposition modeling.

6.1.4 Selection of Compounds

The compounds quantitatively evaluated in the risk assessment were selected after an examination of the list of compounds potentially emitted from the Facility. Of the compounds potentially present in the predicted emissions from the Facility, those selected for analysis are the most toxic, prevalent, and/or persistent in the environment. Based on an assessment of the literature available on this subject, the compounds evaluated in this risk assessment represent the key compounds in combustor emissions.

6.2 Toxicity Assessment

Dose-response values are sometimes based on limited toxicological data. For this reason, a margin of safety is built into estimates of both carcinogenic and noncarcinogenic risk, and actual risks are lower than those estimated. The two major areas of uncertainty introduced in the dose-response assessment are: (1) animal to human extrapolation; and (2) high to low dose extrapolation. These are discussed in the following subsections.

6.2.1 Animal to Human Extrapolation

Human dose-response values are often extrapolated, or estimated, using the results of animal studies. Extrapolation from animals to humans introduces a great deal of uncertainty in the risk assessment because in most instances, it is not known how differently a human may react to the compound compared to the animal species used to test the compound. The procedures used to extrapolate from animals to humans involve conservative assumptions and incorporate several uncertainty factors that overestimate the adverse effects associated with a specific dose. As a result, overestimation of the potential for adverse effects to humans is more likely than underestimation.

6.2.2 High to Low Dose Extrapolation

Predicting potential health effects from the Facility emissions requires the use of models to extrapolate the observed health effects from the high doses used in laboratory studies to the anticipated human health effects from low doses experienced in the environment. The models contain conservative assumptions to account for the large degree of uncertainty associated with this extrapolation (especially for potential carcinogens) and therefore, tend to be more likely to overestimate than underestimate the risks.

6.3 Exposure Assessment

During the exposure assessment, exposure point concentrations are estimated and exposure doses calculated. Exposure point concentrations are the estimated concentrations of compounds to which humans may be exposed. Because the Facility is not currently operating under the exact conditions evaluated in the risk assessment, exposure point concentrations must be estimated using models containing numerous assumptions, such as the amount of compound released from the Facility, the dispersion of the compound in air and its fate and transport in the environment, and the location of people potentially exposed to released compounds. Once the concentrations in an environmental medium such as soil, water, or air have been predicted, the calculation of human exposure and dose involves making additional assumptions. The major sources of uncertainty associated with these assumptions are discussed below.

6.3.1 Estimation of Ambient Air Concentrations and Deposition Rates

Emissions of each of the compounds selected for quantitative evaluation in this risk assessment were estimated, as described above. Compound concentrations in ambient air at ground level are derived based on these emission rates and the results of the dispersion modeling. This concentration represents the exposure point concentration to which a person is assumed to be exposed via inhalation. Therefore, uncertainties associated with these two steps of the hazard identification process can result in uncertainties associated with the resulting ambient air concentrations. Deposition rates are derived based on emission rates and information from applying the appropriate deposition algorithms to the air dispersion modeling results. As was the case with the estimation of ambient air concentrations, uncertainties associated with both the estimation of emission rates and the deposition calculations can result in uncertainties associated with the resulting deposition rates.

6.3.2 Estimation of Surface Water and Sediment Concentrations

The compound concentrations in surface water bodies were estimated using the U.S. EPA model (2005). Assumptions about the amount and rate of soil runoff, the deposition of particles, the rate of compound degradation, and the size of the catchment, or watershed area, are included in the U.S. EPA model. Each assumption has uncertainty associated with it, particularly because input data were based on information for the general area obtained from generally available literature. Estimating surface water and sediment compound concentrations also involves numerous assumptions regarding the fate and transport of compounds, and the hydrology of local water bodies, such as turn-over patterns and flow rates. These assumptions are conservative to provide reasonable assurance that the evaluation of surface water and sediment exposures does not understate actual exposures.

6.3.3 Estimation of Compound Intake from Food

Estimation of potential compound intake in the food consumed by people living in the study area incorporates many assumptions. Conservative estimates are made about the uptake of compounds into root crops, leaf crops, beef, and dairy products. Parameters, such as crop densities, root uptake factors and interception factors for the produce pathway, and soil and crop ingestion rates, and biotransfer factors for the beef and dairy pathways, are often high-end estimates may not represent actual conditions near the Facility.

People may be exposed to compounds in the soil through ingestion of crops and inadvertent ingestion of soil. Because the compounds deposited on the soil surface are bound to or mixed with soil particles, conservative assumptions were made concerning the intake of the compounds by receptors. The conservative assumptions were made to provide reasonable assurance that the evaluation of risks from exposure to soil is not understated. Each conservative assumption tends to overestimate, rather than underestimate, potential risks.

Fish in area water bodies may accumulate compounds in their tissues. Accumulation of compounds in fish tissue is estimated using bioconcentration factors (BCFs) and bioaccumulation factors (BAFs) that are estimated from fish studies which may not reflect actual area conditions. The use of BCFs and BAFs introduces uncertainty into the predicted fish tissue concentrations. For instance, the BAF for mercury is derived from studies of fish in cold water bodies which are known to bioconcentrate mercury to a greater degree than fish in warm bodies.

6.3.4 Other Potential Exposure Pathways

The risk assessment evaluated the risks posed by ingestion of fish after an assumed 30 years of deposition of emissions from the Facility into the watersheds of Pearl Harbor, the West Loch of Pearl Harbor, and the Wahiawa Reservoir. This is health-protective, because it assumes that the fish consumed are mature fish that were exposed to plant emissions for their entire lifetime. Marine fish (both finfish and shellfish) evaluated in this risk assessment are expected to have lower exposures than freshwater fish due to their large home range and the large dilution capacity of the marine environment. Therefore, potential risks associated with this pathway are likely overestimated.

6.3.5 Estimation of Exposure Dose

Once the concentrations of the potentially released compounds in water, soil, air, and food have been predicted through modeling, the extent of human exposure must be estimated. This requires making assumptions about the frequency and duration of human exposure to water, soil, air and food.

Uncertainty may be associated with some of the assumptions used to estimate how often exposure occurs. Such assumptions include location, accessibility, and use of an area. With this in mind, the receptor, or person who may potentially be exposed and the location of exposure were defined for this risk assessment. The locations where certain activities were assumed to take place have been purposely selected because compound concentrations and frequency of exposure are expected to be high (i.e., use of the maximally affected areas). However, actual frequencies of exposure are likely to be much lower than assumed because residents are not likely to stay in one place and may, for instance, work far away or move to another location. In these cases, the person's potential exposure would be reduced, and the health risks discussed here would be overestimated.

6.3.6 Definition of Study Area

The study area was defined as the area within 30 km of the Facility. Risk assessment guidance usually recommends that the study area be defined as the area within 10 km, but the study area was expanded to 30 km to include watersheds for Pearl Harbor and West Loch, as well as the Wahiawa Reservoir and its watershed.

6.4 Risk Characterization

The risk of adverse human health effects depends on estimated levels of exposure and dose-response relationships. Two important additional sources of uncertainty are introduced in this phase of the risk assessment: (1) the evaluation of potential exposure to more than one compound; and (2) the presence of subpopulations which may be particularly sensitive.

6.4.1 Risk to Sensitive Populations

The health risks estimated in the risk characterization generally apply to the hypothetical area resident whose activities and locations were described in the exposure assessment. Some people will always be more sensitive than the average person and, therefore, will be at greater risk. In evaluating a maximally exposed individual, assuming maximum emission rates and many upper-bound exposure assumptions, this risk assessment estimates potential risks which will overstate any actual risks to over 99% of the exposed population. Dose-response values used to calculate risk, in addition, are derived to estimate potential health risks to these sensitive subpopulations.

This risk assessment specifically takes into account the possibility that the developing fetus and children may be more sensitive to air pollution than adults. First, the differences in inhalation rates and the lower body weights are explicitly incorporated into the risk assessment calculations. Second, the reference dose (RfD) values that are used to evaluate the toxicity associated with a certain estimated compound dose level have been derived by governmental health agencies specifically to be protective of sensitive members of the population, which includes the developing fetus, children, the elderly, and people with impaired health status. The RfDs assume that sensitive members of the population are a factor of ten times more sensitive than a healthy adult.

7.0 REFERENCES

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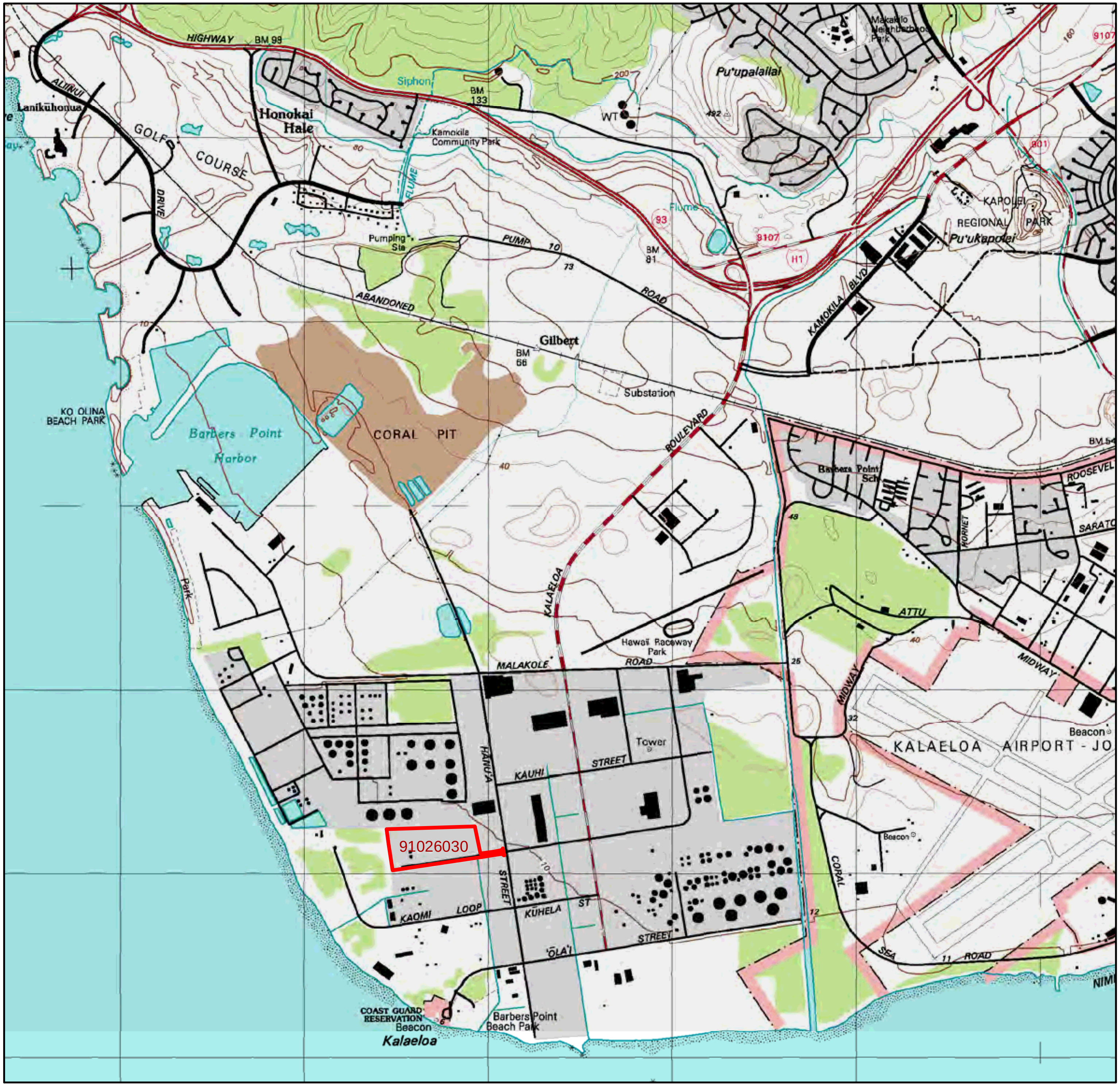


TITLE

Site Location Map

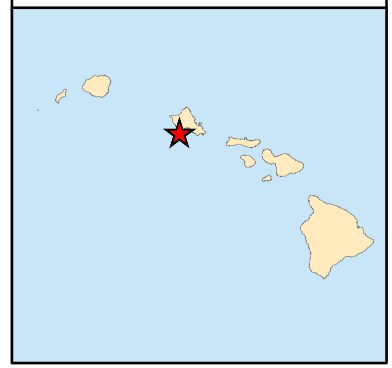
Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

Site Boundary

91026030 Tax Map Key

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters
Base Map Source: USGS Topographic Map, 1998

0 2,500 Feet

N

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FIGURE
1-1

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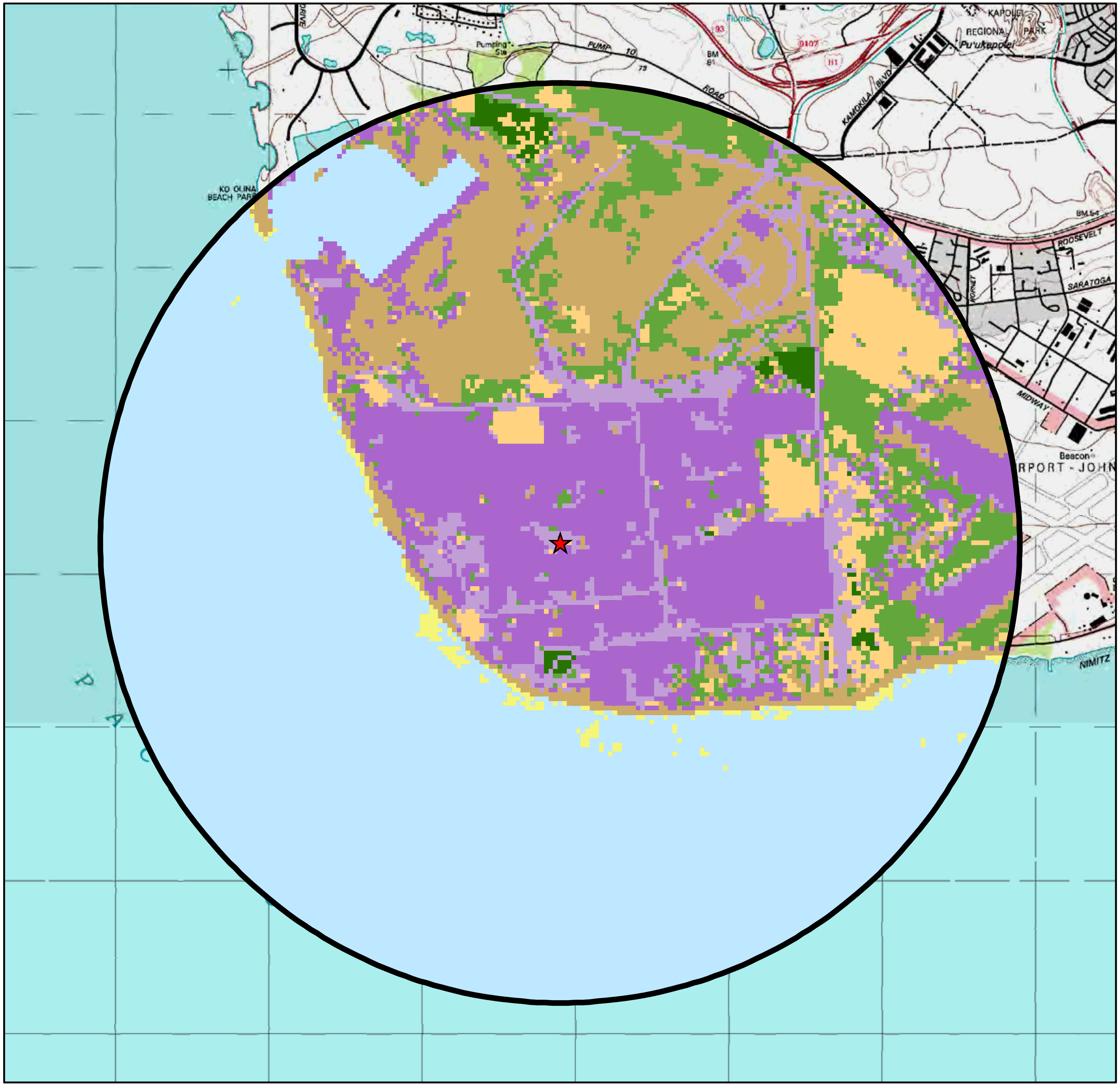


TITLE

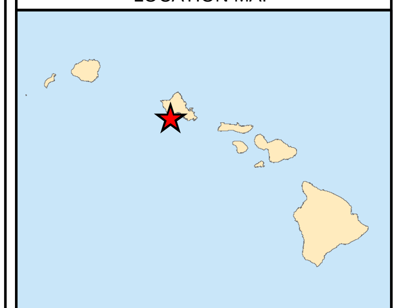
Land Use Within 3 Kilometers of H-POWER

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- Site Location
- 3 km Buffer Centered on Site
- Bare Land
- Scrub/Shrub
- Estuarine Forested Wetland
- Cultivated Land
- Grassland
- Evergreen Forest
- Unconsolidated Shore
- Water
- Low Intensity Developed
- High Intensity Developed

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters
Base Map Source: USGS Topographic Map, 1998
Land Use: NOAA Coastal Services Center,
Hawaii Land Cover, Oahu Island, 2000

0 3,000 Feet

N

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FIGURE
2-1

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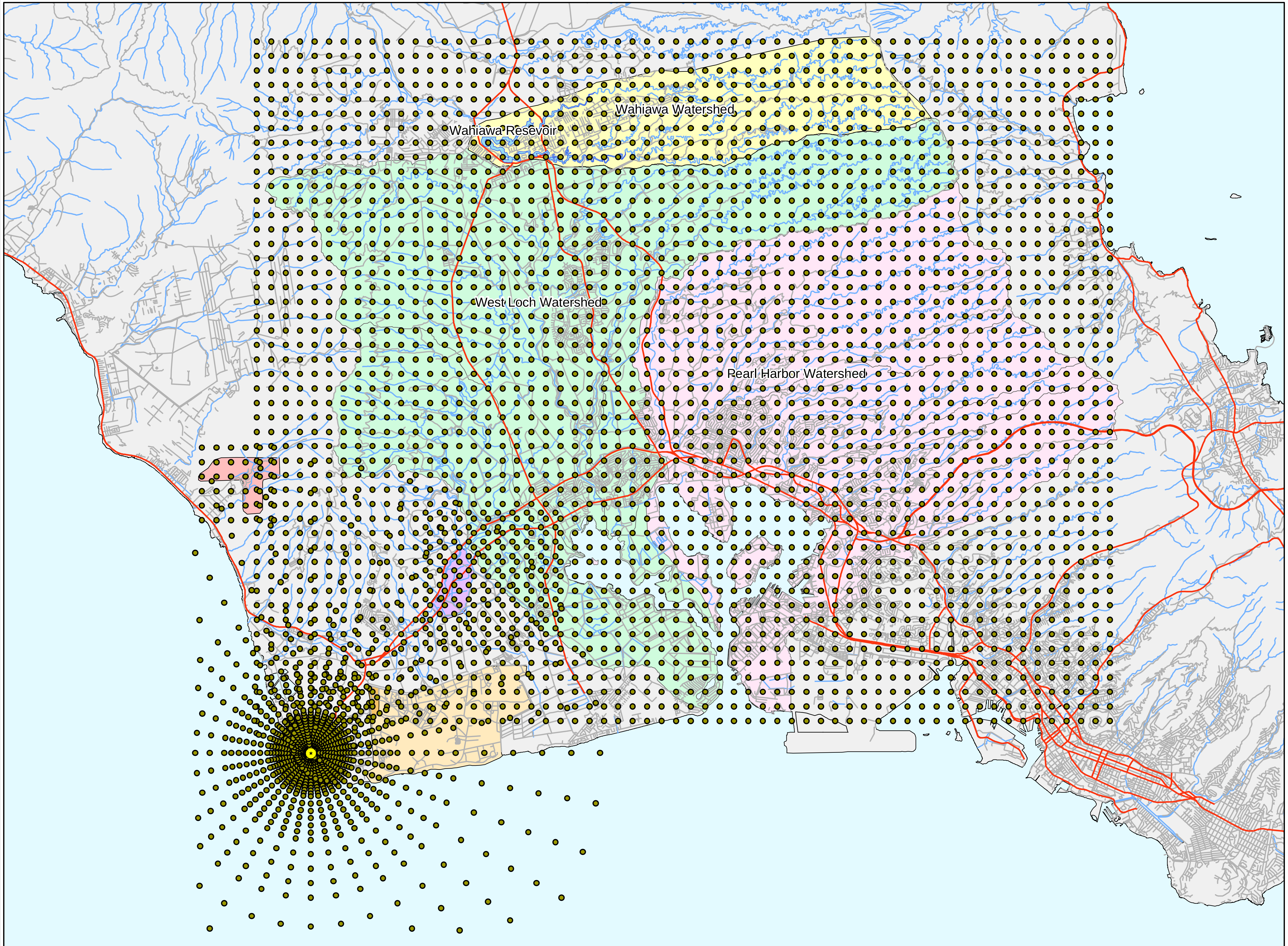


TITLE

Land Use Receptor Grids

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Receptor Point
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

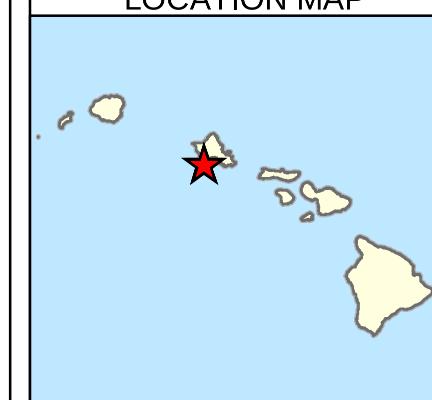
Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 83, UTM, Zone 4N, Meters

Land Use Source: NOAA Coastal Services Center, Hawaii Land Cover, Oahu Island, 2000

0 10,000 Feet

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October 21, 2008 DWN: KMP DJK CHKD: KMP

FIGURE **2-2**

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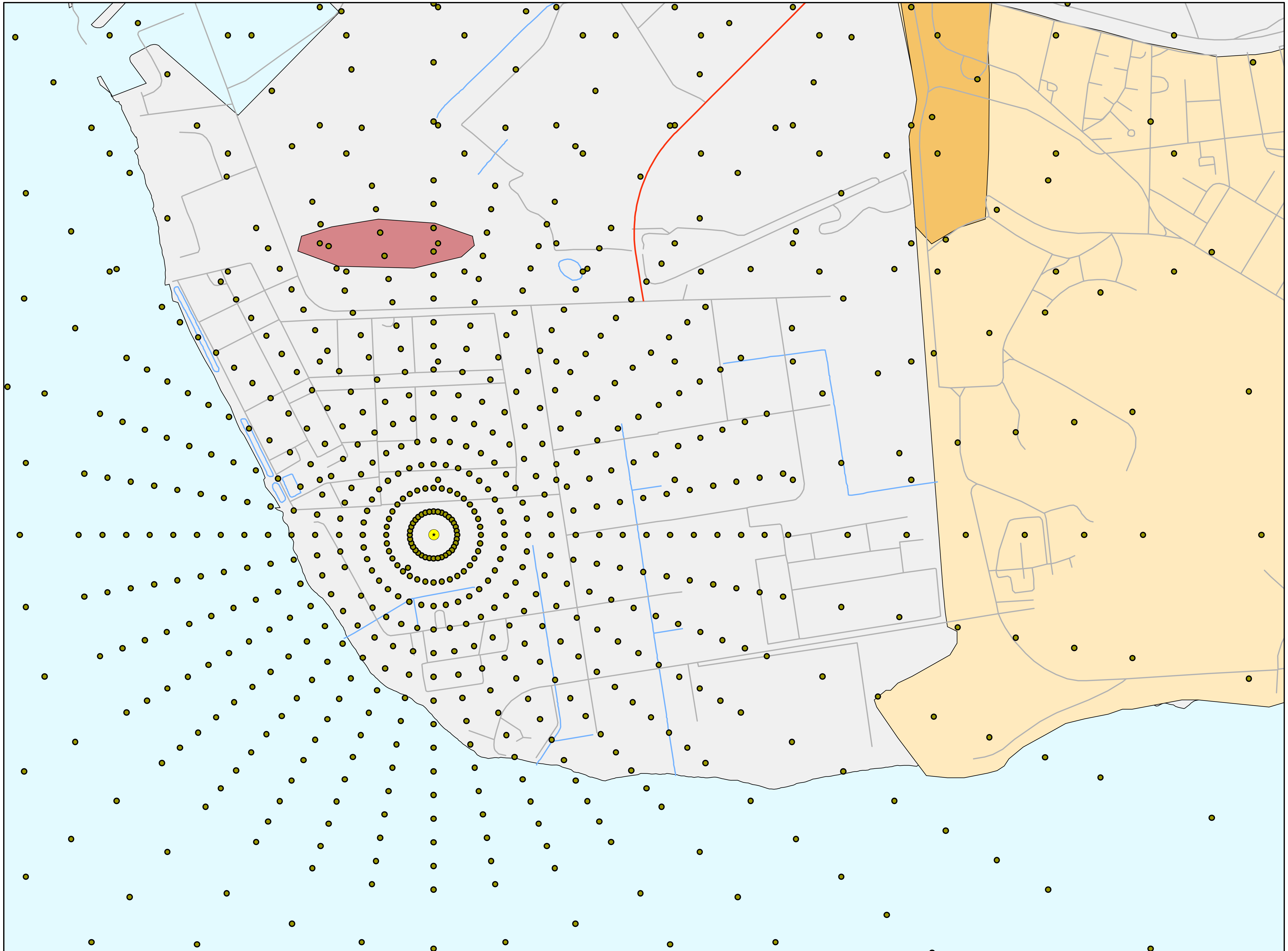


TITLE

Polar Receptor Grid

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Receptor Point
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

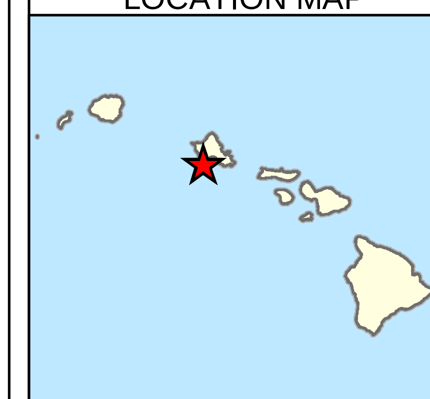
Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 83, UTM, Zone 4N, Meters

Land Use Source: NOAA Coastal Services Center, Hawaii Land Cover, Oahu Island, 2000

0 1,000 Feet

N

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October 21, 2008 DWN: KMP DJK CHKD: KMP

FIGURE
2-3

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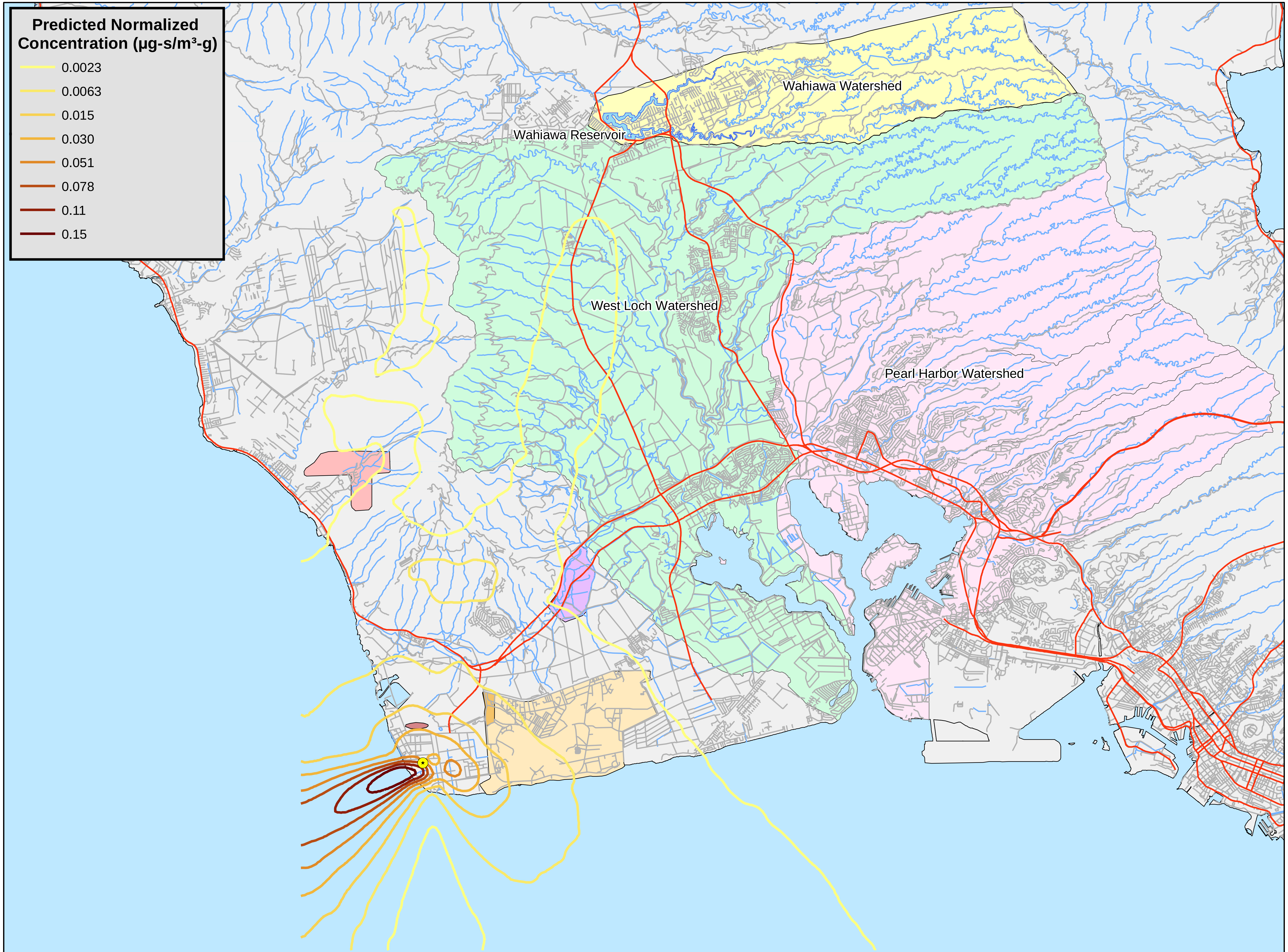


TITLE

Normalized Air Concentrations for Particle-Bound Compounds

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

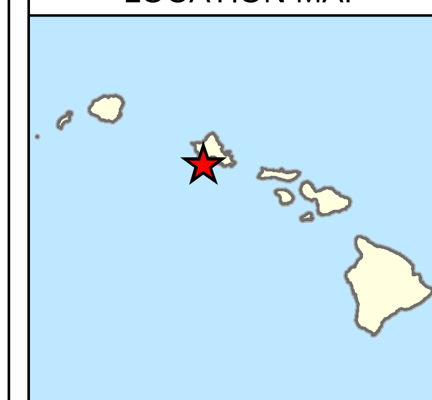
Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

0 10,000 Feet

N

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October 21, 2008 DWN: KMP CHKD: DJK

FIGURE
2-4

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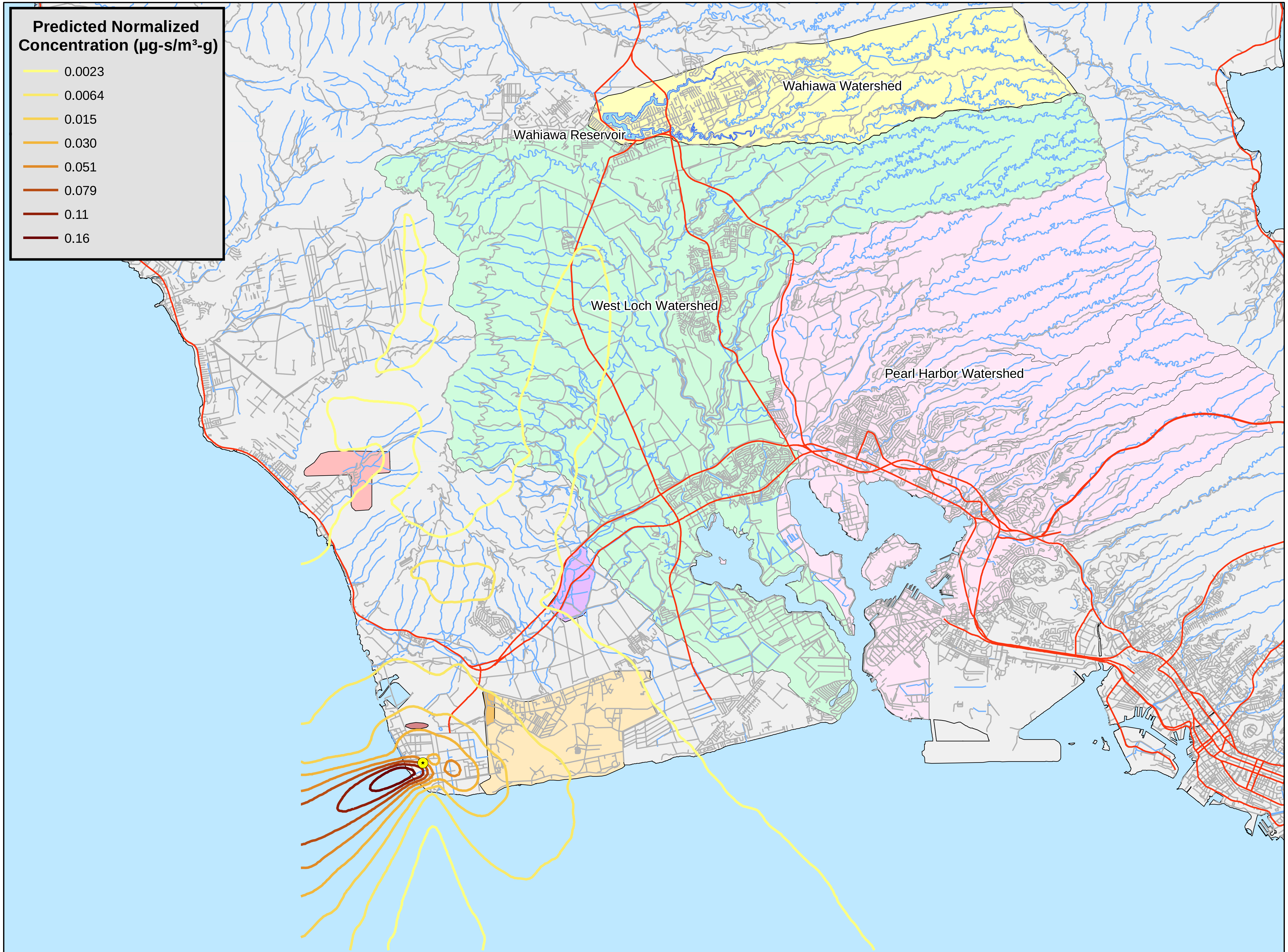

TITLE

Normalized Air Concentrations for Particle-Phase Compounds

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP

NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

0 10,000
Feet

N

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October 21, 2008 DWN: KMP CHKD: DJK

FIGURE
2-5

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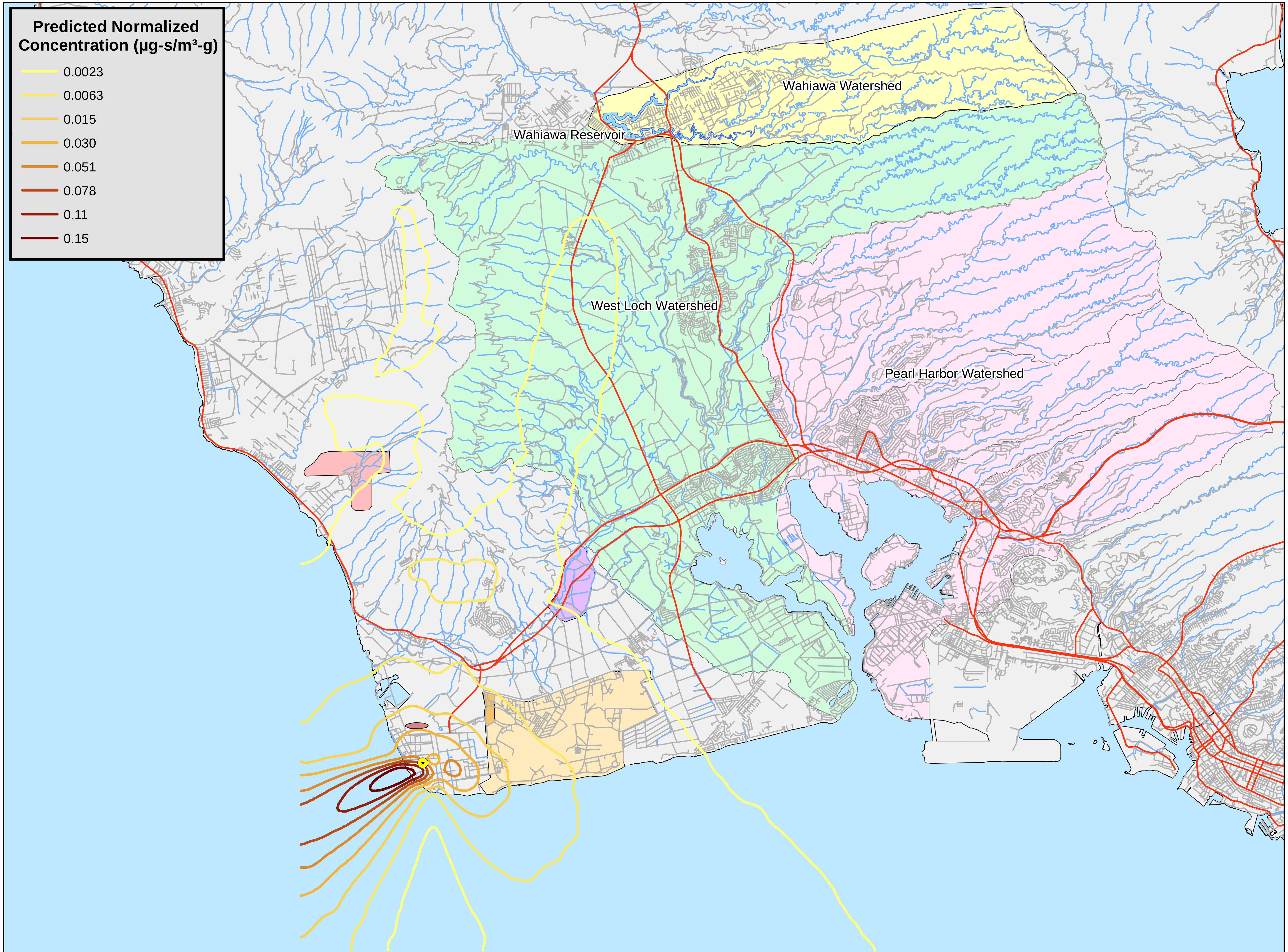

TITLE

Normalized Air Concentrations for Elemental Mercury Vapor

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP

NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

0 10,000 Feet

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FIGURE
2-6

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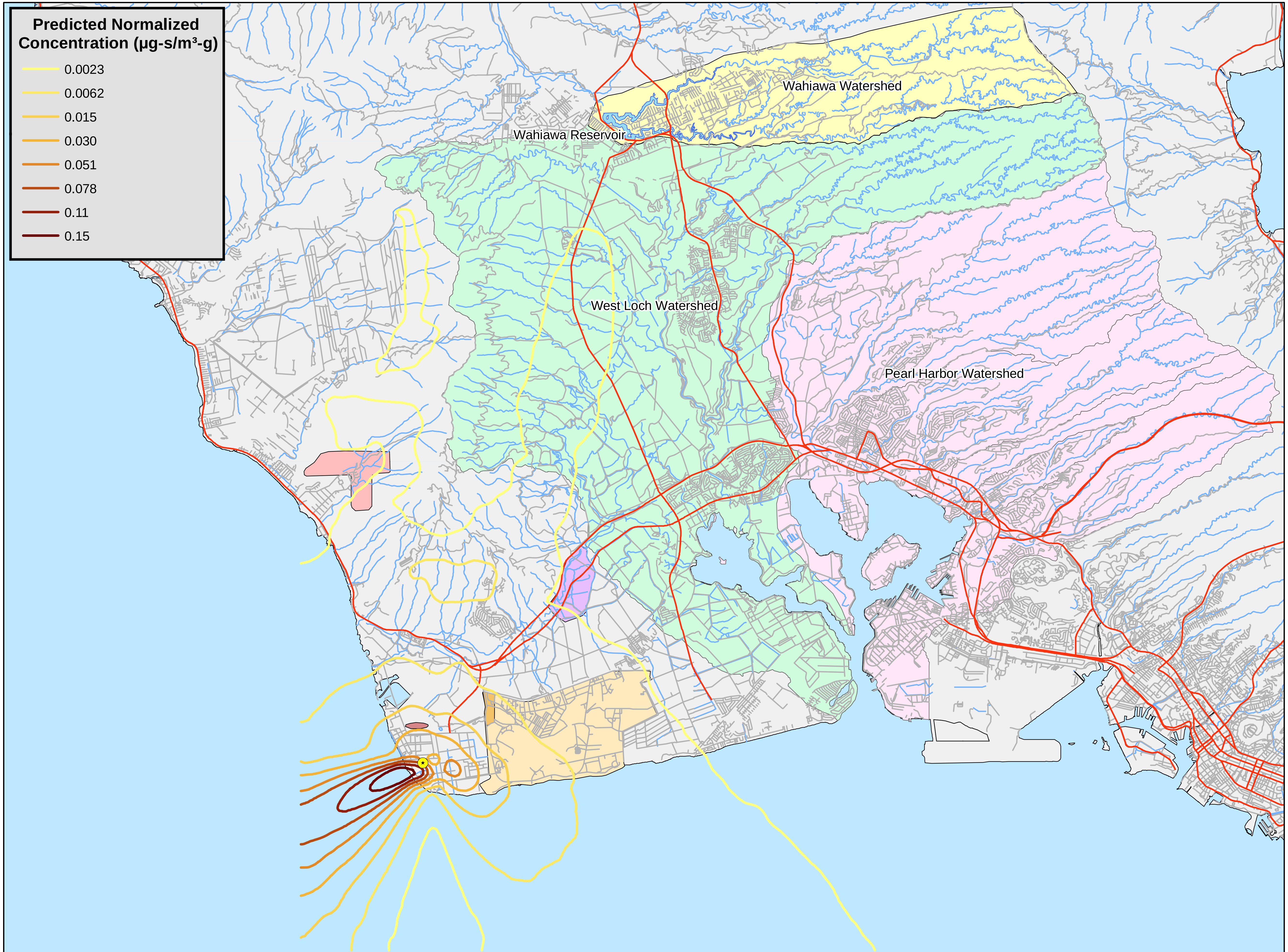

TITLE

Normalized Air Concentrations for Divalent Mercury Vapor

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP

NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

0 10,000 Feet

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FIGURE **2-7**

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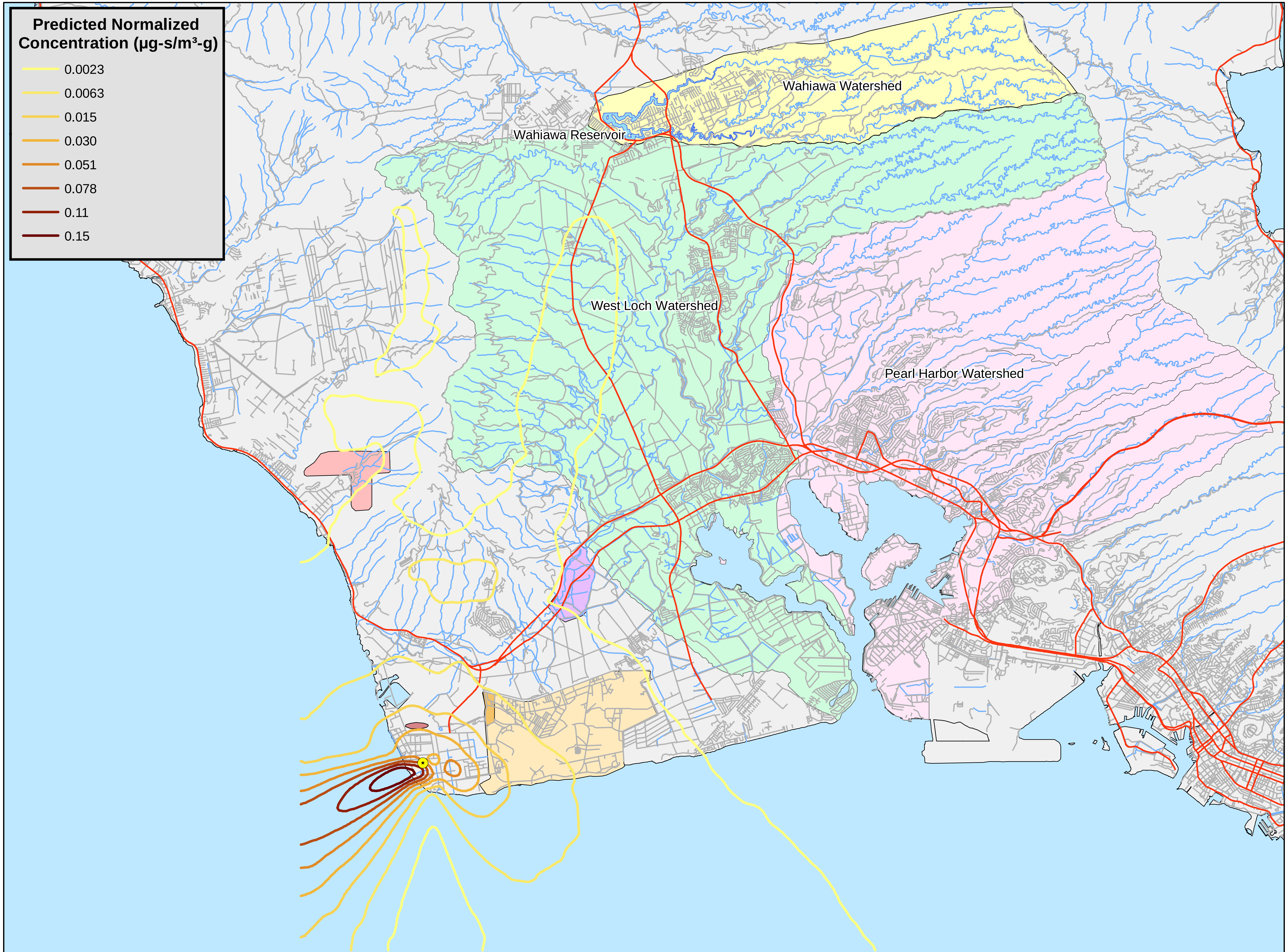


TITLE

Normalized Air Concentrations for Dioxin and Furan Vapor

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

H-Power
Major Roads
Streets
Streams
Former Military Base
Oahu

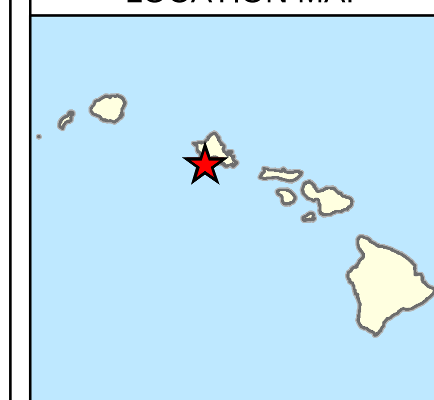
Exposure Areas

Poultry
Compost
Agricultural
Residential

Watershed Name

Wahiawa Resevor
West Loch
Pearl Harbor

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

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Feet
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October 21, 2008 DWN: KMP CHKD: DJK

FIGURE
2-8

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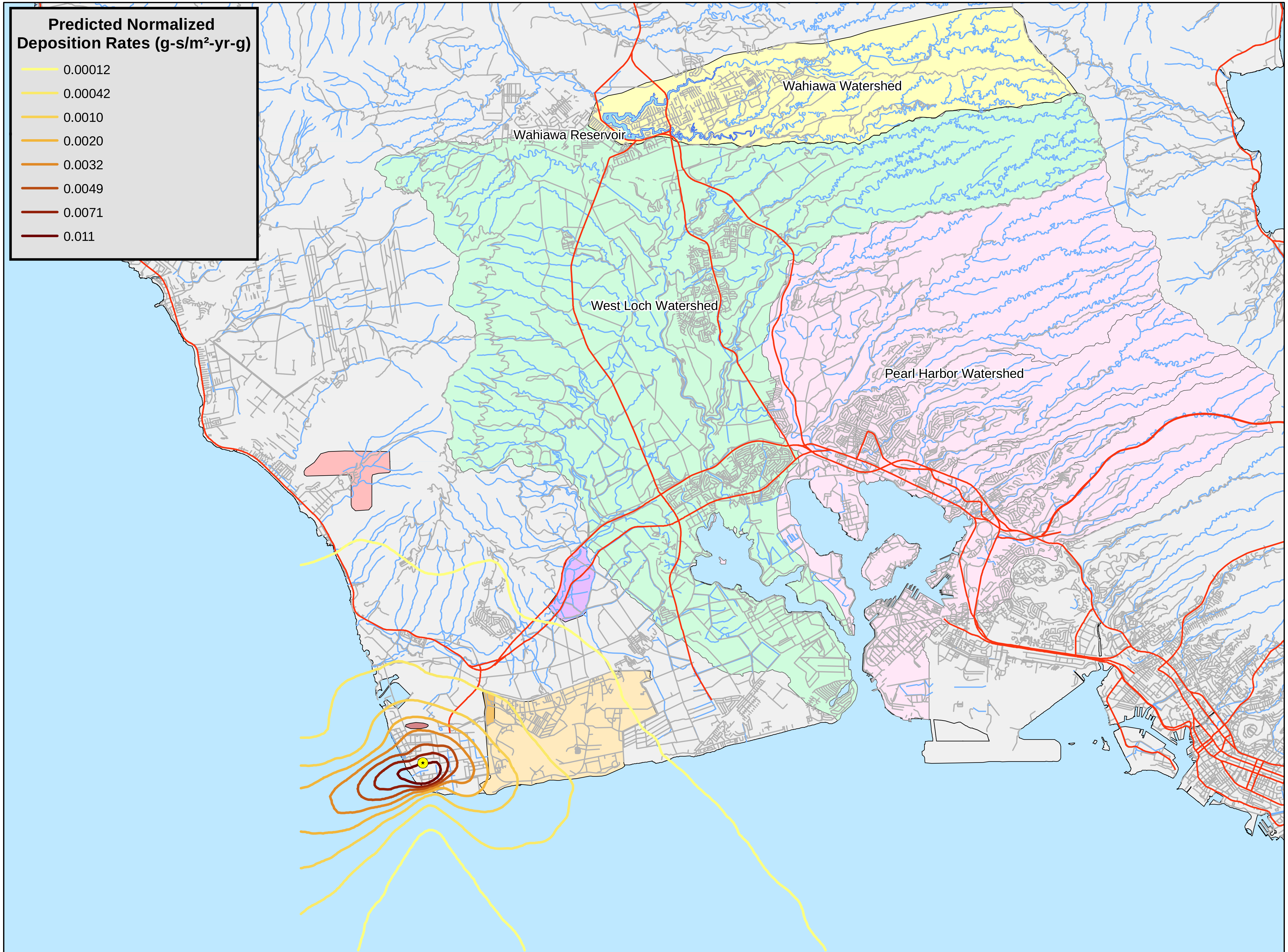


TITLE

Normalized Total (Wet + Dry) Deposition for Particle-Bound Compounds

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

H-Power
Major Roads
Streets
Streams
Former Military Base
Oahu

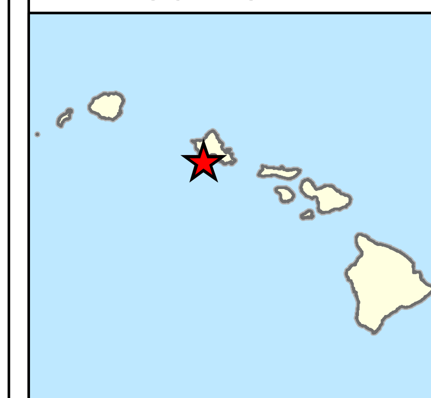
Exposure Areas

Poultry
Compost
Agricultural
Residential

Watershed Name

Wahiawa Resevor
West Loch
Pearl Harbor

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

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Feet
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FIGURE
2-9

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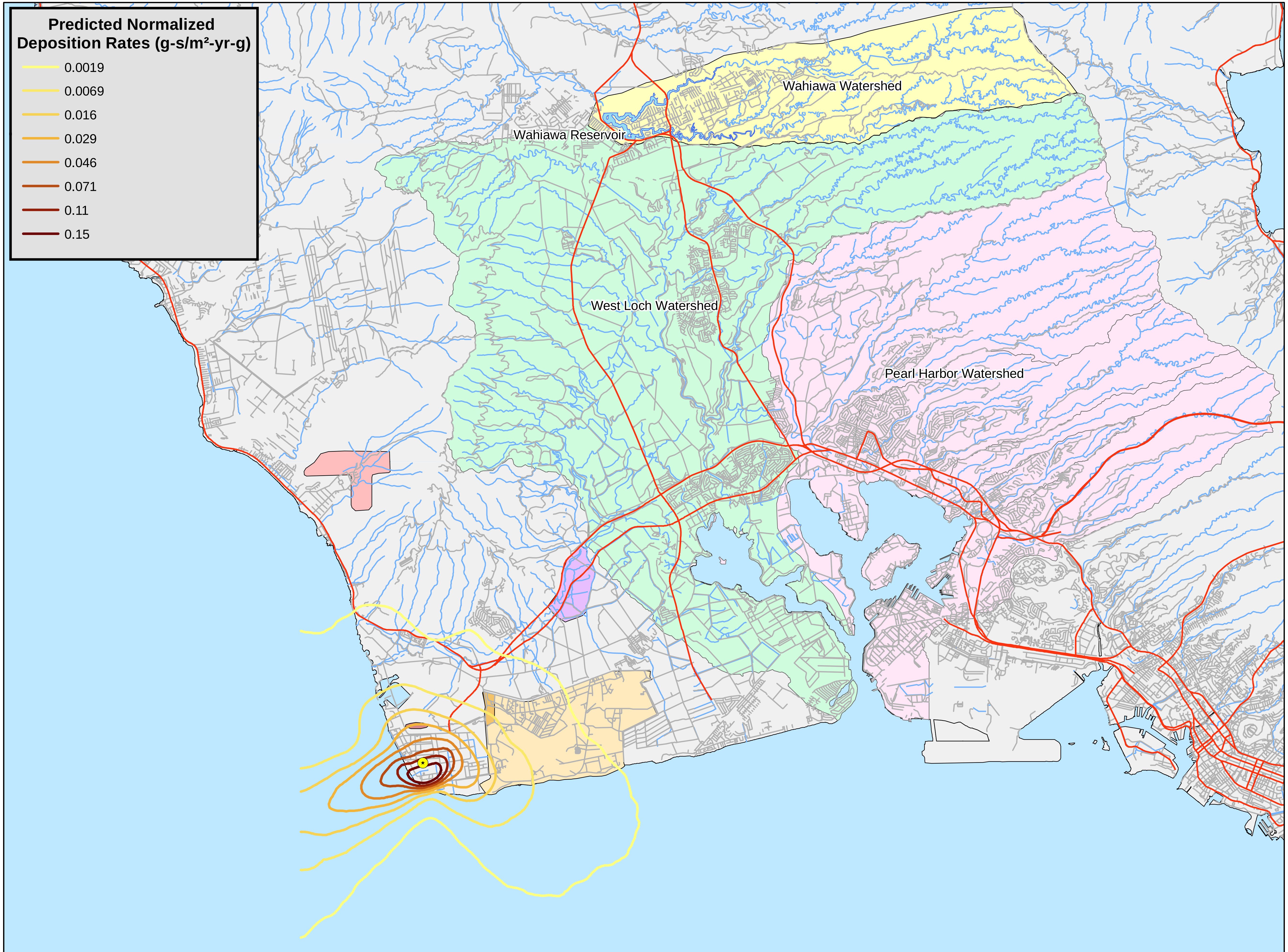


TITLE

Normalized Total (Wet + Dry) Deposition for Particle-Phase Compounds

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

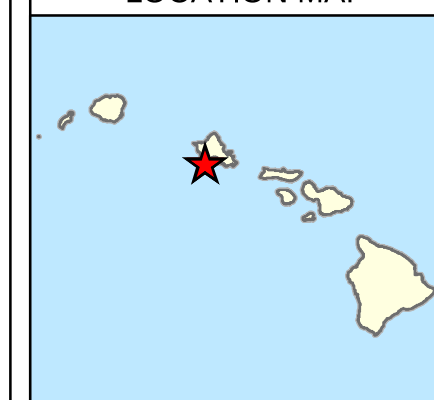
Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

0 10,000
Feet

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FIGURE
2-10

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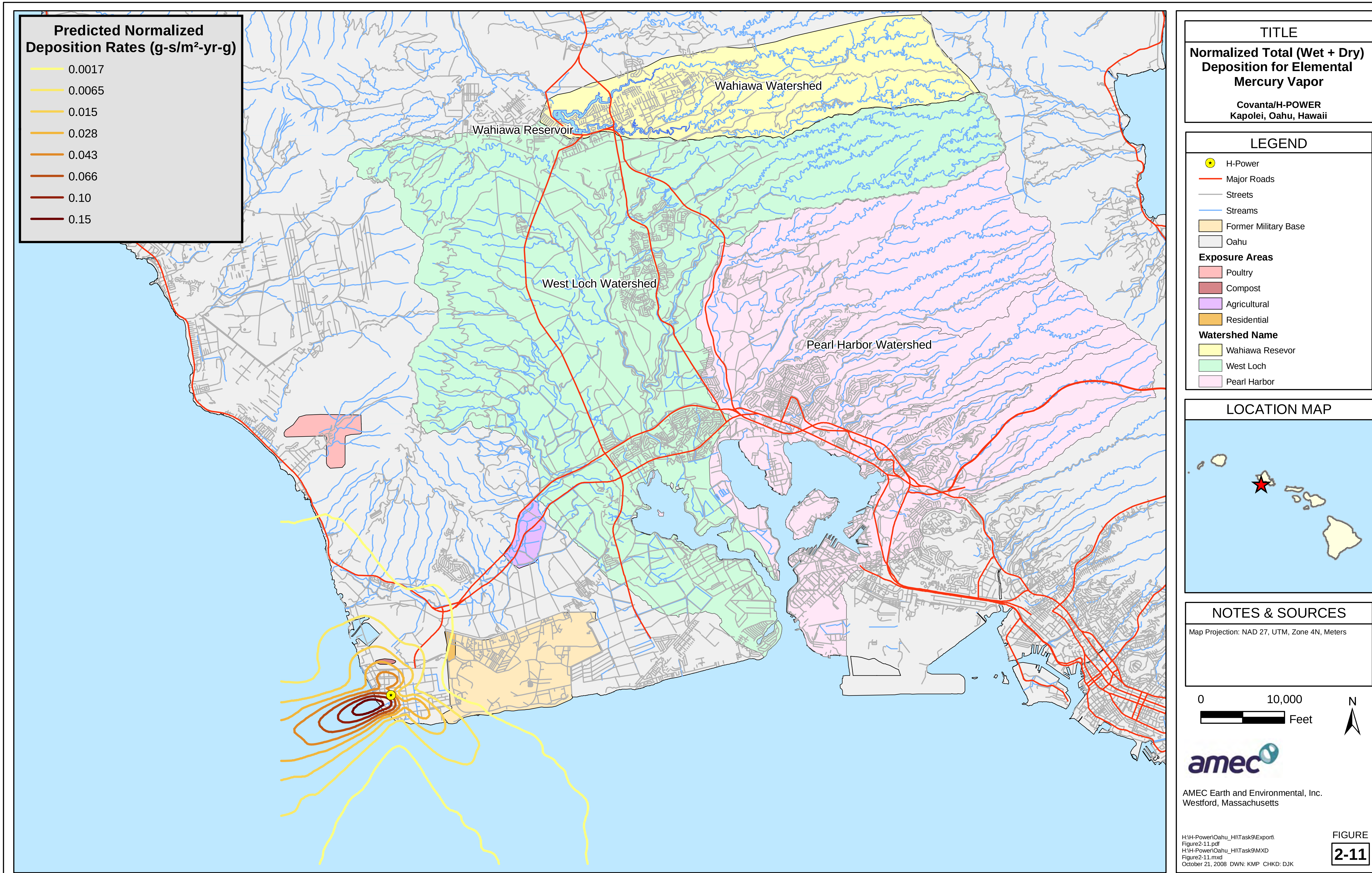

Predicted Normalized Deposition Rates (g-s/m²-yr-g)
0.0017
0.0065
0.015
0.028
0.043
0.066
0.10
0.15
Wahiawa Watershed
Wahiawa Reservoir
West Loch Watershed
Pearl Harbor Watershed
TITLE
Normalized Total (Wet + Dry) Deposition for Elemental Mercury Vapor
Covanta/H-POWER
Kapolei, Oahu, Hawaii
LEGEND
H-Power
Major Roads
Streets
Streams
Former Military Base
Oahu
Exposure Areas
Poultry
Compost
Agricultural
Residential
Watershed Name
Wahiawa Resevor
West Loch
Pearl Harbor
LOCATION MAP
NOTES & SOURCES
Map Projection: NAD 27, UTM, Zone 4N, Meters
0
10,000
Feet
N
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FIGURE
2-11

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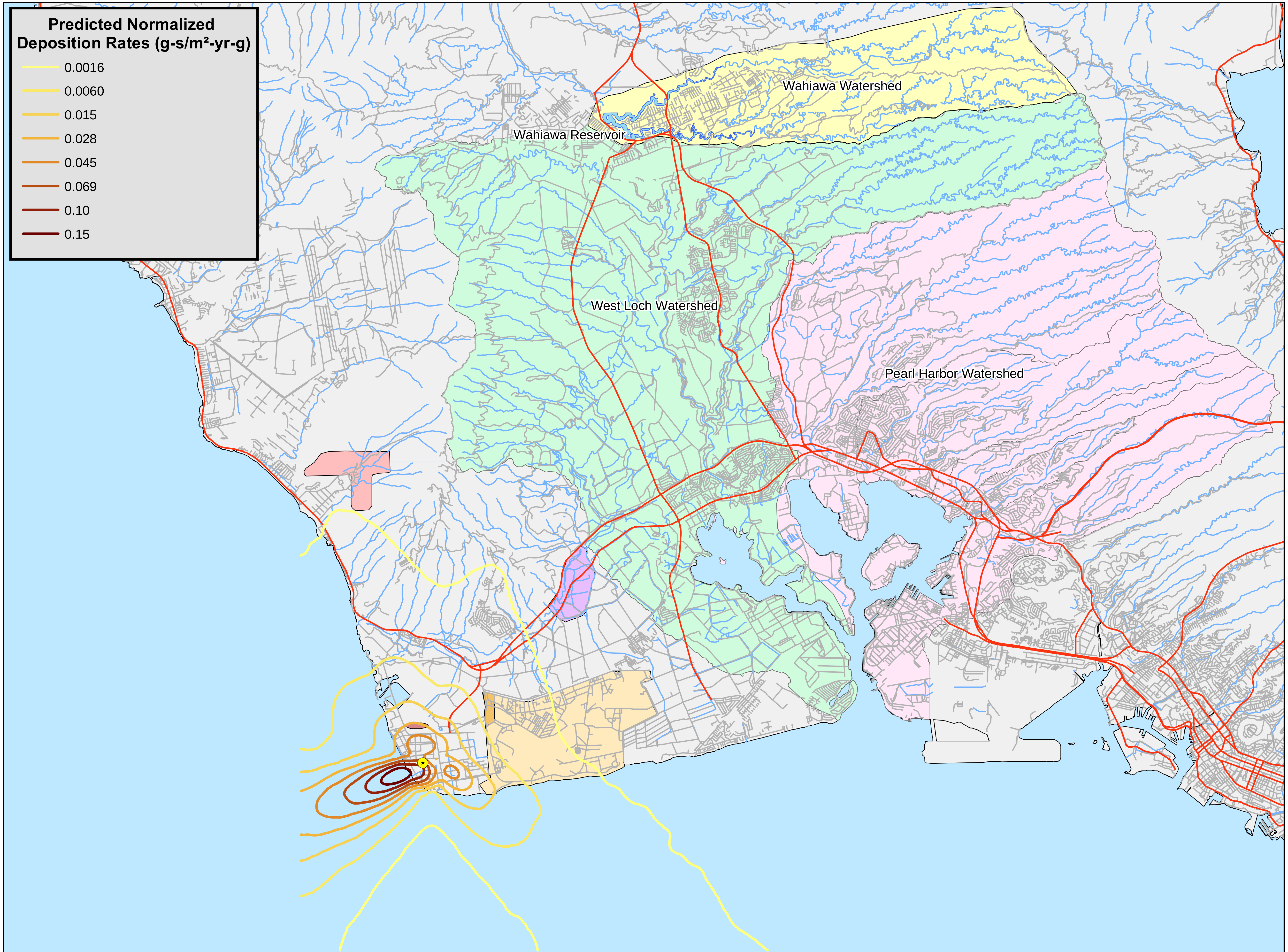


TITLE

Scenario B – Normalized Total (Wet + Dry) Deposition for Divalent Mercury Vapor

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

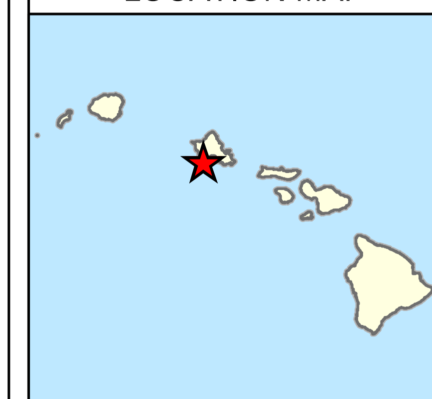
Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

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AMEC Earth and Environmental, Inc.
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October 21, 2008 DWN: KMP CHKD: DJK

FIGURE
2-12

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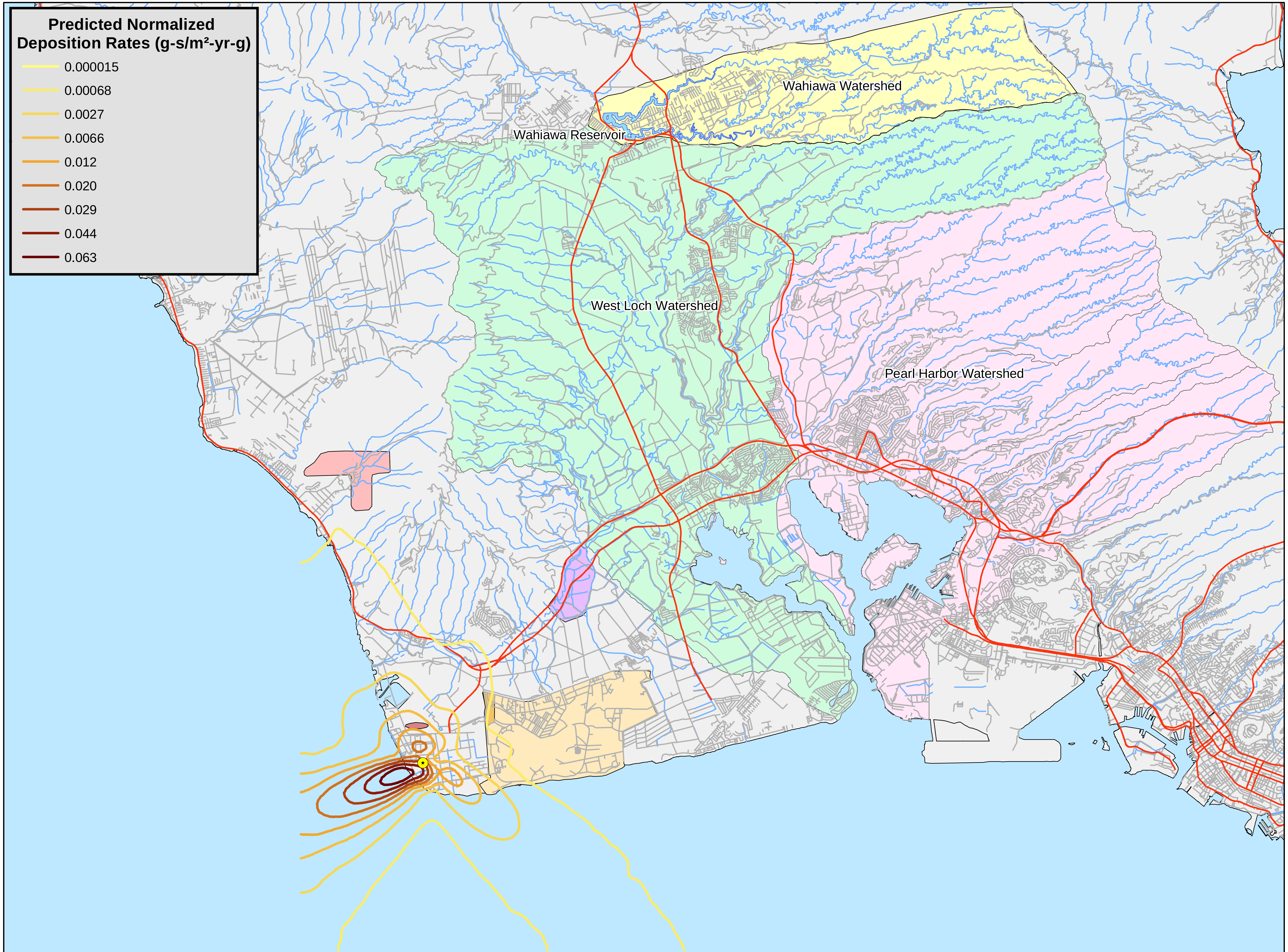

TITLE

Normalized Total (Wet + Dry) Deposition for Dioxin and Furan Vapor

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP

NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

0 10,000
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FIGURE
2-13

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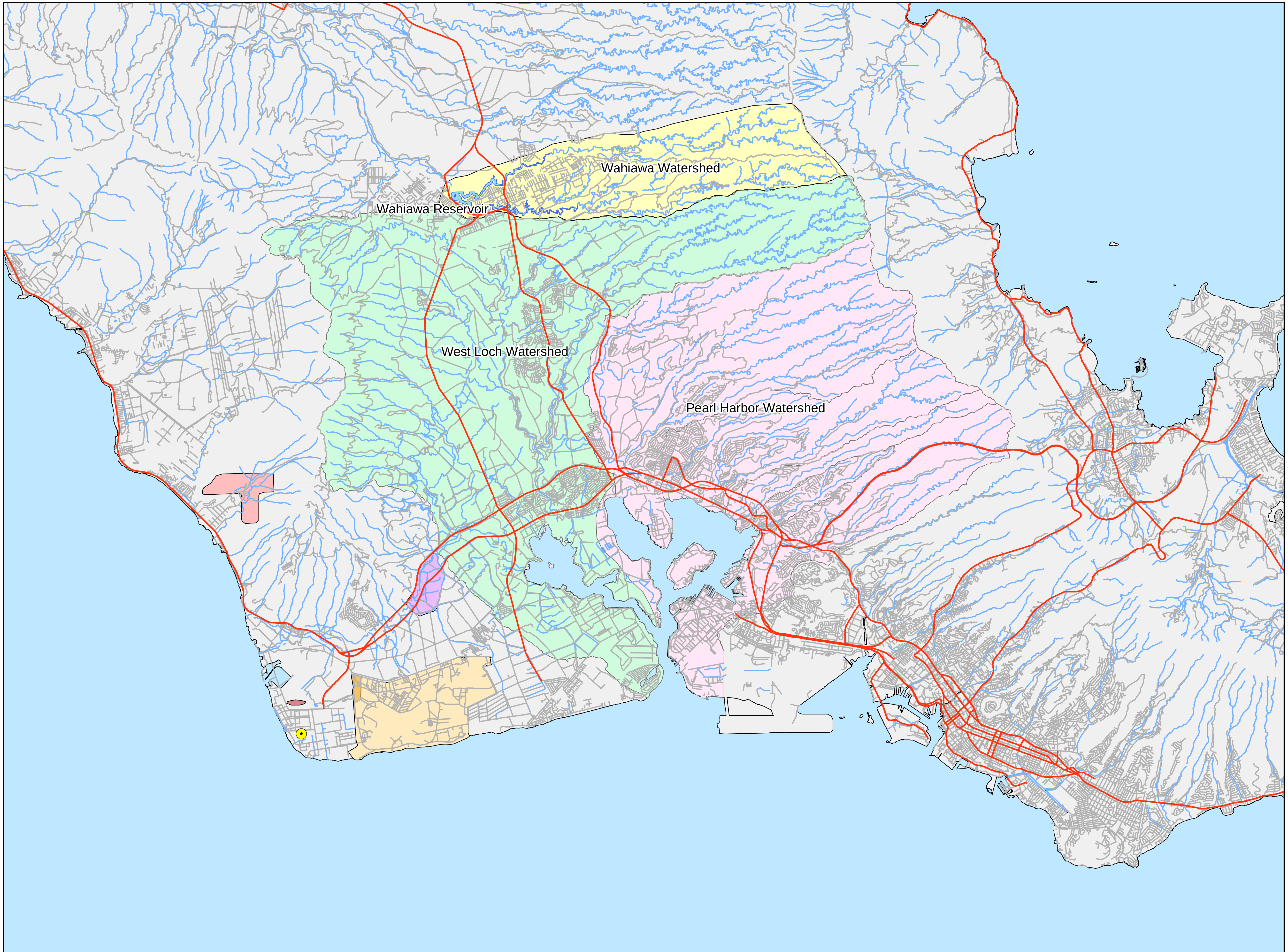


TITLE

Risk Assessment Study Area

Covanta/H-POWER
Kapolei, Oahu, Hawaii

LEGEND

- H-Power
- Major Roads
- Streets
- Streams
- Former Military Base
- Oahu

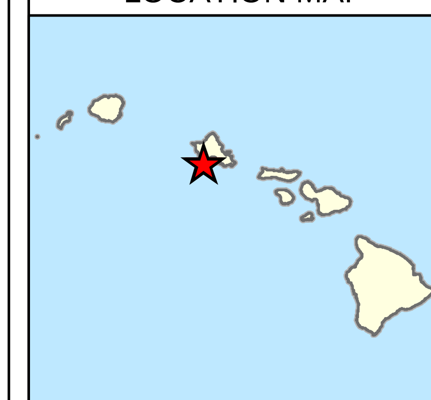
Exposure Areas

- Poultry
- Compost
- Agricultural
- Residential

Watershed Name

- Wahiawa Resevor
- West Loch
- Pearl Harbor

LOCATION MAP



NOTES & SOURCES

Map Projection: NAD 27, UTM, Zone 4N, Meters

0 12,000 Feet

N

AMEC Earth and Environmental, Inc.
Westford, Massachusetts

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October 21, 2008 DWN: KMP CHKD: DJK

FIGURE
4-1

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TABLE 2-1
COMPOUNDS OF POTENTIAL CONCERN
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound
2,3,7,8-TCDD
1,2,3,7,8-PeCDD
1,2,3,4,7,8-HxCDD
1,2,3,6,7,8-HxCDD
1,2,3,7,8,9-HxCDD
1,2,3,4,6,7,8-HpCDD
OCDD
2,3,7,8-TCDF
1,2,3,7,8-PeCDF
2,3,4,7,8-PeCDF
1,2,3,4,7,8-HxCDF
1,2,3,6,7,8-HxCDF
1,2,3,7,8,9-HxCDF
2,3,4,6,7,8-HxCDF
1,2,3,4,6,7,8-HpCDF
1,2,3,4,7,8,9-HpCDF
OCDF
Arsenic
Beryllium
Cadmium
Chromium
Lead
Mercury
Nickel

TABLE 2-2
EMISSION TEST DATA FOR METALS FROM H-POWER BOILERS 1 AND 2
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Test Date		Emission Rate (g/sec)						
	Emission	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel
Jun-91	Boiler 1	7.23E-05	NA	NA	< 2.26E-04	NA	NA	< 2.26E-04
	Boiler 2	5.71E-05	NA	NA	< 2.15E-04	NA	NA	< 2.15E-04
May-92	Boiler 1	1.58E-05	NA	NA	NA	NA	NA	< 1.63E-04
	Boiler 2	2.73E-05	NA	NA	NA	NA	NA	< 1.74E-04
2006	Boiler 1	NA	< 4.19E-06	3.11E-04	NA	1.29E-02	2.69E-03	NA
	Boiler 2	NA	< 4.79E-06	3.47E-04	NA	6.37E-03	1.26E-03	NA
2007	Boiler 1	NA	< 3.94E-06	1.13E-04	NA	5.32E-03	1.02E-03	NA
	Boiler 2	NA	< 3.85E-06	8.77E-05	NA	4.79E-03	9.22E-04	NA
2008	Boiler 1	NA	< 4.55E-06	2.25E-04	NA	1.28E-02	6.86E-04	NA
	Boiler 2	NA	< 4.38E-06	1.43E-04	NA	6.18E-03	8.14E-04	NA
Average	Boiler 1	4.41E-05	< 4.23E-06	2.16E-04	< 2.26E-04	1.03E-02	1.47E-03	< 1.95E-04
	Boiler 2	4.22E-05	< 4.34E-06	1.93E-04	< 2.15E-04	5.78E-03	9.99E-04	< 1.95E-04
Time Period for Average		1991-1992	2006-2008	2006-2008	1991	2006-2008	2006-2008	1991-1992

ND - Not Detected
NA - Not Applicable
Note: Half detection limit used for NDs (represented as "<#" in table).

TABLE 2-3
DIOXIN AND FURAN CONGENER DISTRIBUTION FROM H-POWER BOILERS 1 AND 2
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

	Boiler 1					Boiler 2					Combined
	Percent Catch Weight				Emissions	Percent Catch Weight				Emissions	Emissions
Congener	2006	2007	2008	Average	Factor (g/sec)	2006	2007	2008	Average	Factor (g/sec)	Factor (g/sec)
2,3,7,8-TCDD	0.20%	0.23%	0.23%	0.22%	3.73E-09	0.19%	0.24%	0.18%	0.20%	4.06E-09	7.79E-09
1,2,3,7,8-PeCDD	0.36%	0.56%	0.70%	0.54%	9.13E-09	0.34%	0.49%	0.54%	0.45%	9.20E-09	1.83E-08
1,2,3,4,7,8-HxCDD	0.15%	0.32%	0.40%	0.29%	4.94E-09	0.13%	0.24%	0.31%	0.23%	4.65E-09	9.59E-09
1,2,3,6,7,8-HxCDD	0.25%	0.42%	0.49%	0.39%	6.55E-09	0.18%	0.37%	0.41%	0.32%	6.44E-09	1.30E-08
1,2,3,7,8,9-HxCDD	0.17%	0.37%	0.44%	0.33%	5.52E-09	0.13%	0.27%	0.33%	0.24%	4.90E-09	1.04E-08
1,2,3,4,6,7,8-HpCDD	1.27%	1.77%	1.60%	1.55%	2.61E-08	0.57%	1.33%	1.40%	1.10%	2.23E-08	4.84E-08
OCDD	1.32%	1.54%	1.29%	1.39%	2.34E-08	0.47%	1.03%	0.96%	0.82%	1.66E-08	4.00E-08
2,3,7,8-TCDF	1.15%	0.86%	0.71%	0.90%	1.53E-08	1.09%	0.96%	0.71%	0.92%	1.86E-08	3.39E-08
1,2,3,7,8-PeCDF	1.58%	1.85%	1.69%	1.71%	2.88E-08	1.51%	1.89%	1.57%	1.66%	3.35E-08	6.24E-08
2,3,4,7,8-PeCDF	1.71%	1.90%	1.98%	1.86%	3.15E-08	1.62%	1.78%	2.13%	1.84%	3.73E-08	6.88E-08
1,2,3,4,7,8-HxCDF	1.00%	1.78%	2.03%	1.60%	2.70E-08	0.93%	1.52%	2.00%	1.48%	3.00E-08	5.71E-08
1,2,3,6,7,8-HxCDF	0.99%	1.89%	2.17%	1.68%	2.84E-08	0.94%	1.64%	2.11%	1.56%	3.16E-08	6.01E-08
1,2,3,7,8,9-HxCDF	0.13%	0.24%	0.33%	0.23%	3.94E-09	0.14%	0.22%	0.32%	0.23%	4.63E-09	8.56E-09
2,3,4,6,7,8-HxCDF	0.70%	1.27%	1.43%	1.13%	1.91E-08	0.70%	1.07%	1.58%	1.12%	2.26E-08	4.18E-08
1,2,3,4,6,7,8-HpCDF	1.03%	3.41%	4.32%	2.92%	4.93E-08	1.03%	2.53%	4.12%	2.56%	5.18E-08	1.01E-07
1,2,3,4,7,8,9-HpCDF	0.07%	0.25%	0.38%	0.23%	3.89E-09	0.06%	0.20%	0.31%	0.19%	3.85E-09	7.74E-09
OCDF	0.11%	0.45%	0.54%	0.37%	6.17E-09	0.07%	0.31%	0.39%	0.26%	5.19E-09	1.14E-08

Boiler 1 and 2 Total PCDD/PCDF Emission Concentration: 30 ng/dscm
Boiler 1 Total PCDD/PCDF Emission Rate: 1.69E-06 g/sec
Boiler 2 Total PCDD/PCDF Emission Rate: 2.02E-06 g/sec

TABLE 2-4
FACILITY-SPECIFIC MERCURY SPECIATION DATA
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

	Description	**2-O-M29-1**	**2-O-M29-3**	**1-O-M29-1**	**1-O-M29-2**	**1-O-M29-3**	**Mean**
Total Mercury		58.565	44.175	35.877	98.6	34.05	54.2534
KMNO4	elemental vapor	0.35	<0.100	0.12	0.99	0.26	0.364
Empty	ionic vapor	<0.095	<0.095	<0.095	<0.095	<0.100	0.096
HNO3	ionic vapor	56.2	42.5	34.7	95.2	32.9	52.3
Front Half	ionic particle	0.22	0.28	0.042	<0.015	0.12	0.1354
HCl	elemental vapor	1.7	1.2	0.92	2.3	0.67	1.358
	ionic vapor	56.295	42.595	34.795	95.295	33	52.396
	elemental vapor	2.05	1.3	1.04	3.29	0.93	1.722
	ionic particle	0.22	0.28	0.042	0.015	0.12	0.1354
	fraction ionic vapor	0.9612	0.9642	0.9698	0.9665	0.9692	**0.9662**
	fraction elemental vapor	0.0350	0.0294	0.0290	0.0334	0.0273	**0.0308**
	fraction ionic particle	0.0038	0.0063	0.0012	0.0002	0.0035	**0.0030**
	Fraction vapor:						
	elemental	1.0000	1.0000	1.0000	1.0000	1.0000	**1.0000**
	ionic	0.9961	0.9935	0.9988	0.9998	0.9964	**0.9969**
Global Hg cycle:							
element vapor	1% deposited	0.0004	0.0003	0.0003	0.0003	0.0003	0.0003
	99% global						
ionic vapor	68% deposited	0.6536	0.6557	0.6595	0.6572	0.6590	0.6570
	32% global						
ionic particle	36% deposited	0.0014	0.0023	0.0004	0.0001	0.0013	0.0011
	64% global						
	Total deposited:	0.6553	0.6583	0.6602	0.6576	0.6606	**0.6584**

Note:
< # = not detected, 1/2 detection limit used
Total Mercury is the sum of $KMnO_4$, Empty, HNO_3, Front Half and HCl

TABLE 2-5
ESTIMATION OF BOILER 3 EMISSION RATES FOR METALS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Eb Standard (lb/hr)	Emission Rate Using Eb Standard (a) (g/sec)	Average Alexandria Emission Rate (a) (ug/dscm)		Average Stanislaus Emission Rate (a) (ug/dscm)		Average Emission Rate (g/sec)[1]	Estimated Boiler 3 Emission Rate (g/sec)
			2007	2008	2006	2008		
Arsenic	NA[2]	NA	6.60E-02	2.07E-01	1.65E-01	1.38E-01	7.57E-06	7.57E-06
Beryllium	NA	NA	< 1.21E-02	< 1.12E-02	< 8.27E-02	< 6.10E-02	< 2.20E-06	< 2.20E-06
Cadmium	7.50E-03	5.25E-04	NA	NA	NA	NA	NA	5.25E-04
Chromium	NA	NA	ND[3]	ND	9.58E-01	2.39E+00	8.80E-05	8.80E-05
Lead	7.50E-02	7.36E-03	NA	NA	NA	NA	NA	7.36E-03
Mercury	3.00E-02	1.47E-03	NA	NA	NA	NA	NA	1.47E-03
Nickel	NA	NA	ND	ND	1.86E+00	4.59E+00	1.70E-04	1.70E-04

(1) Estimated emission rates based on assumed Boiler 3 flow rate.
(2) NA = Not applicable
(3) ND = Not determined
< indicates that compound was not detected during measurements. Value represents one half the detection limit.

TABLE 2-6
ESTIMATION OF BOILER 3 CONGENER DISTRIBUTION FOR DIOXINS AND FURANS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

	Alexandria MWC Congener Distribution					
	Percent Catch Weight					Emissions
Congener	2004	2005	2006	2007	Average	Factor (g/sec)
2,3,7,8-TCDD	0.04%	0.29%	0.19%	0.05%	0.14%	9.90E-10
1,2,3,7,8-PeCDD	0.22%	0.23%	0.52%	0.21%	0.29%	2.01E-09
1,2,3,4,7,8-HxCDD	0.16%	0.36%	0.45%	0.25%	0.31%	2.09E-09
1,2,3,6,7,8-HxCDD	1.11%	1.04%	0.73%	1.06%	0.98%	6.73E-09
1,2,3,7,8,9-HxCDD	0.55%	0.55%	0.61%	0.59%	0.58%	3.93E-09
1,2,3,4,6,7,8-HpCDD	3.94%	9.27%	5.54%	9.12%	6.97%	4.77E-08
OCDD	4.25%	16.58%	10.48%	17.96%	12.32%	8.42E-08
2,3,7,8-TCDF	0.22%	0.47%	0.84%	0.27%	0.45%	3.06E-09
1,2,3,7,8-PeCDF	0.29%	0.81%	1.51%	0.44%	0.76%	5.23E-09
2,3,4,7,8-PeCDF	0.48%	0.78%	1.58%	0.74%	0.89%	6.12E-09
1,2,3,4,7,8-HxCDF	0.38%	1.02%	1.86%	0.65%	0.98%	6.69E-09
1,2,3,6,7,8-HxCDF	0.30%	0.84%	1.96%	0.76%	0.96%	6.60E-09
1,2,3,7,8,9-HxCDF	0.31%	0.78%	0.55%	0.34%	0.50%	3.39E-09
2,3,4,6,7,8-HxCDF	0.05%	0.15%	1.67%	1.03%	0.72%	4.95E-09
1,2,3,4,6,7,8-HpCDF	0.78%	2.08%	5.29%	2.20%	2.59%	1.77E-08
1,2,3,4,7,8,9-HpCDF	0.08%	0.26%	0.82%	0.51%	0.42%	2.87E-09
OCDF	1.06%	0.57%	2.20%	1.44%	1.32%	9.02E-09

Boiler 3 Total PCDD/PCDF Emission Concentration: 13 ng/dscm
Boiler 3 Total PCDD/PCDF Emission Rate: 6.84E-07 g/sec

TABLE 2-7
SUMMARY OF EMISSION RATES FOR ALL BOILERS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

	Emission Rate (g/sec)		
Compound	**Boiler 1**	**Boiler 2**	**Boiler 3**
2,3,7,8-TCDD	3.73E-09	4.06E-09	9.90E-10
1,2,3,7,8-PeCDD	9.13E-09	9.20E-09	2.01E-09
1,2,3,4,7,8-HxCDD	4.94E-09	4.65E-09	2.09E-09
1,2,3,6,7,8-HxCDD	6.55E-09	6.44E-09	6.73E-09
1,2,3,7,8,9-HxCDD	5.52E-09	4.90E-09	3.93E-09
1,2,3,4,6,7,8-HpCDD	2.61E-08	2.23E-08	4.77E-08
OCDD	2.34E-08	1.66E-08	8.42E-08
2,3,7,8-TCDF	1.53E-08	1.86E-08	3.06E-09
1,2,3,7,8-PeCDF	2.88E-08	3.35E-08	5.23E-09
2,3,4,7,8-PeCDF	3.15E-08	3.73E-08	6.12E-09
1,2,3,4,7,8-HxCDF	2.70E-08	3.00E-08	6.69E-09
1,2,3,6,7,8-HxCDF	2.84E-08	3.16E-08	6.60E-09
1,2,3,7,8,9-HxCDF	3.94E-09	4.63E-09	3.39E-09
2,3,4,6,7,8-HxCDF	1.91E-08	2.26E-08	4.95E-09
1,2,3,4,6,7,8-HpCDF	4.93E-08	5.18E-08	1.77E-08
1,2,3,4,7,8,9-HpCDF	3.89E-09	3.85E-09	2.87E-09
OCDF	6.17E-09	5.19E-09	9.02E-09
Arsenic	4.41E-05	4.22E-05	7.57E-06
Beryllium	4.23E-06	4.34E-06	2.20E-06
Cadmium	2.16E-04	1.93E-04	5.25E-04
Chromium	2.26E-04	2.15E-04	8.80E-05
Lead	1.03E-02	5.78E-03	7.36E-03
Mercury	1.47E-03	9.99E-04	1.47E-03
Nickel	1.95E-04	1.95E-04	1.70E-04

TABLE 2-8
PHYSICAL CHARACTERISTICS EMISSION POINT SOURCES
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Operational Scenario	UTM Easting [1] (m)	UTM Northing[1] (m)	Base Elev. (m)	Stack Ht. (m)	Exit Dia. (m)	Exhaust Flow (acfm)	Exhaust Temp. (Deg K)	Exit Vel. (m/s)
Units 1 and 2 at 100% MCR	592239.0	2356326.0	4.6	88.40	2.69	472248	418.65	39.1
110% MCR at 6400 btu/lb	592618.6	2356414.8	3.8	60.66	2.23	181981	405.37	21.9

Notes:
1 - NAD27, Zone 4

TABLE 2-9
SURFACE CHARACTERISTICS AT CIP METEOROLOGICAL STATION
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Surface Characteristic		Value
Albedo		0.13
Bowen ratio		1.23
Surface Roughness Length by Wind Sector (m)	**Degrees**	**Value**
	0 - 30	0.10
	30 - 60	0.07
	60 - 90	0.11
	90 - 120	0.14
	120 - 150	0.45
	150 - 180	0.50
	180 - 210	0.50
	210 - 240	0.49
	240 - 270	0.42
	270 - 300	0.29
	300 - 330	0.16
	330 - 360	0.18

TABLE 2-10
PARTICLE SIZE DISTRIBUTIONS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Mean Particle Diameter (um)	Particle Radius	Surface Area to Volume Ratio	Mass Fraction	Proportional Surface Area Available	Fraction of Total Surface Area
0.38	0.19	15.79	0.53	8.37	0.899
0.82	0.41	7.32	0.04	0.29	0.031
1.32	0.66	4.55	0.03	0.14	0.015
2.49	1.245	2.41	0.1	0.24	0.026
4.16	2.08	1.44	0.08	0.12	0.012
6.22	3.11	0.96	0.08	0.08	0.008
9.16	4.58	0.66	0.06	0.04	0.004
14.35	7.175	0.42	0.08	0.03	0.004
			Total	9.30	1

TABLE 2-11
CHEMICAL-PHYSICAL PROPERTIES USED IN VAPOR MODELING
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Chemical Name/Class	Diffusivity in air (cm^2/sec)	source	Diffusivity in water (cm^2/sec)	source	Cuticular resistance (sec/cm)	source	Henry's law constant (Pa-mol/atm)	source	Reactivity factor	source
Elemental mercury	0.07	a	3.01E-05	b	1.00E+05	a	150	a	0	c
Divalent mercury	0.06	a	5.25E-06	b	1.00E+05	a	6.00E-06	a	1	c
Dioxins/Furans	1.21E-02	b	4.38E-06	b	0.547	b	0.263445	b	0	c

Source:

a - Wesely, et al., 2002. Deposition Parameterizations for the Industrial Source Complex (ISC3) Model. Argonne National Laboratories, Environmental Research Division. ANL/ER/TR-01/003. June.

b - EPA, 1998. Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities. U.S. Environmental Protection Agency, Washington D.C. Office of Solid Waste and Emergency Response. EPA530-D-98-001A. July.

c - EPA, 2003. User's Guide for the AMS/EPA Regulatory Model-AERMOD - Addendum. U.S. Environmental Protection Agency, Washington D.C. Office of Air Quality Planning and Standards. September, 2003.

TABLE 2-12
AIR MODELING RESULTS FOR UNITS 1 & 2
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Receptor Area	Unitized Air concentration - Dioxin Vapors (ug/m3) / (g/s)	Unitized Dry deposition - Dioxin Vapors (g/m2/s) / (g/s)	Unitized Wet deposition - Dioxin Vapors (g/m2/s) / (g/s)	Unitized Air concentration - Particle bound (ug/m3) / (g/s)	Unitized Dry deposition - Particle bound (g/m2/s) / (g/s)	Unitized Wet deposition - Particle bound (g/m2/s) / (g/s)	Unitized Wet+Dry deposition - Particle bound (g/m2/s) / (g/s)	Unitized Air concentration - Particle phase (ug/m3) / (g/s)	Unitized Dry deposition - Particle phase (g/m2/s) / (g/s)	Unitized Wet deposition - Particle phase (g/m2/s) / (g/s)	Unitized Wet+Dry deposition - Particle phase (g/m2/s) / (g/s)	Unitized air concentration - HgII (ug/m3) / (g/s)	Unitized Dry deposition - HgII (g/m2/s) / (g/s)	Unitized Wet deposition - HgII (g/m2/s) / (g/s)	Unitized air concentration - Hg0 (ug/m3) / (g/s)	Unitized Dry deposition - Hg0 (g/m2/s) / (g/s)	Unitized Wet deposition - Hg0 (g/m2/s) / (g/s)
Agriculture Area	8.00E-04	7.44E-05	7.05E-06	8.00E-04	3.70E-05	4.38E-06	4.14E-05	7.80E-04	3.92E-04	3.68E-05	4.28E-04	7.80E-04	3.97E-04	4.62E-05	7.94E-04	1.91E-04	3.00E-08
Compost Area	8.58E-03	2.88E-03	3.11E-04	8.59E-03	6.43E-04	1.86E-04	8.30E-04	8.55E-03	6.90E-03	7.58E-04	7.66E-03	8.52E-03	9.26E-03	1.26E-03	8.55E-03	7.89E-03	8.53E-07
Poultry Area	8.71E-04	1.51E-04	3.69E-05	8.79E-04	3.46E-05	3.46E-06	3.81E-05	8.60E-04	3.35E-04	3.39E-05	3.69E-04	8.37E-04	5.14E-04	6.83E-05	8.58E-04	3.92E-04	1.46E-07
Residential Area	2.86E-03	2.22E-04	2.21E-05	2.85E-03	1.82E-04	3.39E-05	2.15E-04	2.81E-03	2.01E-03	2.34E-04	2.25E-03	2.83E-03	1.45E-03	1.72E-04	2.85E-03	5.74E-04	8.75E-08
West Loch	5.10E-04	1.96E-05	7.03E-06	5.10E-04	2.27E-05	1.94E-06	2.46E-05	4.96E-04	2.17E-04	1.72E-05	2.34E-04	4.96E-04	1.71E-04	3.05E-05	5.08E-04	4.67E-05	1.72E-07
West Loch Agricultural Pervious	7.73E-04	5.35E-05	3.84E-06	7.75E-04	1.97E-05	1.69E-06	2.13E-05	7.55E-04	1.77E-04	1.26E-05	1.89E-04	7.42E-04	2.44E-04	2.02E-05	7.66E-04	1.33E-04	4.25E-08
West Loch Conservation Impervious	3.13E-04	3.49E-05	2.22E-06	3.16E-04	1.03E-05	1.15E-06	1.14E-05	3.11E-04	9.21E-05	8.16E-06	1.00E-04	2.97E-04	1.46E-04	1.35E-05	3.07E-04	8.80E-05	1.19E-08
West Loch Conservation Pervious	3.37E-04	3.32E-05	2.26E-06	3.40E-04	1.05E-05	1.15E-06	1.17E-05	3.32E-04	9.33E-05	7.96E-06	1.01E-04	3.19E-04	1.42E-04	1.40E-05	3.32E-04	8.33E-05	1.20E-08
West Loch Urban Impervious	4.62E-04	4.43E-05	2.36E-06	4.66E-04	1.30E-05	1.15E-06	1.42E-05	4.64E-04	1.15E-04	6.12E-06	1.21E-04	4.39E-04	1.87E-04	1.21E-05	4.54E-04	1.10E-04	1.27E-08
West Loch Urban Pervious	5.43E-04	3.66E-05	5.73E-06	5.46E-04	1.84E-05	1.56E-06	1.99E-05	5.40E-04	1.71E-04	1.13E-05	1.82E-04	5.22E-04	1.93E-04	2.04E-05	5.38E-04	9.02E-05	1.43E-07
West Loch Watershed Impervious	4.44E-04	3.62E-05	4.13E-06	4.47E-04	1.48E-05	1.37E-06	1.61E-05	4.41E-04	1.36E-04	9.76E-06	1.45E-04	4.25E-04	1.73E-04	1.72E-05	4.39E-04	9.02E-05	8.31E-08
West Loch Watershed Pervious	6.99E-04	4.94E-05	3.85E-06	7.01E-04	1.85E-05	1.62E-06	2.01E-05	6.84E-04	1.67E-04	1.19E-05	1.78E-04	6.71E-04	2.27E-04	1.95E-05	6.92E-04	1.23E-04	4.95E-08
Pearl Harbor	4.74E-04	1.57E-05	6.59E-06	4.75E-04	1.91E-05	1.46E-06	2.06E-05	4.68E-04	1.78E-04	1.17E-05	1.90E-04	4.61E-04	1.40E-04	2.12E-05	4.73E-04	3.67E-05	2.49E-07
Pearl Harbor Agricultural Pervious	7.03E-04	4.78E-05	3.69E-06	7.06E-04	1.84E-05	1.59E-06	2.00E-05	6.90E-04	1.66E-04	1.15E-05	1.77E-04	6.75E-04	2.23E-04	1.94E-05	6.97E-04	1.18E-04	4.02E-08
Pearl Harbor Conservation Impervious	3.61E-04	1.99E-05	2.06E-06	3.62E-04	1.04E-05	9.31E-07	1.13E-05	3.54E-04	8.92E-05	5.39E-06	9.46E-05	3.42E-04	1.08E-04	1.18E-05	3.58E-04	4.79E-05	3.19E-08
Pearl Harbor Conservation Pervious	4.04E-04	1.89E-05	2.14E-06	4.05E-04	1.08E-05	9.33E-07	1.17E-05	3.92E-04	9.07E-05	5.33E-06	9.60E-05	3.82E-04	1.07E-04	1.22E-05	4.01E-04	4.50E-05	3.71E-08
Pearl Harbor Urban Impervious	4.47E-04	2.55E-05	2.68E-06	4.50E-04	1.32E-05	1.07E-06	1.42E-05	4.53E-04	1.16E-04	5.91E-06	1.22E-04	4.28E-04	1.38E-04	1.38E-05	4.43E-04	6.18E-05	5.03E-08
Pearl Harbor Urban Pervious	4.90E-04	2.63E-05	5.34E-06	4.92E-04	1.67E-05	1.36E-06	1.80E-05	4.91E-04	1.53E-04	9.24E-06	1.62E-04	4.72E-04	1.57E-04	1.84E-05	4.86E-04	6.37E-05	1.73E-07
Pearl Harbor Watershed Impervious	4.24E-04	2.31E-05	3.59E-06	4.26E-04	1.34E-05	1.13E-06	1.45E-05	4.21E-04	1.20E-04	7.17E-06	1.27E-04	4.06E-04	1.32E-04	1.49E-05	4.21E-04	5.58E-05	9.73E-08
Pearl Harbor Watershed Pervious	6.06E-04	3.83E-05	3.56E-06	6.08E-04	1.64E-05	1.41E-06	1.78E-05	5.95E-04	1.47E-04	9.75E-06	1.57E-04	5.80E-04	1.88E-04	1.76E-05	6.00E-04	9.42E-05	5.75E-08
Wahiawa	7.79E-04	5.45E-05	1.88E-06	7.84E-04	1.44E-05	9.83E-07	1.54E-05	7.50E-04	1.12E-04	5.47E-06	1.18E-04	7.38E-04	2.14E-04	1.09E-05	7.68E-04	1.32E-04	1.00E-08
Wahiawa Agricultural Pervious	4.82E-04	4.46E-05	1.74E-06	4.88E-04	1.13E-05	8.10E-07	1.21E-05	4.82E-04	9.22E-05	3.83E-06	9.60E-05	4.55E-04	1.74E-04	8.56E-06	4.73E-04	1.09E-04	1.00E-08
Wahiawa Conservation Impervious	2.60E-04	2.77E-05	1.60E-06	2.64E-04	7.73E-06	8.92E-07	8.62E-06	2.67E-04	6.55E-05	3.17E-06	6.87E-05	2.42E-04	1.16E-04	7.31E-06	2.53E-04	6.72E-05	1.00E-08
Wahiawa Conservation Pervious	3.94E-04	3.34E-05	1.67E-06	3.98E-04	9.20E-06	9.02E-07	1.01E-05	3.92E-04	7.51E-05	3.63E-06	7.88E-05	3.70E-04	1.36E-04	7.99E-06	3.87E-04	8.10E-05	1.00E-08
Wahiawa Urban Impervious	3.80E-04	4.34E-05	1.67E-06	3.86E-04	1.05E-05	7.60E-07	1.13E-05	3.88E-04	8.72E-05	3.39E-06	9.06E-05	3.56E-04	1.67E-04	7.91E-06	3.70E-04	1.07E-04	1.00E-08
Wahiawa Urban Pervious	5.79E-04	4.80E-05	1.76E-06	5.85E-04	1.24E-05	8.57E-07	1.32E-05	5.73E-04	9.90E-05	4.33E-06	1.03E-04	5.48E-04	1.88E-04	9.27E-06	5.69E-04	1.17E-04	1.00E-08
Wahiawa Watershed Impervious	3.14E-04	3.12E-05	1.63E-06	3.18E-04	8.53E-06	8.84E-07	9.41E-06	3.19E-04	7.13E-05	3.36E-06	7.47E-05	2.94E-04	1.28E-04	7.64E-06	3.07E-04	7.59E-05	1.00E-08
Wahiawa Watershed Pervious	4.46E-04	3.93E-05	1.71E-06	4.50E-04	1.04E-05	8.59E-07	1.12E-05	4.44E-04	8.42E-05	3.77E-06	8.80E-05	4.20E-04	1.56E-04	8.33E-06	4.37E-04	9.58E-05	1.00E-08

Notes:
Impervious = (conservation > 45 degrees) + (urban > 45 degrees) + (75% of urban < 45 degrees)   I: C>45+U>45+.75*U<45
Pervious = (all agriculture regardless of slope) + (conservation if <= 45 degrees) + (25% of urban <= 45 degrees)   P: A+C<45+.25*u<45

TABLE 2-13
AIR MODELING RESULTS FOR UNIT 3
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Receptor Area	Unitized Air concentration - Dioxin Vapors (ug/m3) / (g/s)	Unitized Dry deposition - Dioxin Vapors (g/m2/s) / (g/s)	Unitized Wet deposition - Dioxin Vapors (g/m2/s) / (g/s)	Unitized Air concentration - Particle bound (ug/m3) / (g/s)	Unitized Dry deposition - Particle bound (g/m2/s) / (g/s)	Unitized Wet deposition - Particle bound (g/m2/s) / (g/s)	Unitized Wet+Dry deposition - Particle bound (g/m2/s) / (g/s)	Unitized Air concentration - Particle phase (ug/m3) / (g/s)	Unitized Dry deposition - Particle phase (g/m2/s) / (g/s)	Unitized Wet deposition - Particle phase (g/m2/s) / (g/s)	Unitized Wet+Dry deposition - Particle phase (g/m2/s) / (g/s)	Unitized air concentration - HgII (ug/m3) / (g/s)	Unitized Dry deposition - HgII (g/m2/s) / (g/s)	Unitized Wet deposition - HgII (g/m2/s) / (g/s)	Unitized air concentration - Hg0 (ug/m3) / (g/s)	Unitized Dry deposition - Hg0 (g/m2/s) / (g/s)	Unitized Wet deposition - Hg0 (g/m2/s) / (g/s)
Agriculture Area	1.22E-03	1.02E-04	7.37E-06	1.22E-03	4.15E-05	4.69E-06	4.62E-05	1.20E-03	4.17E-04	3.56E-05	4.52E-04	1.19E-03	5.22E-04	4.65E-05	1.21E-03	2.58E-04	3.22E-08
Compost Area	1.69E-02	6.45E-03	3.35E-04	1.70E-02	1.25E-03	1.69E-04	1.42E-03	1.68E-02	1.34E-02	7.16E-04	1.41E-02	1.67E-02	1.80E-02	1.32E-03	1.68E-02	1.75E-02	8.97E-07
Poultry Area	1.25E-03	1.86E-04	3.96E-05	1.27E-03	4.01E-05	3.12E-06	4.33E-05	1.26E-03	3.75E-04	2.70E-05	4.01E-04	1.21E-03	5.98E-04	7.24E-05	1.24E-03	4.78E-04	1.45E-07
Residential Area	5.06E-03	4.48E-04	2.46E-05	5.06E-03	2.61E-04	4.16E-05	3.02E-04	4.97E-03	2.87E-03	2.47E-04	3.12E-03	4.98E-03	2.49E-03	1.83E-04	5.03E-03	1.15E-03	9.50E-08
West Loch	8.64E-04	2.52E-05	7.71E-06	8.66E-04	2.60E-05	2.06E-06	2.80E-05	8.56E-04	2.35E-04	1.71E-05	2.53E-04	8.32E-04	2.13E-04	3.21E-05	8.62E-04	5.75E-05	1.37E-07
West Loch Agricultural Pervious	9.46E-04	6.13E-05	3.94E-06	9.49E-04	2.12E-05	1.76E-06	2.29E-05	9.13E-04	1.83E-04	1.25E-05	1.95E-04	9.01E-04	2.77E-04	2.08E-05	9.37E-04	1.50E-04	3.60E-08
West Loch Conservation Impervious	4.08E-04	3.81E-05	2.18E-06	4.11E-04	1.08E-05	1.16E-06	1.20E-05	3.96E-04	9.19E-05	7.85E-06	9.97E-05	3.77E-04	1.56E-04	1.35E-05	4.01E-04	9.45E-05	1.08E-08
West Loch Conservation Pervious	4.17E-04	3.63E-05	2.22E-06	4.19E-04	1.10E-05	1.16E-06	1.21E-05	4.01E-04	9.33E-05	7.61E-06	1.01E-04	3.87E-04	1.53E-04	1.39E-05	4.10E-04	8.99E-05	1.08E-08
West Loch Urban Impervious	7.37E-04	5.10E-05	2.39E-06	7.42E-04	1.50E-05	1.15E-06	1.61E-05	7.23E-04	1.22E-04	5.84E-06	1.28E-04	6.91E-04	2.15E-04	1.22E-05	7.27E-04	1.24E-04	1.27E-08
West Loch Urban Pervious	8.85E-04	4.35E-05	6.05E-06	8.88E-04	2.10E-05	1.62E-06	2.26E-05	8.59E-04	1.81E-04	1.11E-05	1.92E-04	8.34E-04	2.29E-04	2.10E-05	8.79E-04	1.04E-04	1.10E-07
West Loch Watershed Impervious	6.80E-04	4.16E-05	4.29E-06	6.84E-04	1.65E-05	1.41E-06	1.79E-05	6.61E-04	1.42E-04	9.50E-06	1.51E-04	6.38E-04	1.98E-04	1.75E-05	6.74E-04	1.01E-04	6.43E-08
West Loch Watershed Pervious	8.79E-04	5.66E-05	3.96E-06	8.82E-04	2.00E-05	1.67E-06	2.17E-05	8.49E-04	1.73E-04	1.18E-05	1.84E-04	8.35E-04	2.58E-04	2.00E-05	8.71E-04	1.39E-04	4.08E-08
Pearl Harbor	8.23E-04	1.96E-05	6.91E-06	8.25E-04	2.20E-05	1.55E-06	2.36E-05	8.09E-04	1.92E-04	1.17E-05	2.04E-04	7.80E-04	1.70E-04	2.24E-05	8.22E-04	4.33E-05	1.81E-07
Pearl Harbor Agricultural Pervious	9.02E-04	5.50E-05	3.79E-06	9.05E-04	2.00E-05	1.66E-06	2.17E-05	8.70E-04	1.72E-04	1.13E-05	1.83E-04	8.53E-04	2.55E-04	1.99E-05	8.94E-04	1.34E-04	3.41E-08
Pearl Harbor Conservation Impervious	4.63E-04	2.19E-05	2.04E-06	4.64E-04	1.11E-05	9.49E-07	1.20E-05	4.45E-04	9.05E-05	5.21E-06	9.57E-05	4.25E-04	1.17E-04	1.18E-05	4.59E-04	5.17E-05	2.16E-08
Pearl Harbor Conservation Pervious	4.65E-04	2.07E-05	2.11E-06	4.65E-04	1.12E-05	9.49E-07	1.21E-05	4.40E-04	9.12E-05	5.12E-06	9.63E-05	4.30E-04	1.15E-04	1.21E-05	4.62E-04	4.87E-05	2.56E-08
Pearl Harbor Urban Impervious	7.50E-04	2.99E-05	2.68E-06	7.51E-04	1.51E-05	1.09E-06	1.62E-05	7.20E-04	1.21E-04	5.67E-06	1.27E-04	6.88E-04	1.61E-04	1.39E-05	7.46E-04	6.96E-05	3.50E-08
Pearl Harbor Urban Pervious	8.45E-04	3.14E-05	5.52E-06	8.46E-04	1.92E-05	1.41E-06	2.06E-05	8.15E-04	1.62E-04	9.04E-06	1.71E-04	7.84E-04	1.87E-04	1.89E-05	8.41E-04	7.33E-05	1.27E-07
Pearl Harbor Watershed Impervious	6.51E-04	2.66E-05	3.66E-06	6.52E-04	1.50E-05	1.17E-06	1.61E-05	6.27E-04	1.25E-04	6.98E-06	1.32E-04	6.02E-04	1.51E-04	1.51E-05	6.48E-04	6.25E-05	7.03E-08
Pearl Harbor Watershed Pervious	7.94E-04	4.39E-05	3.64E-06	7.96E-04	1.79E-05	1.46E-06	1.93E-05	7.64E-04	1.52E-04	9.58E-06	1.62E-04	7.47E-04	2.14E-04	1.80E-05	7.88E-04	1.06E-04	4.47E-08
Wahiawa	6.76E-04	5.80E-05	1.78E-06	6.82E-04	1.39E-05	1.06E-06	1.50E-05	6.41E-04	1.10E-04	5.72E-06	1.16E-04	6.31E-04	2.24E-04	1.15E-05	6.60E-04	1.41E-04	1.00E-08
Wahiawa Agricultural Pervious	6.64E-04	4.94E-05	1.70E-06	6.70E-04	1.25E-05	8.53E-07	1.34E-05	6.40E-04	9.53E-05	3.86E-06	9.91E-05	6.19E-04	1.92E-04	8.88E-06	6.53E-04	1.18E-04	1.00E-08
Wahiawa Conservation Impervious	4.52E-04	3.14E-05	1.65E-06	4.57E-04	8.92E-06	8.97E-07	9.81E-06	4.45E-04	6.84E-05	3.01E-06	7.14E-05	4.14E-04	1.29E-04	7.32E-06	4.45E-04	7.37E-05	1.00E-08
Wahiawa Conservation Pervious	5.18E-04	3.68E-05	1.70E-06	5.21E-04	9.94E-06	9.14E-07	1.09E-05	4.93E-04	7.62E-05	3.51E-06	7.97E-05	4.77E-04	1.48E-04	8.08E-06	5.10E-04	8.76E-05	1.00E-08
Wahiawa Urban Impervious	6.43E-04	4.96E-05	1.65E-06	6.51E-04	1.23E-05	8.13E-07	1.31E-05	6.32E-04	9.33E-05	3.47E-06	9.68E-05	5.98E-04	1.90E-04	8.31E-06	6.30E-04	1.18E-04	1.00E-08
Wahiawa Urban Pervious	7.16E-04	5.27E-05	1.69E-06	7.21E-04	1.32E-05	9.16E-07	1.41E-05	6.80E-04	1.00E-04	4.43E-06	1.05E-04	6.65E-04	2.05E-04	9.68E-06	7.03E-04	1.26E-04	1.00E-08
Wahiawa Watershed Impervious	4.98E-04	3.51E-05	1.66E-06	5.03E-04	9.67E-06	8.99E-07	1.06E-05	4.86E-04	7.40E-05	3.25E-06	7.72E-05	4.58E-04	1.43E-04	7.72E-06	4.90E-04	8.30E-05	1.00E-08
Wahiawa Watershed Pervious	5.95E-04	4.34E-05	1.70E-06	6.00E-04	1.13E-05	8.88E-07	1.22E-05	5.70E-04	8.62E-05	3.73E-06	8.99E-05	5.52E-04	1.71E-04	8.54E-06	5.85E-04	1.04E-04	1.00E-08

Notes:
Impervious = (conservation > 45 degrees) + (urban > 45 degrees) + (75% of urban < 45 degrees) I: C>45+U>45+.75*U<45
Pervious = (all agriculture regardless of slope) + (conservation if <= 45 degrees) + (25% of urban <= 45 degrees) P: A+C<45+.25*u<45

TABLE 3-1
SUMMARY OF TOXICITY INFORMATION
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Oral Reference Dose (mg/kg-day)		Inhalation Reference Dose (mg/kg-day)		2,3,7,8-TCDD-TE Toxic Equivalence Factor (b)	Oral Cancer Slope Factor (mg/kg-day)-1		Inhalation Cancer Slope Factor (mg/kg-day)-1	
2,3,7,8-TCDD	1.00E-09	(e)	ND		1	1.50E+05	(e)	1.50E+05	(e)
1,2,3,7,8-PeCDD	1.00E-09	(c)	ND		1	1.50E+05	(c)	1.50E+05	(c)
1,2,3,4,7,8-HxCDD	1.00E-08	(c)	ND		0.1	1.50E+04	(c)	1.50E+04	(c)
1,2,3,6,7,8-HxCDD	1.00E-08	(c)	ND		0.1	1.50E+04	(c)	1.50E+04	(c)
1,2,3,7,8,9-HxCDD	1.00E-08	(c)	ND		0.1	1.50E+04	(c)	1.50E+04	(c)
1,2,3,4,6,7,8-HpCDD	1.00E-07	(c)	ND		0.01	1.50E+03	(c)	1.50E+03	(c)
OCDD	3.33E-06	(c)	ND		0.0003	4.50E+01	(c)	4.50E+01	(c)
2,3,7,8-TCDF	1.00E-08	(c)	ND		0.1	1.50E+04	(c)	1.50E+04	(c)
1,2,3,7,8-PeCDF	3.33E-08	(c)	ND		0.03	4.50E+03	(c)	4.50E+03	(c)
2,3,4,7,8-PeCDF	3.33E-09	(c)	ND		0.3	4.50E+04	(c)	4.50E+04	(c)
1,2,3,4,7,8-HxCDF	1.00E-08	(c)	ND		0.1	1.50E+04	(c)	1.50E+04	(c)
1,2,3,6,7,8-HxCDF	1.00E-08	(c)	ND		0.1	1.50E+04	(c)	1.50E+04	(c)
1,2,3,7,8,9-HxCDF	1.00E-08	(c)	ND		0.1	1.50E+04	(c)	1.50E+04	(c)
2,3,4,6,7,8-HxCDF	1.00E-08	(c)	ND		0.1	1.50E+04	(c)	1.50E+04	(c)
1,2,3,4,6,7,8-HpCDF	1.00E-07	(c)	ND		0.01	1.50E+03	(c)	1.50E+03	(c)
1,2,3,4,7,8,9-HpCDF	1.00E-07	(c)	ND		0.01	1.50E+03	(c)	1.50E+03	(c)
OCDF	3.33E-06	(c)	ND		0.0003	4.50E+01	(c)	4.50E+01	(c)
Arsenic	3.00E-04	(a)	8.57E-06	(e)	NA	1.50E+00	(a)	1.51E+01	(a)
Beryllium	2.00E-03	(a)	5.71E-06	(a)	NA	ND	(a)	8.40E+00	(a)
Cadmium	5.00E-04	(a)	5.71E-05	(e)	NA	3.80E-01	(e)	6.30E+00	(a)
Chromium	1.50E+00	(a)	1.51E+00	(e)	NA	ND	(a)	ND	(a)
Lead	4.29E-04	(e)	4.29E-04	(e)	NA	8.50E-03	(e)	4.20E-02	(e)
Mercury, Elemental	8.57E-05	(e)	8.57E-05	(a)	NA	ND	(a)	ND	(a)
Mercury, Divalent	3.00E-04	(a)	3.14E-04	(e)	NA	ND	(a)	ND	(a)
Mercury, Methyl	1.00E-04	(a)	1.00E-04	(e)	NA	ND	(a)	ND	(a)
Nickel	2.00E-02	(a)	5.71E-05	(e)	NA	ND	(a)	ND	(a)

NA - Not Available
(a) EPA IRIS, website accessed October 15, 2008
(b) Van den Berg (2006)
(c) Derived by multiplying the toxicity factor for 2,3,7,8-TCDD by the congener's toxic equivalence factor.
(d) Assumed to equal oral toxicity value.
(e) EPA HHRAP database (2005)

TABLE 4-1
COMPOUND-SPECIFIC PARAMETERS USED TO ESTIMATE EXPOSURE POINT CONCENTRATIONS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	ksg	Fv	Kds	Fw	BRbg	BRag	BRforage	H	Da	RCF	BVag	BVforage	VGbg	VGag	Kow	BAbeef	BAmilk	BApork	BAegg	BApoultry	BCFfish	BAFfish	BSAF	Kdsw	Kdbs	Dw	particle type
1,2,3,4,6,7,8,9-OCDD	3.00E-02	2.00E-03	9.77E+05	6.00E-01	4.90E-01	7.05E-04	7.05E-04	6.75E-06	8.69E-02	4.79E+05	2.36E+06	2.36E+06	1.00E-02	1.00E-02	1.58E+08	6.85E-03	1.44E-03	8.30E-03	2.89E-03	5.05E-03	1.47E+03	0.00E+00	1.00E-04	7.33E+06	3.91E+06	8.00E-06	Particle bound
1,2,3,4,6,7,8,9-OCDF	3.00E-02	2.00E-03	6.17E+05	6.00E-01	7.76E-01	9.20E-04	9.20E-04	1.88E-06	1.95E-02	4.79E+05	2.28E+06	2.28E+06	1.00E-02	1.00E-02	1.00E+08	8.77E-03	1.85E-03	1.06E-02	3.69E-03	6.46E-03	2.75E+03	0.00E+00	1.00E-04	4.62E+06	2.47E+06	8.00E-06	Particle bound
1,2,3,4,6,7,8-HpCDD	3.00E-02	3.00E-03	6.17E+05	6.00E-01	5.45E-01	9.20E-04	9.20E-04	1.20E-05	9.05E-02	3.36E+05	9.10E+05	9.10E+05	1.00E-02	1.00E-02	1.00E+08	8.77E-03	1.85E-03	1.06E-02	3.69E-03	6.46E-03	2.75E+03	0.00E+00	5.00E-03	4.62E+06	2.47E+06	8.00E-06	Particle bound
1,2,3,4,6,7,8-HpCDF	3.00E-02	1.00E-02	1.55E+05	6.00E-01	7.48E-01	2.05E-03	2.05E-03	1.41E-05	2.03E-02	1.16E+05	8.30E+05	8.30E+05	1.00E-02	1.00E-02	2.51E+07	1.64E-02	3.46E-03	1.99E-02	6.92E-03	1.21E-02	1.83E+04	0.00E+00	5.00E-03	1.16E+06	6.20E+05	8.00E-06	Particle bound
1,2,3,4,7,8,9-HpCDF	3.00E-02	5.70E-02	1.55E+05	6.00E-01	7.48E-01	2.05E-03	2.05E-03	1.40E-05	2.03E-02	1.16E+05	8.30E+05	8.30E+05	1.00E-02	1.00E-02	2.51E+07	1.64E-02	3.46E-03	1.99E-02	6.92E-03	1.21E-02	1.83E+04	0.00E+00	5.00E-03	1.16E+06	6.20E+05	8.00E-06	Particle bound
1,2,3,4,7,8-HxCDD	3.00E-02	2.40E-02	3.89E+05	6.00E-01	6.05E-01	1.20E-03	1.20E-03	1.07E-05	9.44E-02	2.36E+05	5.20E+05	5.20E+05	1.00E-02	1.00E-02	6.31E+07	1.10E-02	2.32E-03	1.33E-02	4.63E-03	8.11E-03	5.18E+03	0.00E+00	4.00E-02	2.92E+06	1.56E+06	8.00E-06	Particle bound
1,2,3,4,7,8-HxCDF	3.00E-02	4.90E-02	6.17E+04	6.00E-01	9.25E-01	3.48E-03	3.48E-03	1.43E-05	2.12E-02	5.70E+04	1.62E+05	1.62E+05	1.00E-02	1.00E-02	1.00E+07	2.28E-02	4.80E-03	2.76E-02	9.60E-03	1.68E-02	4.90E+04	0.00E+00	4.00E-02	4.62E+05	2.47E+05	8.00E-06	Particle bound
1,2,3,6,7,8-HxCDD	3.00E-02	2.90E-02	1.23E+05	6.00E-01	7.89E-01	2.34E-03	2.33E-03	1.10E-05	9.44E-02	9.71E+04	5.20E+05	5.20E+05	1.00E-02	1.00E-02	2.00E+07	1.79E-02	3.78E-03	2.17E-02	7.56E-03	1.32E-02	2.51E+04	0.00E+00	4.00E-02	9.23E+05	4.92E+05	8.00E-06	Particle bound
1,2,3,6,7,8-HxCDF	3.00E-02	5.20E-02	6.17E+04	6.00E-01	9.25E-01	3.48E-03	3.48E-03	7.31E-06	2.12E-02	5.70E+04	1.62E+05	1.62E+05	1.00E-02	1.00E-02	1.00E+07	2.28E-02	4.80E-03	2.76E-02	9.60E-03	1.68E-02	4.90E+04	0.00E+00	4.00E-02	4.62E+05	2.47E+05	8.00E-06	Particle bound
1,2,3,7,8,9-HxCDD	3.00E-02	1.60E-02	1.23E+05	6.00E-01	7.89E-01	2.34E-03	2.34E-03	1.10E-05	9.44E-02	9.71E+04	5.20E+05	5.20E+05	1.00E-02	1.00E-02	2.00E+07	1.79E-02	3.78E-03	2.17E-02	7.56E-03	1.32E-02	2.51E+04	0.00E+00	4.00E-02	9.23E+05	4.92E+05	8.00E-06	Particle bound
1,2,3,7,8,9-HxCDF	3.00E-02	9.00E-02	6.17E+04	6.00E-01	9.25E-01	3.48E-03	3.48E-03	1.10E-05	2.12E-02	5.70E+04	1.62E+05	1.62E+05	1.00E-02	1.00E-02	1.00E+07	2.28E-02	4.80E-03	2.76E-02	9.60E-03	1.68E-02	4.90E+04	0.00E+00	4.00E-02	4.62E+05	2.47E+05	8.00E-06	Particle bound
1,2,3,7,8-PeCDD	3.00E-02	1.17E-01	2.69E+04	6.00E-01	1.12E+00	5.62E-03	5.62E-03	2.60E-06	9.88E-02	3.01E+04	2.39E+05	2.39E+05	1.00E-02	1.00E-02	4.37E+06	2.88E-02	6.05E-03	3.48E-02	1.21E-02	2.12E-02	2.59E+04	0.00E+00	9.00E-02	2.02E+05	1.08E+05	8.00E-06	Particle bound
1,2,3,7,8-PeCDF	3.00E-02	2.68E-01	3.80E+04	6.00E-01	1.03E+00	4.61E-03	4.61E-03	5.00E-06	2.23E-02	3.93E+04	9.75E+04	9.75E+04	1.00E-02	1.00E-02	6.17E+06	2.63E-02	5.53E-03	3.18E-02	1.11E-02	1.94E-02	3.38E+04	0.00E+00	9.00E-02	2.85E+05	1.52E+05	8.00E-06	Particle bound
2,3,4,6,7,8-HxCDF	3.00E-02	5.50E-02	6.17E+04	6.00E-01	9.25E-01	3.48E-03	3.48E-03	1.10E-05	2.12E-02	5.70E+04	1.62E+05	1.62E+05	1.00E-02	1.00E-02	1.00E+07	2.28E-02	4.80E-03	2.76E-02	9.60E-03	1.68E-02	4.90E+04	0.00E+00	4.00E-02	4.62E+05	2.47E+05	8.00E-06	Particle bound
2,3,4,7,8-PeCDF	3.00E-02	2.21E-01	1.95E+04	6.00E-01	1.21E+00	6.78E-03	6.78E-03	4.98E-06	2.23E-02	2.35E+04	9.75E+04	9.75E+04	1.00E-02	1.00E-02	3.16E+06	3.10E-02	6.52E-03	3.75E-02	1.30E-02	2.28E-02	2.02E+04	0.00E+00	9.00E-02	1.46E+05	7.80E+04	8.00E-06	Particle bound
2,3,7,8-TCDD	3.00E-02	6.64E-01	3.89E+04	6.00E-01	1.03E+00	4.55E-03	4.55E-03	3.29E-05	1.04E-01	4.00E+04	6.55E+04	6.55E+04	1.00E-02	1.00E-02	6.31E+06	2.61E-02	5.50E-03	3.16E-02	1.10E-02	1.92E-02	3.44E+04	0.00E+00	9.00E-02	2.92E+05	1.56E+05	5.60E-06	Particle bound
2,3,7,8-TCDF	3.00E-02	7.70E-01	7.76E+03	6.00E-01	1.49E+00	1.15E-02	1.15E-02	1.44E-05	2.35E-02	1.16E+04	4.57E+04	4.57E+04	1.00E-02	1.00E-02	1.26E+06	3.65E-02	7.68E-03	4.42E-02	1.54E-02	2.69E-02	9.93E+03	0.00E+00	9.00E-02	5.82E+04	3.10E+04	6.01E-06	Particle bound
Arsenic	0.00E+00	6.00E-03	2.90E+01	6.00E-01	8.00E-03	6.33E-03	3.60E-02	7.70E-01	7.72E-02	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00	4.79E+00	2.00E-03	6.00E-05	0.00E+00	0.00E+00	0.00E+00	1.14E+02	0.00E+00	0.00E+00	2.90E+01	2.90E+01	9.57E-06	Particle phase
Beryllium	0.00E+00	9.00E-03	7.90E+02	6.00E-01	1.50E-03	2.58E-03	1.00E-02	1.50E-02	7.72E-02	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00	2.69E-01	1.00E-03	9.00E-07	0.00E+00	0.00E+00	0.00E+00	6.20E+01	0.00E+00	0.00E+00	7.90E+02	7.90E+02	9.57E-06	Particle phase
Cadmium	0.00E+00	9.00E-03	7.50E+01	6.00E-01	6.40E-02	1.25E-01	3.64E-01	3.10E-02	7.72E-02	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00	8.51E-01	1.20E-04	6.50E-06	1.91E-04	2.50E-03	1.06E-01	9.07E+02	0.00E+00	0.00E+00	7.50E+01	7.50E+01	9.57E-06	Particle phase
Chromium	0.00E+00	9.00E-03	1.90E+01	6.00E-01	4.50E-03	4.88E-03	7.50E-03	0.00E+00	1.27E-01	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00	1.70E+00	5.50E-03	1.50E-03	0.00E+00	0.00E+00	0.00E+00	1.90E+01	0.00E+00	0.00E+00	1.90E+01	1.90E+01	1.41E-05	Particle phase
Lead	0.00E+00	7.00E-03	9.00E+02	6.00E-01	9.00E-03	1.36E-02	4.50E-02	2.50E-02	7.72E-02	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00	5.37E+00	3.00E-04	2.50E-04	0.00E+00	0.00E+00	0.00E+00	9.00E-02	0.00E+00	0.00E+00	9.00E+02	9.00E+02	9.57E-06	Particle phase
Mercury, elemental	0.00E+00	1.00E+00	1.00E+03	6.00E-01	0.00E+00	0.00E+00	0.00E+00	7.10E-03	1.09E-02	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00	4.17E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E+03	3.00E+03	3.01E-05	Particle bound
Mercury, methyl	0.00E+00	9.97E-01	7.00E+03	6.00E-01	9.90E-02	2.94E-02	0.00E+00	4.70E-07	5.28E-02	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00	0.00E+00	7.80E-04	3.38E-04	5.07E-06	3.58E-03	3.58E-03	0.00E+00	6.80E+06	0.00E+00	1.00E+05	3.00E+03	6.11E-06	Particle bound
Mercury, divalent	0.00E+00	9.97E-01	5.80E+04	6.00E-01	3.60E-02	1.45E-02	0.00E+00	7.10E-10	4.53E-02	0.00E+00	1.80E+03	1.80E+03	1.00E+00	1.00E+00	6.10E-01	5.22E-03	2.26E-03	3.39E-05	2.39E-02	2.39E-02	0.00E+00	1.00E+00	0.00E+00	1.00E+05	5.00E+04	5.25E-06	Particle bound
Nickel	0.00E+00	9.00E-03	6.50E+01	6.00E-01	8.00E-03	9.31E-03	3.20E-02	2.50E-02	7.72E-02	0.00E+00	0.00E+00	0.00E+00	1.00E+00	1.00E+00	2.69E-01	6.00E-03	1.00E-03	0.00E+00	0.00E+00	0.00E+00	7.80E+01	0.00E+00	0.00E+00	6.50E+01	6.50E+01	9.57E-06	Particle phase

All values from EPA HHRAP Database. See text for explanation.

TABLE 4-2
EXPOSURE POINT CONCENTRATIONS IN AIR
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Residential Area Air C_a (ug/m3)	Agriculture Area Air C_a (ug/m3)	Poultry Area Air C_a (ug/m3)
Mercury, elemental	4.44E-09	1.15E-09	1.21E-09
Mercury, methyl	NC	NC	NC
Mercury, divalent	9.41E-06	2.41E-06	2.53E-06
1,2,3,4,6,7,8,9-OCDD	5.40E-10	1.35E-10	1.42E-10
1,2,3,4,6,7,8,9-OCDF	7.80E-11	2.01E-11	2.14E-11
1,2,3,4,6,7,8-HpCDD	3.79E-10	9.71E-11	1.03E-10
1,2,3,4,6,7,8-HpCDF	3.78E-10	1.03E-10	1.11E-10
1,2,3,4,7,8,9-HpCDF	3.66E-11	9.71E-12	1.04E-11
1,2,3,4,7,8-HxCDD	3.79E-11	1.02E-11	1.11E-11
1,2,3,4,7,8-HxCDF	1.97E-10	5.39E-11	5.86E-11
1,2,3,6,7,8-HxCDD	7.11E-11	1.86E-11	2.00E-11
1,2,3,6,7,8-HxCDF	2.05E-10	5.61E-11	6.12E-11
1,2,3,7,8,9-HxCDD	4.96E-11	1.32E-11	1.42E-11
1,2,3,7,8,9-HxCDF	4.16E-11	1.10E-11	1.18E-11
1,2,3,7,8-PeCDD	6.25E-11	1.71E-11	1.86E-11
1,2,3,7,8-PeCDF	2.04E-10	5.63E-11	6.13E-11
2,3,4,7,8-PeCDF	2.27E-10	6.25E-11	6.81E-11
2,3,7,8-TCDD	2.72E-11	7.44E-12	8.05E-12
2,3,7,8-TCDF	1.12E-10	3.09E-11	3.34E-11
Arsenic	2.80E-07	7.64E-08	8.38E-08
Beryllium	3.50E-08	9.33E-09	1.01E-08
Cadmium	3.76E-06	9.50E-07	1.02E-06
Chromium	1.68E-06	4.50E-07	4.91E-07
Lead	8.20E-05	2.14E-05	2.32E-05
Nickel	1.94E-06	5.08E-07	5.49E-07

NC - Not Calculated

TABLE 4-3
EXPOSURE POINT CONCENTRATIONS IN SOIL
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Residential Area Soil C_s (mg/kg)	Agriculture Area Soil C_s (mg/kg)	Compost Area Soil C_s (mg/kg)	Poultry Area Soil C_s (mg/kg)	Residential Area Soil Cs_{tD} (mg/kg)	Agriculture Area Soil Cs_{tD} (mg/kg)	Compost Area Soil Cs_{tD} (mg/kg)	Poultry Area Soil Cs_{tD} (mg/kg)
Mercury, elemental	NC	NC	NC	NC	NC	NC	NC	NC
Mercury, methyl	5.01E-05	1.22E-05	3.43E-04	1.53E-05	9.82E-05	2.39E-05	6.74E-04	3.00E-05
Mercury, divalent	2.54E-03	6.18E-04	1.74E-02	7.75E-04	5.06E-03	1.23E-03	3.47E-02	1.55E-03
1,2,3,4,6,7,8,9-OCDD	1.29E-08	2.10E-09	5.81E-08	1.97E-09	2.25E-08	3.66E-09	1.01E-07	3.43E-09
1,2,3,4,6,7,8,9-OCDF	1.96E-09	3.36E-10	8.45E-09	3.14E-10	3.41E-09	5.86E-10	1.47E-08	5.47E-10
1,2,3,4,6,7,8-HpCDD	9.40E-09	1.60E-09	4.11E-08	1.49E-09	1.64E-08	2.78E-09	7.16E-08	2.60E-09
1,2,3,4,6,7,8-HpCDF	1.03E-08	1.91E-09	4.24E-08	1.81E-09	1.79E-08	3.32E-09	7.38E-08	3.16E-09
1,2,3,4,7,8,9-HpCDF	9.73E-10	1.82E-10	4.69E-09	1.94E-10	1.69E-09	3.16E-10	8.16E-09	3.38E-10
1,2,3,4,7,8-HxCDD	1.03E-09	1.91E-10	4.43E-09	1.89E-10	1.78E-09	3.33E-10	7.71E-09	3.28E-10
1,2,3,4,7,8-HxCDF	5.44E-09	1.06E-09	2.45E-08	1.11E-09	9.45E-09	1.83E-09	4.26E-08	1.92E-09
1,2,3,6,7,8-HxCDD	1.84E-09	3.30E-10	8.37E-09	3.30E-10	3.19E-09	5.73E-10	1.46E-08	5.74E-10
1,2,3,6,7,8-HxCDF	5.68E-09	1.11E-09	2.58E-08	1.17E-09	9.88E-09	1.92E-09	4.48E-08	2.03E-09
1,2,3,7,8,9-HxCDD	1.30E-09	2.35E-10	5.63E-09	2.27E-10	2.26E-09	4.08E-10	9.78E-09	3.95E-10
1,2,3,7,8,9-HxCDF	1.11E-09	2.11E-10	5.78E-09	2.42E-10	1.93E-09	3.67E-10	1.00E-08	4.21E-10
1,2,3,7,8-PeCDD	1.74E-09	3.56E-10	9.12E-09	4.29E-10	3.02E-09	6.17E-10	1.58E-08	7.43E-10
1,2,3,7,8-PeCDF	5.91E-09	1.35E-09	3.99E-08	2.01E-09	1.03E-08	2.34E-09	6.93E-08	3.49E-09
2,3,4,6,7,8-HxCDF	3.99E-09	7.78E-10	1.83E-08	8.27E-10	6.94E-09	1.35E-09	3.18E-08	1.44E-09
2,3,4,7,8-PeCDF	6.47E-09	1.43E-09	4.07E-08	2.02E-09	1.12E-08	2.47E-09	7.03E-08	3.49E-09
2,3,7,8-TCDD	8.10E-10	2.23E-10	8.55E-09	4.46E-10	1.38E-09	3.81E-10	1.46E-08	7.60E-10
2,3,7,8-TCDF	3.39E-09	9.89E-10	3.86E-08	2.08E-09	5.77E-09	1.68E-09	6.57E-08	3.53E-09
Arsenic	6.69E-11	1.24E-11	2.37E-10	1.08E-11	6.69E-11	1.24E-11	2.37E-10	1.08E-11
Beryllium	1.12E-08	2.00E-09	4.15E-08	1.74E-09	1.12E-08	2.00E-09	4.15E-08	1.74E-09
Cadmium	5.04E-08	8.14E-09	2.08E-07	7.16E-09	5.04E-08	8.14E-09	2.08E-07	7.16E-09
Chromium	3.03E-05	5.49E-06	1.11E-04	4.77E-06	3.11E-05	5.63E-06	1.14E-04	4.89E-06
Lead	1.74E-05	3.01E-06	6.69E-05	2.62E-06	1.74E-05	3.01E-06	6.69E-05	2.63E-06
Nickel	2.97E-08	5.16E-09	1.14E-07	4.50E-09	2.97E-08	5.16E-09	1.14E-07	4.50E-09

NC - Not Calculated
CstD - Concentration used to estimate potential noncarcinogenic risks.
Cs - Concentration used to estimate potential carcinogenic risks.

TABLE 4-4
EXPOSURE POINT CONCENTRATIONS IN WATERBODIES AND WATERSHED SOIL
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Pearl Harbor Water $C_{dw\ (Cs)}$ (mg/L)	West Loch Water $C_{dw\ (Cs)}$ (mg/L)	Wahiawa Water $C_{dw\ (Cs)}$ (mg/L)	Pearl Harbor Watershed Soil Cs (mg/kg)	West Loch Watershed Soil Cs (mg/kg)	Wahiawa Watershed Soil Cs (mg/kg)	Pearl Harbor Water $C_{dw\ (CstD)}$ (mg/L)	West Loch Water $C_{dw\ (CstD)}$ (mg/L)	Wahiawa Water $C_{dw\ (CstD)}$ (mg/L)	Pearl Harbor Watershed Soil Cs_{tD} (mg/kg)	West Loch Watershed Soil Cs_{tD} (mg/kg)	Wahiawa Watershed Soil Cs_{tD} (mg/kg)
Mercury, elemental	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Mercury, methyl	1.66E-10	3.52E-10	7.53E-10	1.34E-06	1.21E-06	1.70E-06	1.66E-10	3.52E-10	7.53E-10	2.67E-06	2.40E-06	3.38E-06
Mercury, divalent	2.07E-09	4.38E-09	8.27E-09	6.63E-05	5.94E-05	8.44E-05	2.07E-09	4.38E-09	8.27E-09	1.33E-04	1.19E-04	1.69E-04
1,2,3,4,6,7,8,9-OCDD	1.80E-16	3.32E-16	4.16E-16	2.17E-10	1.81E-10	2.20E-10	1.80E-16	3.32E-16	4.16E-16	3.77E-10	3.16E-10	3.83E-10
1,2,3,4,6,7,8,9-OCDF	4.56E-17	8.40E-17	1.05E-16	3.49E-11	2.92E-11	3.54E-11	4.56E-17	8.40E-17	1.05E-16	6.07E-11	5.09E-11	6.17E-11
1,2,3,4,6,7,8-HpCDD	2.17E-16	3.99E-16	5.01E-16	1.65E-10	1.39E-10	1.68E-10	2.17E-16	3.99E-16	5.01E-16	2.88E-10	2.42E-10	2.93E-10
1,2,3,4,6,7,8-HpCDF	1.02E-15	1.89E-15	2.42E-15	2.01E-10	1.69E-10	2.06E-10	1.02E-15	1.89E-15	2.42E-15	3.50E-10	2.94E-10	3.58E-10
1,2,3,4,7,8,9-HpCDF	9.64E-17	1.83E-16	2.44E-16	1.93E-11	1.64E-11	2.08E-11	9.64E-17	1.83E-16	2.44E-16	3.36E-11	2.86E-11	3.62E-11
1,2,3,4,7,8-HxCDD	4.10E-17	7.65E-17	9.83E-17	2.02E-11	1.70E-11	2.10E-11	4.10E-17	7.65E-17	9.83E-17	3.51E-11	2.97E-11	3.66E-11
1,2,3,4,7,8-HxCDF	1.38E-15	2.61E-15	3.55E-15	1.13E-10	9.61E-11	1.21E-10	1.38E-15	2.61E-15	3.55E-15	1.96E-10	1.67E-10	2.10E-10
1,2,3,6,7,8-HxCDD	2.21E-16	4.13E-16	5.40E-16	3.47E-11	2.94E-11	3.64E-11	2.21E-16	4.13E-16	5.40E-16	6.05E-11	5.12E-11	6.33E-11
1,2,3,6,7,8-HxCDF	1.45E-15	2.74E-15	3.73E-15	1.18E-10	1.01E-10	1.27E-10	1.45E-15	2.74E-15	3.73E-15	2.06E-10	1.76E-10	2.21E-10
1,2,3,7,8,9-HxCDD	1.58E-16	2.93E-16	3.78E-16	2.47E-11	2.08E-11	2.55E-11	1.58E-16	2.93E-16	3.78E-16	4.30E-11	3.63E-11	4.43E-11
1,2,3,7,8,9-HxCDF	2.74E-16	5.28E-16	7.42E-16	2.26E-11	1.94E-11	2.52E-11	2.74E-16	5.28E-16	7.42E-16	3.94E-11	3.39E-11	4.39E-11
1,2,3,7,8-PeCDD	1.02E-15	1.99E-15	2.99E-15	3.90E-11	3.38E-11	4.46E-11	1.02E-15	1.99E-15	2.99E-15	6.79E-11	5.89E-11	7.75E-11
1,2,3,7,8-PeCDF	2.76E-15	5.70E-15	9.12E-15	1.52E-10	1.36E-10	1.93E-10	2.76E-15	5.70E-15	9.12E-15	2.65E-10	2.36E-10	3.37E-10
2,3,4,6,7,8-HxCDF	1.02E-15	1.93E-15	2.64E-15	8.33E-11	7.10E-11	8.98E-11	1.02E-15	1.93E-15	2.64E-15	1.45E-10	1.24E-10	1.56E-10
2,3,4,7,8-PeCDF	5.41E-15	1.10E-14	1.82E-14	1.61E-10	1.42E-10	1.98E-10	5.41E-15	1.10E-14	1.82E-14	2.80E-10	2.47E-10	3.45E-10
2,3,7,8-TCDD	4.49E-16	1.02E-15	1.85E-15	2.77E-11	2.58E-11	4.05E-11	4.49E-16	1.02E-15	1.85E-15	4.81E-11	4.48E-11	7.02E-11
2,3,7,8-TCDF	7.95E-15	1.85E-14	4.18E-14	1.24E-10	1.17E-10	1.86E-10	7.95E-15	1.85E-14	4.18E-14	2.15E-10	2.03E-10	3.22E-10
Arsenic	1.42E-10	2.41E-10	1.12E-09	1.86E-11	2.85E-11	6.50E-12	1.42E-10	2.41E-10	1.12E-09	1.86E-11	2.85E-11	6.50E-12
Beryllium	1.63E-11	2.79E-11	1.17E-10	2.96E-09	4.50E-09	1.04E-09	1.63E-11	2.79E-11	1.17E-10	2.98E-09	4.56E-09	1.04E-09
Cadmium	1.45E-09	2.46E-09	1.13E-08	1.20E-08	1.84E-08	4.19E-09	1.45E-09	2.46E-09	1.13E-08	1.20E-08	1.84E-08	4.19E-09
Chromium	3.17E-09	7.36E-09	7.42E-08	1.84E-06	2.02E-06	1.08E-06	3.17E-09	7.36E-09	7.42E-08	2.05E-06	2.34E-06	1.15E-06
Lead	3.56E-08	6.06E-08	2.52E-07	4.45E-06	6.79E-06	1.56E-06	3.56E-08	6.06E-08	2.52E-07	4.48E-06	6.85E-06	1.56E-06
Nickel	8.58E-10	1.46E-09	6.70E-09	7.68E-09	1.17E-08	2.68E-09	8.58E-10	1.46E-09	6.70E-09	7.68E-09	1.17E-08	2.68E-09

NC - Not Calculated
CstD - Concentration used to estimate potential noncarcinogenic risks.
Cs - Concentration used to estimate potential carcinogenic risks.

TABLE 4-5
MEDIUM-SPECIFIC AND PATHWAY-SPECIFIC PARAMETERS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Parameter	Waterbody:	West Loch	West Loch Comment
Constants			
BD (g/cm3)	soil bulk density	1.5	
qsw (ml/cm3)	soil volumetric water content	0.2	
kp (yr-1)	plant surface loss coefficient	18	
R (atm-m3/mol-K)	Universal gas constant	0.00008205	
mair (g/cm-s)	viscosity of air	0.000181	
rair	density of air (g/cm3)	0.0012	
rair	density of air (g/m3)	1200	
rs	particle density (g/m3)	2.7	
Site-Specific Input Parameters			
tD (yr)	time period over which deposition occurs	30	Per email from Jeffrey Hahn (Covanta) to B. Magee 2/13/02
Ta (K)	ambient temperature	298	
T1 (yr)	time period at beginning of combustion	0	
T2 (yr)	length of exposure duration	30	
Zs (cm)	soil mixing depth	2	untilled, for soil ingestion, for forage and soil which is consumed by livestock
		20	tilled, for root veg. and aboveground produce consumed by humans and silage and grain consumed by livestock
		11	Change the Z values for watersheds only. I have prorated them by % tilled at 20 and the balance at 1 (B.Magee).
Vdv (cm/s)	dry deposition velocity	3	
kse (yr-1)	loss constant due to soil erosion	0	
P (cm/yr)	average annual precipitation	132.1	Average of 8 stations reporting rain data, 1980-2002 [Aiea Heights, Aloha Stadium, Ewa Plantation, Honolulu Observatory, Kaheohe Mauka, Moanalua, Upper Wahiawa, Waiawa, Waipahu] Conservative: Includes P data from stations in rainforest locations. 3 times higher than statewide average P rate. 6 times higher than average Airport average P rate.
I (cm/yr)	average annual irrigation	34	10% of the average irrigation rate for the whole Island from Water Atlas of the United States. Conservative: Equation refers only to pervious watershed areas, which are 18-50% agricultural. However, these areas receive more rain that other agricultural areas.
RO (cm/yr)	average annual surface runoff	39.6	30% of P, Oki, Gingerich and Whitehead, 1999) Neutral.
Ev (cm/yr)	average annual evapotranspiration	88.9	(0.70 x pan evaporation rate of 127 cm/year given by Ekern and Chang, 1985.) Conservative: Ev is probably very much lower in the three watersheds. The factor of 0.7 is given by Western Regional Climate Center to "more closely estimate the evaporation from naturally existing surfaces." See www.wrcc.dri.edu/htmlfiles/westevap.final.html
Rp (unitless)	interception fraction of edible portion of plant	0.39	aboveground produce
		0.5	forage
		0.46	silage
Tp (yrs)	length of plant exp. to dep. of edible portion of plant, per harvest	0.16	produce
		0.12	forage
		0.16	silage
Yp (kg DW/m2)	yield or standing crop biomass of the edible portion of the plant	2.24	aboveground produce
		0.24	forage
		0.8	silage
VGag (unitless)	correction factor for forage and silage	1	forage
		0.5	silage
ER (unitless)	soil enrichment factor	3	organics
		1	inorganics
q (unitless)	temperature correction factor	1.026	
Twk (K)	waterbody temperature	298	
b (unitless)	empirical slope coefficient	0.125	
dbs (m)	depth of upper benthic sediment layer	0.03	
CBS (g/cm3)	bed sediment concentration	1	
qbs (Lwater/Lsed)	bed sediment porosity	0.6	"default" used for Waipahu West Loch surface water runoff modeling
Cd (unitless)	drag coefficient	0.0011	
W (m/s)	average annual wind speed	3.78	Average wind speed from met data set
ra (g/cm3)	density of air	0.0012	
rw (g/cm3)	density of water	1	
k (unitless)	von Karman's constant	0.4	
lz (unitless)	dimensionless viscious sublayer thickness	4	
mw (g/cm-s)	viscosity of water corresponding to water temp	0.0169	
ma (g/cm-s)	viscosity of air	0.000181	
KG (m/yr)	gas phase transfer coefficient (streams or rivers)	36500	
flipid (unitless)	fish lipid content	0.03	
OCsed (unitless)	fraction of organic carbon in bottom sediment	0.04	
Water body type	Type	stream	must type "lake" or "stream"
Water body surface area (m2)	Aw	5539524.73	Determined from site-specific GIS for West Loch Pearl Harbor
Impervious watershed area (m2)	AI	69109797	Determined from site-specific GIS (assumed that impervious surface = (conservation >45o + urban > 45o + 0.75*urban<45o)
Total watershed area (m2)	AL	189481258.7	Determined from site-specific GIS (www.state.hi.us/dbedt/gis/data/wshdunpy.txt)
USLE rainfall (or erosivity) factor (yr-1)	RF	75.16	Assuming equivalent of 12 storms/year (used in Waipahu)
ULSE erodability factor (ton/acre)	K	0.39	EPA default
USLE length-slope factor	LS	1.5	default
USLE cover management factor	C	0.1	EPA default
USLE supporting practice factor	PF	1	default
Volumetric flow rate (m3/yr)	Vfx	1549736343	Calculated as surface area x tidal elevation change (1.3 ft per USGS website) divided by tidal period (12.4 hours)
Depth of water column (m)	dwc	6.1	Per May 7, 2002 email from Bill Lester
Total suspended solids (mg/L)	TSS	50	site-specific (high end = 80) - from West Loch Surface water runoff modeling (Waipahu risk assessment)
Current velocity (m/s)	u	1.35636	Need site-specific input only if "stream"
Empirical intercept coefficient	a	1.4	from guidance, based on area of watershed
Chemical-Specific Constants			
Fw (unitless)	fraction of wet deposition that adheres to plant	0.2	anions
		0.6	cations and organics
VGbg (unitless)	correction factor for root vegetables	0.01	log Kow>4
		1	log Kow<4
VGag (unitless)	correction factor for aboveground produce	0.01	log Kow>4
		1	log Kow<4
MF (unitless)	metabolism factor in animals	1	
Animal Specific Constants			
Bs (unitless)	soil bioavailability factor	1	

TABLE 4-5
MEDIUM-SPECIFIC AND PATHWAY-SPECIFIC PARAMETERS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Parameter	Waterbody:	Pearl Harbor	Pearl Harbor Comment
Constants			
BD (g/cm3)	soil bulk density	1.5	
qsw (ml/cm3)	soil volumetric water content	0.2	
kp (yr-1)	plant surface loss coefficient	18	
R (atm-m3/mol-K)	Universal gas constant	0.00008205	
mair (g/cm-s)	viscosity of air	0.000181	
rair	density of air (g/cm3)	0.0012	
rair	density of air (g/m3)	1200	
rs	particle density (g/m3)	2.7	
Site-Specific Input Parameters			
tD (yr)	time period over which deposition occurs	30	Per email from Jeffrey Hahn (Covanta) to B. Magee 2/13/02
Ta (K)	ambient temperature	298	
T1 (yr)	time period at beginning of combustion	0	
T2 (yr)	length of exposure duration	30	
Zs (cm)	soil mixing depth	2	untilled, for soil ingestion, for forage and soil which is consumed by livestock
		20	tilled, for root veg. and aboveground produce consumed by humans and silage and grain consumed by livestock
		8.2	Change the Z values for watersheds only. I have prorated them by % tilled at 20 and the balance at 1 (B.Magee).
Vdv (cm/s)	dry deposition velocity	3	
kse (yr-1)	loss constant due to soil erosion	0	
P (cm/yr)	average annual precipitation	132.1	Average of 8 stations reporting rain data, 1980-2002 [Aiea Heights, Aloha Stadium, Ewa Plantation, Honolulu Observatory, Kaheohe Mauka, Moanalua, Upper Wahiawa, Waiawa, Waipahu] Conservative: Includes P data from stations in rainforest locations. 3 times higher than statewide average P rate. 6 times higher than average Airport average P rate.
I (cm/yr)	average annual irrigation	34	10% of the average irrigation rate for the whole Island from Water Atlas of the United States. Conservative: Equation refers only to pervious watershed areas, which are 18-50% agricultural. However, these areas receive more rain that other agricultural areas.
RO (cm/yr)	average annual surface runoff	39.6	30% of P, Oki, Gingerich and Whitehead, 1999) Neutral.
Ev (cm/yr)	average annual evapotranspiration	88.9	(0.70 x pan evaporation rate of 127 cm/year given by Ekern and Chang, 1985.) Conservative: Ev is probably very much lower in the three watersheds. The factor of 0.7 is given by Western Regional Climate Center to "more closely estimate the evaporation from naturally existing surfaces." See www.wrcc.dri.edu/htmlfiles/westevap.final.html
Rp (unitless)	interception fraction of edible portion of plant	0.39	aboveground produce
		0.5	forage
		0.46	silage
Tp (yrs)	length of plant exp. to dep. of edible portion of plant, per harvest	0.16	produce
		0.12	forage
		0.16	silage
Yp (kg DW/m2)	yield or standing crop biomass of the edible portion of the plant	2.24	aboveground produce
		0.24	forage
		0.8	silage
VGag (unitless)	correction factor for forage and silage	1	forage
		0.5	silage
ER (unitless)	soil enrichment factor	3	organics
		1	inorganics
q (unitless)	temperature correction factor	1.026	
Twk (K)	waterbody temperature	298	
b (unitless)	empirical slope coefficient	0.125	
dbs (m)	depth of upper benthic sediment layer	0.03	
CBS (g/cm3)	bed sediment concentration	1	
qbs (Lwater/Lsed)	bed sediment porosity	0.6	"default" used for Waipahu West Loch surface water runoff modeling
Cd (unitless)	drag coefficient	0.0011	
W (m/s)	average annual wind speed	3.78	Average wind speed from met data set
ra (g/cm3)	density of air	0.0012	
rw (g/cm3)	density of water	1	
k (unitless)	von Karman's constant	0.4	
lz (unitless)	dimensionless viscious sublayer thickness	4	
mw (g/cm-s)	viscosity of water corresponding to water temp	0.0169	
ma (g/cm-s)	viscosity of air	0.000181	
KG (m/yr)	gas phase transfer coefficient (streams or rivers)	36500	
flipid (unitless)	fish lipid content	0.03	
OCsed (unitless)	fraction of organic carbon in bottom sediment	0.04	
Water body type	Type	stream	must type "lake" or "stream"
Water body surface area (m2)	Aw	23354900	Determined from site-specific GIS for West Loch Pearl Harbor
Impervious watershed area (m2)	AI	162598544	Determined from site-specific GIS (assumed that impervious surface = (conservation >45o + urban > 45o + 0.75*urban<45o)
Total watershed area (m2)	AL	346617700	Determined from site-specific GIS (www.state.hi.us/dbedt/gis/data/wshdunpy.txt)
USLE rainfall (or erosivity) factor (yr-1)	RF	75.16	Assuming equivalent of 12 storms/year (used in Waipahu)
ULSE erodability factor (ton/acre)	K	0.39	EPA default
USLE length-slope factor	LS	1.5	default
USLE cover management factor	C	0.1	EPA default
USLE supporting practice factor	PF	1	default
Volumetric flow rate (m3/yr)	Vfx	6533762204	Calculated as surface area x tidal elevation change (1.3 ft per USGS website) divided by tidal period (12.4 hours)
Depth of water column (m)	dwc	9	Per May 7, 2002 email from Bill Lester (average)
Total suspended solids (mg/L)	TSS	50	site-specific (high end = 80) - from West Loch Surface water runoff modeling (Waipahu risk assessment)
Current velocity (m/s)	u	1.35636	Need site-specific input only if "stream"
Empirical intercept coefficient	a	1.4	from guidance, based on area of watershed
Chemical-Specific Constants			
Fw (unitless)	fraction of wet deposition that adheres to plant	0.2	anions
		0.6	cations and organics
VGbg (unitless)	correction factor for root vegetables	0.01	log Kow>4
		1	log Kow<4
VGag (unitless)	correction factor for aboveground produce	0.01	log Kow>4
		1	log Kow<4
MF (unitless)	metabolism factor in animals	1	
Animal Specific Constants			
Bs (unitless)	soil bioavailability factor	1	

TABLE 4-5
MEDIUM-SPECIFIC AND PATHWAY-SPECIFIC PARAMETERS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Parameter	Waterbody:	Wahiawa	Wahiawa Comment
Constants			
BD (g/cm3)	soil bulk density	1.5	
qsw (ml/cm3)	soil volumetric water content	0.2	
kp (yr-1)	plant surface loss coefficient	18	
R (atm-m3/mol-K)	Universal gas constant	0.00008205	
mair (g/cm-s)	viscosity of air	0.000181	
rair	density of air (g/cm3)	0.0012	
rair	density of air (g/m3)	1200	
rs	particle density (g/m3)	2.7	
Site-Specific Input Parameters			
tD (yr)	time period over which deposition occurs	30	Per email from Jeffrey Hahn (Covanta) to B. Magee 2/13/02
Ta (K)	ambient temperature	298	
T1 (yr)	time period at beginning of combustion	0	
T2 (yr)	length of exposure duration	30	
Zs (cm)	soil mixing depth	2	untilled, for soil ingestion, for forage and soil which is consumed by livestock
		20	tilled, for root veg. and aboveground produce consumed by humans and silage and grain consumed by livestock
		5.1	Change the Z values for watersheds only. I have prorated them by % tilled at 20 and the balance at 1 (B.Magee).
Vdv (cm/s)	dry deposition velocity	3	
kse (yr-1)	loss constant due to soil erosion	0	
P (cm/yr)	average annual precipitation	132.1	Average of 8 stations reporting rain data, 1980-2002 [Aiea Heights, Aloha Stadium, Ewa Plantation, Honolulu Observatory, Kaheohe Mauka, Moanalua, Upper Wahiawa, Waiawa, Waipahu] Conservative: Includes P data from stations in rainforest locations. 3 times higher than statewide average P rate. 6 times higher than average Airport average P rate.
I (cm/yr)	average annual irrigation	34	10% of the average irrigation rate for the whole Island from Water Atlas of the United States. Conservative: Equation refers only to pervious watershed areas, which are 18-50% agricultural. However, these areas receive more rain that other agricultural areas.
RO (cm/yr)	average annual surface runoff	39.6	30% of P, Oki, Gingerich and Whitehead, 1999) Neutral.
Ev (cm/yr)	average annual evapotranspiration	88.9	(0.70 x pan evaporation rate of 127 cm/year given by Ekern and Chang, 1985.) Conservative: Ev is probably very much lower in the three watersheds. The factor of 0.7 is given by Western Regional Climate Center to "more closely estimate the evaporation from naturally existing surfaces." See www.wrcc.dri.edu/htmlfiles/westevap.final.html
Rp (unitless)	interception fraction of edible portion of plant	0.39	aboveground produce
		0.5	forage
		0.46	silage
Tp (yrs)	length of plant exp. to dep. of edible portion of plant, per harvest	16	produce
		0.12	forage
		0.16	silage
Yp (kg DW/m2)	yield or standing crop biomass of the edible portion of the plant	2.24	aboveground produce
		0.24	forage
		0.8	silage
VGag (unitless)	correction factor for forage and silage	1	forage
		0.5	silage
ER (unitless)	soil enrichment factor	3	organics
		1	inorganics
q (unitless)	temperature correction factor	1.026	
Twk (K)	waterbody temperature	298	
b (unitless)	empirical slope coefficient	0.125	
dbs (m)	depth of upper benthic sediment layer	0.03	
CBS (g/cm3)	bed sediment concentration	1	
qbs (Lwater/Lsed)	bed sediment porosity	0.6	"default" used for Waipahu West Loch surface water runoff modeling
Cd (unitless)	drag coefficient	0.0011	
W (m/s)	average annual wind speed	3.78	Average wind speed from met data set
ra (g/cm3)	density of air	0.0012	
rw (g/cm3)	density of water	1	
k (unitless)	von Karman's constant	0.4	
lz (unitless)	dimensionless viscious sublayer thickness	4	
mw (g/cm-s)	viscosity of water corresponding to water temp	0.0169	
ma (g/cm-s)	viscosity of air	0.000181	
KG (m/yr)	gas phase transfer coefficient (streams or rivers)	36500	
flipid (unitless)	fish lipid content	0.03	
OCsed (unitless)	fraction of organic carbon in bottom sediment	0.04	
Water body type	Type	stream	must type "lake" or "stream"
Water body surface area (m2)	Aw	541876.2	Determined from site-specific GIS for Wahiawa Reservoir
Impervious watershed area (m2)	AI	24627760	Determined from site-specific GIS (assumed that impervious surface = (conservation >45o + urban > 45o + 0.75*urban<45o)
Total watershed area (m2)	AL	42971720	Determined from site-specific GIS
USLE rainfall (or erosivity) factor (yr-1)	RF	75.16	Assuming equivalent of 12 storms/year (used in Waipahu)
ULSE erodability factor (ton/acre)	K	0.39	EPA default
USLE length-slope factor	LS	1.5	default
USLE cover management factor	C	0.1	EPA default
USLE supporting practice factor	PF	1	default
Volumetric flow rate (m3/yr)	Vfx	19100000	From USGS gauging station 2080 - South Fork Kaukonahua Stream at east pump reservoir, near Wahiawa
Depth of water column (m)	dwc	25	Max Depth based on Hawaii State Department of Business, Economic Development and Tourism, State of Hawaii Data Book, 1995
Total suspended solids (mg/L)	TSS	50	site-specific (high end = 80) - from West Loch Surface water runoff modeling (Waipahu risk assessment)
Current velocity (m/s)	u	1.35636	Need site-specific input only if "stream"
Empirical intercept coefficient	a	1.4	from guidance, based on area of watershed
Chemical-Specific Constants			
Fw (unitless)	fraction of wet deposition that adheres to plant	0.2	anions
		0.6	cations and organics
VGbg (unitless)	correction factor for root vegetables	0.01	log Kow>4
		1	log Kow<4
VGag (unitless)	correction factor for aboveground produce	0.01	log Kow>4
		1	log Kow<4
MF (unitless)	metabolism factor in animals	1	
Animal Specific Constants			
Bs (unitless)	soil bioavailability factor	1	

TABLE 4-6
EXPOSURE POINT CONCENTRATIONS IN PRODUCE
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Residential Area Above-Ground Produce $P_{ag\ (Cs)}$ (mg/kg DW)	Residential Area Root Produce $P_{bg\ (Cs)}$ (mg/kg DW)	Agriculture Area Above-Ground Produce $P_{ag\ (Cs)}$ (mg/kg DW)	Agriculture Area Root Produce $P_{bg\ (Cs)}$ (mg/kg DW)	Agriculture Area Forage $P_{forage\ (Cs)}$ (mg/kg DW)	Agriculture Area Grain $P_{grain\ (Cs)}$ (mg/kg DW)	Agriculture Area Silage $P_{silage\ (Cs)}$ (mg/kg DW)	Poultry Area Above-Ground Produce $P_{ag\ (Cs)}$ (mg/kg DW)	Poultry Area Root Produce $P_{bg\ (Cs)}$ (mg/kg DW)	Poultry Area Grain $P_{grain\ (Cs)}$ (mg/kg DW)
Mercury, elemental	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Mercury, methyl	1.56E-07	5.13E-07	3.78E-08	1.25E-07	7.44E-09	NC	2.19E-09	4.72E-08	1.57E-07	NC
Mercury, divalent	1.47E-05	9.17E-06	3.72E-06	2.23E-06	2.84E-06	NC	1.42E-06	4.08E-06	2.80E-06	NC
1,2,3,4,6,7,8,9-OCDD	3.15E-10	6.33E-12	5.39E-11	1.03E-12	1.08E-09	1.48E-13	4.25E-10	5.13E-11	9.66E-13	1.39E-13
1,2,3,4,6,7,8,9-OCDF	4.75E-11	1.52E-12	8.54E-12	2.61E-13	1.63E-10	3.09E-14	6.38E-11	8.08E-12	2.44E-13	2.89E-14
1,2,3,4,6,7,8-HpCDD	2.22E-10	5.13E-12	3.91E-11	8.71E-13	6.34E-10	1.47E-13	2.32E-10	3.69E-11	8.16E-13	1.38E-13
1,2,3,4,6,7,8-HpCDF	2.59E-10	7.70E-12	5.08E-11	1.43E-12	1.20E-09	3.92E-13	4.98E-10	4.83E-11	1.36E-12	3.73E-13
1,2,3,4,7,8,9-HpCDF	3.52E-11	7.29E-13	7.60E-12	1.36E-13	4.25E-10	3.73E-14	2.04E-10	7.60E-12	1.46E-13	3.99E-14
1,2,3,4,7,8-HxCDD	2.66E-11	6.21E-13	5.30E-12	1.16E-13	1.54E-10	2.30E-14	6.71E-11	5.08E-12	1.14E-13	2.27E-14
1,2,3,4,7,8-HxCDF	1.32E-10	5.06E-12	2.61E-11	9.81E-13	6.09E-10	3.69E-13	2.52E-10	2.49E-11	1.03E-12	3.87E-13
1,2,3,6,7,8-HxCDD	4.97E-11	1.46E-12	9.63E-12	2.62E-13	3.16E-10	7.73E-14	1.41E-10	9.30E-12	2.62E-13	7.74E-14
1,2,3,6,7,8-HxCDF	1.38E-10	5.28E-12	2.75E-11	1.03E-12	6.57E-10	3.87E-13	2.74E-10	2.61E-11	1.09E-12	4.08E-13
1,2,3,7,8,9-HxCDD	3.28E-11	1.03E-12	6.24E-12	1.86E-13	1.51E-10	5.52E-14	6.30E-11	5.95E-12	1.80E-13	5.34E-14
1,2,3,7,8,9-HxCDF	2.78E-11	1.03E-12	5.48E-12	1.96E-13	1.80E-10	7.39E-14	8.02E-11	5.30E-12	2.25E-13	8.47E-14
1,2,3,7,8-PeCDD	5.00E-11	1.97E-12	1.08E-11	4.03E-13	4.75E-10	2.02E-13	2.21E-10	1.07E-11	4.86E-13	2.44E-13
1,2,3,7,8-PeCDF	1.41E-10	6.13E-12	3.09E-11	1.40E-12	1.43E-09	6.25E-13	6.73E-10	3.10E-11	2.09E-12	9.33E-13
2,3,4,6,7,8-HxCDF	9.71E-11	3.71E-12	1.94E-11	7.23E-13	4.77E-10	2.72E-13	2.00E-10	1.85E-11	7.69E-13	2.89E-13
2,3,4,7,8-PeCDF	1.56E-10	7.93E-12	3.35E-11	1.75E-12	1.37E-09	9.80E-13	6.32E-10	3.33E-11	2.47E-12	1.38E-12
2,3,7,8-TCDD	1.60E-11	8.72E-13	3.88E-12	2.40E-13	2.83E-10	1.06E-13	1.38E-10	4.13E-12	4.80E-13	2.12E-13
2,3,7,8-TCDF	5.32E-11	5.28E-12	1.33E-11	1.54E-12	9.51E-10	1.19E-12	4.64E-10	1.52E-11	3.23E-12	2.50E-12
Arsenic	1.89E-06	5.35E-12	3.54E-07	9.95E-13	3.97E-06	4.48E-12	1.17E-06	3.05E-07	8.61E-13	3.87E-12
Beryllium	2.27E-07	1.60E-10	4.08E-08	2.86E-11	4.57E-07	1.91E-10	1.35E-07	3.54E-08	2.49E-11	1.66E-10
Cadmium	2.24E-05	3.21E-08	3.62E-06	5.19E-09	4.05E-05	2.95E-08	1.20E-05	3.18E-06	4.57E-09	2.60E-08
Chromium	1.11E-05	1.06E-07	2.02E-06	1.92E-08	2.25E-05	3.19E-08	6.63E-06	1.75E-06	1.66E-08	2.77E-08
Lead	5.18E-04	1.52E-06	9.01E-05	2.62E-07	1.01E-03	1.31E-06	2.98E-04	7.84E-05	2.29E-07	1.14E-06
Nickel	1.22E-05	2.37E-09	2.13E-06	4.11E-10	2.39E-05	1.64E-09	7.03E-06	1.85E-06	3.59E-10	1.43E-09

NC - Not Calculated
DW - Dry weight

CstD - Concentration used to estimate potential noncarcinogenic risks.
Cs - Concentration used to estimate potential carcinogenic risks.

TABLE 4-6
EXPOSURE POINT CONCENTRATIONS IN PRODUCE
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Residential Area Above-Ground Produce $P_{ag\ (CstD)}$ (mg/kg DW)	Residential Area Root Produce $P_{bg\ (CstD)}$ (mg/kg DW)	Agriculture Area Above-Ground Produce $P_{ag\ (CstD)}$ (mg/kg DW)	Agriculture Area Root Produce $P_{bg\ (CstD)}$ (mg/kg DW)	Agriculture Area Forage $P_{forage\ (CstD)}$ (mg/kg DW)	Agriculture Area Grain $P_{grain\ (CstD)}$ (mg/kg DW)	Agriculture Area Silage $P_{silage\ (CstD)}$ (mg/kg DW)	Poultry Area Above-Ground Produce $P_{ag\ (CstD)}$ (mg/kg DW)	Poultry Area Root Produce $P_{bg\ (CstD)}$ (mg/kg DW)	Poultry Area Grain $P_{grain\ (CstD)}$ (mg/kg DW)
Mercury, elemental	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Mercury, methyl	3.08E-07	1.02E-06	7.47E-08	2.49E-07	7.44E-09	NC	2.19E-09	9.36E-08	3.13E-07	NC
Mercury, divalent	1.84E-05	1.83E-05	4.62E-06	4.46E-06	2.84E-06	NC	1.42E-06	5.21E-06	5.60E-06	NC
1,2,3,4,6,7,8,9-OCDD	3.16E-10	1.10E-11	5.40E-11	1.80E-12	1.08E-09	2.59E-13	4.25E-10	5.14E-11	1.68E-12	2.42E-13
1,2,3,4,6,7,8,9-OCDF	4.76E-11	2.65E-12	8.56E-12	4.55E-13	1.64E-10	5.39E-14	6.38E-11	8.11E-12	4.24E-13	5.03E-14
1,2,3,4,6,7,8-HpCDD	2.23E-10	8.94E-12	3.92E-11	1.52E-12	6.35E-10	2.56E-13	2.32E-10	3.70E-11	1.42E-12	2.40E-13
1,2,3,4,6,7,8-HpCDF	2.60E-10	1.34E-11	5.11E-11	2.49E-12	1.20E-09	6.83E-13	4.98E-10	4.86E-11	2.37E-12	6.49E-13
1,2,3,4,7,8,9-HpCDF	3.53E-11	1.27E-12	7.63E-12	2.37E-13	4.25E-10	6.50E-14	2.04E-10	7.63E-12	2.54E-13	6.96E-14
1,2,3,4,7,8-HxCDD	2.67E-11	1.08E-12	5.32E-12	2.02E-13	1.54E-10	4.00E-14	6.71E-11	5.10E-12	1.99E-13	3.95E-14
1,2,3,4,7,8-HxCDF	1.33E-10	8.81E-12	2.64E-11	1.71E-12	6.11E-10	6.43E-13	2.52E-10	2.51E-11	1.79E-12	6.74E-13
1,2,3,6,7,8-HxCDD	5.00E-11	2.54E-12	9.69E-12	4.56E-13	3.16E-10	1.35E-13	1.41E-10	9.35E-12	4.57E-13	1.35E-13
1,2,3,6,7,8-HxCDF	1.39E-10	9.20E-12	2.78E-11	1.79E-12	6.60E-10	6.74E-13	2.74E-10	2.64E-11	1.89E-12	7.11E-13
1,2,3,7,8,9-HxCDD	3.30E-11	1.79E-12	6.29E-12	3.24E-13	1.51E-10	9.62E-14	6.31E-11	5.99E-12	3.14E-13	9.31E-14
1,2,3,7,8,9-HxCDF	2.81E-11	1.79E-12	5.53E-12	3.42E-13	1.80E-10	1.29E-13	8.03E-11	5.36E-12	3.92E-13	1.48E-13
1,2,3,7,8-PeCDD	5.08E-11	3.44E-12	1.09E-11	7.03E-13	4.76E-10	3.53E-13	2.21E-10	1.08E-11	8.47E-13	4.25E-13
1,2,3,7,8-PeCDF	1.43E-10	1.07E-11	3.14E-11	2.43E-12	1.44E-09	1.09E-12	6.73E-10	3.16E-11	3.63E-12	1.63E-12
2,3,4,6,7,8-HxCDF	9.81E-11	6.47E-12	1.96E-11	1.26E-12	4.79E-10	4.74E-13	2.00E-10	1.87E-11	1.34E-12	5.04E-13
2,3,4,7,8-PeCDF	1.60E-10	1.38E-11	3.42E-11	3.05E-12	1.38E-09	1.71E-12	6.33E-10	3.43E-11	4.30E-12	2.41E-12
2,3,7,8-TCDD	1.62E-11	1.52E-12	3.96E-12	4.18E-13	2.84E-10	1.85E-13	1.39E-10	4.28E-12	8.35E-13	3.69E-13
2,3,7,8-TCDF	5.62E-11	9.18E-12	1.42E-11	2.68E-12	9.59E-10	2.07E-12	4.65E-10	1.70E-11	5.62E-12	4.34E-12
Arsenic	1.89E-06	5.35E-12	3.54E-07	9.95E-13	3.97E-06	4.48E-12	1.17E-06	3.05E-07	8.61E-13	3.87E-12
Beryllium	2.27E-07	1.67E-10	4.08E-08	2.99E-11	4.57E-07	2.00E-10	1.35E-07	3.54E-08	2.60E-11	1.74E-10
Cadmium	2.24E-05	3.22E-08	3.62E-06	5.20E-09	4.05E-05	2.96E-08	1.20E-05	3.18E-06	4.57E-09	2.60E-08
Chromium	1.11E-05	1.38E-07	2.03E-06	2.49E-08	2.25E-05	4.15E-08	6.64E-06	1.75E-06	2.16E-08	3.60E-08
Lead	5.18E-04	1.56E-06	9.01E-05	2.70E-07	1.01E-03	1.35E-06	2.98E-04	7.84E-05	2.36E-07	1.18E-06
Nickel	1.22E-05	2.37E-09	2.13E-06	4.12E-10	2.39E-05	1.65E-09	7.03E-06	1.85E-06	3.59E-10	1.44E-09

NC - Not Calculated
DW - Dry weight

CstD - Concentration used to estimate potential noncarcinogenic risks.
Cs - Concentration used to estimate potential carcinogenic risks.

TABLE 4-7
EXPOSURE POINT CONCENTRATIONS IN FISH
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Pearl Harbor Fish $C_{fish\ (Cs)}$ (mg/kg FW)	West Loch Fish $C_{fish\ (Cs)}$ (mg/kg FW)	Wahiawa Fish $C_{fish\ (Cs)}$ (mg/kg FW)	Pearl Harbor Fish $C_{fish\ (CstD)}$ (mg/kg FW)	West Loch Fish $C_{fish\ (CstD)}$ (mg/kg FW)	Wahiawa Fish $C_{fish\ (CstD)}$ (mg/kg FW)
Mercury, elemental	NC	NC	NC	NC	NC	NC
Mercury, methyl	1.13E-03	2.39E-03	5.12E-03	1.13E-03	2.39E-03	5.12E-03
Mercury, divalent	2.07E-09	4.38E-09	8.27E-09	2.07E-09	4.38E-09	8.27E-09
1,2,3,4,6,7,8,9-OCDD	2.64E-13	4.86E-13	6.09E-13	2.64E-13	4.86E-13	6.09E-13
1,2,3,4,6,7,8,9-OCDF	1.26E-13	2.31E-13	2.90E-13	1.26E-13	2.31E-13	2.90E-13
1,2,3,4,6,7,8-HpCDD	5.97E-13	1.10E-12	1.38E-12	5.97E-13	1.10E-12	1.38E-12
1,2,3,4,6,7,8-HpCDF	1.87E-11	3.46E-11	4.42E-11	1.87E-11	3.46E-11	4.42E-11
1,2,3,4,7,8,9-HpCDF	1.76E-12	3.34E-12	4.47E-12	1.76E-12	3.34E-12	4.47E-12
1,2,3,4,7,8-HxCDD	2.12E-13	3.96E-13	5.09E-13	2.12E-13	3.96E-13	5.09E-13
1,2,3,4,7,8-HxCDF	6.76E-11	1.28E-10	1.74E-10	6.76E-11	1.28E-10	1.74E-10
1,2,3,6,7,8-HxCDD	5.54E-12	1.04E-11	1.36E-11	5.54E-12	1.04E-11	1.36E-11
1,2,3,6,7,8-HxCDF	7.09E-11	1.34E-10	1.83E-10	7.09E-11	1.34E-10	1.83E-10
1,2,3,7,8,9-HxCDD	3.95E-12	7.35E-12	9.49E-12	3.95E-12	7.35E-12	9.49E-12
1,2,3,7,8,9-HxCDF	1.34E-11	2.59E-11	3.63E-11	1.34E-11	2.59E-11	3.63E-11
1,2,3,7,8-PeCDD	2.63E-11	5.15E-11	7.73E-11	2.63E-11	5.15E-11	7.73E-11
1,2,3,7,8-PeCDF	9.31E-11	1.92E-10	3.08E-10	9.31E-11	1.92E-10	3.08E-10
2,3,4,6,7,8-HxCDF	4.98E-11	9.46E-11	1.29E-10	4.98E-11	9.46E-11	1.29E-10
2,3,4,7,8-PeCDF	1.09E-10	2.23E-10	3.67E-10	1.09E-10	2.23E-10	3.67E-10
2,3,7,8-TCDD	1.55E-11	3.51E-11	6.36E-11	1.55E-11	3.51E-11	6.36E-11
2,3,7,8-TCDF	7.90E-11	1.84E-10	4.15E-10	7.90E-11	1.84E-10	4.15E-10
Arsenic	1.62E-08	2.74E-08	1.28E-07	1.62E-08	2.74E-08	1.28E-07
Beryllium	1.01E-09	1.73E-09	7.25E-09	1.01E-09	1.73E-09	7.25E-09
Cadmium	1.31E-06	2.23E-06	1.02E-05	1.31E-06	2.23E-06	1.02E-05
Chromium	6.03E-08	1.40E-07	1.41E-06	6.03E-08	1.40E-07	1.41E-06
Lead	3.20E-09	5.45E-09	2.27E-08	3.20E-09	5.45E-09	2.27E-08
Nickel	6.69E-08	1.14E-07	5.23E-07	6.69E-08	1.14E-07	5.23E-07

NC - Not Calculated
FW - Fresh weight
CstD - Concentration used to estimate potential noncarcinogenic risks.
Cs - Concentration used to estimate potential carcinogenic risks.

TABLE 4-8
EXPOSURE POINT CONCENTRATIONS IN ANIMAL PRODUCTS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Agriculture Area Beef $A_{beef\ (Cs)}$ (mg/kg FW)	Agriculture Area Milk $A_{milk\ (Cs)}$ (mg/kg FW)	Agriculture Area Chicken $A_{chicken\ (Cs)}$ (mg/kg FW)	Agriculture Area Eggs $A_{egg\ (Cs)}$ (mg/kg FW)	Agriculture Area Pork $A_{pork\ (Cs)}$ (mg/kg FW)	Poultry Area Chicken $A_{chicken\ (Cs)}$ (mg/kg FW)	Poultry Area Eggs $A_{egg\ (Cs)}$ (mg/kg FW)
Mercury, elemental	NC	NC	NC	NC	NC	NC	NC
Mercury, methyl	4.81E-09	1.68E-09	9.59E-10	9.59E-10	2.29E-11	1.20E-09	1.20E-09
Mercury, divalent	1.76E-06	6.57E-07	3.25E-07	3.25E-07	7.82E-09	4.08E-07	4.08E-07
1,2,3,4,6,7,8,9-OCDD	7.94E-11	2.42E-11	2.34E-13	1.34E-13	1.14E-11	2.19E-13	1.25E-13
1,2,3,4,6,7,8,9-OCDF	1.55E-11	4.71E-12	4.78E-14	2.73E-14	2.27E-12	4.46E-14	2.55E-14
1,2,3,4,6,7,8-HpCDD	6.09E-11	1.84E-11	2.27E-13	1.30E-13	9.71E-12	2.13E-13	1.21E-13
1,2,3,4,6,7,8-HpCDF	2.09E-10	6.44E-11	5.09E-13	2.91E-13	2.79E-11	4.84E-13	2.76E-13
1,2,3,4,7,8,9-HpCDF	7.12E-11	2.25E-11	4.85E-14	2.77E-14	7.00E-12	5.19E-14	2.96E-14
1,2,3,4,7,8-HxCDD	1.78E-11	5.52E-12	3.41E-14	1.95E-14	2.19E-12	3.37E-14	1.92E-14
1,2,3,4,7,8-HxCDF	1.48E-10	4.55E-11	3.91E-13	2.23E-13	2.05E-11	4.10E-13	2.34E-13
1,2,3,6,7,8-HxCDD	5.91E-11	1.84E-11	9.62E-14	5.50E-14	6.94E-12	9.64E-14	5.51E-14
1,2,3,6,7,8-HxCDF	1.60E-10	4.91E-11	4.10E-13	2.34E-13	2.19E-11	4.33E-13	2.47E-13
1,2,3,7,8,9-HxCDD	2.88E-11	8.86E-12	6.85E-14	3.91E-14	3.81E-12	6.62E-14	3.79E-14
1,2,3,7,8,9-HxCDF	4.30E-11	1.34E-11	7.83E-14	4.47E-14	5.26E-12	8.98E-14	5.13E-14
1,2,3,7,8-PeCDD	1.41E-10	4.43E-11	1.67E-13	9.53E-14	1.54E-11	2.01E-13	1.15E-13
1,2,3,7,8-PeCDF	3.94E-10	1.23E-10	5.76E-13	3.29E-13	4.59E-11	8.61E-13	4.92E-13
2,3,4,6,7,8-HxCDF	1.16E-10	3.56E-11	2.88E-13	1.65E-13	1.57E-11	3.07E-13	1.75E-13
2,3,4,7,8-PeCDF	4.45E-10	1.39E-10	7.21E-13	4.12E-13	5.31E-11	1.02E-12	5.82E-13
2,3,7,8-TCDD	7.70E-11	2.41E-11	9.50E-14	5.43E-14	8.75E-12	1.90E-13	1.08E-13
2,3,7,8-TCDF	3.66E-10	1.14E-10	5.91E-13	3.38E-13	4.50E-11	1.24E-12	7.09E-13
Arsenic	7.57E-08	3.43E-09	NC	NC	NC	NC	NC
Beryllium	4.36E-09	5.93E-12	NC	NC	NC	NC	NC
Cadmium	4.64E-08	3.79E-09	6.47E-10	1.52E-11	3.22E-09	5.68E-10	1.34E-11
Chromium	1.19E-06	4.89E-07	NC	NC	NC	NC	NC
Lead	2.88E-06	3.63E-06	NC	NC	NC	NC	NC
Nickel	1.37E-06	3.44E-07	NC	NC	NC	NC	NC

NC - Not Calculated
FW - Fresh weight

CstD - Concentration used to estimate potential noncarcinogenic risks.
Cs - Concentration used to estimate potential carcinogenic risks.

TABLE 4-8
EXPOSURE POINT CONCENTRATIONS IN ANIMAL PRODUCTS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Compound	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Chicken	Agriculture Area Eggs	Agriculture Area Pork	Poultry Area Chicken	Poultry Area Eggs
	$A_{beef\ (CstD)}$ (mg/kg FW)	$A_{milk\ (CstD)}$ (mg/kg FW)	$A_{chicken\ (CstD)}$ (mg/kg FW)	$A_{egg\ (CstD)}$ (mg/kg FW)	$A_{pork\ (CstD)}$ (mg/kg FW)	$A_{chicken\ (CstD)}$ (mg/kg FW)	$A_{egg\ (CstD)}$ (mg/kg FW)
Mercury, elemental	NC	NC	NC	NC	NC	NC	NC
Mercury, methyl	9.38E-09	3.27E-09	1.88E-09	1.88E-09	4.49E-11	2.36E-09	2.36E-09
Mercury, divalent	3.37E-06	1.21E-06	6.49E-07	6.49E-07	1.55E-08	8.14E-07	8.14E-07
1,2,3,4,6,7,8,9-OCDD	8.48E-11	2.51E-11	4.07E-13	2.33E-13	1.62E-11	3.82E-13	2.18E-13
1,2,3,4,6,7,8,9-OCDF	1.66E-11	4.90E-12	8.33E-14	4.76E-14	3.25E-12	7.77E-14	4.44E-14
1,2,3,4,6,7,8-HpCDD	6.62E-11	1.93E-11	3.95E-13	2.26E-13	1.44E-11	3.70E-13	2.11E-13
1,2,3,4,6,7,8-HpCDF	2.21E-10	6.65E-11	8.86E-13	5.07E-13	3.84E-11	8.42E-13	4.81E-13
1,2,3,4,7,8,9-HpCDF	7.24E-11	2.27E-11	8.43E-14	4.82E-14	8.00E-12	9.02E-14	5.16E-14
1,2,3,4,7,8-HxCDD	1.86E-11	5.65E-12	5.94E-14	3.40E-14	2.89E-12	5.86E-14	3.35E-14
1,2,3,4,7,8-HxCDF	1.58E-10	4.72E-11	6.79E-13	3.88E-13	2.85E-11	7.12E-13	4.07E-13
1,2,3,6,7,8-HxCDD	6.14E-11	1.88E-11	1.67E-13	9.55E-14	8.90E-12	1.67E-13	9.57E-14
1,2,3,6,7,8-HxCDF	1.70E-10	5.09E-11	7.13E-13	4.07E-13	3.03E-11	7.53E-13	4.30E-13
1,2,3,7,8,9-HxCDD	3.04E-11	9.14E-12	1.19E-13	6.80E-14	5.21E-12	1.15E-13	6.58E-14
1,2,3,7,8,9-HxCDF	4.49E-11	1.37E-11	1.36E-13	7.77E-14	6.86E-12	1.56E-13	8.91E-14
1,2,3,7,8-PeCDD	1.45E-10	4.50E-11	2.89E-13	1.65E-13	1.88E-11	3.48E-13	1.99E-13
1,2,3,7,8-PeCDF	4.08E-10	1.26E-10	1.00E-12	5.71E-13	5.76E-11	1.49E-12	8.54E-13
2,3,4,6,7,8-HxCDF	1.23E-10	3.69E-11	5.01E-13	2.86E-13	2.16E-11	5.33E-13	3.04E-13
2,3,4,7,8-PeCDF	4.63E-10	1.42E-10	1.25E-12	7.13E-13	6.77E-11	1.76E-12	1.01E-12
2,3,7,8-TCDD	7.92E-11	2.45E-11	1.62E-13	9.25E-14	1.06E-11	3.23E-13	1.85E-13
2,3,7,8-TCDF	3.81E-10	1.17E-10	1.01E-12	5.75E-13	5.65E-11	2.11E-12	1.21E-12
Arsenic	7.57E-08	3.43E-09	NC	NC	NC	NC	NC
Beryllium	4.36E-09	5.93E-12	NC	NC	NC	NC	NC
Cadmium	4.64E-08	3.79E-09	6.48E-10	1.52E-11	3.22E-09	5.70E-10	1.34E-11
Chromium	1.19E-06	4.89E-07	NC	NC	NC	NC	NC
Lead	2.88E-06	3.63E-06	NC	NC	NC	NC	NC
Nickel	1.37E-06	3.44E-07	NC	NC	NC	NC	NC

NC - Not Calculated
FW - Fresh weight

CstD - Concentration used to estimate potential noncarcinogenic risks.
Cs - Concentration used to estimate potential carcinogenic risks.

TABLE 4-9
EXPOSURE FACTOR PARAMETER VALUES
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Parameter (units)	Resident Adult	Resident Child	Farmer Adult	Farmer Child	Fisher Adult	Fisher Child
Exposure frequency (d/y)	350	350	350	350	350	350
Exposure duration (y)	30	6	40	6	30	6
Body weight (kg)	70	15	70	15	70	15
Averaging time for carcinogens (d)	25550	25550	25550	25550	25550	25550
Averaging time for noncarcinogens (d)	10950	2190	14600	2190	10950	2190
Soil ingestion rate (mg/d)	100	200	100	200	100	200
Fraction of soil ingested that is from affected area (unitless)	1	1	1	1	1	1
Conversion factor (kg/mg)	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Drinking water ingestion rate (L/d)	0	0	0	0	0	0
Inhalation rate (m3/d)	15.2	8.1	15.2	8.1	15.2	8.1
Fraction of air from affected area (unitless)	1	1	1	1	1	1
Conversion factor (ug/mg)	0.001	0.001	0.001	0.001	0.001	0.001
Produce (above ground) ingestion rate (g/d)	36.1	28.9	54	43.6	36.1	28.9
Produce (root) ingestion rate (g/d)	1.91	3.98	3.58	7.45	1.91	3.98
Fraction of produce that is from affected area (unitless)	1	1	1	1	1	1
Conversion factor (kg/g)	0.001	0.001	0.001	0.001	0.001	0.001
Fish ingestion rate (g/d)	0	0	0	0	87.5	13.2
Fraction of fish from affected area (unitless)	0	0	0	0	0.25	0.25
Conversion factor (kg/g)	0.001	0.001	0.001	0.001	0.001	0.001
Beef ingestion rate (g/d)	NA	NA	85.4	11.25	NA	NA
Fraction of beef that is from affected area (unitless)	NA	NA	1	1	NA	NA
Conversion factor (kg/g)	NA	NA	0.001	0.001	NA	NA
Milk ingestion rate (g/d)	NA	NA	956.9	340.2	NA	NA
Fraction of milk that is from affected area (unitless)	NA	NA	1	1	NA	NA
Conversion factor (kg/g)	NA	NA	0.001	0.001	NA	NA
Poultry ingestion rate (g/d)	46.2 (a)	6.75 (a)	46.2	6.75	NA	NA
Fraction of poultry from affected area (unitless)	1 (a)	1 (a)	1	1	NA	NA
Conversion factor (kg/g)	NA	NA	0.001	0.001	NA	NA
Egg ingestion rate (g/d)	NA	NA	52.5	8.1	NA	NA
Fraction of eggs from affected area (unitless)	NA	NA	1	1	NA	NA
Conversion factor (kg/g)	NA	NA	0.001	0.001	NA	NA
Pork ingestion rate (g/d)	NA	NA	38.5	6.3	NA	NA
Fraction of pork from affected area (unitless)	NA	NA	1	1	NA	NA
Conversion factor (kg/g)	NA	NA	0.001	0.001	NA	NA

NA - Not applicable; receptor is not assumed to be exposed via this pathway.
(a) Nanakuli resident only.

TABLE 5-1
SUMMARY OF OVERALL RISK RESULTS
HUMAN HEALTH RISK ASSESSMENT
COVANTA KAPOLEI RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

Receptor	Risk	HQ	Comments
Fisher Adult (Pearl H)	2E-08	0.004	Soil, air, produce from residence, no water, fish from Pearl Harbor
Fisher Child (Pearl H)	1E-08	0.006	Soil, air, produce from residence, no water, fish from Pearl Harbor
Fisher Adult (West Loch)	2E-08	0.008	Soil, air, produce from residence, no water, fish from West Loch
Fisher Child (West Loch)	1E-08	0.008	Soil, air, produce from residence, no water, fish from West Loch
Fisher Adult (Wahiawa Res)	2E-08	0.02	Soil, air, produce from residence, no water, fish from Wahiawa Reservoir
Fisher Child (Wahiawa Res)	1E-08	0.01	Soil, air, produce from residence, no water, fish from Wahiawa Reservoir
Resident Adult (poultry)	4E-09	0.0002	Soil, air, produce, poultry and eggs from poultry area, no water, no fish
Resident Child (poultry)	3E-09	0.0006	Soil, air, produce, poultry and eggs from poultry area, no water, no fish
Farmer Adult	2E-07	0.003	Soil, air, produce, foodstuffs from farm, no water, no fish
Farmer Child	5E-08	0.005	Soil, air, produce, foodstuffs from farm, no water, no fish
Resident Adult	2E-08	0.0009	Soil, air, produce from residence, no water, no fish
Resident Child	1E-08	0.003	Soil, air, produce from residence, no water, no fish
Resident Adult (compost)	4E-08	0.003	Air from residence, soil and produce from compost, no water, no fish
Resident Child (compost)	4E-08	0.01	Air from residence, soil and produce from compost, no water, no fish

HUMAN HEALTH RISK ASSESSMENT REPORT
H-POWER EXPANSION PROJECT

Appendix A
Air Quality Modeling Results

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Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
600239.00	2356326.00	0.00121349	0.00006788	0.0000672	0.00000068	0.00172146	0.00008537	0.00008485	0.00000053
601239.00	2356326.00	0.00104908	0.0000597	0.0000591	0.0000006	0.00146908	0.00007366	0.00007319	0.00000047
602239.00	2356326.00	0.00092374	0.00005365	0.00005311	0.00000054	0.00128118	0.00006518	0.00006477	0.00000042
596178.25	2355631.50	0.00321403	0.00036938	0.00036919	0.00000019	0.00513349	0.00062609	0.0006259	0.00000019
596670.63	2355544.50	0.00273526	0.00030395	0.00030379	0.00000017	0.00422124	0.00048318	0.00048301	0.00000017
597163.06	2355457.75	0.00236831	0.00025676	0.00025661	0.00000015	0.00356125	0.00038833	0.00038818	0.00000015
598147.88	2355284.00	0.00185187	0.00019501	0.00019489	0.00000012	0.00268665	0.00027445	0.00027433	0.00000013
599132.63	2355110.50	0.00151286	0.00015755	0.00015745	0.0000001	0.00214627	0.00021099	0.00021088	0.00000011
600117.44	2354936.75	0.00127662	0.00013295	0.00013286	0.00000008	0.00178517	0.00017174	0.00017165	0.00000009
601102.25	2354763.25	0.00110428	0.00011571	0.00011564	0.00000007	0.0015292	0.00014544	0.00014536	0.00000008
602087.06	2354589.50	0.0009734	0.00010295	0.00010288	0.00000007	0.0013387	0.00012671	0.00012665	0.00000007
594823.13	2355385.50	0.00606951	0.00196299	0.00196294	0.00000005	0.01095204	0.00483215	0.0048321	0.00000005
595058.06	2355300.00	0.00537662	0.00169521	0.00169516	0.00000005	0.00944671	0.0038966	0.00389655	0.00000005
595527.94	2355129.00	0.00432951	0.00130839	0.00130835	0.00000004	0.00725887	0.00268235	0.00268231	0.00000005
595997.75	2354958.00	0.00358888	0.00105054	0.00105051	0.00000004	0.00579132	0.00196393	0.00196389	0.00000004
596467.63	2354787.00	0.00304431	0.00087027	0.00087023	0.00000003	0.00476081	0.00150915	0.00150912	0.00000004
596937.44	2354616.00	0.00263072	0.00073895	0.00073892	0.00000003	0.00400977	0.00120498	0.00120494	0.00000004
597877.19	2354274.00	0.00205306	0.00056476	0.00056474	0.00000003	0.00300864	0.0008373	0.00083727	0.00000003
598816.88	2353931.75	0.00167676	0.00045688	0.00045686	0.00000002	0.00238685	0.00063209	0.00063206	0.00000003
599756.56	2353589.75	0.00141503	0.00038494	0.00038492	0.00000002	0.00197101	0.00050552	0.0005055	0.00000002
600696.25	2353247.75	0.00122361	0.00033392	0.0003339	0.00000002	0.00167644	0.00042126	0.00042124	0.00000002
601635.94	2352905.75	0.00107795	0.00029582	0.0002958	0.00000002	0.00145807	0.00036171	0.00036169	0.00000002
593971.06	2355326.00	0.00851581	0.00679358	0.00679353	0.00000005	0.01609808	0.0133903	0.01339024	0.00000006
594187.56	2355201.00	0.00738619	0.00568963	0.00568959	0.00000005	0.01339452	0.01056649	0.01056644	0.00000006
594404.06	2355076.00	0.0064812	0.00483204	0.004832	0.00000004	0.01134666	0.00851661	0.00851656	0.00000005
594620.56	2354951.00	0.00574759	0.00415758	0.00415754	0.00000004	0.00977232	0.00700816	0.00700811	0.00000005
594837.06	2354826.00	0.00514252	0.00361947	0.00361944	0.00000004	0.00853741	0.00587495	0.00587491	0.00000005
595270.06	2354576.00	0.00421215	0.00282981	0.00282978	0.00000003	0.00674508	0.00432674	0.0043267	0.00000004
595703.13	2354326.00	0.00353723	0.00228991	0.00228988	0.00000003	0.00553068	0.00334994	0.0033499	0.00000004
596136.13	2354076.00	0.00302949	0.0019051	0.00190508	0.00000003	0.00466209	0.00269526	0.00269522	0.00000003
596569.13	2353826.00	0.00263613	0.00162006	0.00162003	0.00000002	0.00401385	0.00223371	0.00223368	0.00000003
597435.13	2353326.00	0.00207812	0.00123746	0.00123744	0.00000002	0.00312065	0.00163858	0.00163856	0.00000003
598301.19	2352826.00	0.0017061	0.00099778	0.00099776	0.00000002	0.00254195	0.00128116	0.00128114	0.00000002
599167.19	2352326.00	0.00144423	0.00083673	0.00083671	0.00000002	0.00213795	0.0010473	0.00104728	0.00000002
600033.25	2351826.00	0.00125204	0.00072256	0.00072254	0.00000002	0.00184162	0.00088475	0.00088473	0.00000002
600899.25	2351326.00	0.00110569	0.00063781	0.0006378	0.00000002	0.00161534	0.00076597	0.00076595	0.00000002
593579.56	2355201.00	0.00928623	0.00911533	0.00911527	0.00000006	0.01503704	0.01126705	0.01126698	0.00000007
593771.06	2355040.50	0.007949	0.00759069	0.00759063	0.00000006	0.01361208	0.01007673	0.01007666	0.00000007
593962.63	2354879.75	0.00688432	0.00639975	0.00639971	0.00000005	0.01206854	0.00880461	0.00880455	0.00000006
594154.13	2354719.00	0.00602722	0.00546046	0.00546041	0.00000005	0.01063612	0.00762816	0.0076281	0.00000006
594345.63	2354558.25	0.00533113	0.00471352	0.00471348	0.00000004	0.00938133	0.0066044	0.00660435	0.00000005
594537.13	2354397.75	0.00475889	0.00411198	0.00411194	0.00000004	0.00831076	0.00574124	0.00574119	0.00000005
594920.19	2354076.25	0.00388029	0.00321571	0.00321568	0.00000003	0.00663497	0.0044147	0.00441466	0.00000004
595303.19	2353754.75	0.00324707	0.00259424	0.00259421	0.00000003	0.00542924	0.00348699	0.00348695	0.00000004
595686.19	2353433.50	0.00277587	0.00214752	0.0021475	0.00000003	0.00454397	0.00282663	0.0028266	0.00000004
596069.25	2353112.00	0.00241346	0.00181592	0.00181589	0.00000003	0.00387709	0.00234438	0.00234435	0.00000003
596835.25	2352469.25	0.00190013	0.00136705	0.00136703	0.00000002	0.00296597	0.0017071	0.00170707	0.00000003
597601.31	2351826.50	0.00155928	0.00108576	0.00108574	0.00000002	0.00238646	0.00132068	0.00132065	0.00000002
598367.38	2351183.75	0.00132001	0.00089781	0.0008978	0.00000002	0.00199019	0.00106925	0.00106922	0.00000002
599133.38	2350541.00	0.00114474	0.00076541	0.00076539	0.00000002	0.00170397	0.00089578	0.00089576	0.00000002
593138.88	2355253.50	0.00855898	0.00807665	0.00807657	0.00000008	0.00712235	0.00453121	0.00453114	0.00000007
593203.19	2355177.00	0.00814392	0.00755988	0.00755981	0.00000008	0.00740929	0.00452602	0.00452595	0.00000007
593363.88	2354985.50	0.00717231	0.00640557	0.0064055	0.00000007	0.007772	0.00438153	0.00438147	0.00000006
593524.56	2354794.00	0.00635389	0.00546961	0.00546955	0.00000006	0.00776422	0.00412761	0.00412756	0.00000006
593685.25	2354602.50	0.00567439	0.00471811	0.00471806	0.00000005	0.00753304	0.00383089	0.00383084	0.00000005
593846.00	2354411.00	0.00510674	0.00411033	0.00411028	0.00000005	0.0071927	0.00353087	0.00353082	0.00000005
594006.69	2354219.50	0.00462746	0.00361507	0.00361503	0.00000004	0.00680181	0.00324494	0.00324489	0.00000005
594167.38	2354027.75	0.00422006	0.00320553	0.00320549	0.00000004	0.00639771	0.00297781	0.00297776	0.00000005
594488.75	2353644.75	0.00357438	0.00258007	0.00258004	0.00000004	0.00563262	0.00251917	0.00251913	0.00000004
594810.13	2353261.75	0.00308453	0.00213084	0.00213081	0.00000003	0.00495963	0.00214871	0.00214867	0.00000004
595131.56	2352878.75	0.00270246	0.00179776	0.00179773	0.00000003	0.00438567	0.00185129	0.00185126	0.00000003
595452.94	2352495.75	0.00239894	0.00154402	0.00154399	0.00000003	0.00390012	0.00161116	0.00161113	0.00000003
596095.75	2351729.75	0.00195294	0.00118923	0.0011892	0.00000002	0.0031477	0.00125643	0.0012564	0.00000003
596738.50	2350963.75	0.00164051	0.00095776	0.00095774	0.00000002	0.00260472	0.00101353	0.0010135	0.00000002
597381.31	2350197.75	0.00140823	0.00079633	0.00079631	0.00000002	0.00220166	0.0008408	0.00084078	0.00000002
592839.00	2355286.75	0.00456067	0.00387465	0.00387457	0.00000008	0.00327716	0.00232838	0.0023283	0.00000008
592889.00	2355200.25	0.00436014	0.00364414	0.00364407	0.00000008	0.00324632	0.0022002	0.00220012	0.00000007
592939.00	2355113.50	0.00417095	0.00342175	0.00342168	0.00000007	0.00326867	0.002092	0.00209194	0.00000007
592989.00	2355027.00	0.00399546	0.0032117	0.00321163	0.00000007	0.00332873	0.00200072	0.00200066	0.00000006
593114.00	2354810.50	0.00360314	0.00274674	0.00274669	0.00000006	0.00353183	0.0018199	0.00181984	0.00000006

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593239.00	2354594.00	0.00329427	0.0023723	0.00237225	0.00000005	0.00369347	0.00167473	0.00167468	0.00000005
593364.00	2354377.50	0.00304317	0.00206712	0.00206707	0.00000005	0.00376477	0.00154652	0.00154647	0.00000005
593489.00	2354161.00	0.00283447	0.00181862	0.00181858	0.00000004	0.00375322	0.00142964	0.0014296	0.00000004
593614.00	2353944.50	0.00265389	0.00161499	0.00161495	0.00000004	0.00368909	0.00132385	0.00132381	0.00000004
593739.00	2353728.00	0.00249386	0.00144586	0.00144583	0.00000004	0.00359211	0.00122825	0.00122821	0.00000004
593989.00	2353295.00	0.0022205	0.00118552	0.00118549	0.00000003	0.0033498	0.00106451	0.00106447	0.00000004
594239.00	2352862.00	0.00199286	0.0009959	0.00099587	0.00000003	0.0030881	0.00093095	0.00093091	0.00000003
594489.00	2352429.00	0.00180197	0.00085379	0.00085377	0.00000003	0.00283617	0.00082178	0.00082175	0.00000003
594739.00	2351995.75	0.00163966	0.00074402	0.000744	0.00000002	0.00259955	0.00073129	0.00073126	0.00000003
595239.00	2351129.75	0.00138276	0.00058882	0.0005888	0.00000002	0.00219436	0.00059299	0.00059297	0.00000003
595739.00	2350263.75	0.00118904	0.00048573	0.00048571	0.00000002	0.00187882	0.00049435	0.00049433	0.00000002
592615.25	2355292.25	0.00247298	0.00196062	0.00196054	0.00000008	0.00271571	0.00202588	0.0020258	0.00000008
592649.44	2355198.25	0.00232681	0.00183075	0.00183068	0.00000008	0.00245335	0.00180434	0.00180427	0.00000007
592683.63	2355104.50	0.00218866	0.00170359	0.00170352	0.00000007	0.00224515	0.00161962	0.00161955	0.00000007
592717.81	2355010.50	0.00206221	0.00158395	0.00158388	0.00000007	0.00208171	0.0014632	0.00146314	0.00000006
592752.00	2354916.50	0.00194888	0.00147215	0.00147209	0.00000006	0.00195687	0.00133057	0.00133051	0.00000006
592837.56	2354681.50	0.00172023	0.00123527	0.00123522	0.00000005	0.00177642	0.00107783	0.00107777	0.00000006
592923.06	2354446.50	0.00155643	0.00105195	0.0010519	0.00000005	0.00172037	0.00090388	0.00090383	0.00000005
593008.56	2354211.75	0.0014384	0.0009091	0.00090906	0.00000004	0.00172177	0.00078173	0.00078168	0.00000005
593094.06	2353976.75	0.00134766	0.00079514	0.0007951	0.00000004	0.00174	0.00069144	0.00069139	0.00000004
593179.56	2353741.75	0.00127278	0.00070312	0.00070309	0.00000004	0.00175843	0.00062249	0.00062245	0.00000004
593265.06	2353507.00	0.00120902	0.0006284	0.00062837	0.00000003	0.00177194	0.0005687	0.00056866	0.00000004
593436.06	2353037.00	0.00110273	0.00051534	0.00051531	0.00000003	0.00177183	0.00048978	0.00048974	0.00000004
593607.06	2352567.25	0.00101617	0.00043546	0.00043544	0.00000003	0.00173953	0.00043347	0.00043344	0.00000003
593778.06	2352097.50	0.0009435	0.00037692	0.00037689	0.00000003	0.00168377	0.00038993	0.0003899	0.00000003
593949.13	2351627.50	0.00088002	0.00033224	0.00033221	0.00000002	0.00161211	0.00035409	0.00035406	0.00000003
594291.13	2350687.75	0.00077419	0.00026995	0.00026993	0.00000002	0.0014529	0.00029775	0.00029773	0.00000002
592412.63	2355341.25	0.00173884	0.00134371	0.00134362	0.00000009	0.00354668	0.00260859	0.00260851	0.00000008
592430.00	2355242.75	0.00163249	0.00125625	0.00125617	0.00000008	0.0030211	0.0021829	0.00218282	0.00000007
592447.38	2355144.25	0.00152385	0.00116617	0.0011661	0.00000008	0.00263002	0.00186474	0.00186467	0.00000007
592464.75	2355045.75	0.00141898	0.00107841	0.00107834	0.00000007	0.00232721	0.00161804	0.00161798	0.00000007
592482.13	2354947.25	0.00132002	0.00099527	0.00099521	0.00000007	0.002086	0.0014211	0.00142104	0.00000006
592499.50	2354848.75	0.00122879	0.00091833	0.00091827	0.00000006	0.00189037	0.00126045	0.00126039	0.00000006
592542.88	2354602.50	0.00103626	0.00075467	0.00075461	0.00000005	0.00153199	0.00096397	0.00096392	0.00000005
592586.31	2354356.50	0.00088869	0.00062779	0.00062774	0.00000005	0.00129957	0.00076475	0.0007647	0.00000005
592629.69	2354110.25	0.00077616	0.00052941	0.00052936	0.00000004	0.00114464	0.00062447	0.00062442	0.00000005
592673.13	2353864.00	0.00068967	0.00045258	0.00045254	0.00000004	0.00104202	0.00052287	0.00052283	0.00000004
592716.50	2353617.75	0.00062207	0.00039166	0.00039162	0.00000004	0.00097275	0.00044679	0.00044675	0.00000004
592759.94	2353371.50	0.00056853	0.00034295	0.00034292	0.00000003	0.00092668	0.00038877	0.00038873	0.00000004
592846.75	2352879.25	0.00049136	0.00027144	0.00027141	0.00000003	0.00087274	0.00030812	0.00030808	0.00000003
592933.56	2352386.75	0.00043899	0.00022288	0.00022285	0.00000003	0.00084292	0.00025599	0.00025596	0.00000003
593020.44	2351894.25	0.00040155	0.00018887	0.00018885	0.00000003	0.00082044	0.00022002	0.00021999	0.00000003
593107.25	2351402.00	0.0003746	0.00016437	0.00016435	0.00000002	0.00079897	0.00019354	0.00019352	0.00000003
593280.88	2350417.25	0.00033612	0.00013218	0.00013216	0.00000002	0.00075463	0.00015679	0.00015676	0.00000002
592239.00	2355426.00	0.00158297	0.00122159	0.00122149	0.0000001	0.00691632	0.00513321	0.00513312	0.00000009
592239.00	2355326.00	0.00150027	0.00115914	0.00115905	0.00000009	0.00560688	0.00406487	0.00406479	0.00000008
592239.00	2355226.00	0.00140969	0.00108685	0.00108677	0.00000008	0.00467277	0.00328851	0.00328844	0.00000007
592239.00	2355126.00	0.00131544	0.00101036	0.00101028	0.00000008	0.00399851	0.00271451	0.00271445	0.00000007
592239.00	2355026.00	0.00122301	0.00093473	0.00093466	0.00000007	0.0035049	0.00228264	0.00228257	0.00000006
592239.00	2354926.00	0.00113521	0.00086269	0.00086262	0.00000007	0.00313815	0.00195221	0.00195215	0.00000006
592239.00	2354826.00	0.0010537	0.0007956	0.00079554	0.00000006	0.00285843	0.00169419	0.00169413	0.00000006
592239.00	2354576.00	0.00087958	0.00065192	0.00065186	0.00000005	0.00237896	0.00125164	0.00125159	0.00000005
592239.00	2354326.00	0.00074331	0.00053958	0.00053954	0.00000005	0.0020599	0.00097595	0.0009759	0.00000005
592239.00	2354076.00	0.00063752	0.00045241	0.00045237	0.00000004	0.00182317	0.00078927	0.00078923	0.00000004
592239.00	2353826.00	0.000555	0.0003844	0.00038436	0.00000004	0.00163743	0.00065556	0.00065551	0.00000004
592239.00	2353576.00	0.00048994	0.00033079	0.00033075	0.00000004	0.00148831	0.00055584	0.0005558	0.00000004
592239.00	2353326.00	0.00043824	0.00028809	0.00028806	0.00000003	0.00136531	0.0004791	0.00047906	0.00000004
592239.00	2352826.00	0.0003627	0.00022578	0.00022575	0.00000003	0.00116611	0.00036976	0.00036973	0.00000003
592239.00	2352326.00	0.00031231	0.00018394	0.00018391	0.00000003	0.00101728	0.00029705	0.00029702	0.00000003
592239.00	2351826.00	0.00027777	0.00015495	0.00015493	0.00000003	0.00090002	0.00024607	0.00024604	0.00000003
592239.00	2351326.00	0.00025332	0.0001343	0.00013428	0.00000002	0.0008066	0.00020881	0.00020878	0.00000003
592239.00	2350326.00	0.00021831	0.00010641	0.00010639	0.00000002	0.00066892	0.00015885	0.00015883	0.00000002
592100.06	2355538.25	0.001809	0.00139335	0.00139324	0.00000011	0.01509295	0.01141749	0.01141735	0.00000014
592082.75	2355439.75	0.00176473	0.00136738	0.00136728	0.0000001	0.01227797	0.00900811	0.009008	0.00000012
592065.38	2355341.25	0.00168539	0.00130808	0.00130799	0.00000009	0.01020817	0.00723637	0.00723628	0.0000001
592048.00	2355242.75	0.00159248	0.0012338	0.00123372	0.00000008	0.00866967	0.00591039	0.00591031	0.00000008
592030.63	2355144.25	0.0014943	0.0011538	0.00115373	0.00000008	0.00751339	0.00490075	0.00490067	0.00000008
592013.25	2355045.75	0.00139608	0.00107271	0.00107264	0.00000007	0.00663575	0.00412033	0.00412026	0.00000007
591995.88	2354947.25	0.00130222	0.00099467	0.00099461	0.00000007	0.00596191	0.00350874	0.00350867	0.00000006
591978.50	2354848.75	0.00121484	0.00092146	0.0009214	0.00000006	0.00542916	0.00302247	0.00302241	0.00000006

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591935.13	2354602.50	0.00102861	0.0007633	0.00076324	0.00000005	0.00451466	0.00217792	0.00217786	0.00000005
591891.69	2354356.50	0.0008843	0.00063849	0.00063845	0.00000005	0.00392111	0.00165424	0.00165419	0.00000005
591848.31	2354110.25	0.00077436	0.00054116	0.00054112	0.00000004	0.00350615	0.00130968	0.00130964	0.00000005
591804.88	2353864.00	0.00069124	0.00046529	0.00046525	0.00000004	0.00319567	0.00107171	0.00107166	0.00000004
591761.50	2353617.75	0.00062816	0.00040557	0.00040554	0.00000004	0.00295136	0.00089956	0.00089952	0.00000004
591718.06	2353371.50	0.00058013	0.00035812	0.00035809	0.00000003	0.00275181	0.00077072	0.00077068	0.00000004
591631.25	2352879.25	0.00051451	0.00028893	0.0002889	0.00000003	0.00242761	0.00059182	0.00059178	0.00000003
591544.44	2352386.75	0.00047201	0.00024185	0.00024182	0.00000003	0.00217775	0.00047593	0.0004759	0.00000003
591457.56	2351894.25	0.00044117	0.00020854	0.00020852	0.00000003	0.00196836	0.00039563	0.0003956	0.00000003
591370.75	2351402.00	0.00041642	0.00018375	0.00018373	0.00000002	0.00179025	0.0003373	0.00033728	0.00000003
591197.13	2350417.25	0.00037649	0.00014872	0.0001487	0.00000002	0.00150635	0.00025971	0.00025969	0.00000002
591999.56	2355668.25	0.0027355	0.00212745	0.00212731	0.00000014	0.03287425	0.02627859	0.02627835	0.00000024
591965.38	2355574.25	0.00286298	0.00224658	0.00224646	0.00000012	0.02667089	0.02047867	0.02047846	0.00000022
591931.19	2355480.25	0.00287119	0.00226013	0.00226003	0.0000001	0.02234667	0.01637541	0.01637523	0.00000019
591897.00	2355386.25	0.00280155	0.00220446	0.00220436	0.00000009	0.0192305	0.01336146	0.01336129	0.00000016
591862.75	2355292.25	0.00269623	0.00211488	0.00211479	0.00000009	0.01694	0.01109055	0.01109041	0.00000014
591828.56	2355198.25	0.00256751	0.00200561	0.00200553	0.00000008	0.0152026	0.00933756	0.00933743	0.00000012
591794.38	2355104.50	0.00243022	0.00188869	0.00188861	0.00000007	0.013859	0.00796059	0.00796048	0.00000011
591760.19	2355010.50	0.00229148	0.0017704	0.00177033	0.00000007	0.01276349	0.00685494	0.00685484	0.0000001
591726.00	2354916.50	0.0021581	0.00165637	0.0016563	0.00000006	0.0118598	0.0059616	0.00596151	0.00000009
591640.44	2354681.50	0.00185806	0.00139789	0.00139784	0.00000006	0.01016287	0.00435904	0.00435897	0.00000007
591554.94	2354446.50	0.00161234	0.00118226	0.00118222	0.00000005	0.00896079	0.0033272	0.00332714	0.00000006
591469.44	2354211.75	0.00142127	0.00100871	0.00100867	0.00000004	0.00806347	0.00263218	0.00263213	0.00000005
591383.94	2353976.75	0.00127547	0.00086937	0.00086933	0.00000004	0.00735096	0.00214123	0.00214118	0.00000005
591298.44	2353741.75	0.00116657	0.00075758	0.00075754	0.00000004	0.00677987	0.00178412	0.00178407	0.00000005
591212.94	2353507.00	0.00108595	0.00066745	0.00066742	0.00000004	0.00630643	0.00151643	0.00151639	0.00000004
591041.94	2353037.00	0.00097768	0.00053335	0.00053332	0.00000003	0.005542	0.00114643	0.00114639	0.00000004
590870.94	2352567.25	0.00090851	0.00044139	0.00044136	0.00000003	0.00495624	0.00090924	0.00090921	0.00000003
590699.94	2352097.50	0.00085954	0.00037612	0.00037609	0.00000003	0.00446823	0.00074672	0.00074669	0.00000003
590528.88	2351627.50	0.00081947	0.00032761	0.00032759	0.00000002	0.00404476	0.0006298	0.00062977	0.00000003
590186.88	2350687.75	0.00075051	0.00026055	0.00026053	0.00000002	0.00336047	0.000475	0.00047498	0.00000002
591889.00	2355719.75	0.00513416	0.00413169	0.00413147	0.00000022	0.05957035	0.05020936	0.05020908	0.00000027
591839.00	2355633.25	0.0055978	0.00453087	0.00453068	0.00000019	0.04862874	0.0394106	0.03941039	0.00000022
591789.00	2355546.50	0.00579196	0.00469186	0.0046917	0.00000016	0.04094712	0.0316158	0.03161561	0.0000002
591739.00	2355460.00	0.0057972	0.00468642	0.00468627	0.00000015	0.03555894	0.02590759	0.02590741	0.00000019
591689.00	2355373.25	0.00568733	0.00457586	0.00457573	0.00000013	0.03170696	0.02159714	0.02159696	0.00000018
591639.00	2355286.75	0.00550623	0.00440404	0.00440392	0.00000012	0.0289406	0.01830055	0.01830038	0.00000017
591589.00	2355200.25	0.00528185	0.00419508	0.00419497	0.00000011	0.02688358	0.01571426	0.0157141	0.00000016
591539.00	2355113.50	0.00503766	0.00396945	0.00396934	0.0000001	0.02529063	0.01364247	0.01364232	0.00000015
591489.00	2355027.00	0.00479464	0.00374418	0.00374409	0.0000001	0.02405782	0.01197162	0.01197148	0.00000014
591364.00	2354810.50	0.00423028	0.00321203	0.00321194	0.00000008	0.02184284	0.00894853	0.00894841	0.00000012
591239.00	2354594.00	0.0037672	0.00275235	0.00275228	0.00000007	0.02023576	0.0069747	0.00697459	0.00000011
591114.00	2354377.50	0.00341753	0.00237308	0.00237301	0.00000007	0.01887832	0.00561386	0.00561376	0.0000001
590989.00	2354161.00	0.00316797	0.00206438	0.00206432	0.00000006	0.01766434	0.00463409	0.00463401	0.00000009
590864.00	2353944.50	0.00299439	0.00181346	0.00181341	0.00000005	0.01656804	0.00390811	0.00390803	0.00000008
590739.00	2353728.00	0.00286432	0.00160738	0.00160733	0.00000005	0.01558027	0.00335205	0.00335197	0.00000007
590489.00	2353295.00	0.00268395	0.00129627	0.00129623	0.00000004	0.01389278	0.00257123	0.00257117	0.00000006
590239.00	2352862.00	0.00255851	0.0010779	0.00107786	0.00000004	0.01249526	0.00206155	0.0020615	0.00000005
589989.00	2352429.00	0.00245948	0.00091917	0.00091913	0.00000004	0.01131441	0.00170769	0.00170764	0.00000005
589739.00	2351995.75	0.00237158	0.00080058	0.00080055	0.00000003	0.0102959	0.00145126	0.00145121	0.00000004
589239.00	2351129.75	0.00220848	0.0006378	0.00063777	0.00000003	0.00865692	0.00110888	0.00110884	0.00000004
588739.00	2350263.75	0.00205866	0.00053249	0.00053247	0.00000002	0.00739003	0.0008921	0.00089207	0.00000003
591853.31	2355866.25	0.00894352	0.00742363	0.00742325	0.00000038	0.12904353	0.11799883	0.11798811	0.00001074
591789.06	2355789.75	0.01096567	0.00923008	0.00922976	0.00000032	0.10719701	0.0955742	0.09556887	0.00000535
591724.75	2355713.25	0.01228217	0.01040076	0.01040048	0.00000029	0.09016695	0.07800848	0.07800575	0.00000273
591660.50	2355636.50	0.01293575	0.01096631	0.01096606	0.00000026	0.07704199	0.06426724	0.06426579	0.00000145
591596.19	2355560.00	0.01310879	0.01109633	0.0110961	0.00000023	0.06717562	0.05363161	0.05363079	0.00000083
591531.94	2355483.25	0.01296189	0.01092827	0.01092806	0.00000022	0.05972252	0.04524168	0.04524116	0.00000052
591467.63	2355406.75	0.01262003	0.01058511	0.01058491	0.0000002	0.05421452	0.03864051	0.03864016	0.00000035
591403.38	2355330.25	0.01214935	0.01012733	0.01012714	0.00000019	0.05006884	0.03335033	0.03335007	0.00000026
591339.13	2355253.50	0.011609	0.00960607	0.0096059	0.00000017	0.04692478	0.02904693	0.02904673	0.00000021
591274.81	2355177.00	0.0110583	0.00907152	0.00907136	0.00000016	0.04458348	0.02554641	0.02554623	0.00000017
591114.13	2354985.50	0.00976633	0.00778036	0.00778021	0.00000014	0.04073908	0.01914981	0.01914968	0.00000013
590953.44	2354794.00	0.0087127	0.00665372	0.00665359	0.00000013	0.03838673	0.01493958	0.01493946	0.00000012
590792.75	2354602.50	0.00792054	0.0057227	0.00572259	0.00000011	0.0366619	0.01202927	0.01202917	0.0000001
590632.00	2354411.00	0.00735018	0.00496674	0.00496664	0.0000001	0.03517607	0.00993818	0.00993808	0.0000001
590471.31	2354219.50	0.00693844	0.00435223	0.00435213	0.0000001	0.03380235	0.00838363	0.00838354	0.00000009
590310.63	2354027.75	0.00663326	0.0038489	0.00384881	0.00000009	0.03247489	0.00719023	0.00719014	0.00000008
589989.25	2353644.75	0.0062416	0.00309154	0.00309147	0.00000008	0.02994074	0.00551169	0.00551161	0.00000008
589667.88	2353261.75	0.00600582	0.00255735	0.00255728	0.00000007	0.02758093	0.00440293	0.00440287	0.00000007

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
589346.44	2352878.75	0.00583449	0.00216979	0.00216972	0.00000006	0.02541494	0.00362911	0.00362905	0.00000006
589025.06	2352495.75	0.00568968	0.00188032	0.00188027	0.00000006	0.02343869	0.00306462	0.00306456	0.00000006
588382.25	2351729.75	0.00539974	0.00147916	0.00147911	0.00000005	0.02004833	0.00230533	0.00230528	0.00000005
591779.38	2355940.25	0.02342153	0.02115692	0.02115148	0.00000545	0.188686	0.17876562	0.17872667	0.00003898
591702.75	2355876.00	0.02921344	0.02672101	0.02671739	0.00000363	0.16676428	0.15492407	0.15489091	0.00003317
591626.19	2355811.75	0.03289542	0.03022052	0.03021795	0.00000256	0.14776122	0.13387671	0.13384912	0.00002761
591549.56	2355747.50	0.03470094	0.03188132	0.03187941	0.00000191	0.13193051	0.11586532	0.11584257	0.00002277
591472.94	2355683.25	0.03509709	0.03217682	0.03217533	0.00000149	0.11904719	0.10066853	0.10064979	0.00001875
591396.38	2355619.00	0.03460385	0.03159296	0.03159176	0.0000012	0.10871252	0.08790932	0.08789382	0.00001549
591319.75	2355554.75	0.03352909	0.03045944	0.03045844	0.000001	0.10050719	0.07720872	0.07719585	0.00001288
591243.13	2355490.50	0.03211101	0.02901339	0.02901254	0.00000085	0.09398696	0.0682102	0.06819942	0.0000108
591166.56	2355426.00	0.03049223	0.02738729	0.02738656	0.00000073	0.08875739	0.06056782	0.06055871	0.00000911
591089.94	2355361.75	0.02884792	0.02574776	0.02574711	0.00000065	0.08459418	0.05412073	0.05411296	0.00000777
590898.44	2355201.00	0.02491622	0.02182802	0.02182752	0.00000049	0.07718639	0.04176094	0.04175551	0.00000543
590706.94	2355040.50	0.02159523	0.01846956	0.01846916	0.0000004	0.0724107	0.03318253	0.03317857	0.00000396
590515.38	2354879.75	0.01894176	0.01570452	0.01570419	0.00000033	0.0689054	0.02700444	0.02700143	0.00000301
590323.88	2354719.00	0.016903	0.01346987	0.01346959	0.00000028	0.06608092	0.02244567	0.02244328	0.00000239
590132.38	2354558.25	0.01536751	0.01166744	0.01166719	0.00000025	0.06361495	0.0189903	0.01898833	0.00000196
589940.88	2354397.75	0.01421322	0.01021158	0.01021136	0.00000022	0.06138784	0.01632069	0.01631902	0.00000167
589557.81	2354076.25	0.01266445	0.00803022	0.00803004	0.00000018	0.05730717	0.01250968	0.01250839	0.00000129
589174.81	2353754.75	0.01173757	0.00651988	0.00651973	0.00000015	0.05355508	0.00997972	0.00997864	0.00000109
588791.81	2353433.50	0.01115225	0.0054402	0.00544007	0.00000013	0.05008325	0.0082099	0.00820892	0.00000098
588408.75	2353112.00	0.01073925	0.00464112	0.004641	0.00000012	0.04688133	0.00691735	0.00691648	0.00000086
591719.38	2356026.00	0.05344595	0.05207922	0.05202476	0.00005445	0.21603226	0.20945374	0.20943036	0.00002341
591632.75	2355976.00	0.06678497	0.06575004	0.06570067	0.00004938	0.1991772	0.19044521	0.19042168	0.00002357
591546.19	2355926.00	0.07527767	0.0744209	0.07437585	0.00004504	0.18324225	0.17198473	0.17196127	0.00002348
591459.56	2355876.00	0.07938638	0.07852867	0.07848736	0.00004132	0.16902374	0.15492758	0.15490443	0.00002318
591373.00	2355826.00	0.08023163	0.07925847	0.07922038	0.0000381	0.15682243	0.13959166	0.13956892	0.00002275
591286.38	2355776.00	0.07900415	0.07780244	0.07776707	0.00003537	0.14655591	0.12597882	0.1259566	0.00002223
591199.75	2355726.00	0.07642218	0.07497391	0.07494096	0.00003295	0.1380137	0.11399325	0.11397161	0.00002165
591113.19	2355676.00	0.07308818	0.07139875	0.07136796	0.0000308	0.13094489	0.10347089	0.10344987	0.00002104
591026.56	2355626.00	0.06938539	0.0674698	0.0674409	0.00002889	0.12508965	0.0942268	0.09420639	0.00002041
590939.94	2355576.00	0.06556821	0.06343746	0.06341025	0.00002721	0.12018019	0.08609628	0.08607648	0.00001979
590723.44	2355451.00	0.05652227	0.05385499	0.05383128	0.00002371	0.11088229	0.06970204	0.06968378	0.00001826
590506.94	2355326.00	0.04888279	0.04563954	0.04561853	0.000021	0.10436189	0.0575461	0.0575293	0.0000168
590290.44	2355201.00	0.04278075	0.03890065	0.03888181	0.00001884	0.09942329	0.04834656	0.04833107	0.00001548
590073.94	2355076.00	0.03803471	0.03344422	0.03342714	0.00001709	0.09536259	0.04125011	0.04123581	0.00001431
589857.44	2354951.00	0.03437745	0.02902771	0.02901209	0.00001563	0.09183237	0.03567364	0.03566039	0.00001326
589640.94	2354826.00	0.03154323	0.0254336	0.02541919	0.00001441	0.08860663	0.03121907	0.03120675	0.00001232
589207.94	2354576.00	0.02758272	0.02004806	0.02003557	0.00001249	0.08272754	0.02464315	0.0246324	0.00001075
588774.88	2354326.00	0.02500911	0.01630488	0.01629384	0.00001104	0.07736497	0.02009405	0.02008456	0.00000948
588341.88	2354076.00	0.02322221	0.01361164	0.01360174	0.0000099	0.07240739	0.01680845	0.01679998	0.00000847
591675.19	2356120.75	0.06412717	0.06401772	0.06399112	0.00002659	0.18734361	0.18326236	0.18325443	0.00000797
591581.25	2356086.50	0.07977271	0.08052566	0.08050408	0.00002159	0.17403696	0.16843909	0.16843159	0.00000752
591487.25	2356052.50	0.08958241	0.09089463	0.09087659	0.00001806	0.16115219	0.15376057	0.15375352	0.00000709
591393.25	2356018.25	0.09419626	0.09573141	0.09571588	0.00001554	0.1494805	0.1400891	0.1400824	0.00000672
591299.31	2355984.00	0.094957	0.09647919	0.09646554	0.00001367	0.13919901	0.12762478	0.12761841	0.00000638
591205.31	2355949.75	0.0932272	0.09454224	0.09452999	0.00001224	0.13024783	0.11639227	0.1163862	0.00000607
591111.38	2355915.50	0.08994566	0.09098239	0.09097131	0.00001109	0.12253003	0.10637038	0.10636461	0.00000579
591017.38	2355881.25	0.08582166	0.08655182	0.0865417	0.00001012	0.11588067	0.09745061	0.0974451	0.00000553
590923.44	2355847.25	0.08127879	0.0817052	0.0816959	0.0000093	0.11009183	0.08950571	0.08950044	0.00000529
590829.44	2355813.00	0.07665108	0.07677661	0.07676801	0.00000862	0.1050421	0.08245367	0.08244862	0.00000507
590594.56	2355727.50	0.06574332	0.06514005	0.06513277	0.00000728	0.09479532	0.06799006	0.06798548	0.0000046
590359.63	2355642.00	0.0565263	0.05522255	0.05521624	0.00000631	0.08699083	0.05700431	0.05700011	0.00000421
590124.69	2355556.50	0.04911592	0.04711279	0.04710723	0.00000556	0.08078077	0.04851686	0.04851296	0.00000389
589889.75	2355471.00	0.04326031	0.04055305	0.04054808	0.00000497	0.07564085	0.04184715	0.04184353	0.00000363
589654.88	2355385.50	0.03863324	0.0352389	0.03523441	0.0000045	0.07122649	0.03652064	0.03651723	0.00000341
589419.94	2355300.00	0.03494424	0.03090599	0.03090189	0.0000041	0.06728332	0.03220076	0.03219754	0.00000322
588950.06	2355129.00	0.02956529	0.02439936	0.02439588	0.00000349	0.06047908	0.02570483	0.02570191	0.00000293
588480.25	2354958.00	0.02587041	0.0198587	0.01985567	0.00000303	0.05477455	0.02112576	0.02112304	0.00000272
591648.13	2356221.75	0.03743123	0.03616718	0.03616465	0.00000253	0.1262058	0.12209965	0.12209743	0.00000221
591549.63	2356204.50	0.04561457	0.04478124	0.0447792	0.00000204	0.1139854	0.10900792	0.10900596	0.00000196
591451.13	2356187.00	0.05034739	0.04981933	0.04981761	0.00000172	0.10318048	0.09719662	0.09719485	0.00000178
591352.69	2356169.75	0.05203667	0.05165595	0.05165448	0.00000147	0.0937084	0.08664683	0.0866452	0.00000164
591254.19	2356152.25	0.05175022	0.05142094	0.05141965	0.00000129	0.0856811	0.07747888	0.07747736	0.00000153
591155.69	2356135.00	0.0501811	0.04980707	0.04980592	0.00000115	0.07876134	0.06943154	0.0694301	0.00000144
591057.25	2356117.50	0.04794836	0.0474939	0.04749286	0.00000105	0.07290775	0.06250382	0.06250245	0.00000137
590958.75	2356100.25	0.04531423	0.04475846	0.04475751	0.00000096	0.06782634	0.05643193	0.05643063	0.00000131
590860.25	2356083.00	0.04255769	0.04189871	0.04189784	0.00000088	0.06343741	0.05115202	0.05115075	0.00000127
590761.81	2356065.50	0.03987052	0.03910635	0.03910553	0.00000082	0.05964349	0.04658091	0.04657967	0.00000124

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
590515.56	2356022.00	0.03369679	0.03265483	0.03265413	0.0000007	0.05191841	0.03740199	0.03740084	0.00000114
590269.38	2355978.75	0.02863403	0.02729691	0.0272963	0.00000061	0.04605035	0.03063967	0.03063867	0.000001
590023.19	2355935.25	0.02467307	0.02302334	0.0230228	0.00000055	0.04145471	0.02557146	0.02557057	0.00000089
589777.00	2355892.00	0.02157442	0.01960761	0.01960711	0.0000005	0.0377066	0.02166407	0.02166327	0.0000008
589530.75	2355848.50	0.01914534	0.01687914	0.01687868	0.00000046	0.0346117	0.01861313	0.01861241	0.00000073
589284.56	2355805.00	0.01720732	0.01467642	0.01467598	0.00000044	0.03196701	0.01618349	0.01618283	0.00000066
588792.19	2355718.25	0.01435052	0.01139899	0.01139859	0.0000004	0.02762859	0.01259595	0.01259538	0.00000056
588299.75	2355631.50	0.01237575	0.00914439	0.009144	0.00000039	0.02422215	0.01013296	0.01013247	0.00000049
591539.00	2356326.00	0.01936544	0.01745732	0.01745701	0.00000031	0.06219286	0.05730706	0.05730676	0.00000031
591439.00	2356326.00	0.02060193	0.01872645	0.01872619	0.00000026	0.05400405	0.04892136	0.0489211	0.00000027
591339.00	2356326.00	0.02074233	0.0189137	0.01891347	0.00000023	0.04730566	0.04201825	0.04201802	0.00000023
591239.00	2356326.00	0.02019506	0.01842569	0.01842548	0.00000021	0.04183805	0.03633164	0.03633144	0.00000021
591139.00	2356326.00	0.01928747	0.01757343	0.01757325	0.00000019	0.03734709	0.0316243	0.03162411	0.0000002
591039.00	2356326.00	0.01819549	0.01653646	0.01653629	0.00000017	0.03361527	0.02770692	0.02770674	0.00000018
590939.00	2356326.00	0.01703178	0.01542823	0.01542808	0.00000016	0.03048903	0.02442979	0.02442962	0.00000017
590839.00	2356326.00	0.01587032	0.01432297	0.01432283	0.00000015	0.02785077	0.0216689	0.02166873	0.00000017
590739.00	2356326.00	0.01475524	0.01326206	0.01326193	0.00000014	0.02558723	0.01933129	0.01933113	0.00000016
590489.00	2356326.00	0.01228383	0.01090976	0.01090964	0.00000012	0.02118183	0.01486202	0.01486186	0.00000016
590239.00	2356326.00	0.01030295	0.0090211	0.009021	0.0000001	0.01801701	0.01175281	0.01175268	0.00000013
589989.00	2356326.00	0.00875718	0.00753563	0.00753554	0.00000009	0.01564631	0.00951776	0.00951764	0.00000012
589739.00	2356326.00	0.00755457	0.00636805	0.00636796	0.00000008	0.01380525	0.00786664	0.00786653	0.00000011
589489.00	2356326.00	0.00660806	0.00544168	0.00544161	0.00000008	0.01233887	0.00661763	0.00661754	0.0000001
589239.00	2356326.00	0.00585346	0.00469955	0.00469948	0.00000007	0.01113861	0.00565106	0.00565098	0.00000009
588739.00	2356326.00	0.00474547	0.0036091	0.00360904	0.00000006	0.00929273	0.0042833	0.00428322	0.00000007
588239.00	2356326.00	0.00398243	0.00286774	0.00286768	0.00000006	0.00794009	0.00338474	0.00338468	0.00000006
591549.63	2356447.50	0.01244552	0.01080296	0.01080257	0.00000039	0.03479333	0.03039706	0.03039687	0.00000019
591451.13	2356465.00	0.01285206	0.01119701	0.01119667	0.00000034	0.02953346	0.02539978	0.0253996	0.00000018
591352.69	2356482.25	0.01269562	0.01106462	0.01106432	0.0000003	0.0254144	0.02150512	0.02150496	0.00000017
591254.19	2356499.75	0.01219977	0.01061805	0.01061778	0.00000027	0.02211453	0.01839237	0.01839221	0.00000016
591155.69	2356517.00	0.01154634	0.0100225	0.01002225	0.00000025	0.01947084	0.01589854	0.01589839	0.00000015
591057.25	2356534.50	0.01082537	0.00936396	0.00936373	0.00000023	0.01730231	0.01385919	0.01385905	0.00000015
590958.75	2356551.75	0.01009501	0.00869775	0.00869754	0.00000021	0.0155227	0.012188	0.01218786	0.00000014
590860.25	2356569.00	0.00938517	0.00805325	0.00805305	0.0000002	0.01404328	0.0107977	0.01079757	0.00000014
590761.81	2356586.50	0.00871303	0.00744505	0.00744486	0.00000019	0.01279688	0.00962705	0.00962692	0.00000013
590515.56	2356630.00	0.00724633	0.00612451	0.00612435	0.00000016	0.01044121	0.0074202	0.00742008	0.00000012
590269.38	2356673.25	0.00607434	0.0050773	0.00507716	0.00000014	0.00881603	0.00590375	0.00590364	0.00000011
590023.19	2356716.75	0.00515173	0.00425624	0.00425612	0.00000013	0.00764363	0.00481818	0.00481808	0.0000001
589777.00	2356760.00	0.00442671	0.00361212	0.00361201	0.00000011	0.00676678	0.00401942	0.00401932	0.0000001
589530.75	2356803.50	0.0038503	0.003101	0.0031009	0.0000001	0.00608512	0.00341404	0.00341395	0.00000009
589284.56	2356847.00	0.00338812	0.00269166	0.00269156	0.0000001	0.00554398	0.00294572	0.00294564	0.00000009
588792.19	2356933.75	0.00270655	0.00208963	0.00208955	0.00000008	0.00473542	0.00228064	0.00228056	0.00000008
588299.75	2357020.50	0.00224208	0.00167989	0.00167981	0.00000008	0.00414969	0.00184053	0.00184046	0.00000007
591487.25	2356599.50	0.0126971	0.01184948	0.01184912	0.00000036	0.02138633	0.01790402	0.0179038	0.00000022
591393.25	2356633.75	0.01242838	0.01157319	0.01157287	0.00000032	0.01872688	0.01551314	0.01551294	0.00000021
591299.31	2356668.00	0.0118695	0.01101128	0.01101099	0.00000029	0.01658034	0.01357301	0.01357282	0.00000019
591205.31	2356702.25	0.0111819	0.01032158	0.01032133	0.00000026	0.01482694	0.01197544	0.01197525	0.00000018
591111.38	2356736.50	0.01045284	0.00959432	0.00959409	0.00000024	0.01338096	0.01064429	0.01064412	0.00000017
591017.38	2356770.75	0.00972725	0.00887459	0.00887437	0.00000022	0.01217721	0.00952364	0.00952347	0.00000016
590923.44	2356804.75	0.00903437	0.0081901	0.00818989	0.0000002	0.01117347	0.00857445	0.00857429	0.00000016
590829.44	2356839.00	0.0083851	0.00755415	0.00755396	0.00000019	0.01032516	0.0077609	0.00776075	0.00000015
590594.56	2356924.50	0.00698246	0.00619221	0.00619204	0.00000016	0.00870888	0.00617897	0.00617883	0.00000014
590359.63	2357010.00	0.00587369	0.00512695	0.00512681	0.00000014	0.00755959	0.00504771	0.00504759	0.00000012
590124.69	2357095.50	0.00500518	0.00429962	0.0042995	0.00000013	0.00670134	0.00421348	0.00421337	0.00000011
589889.75	2357181.00	0.00432261	0.00365356	0.00365345	0.00000012	0.00603491	0.00358196	0.00358186	0.00000011
589654.88	2357266.50	0.00377998	0.00314273	0.00314263	0.00000011	0.00549809	0.00309323	0.00309313	0.0000001
589419.94	2357352.00	0.00334345	0.0027335	0.0027334	0.0000001	0.00505469	0.00270733	0.00270724	0.00000009
588950.06	2357523.00	0.00269746	0.00213161	0.00213153	0.00000008	0.00436258	0.00214485	0.00214477	0.00000008
588480.25	2357694.00	0.00225344	0.00172133	0.00172125	0.00000008	0.00384005	0.00176224	0.00176217	0.00000007
591286.38	2356876.00	0.01260093	0.01314494	0.01314463	0.0000003	0.01481301	0.01248106	0.01248088	0.00000019
591199.75	2356926.00	0.01171398	0.01213551	0.01213523	0.00000028	0.01352478	0.01130063	0.01130046	0.00000018
591113.19	2356976.00	0.0108521	0.01116361	0.01116336	0.00000026	0.01241143	0.01027219	0.01027202	0.00000017
591026.56	2357026.00	0.01004133	0.01025546	0.01025522	0.00000024	0.01144479	0.00937197	0.00937181	0.00000016
590939.94	2357076.00	0.00929152	0.00942184	0.00942161	0.00000023	0.01060332	0.00858122	0.00858107	0.00000015
590723.44	2357201.00	0.00769896	0.00766525	0.00766505	0.00000019	0.0089143	0.00698502	0.00698488	0.00000014
590506.94	2357326.00	0.00645838	0.00631433	0.00631416	0.00000017	0.00764404	0.00579526	0.00579514	0.00000013
590290.44	2357451.00	0.00549556	0.00527561	0.00527546	0.00000015	0.00666236	0.00488917	0.00488905	0.00000012
590073.94	2357576.00	0.00474188	0.00446977	0.00446963	0.00000014	0.00588725	0.00418605	0.00418594	0.00000011
589857.44	2357701.00	0.00414171	0.00383404	0.00383392	0.00000013	0.00526334	0.00363124	0.00363114	0.0000001
589640.94	2357826.00	0.0036588	0.00332694	0.00332682	0.00000012	0.00475215	0.00318651	0.00318642	0.00000009
589207.94	2358076.00	0.00294273	0.00258308	0.00258298	0.0000001	0.00397241	0.00252756	0.00252747	0.00000008

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
588774.88	2358326.00	0.00244692	0.00207685	0.00207676	0.00000009	0.00341038	0.00207187	0.0020718	0.00000008
588341.88	2358576.00	0.00209026	0.00171882	0.00171874	0.00000008	0.00298848	0.00174421	0.00174415	0.00000007
591089.94	2357290.25	0.00950146	0.01112731	0.01112706	0.00000025	0.01148809	0.010401	0.01040084	0.00000017
590898.44	2357451.00	0.00777728	0.0089365	0.00893629	0.00000021	0.00947047	0.00838064	0.00838048	0.00000015
590706.94	2357611.50	0.00646557	0.00728408	0.00728389	0.00000019	0.00796974	0.00686257	0.00686243	0.00000014
590515.38	2357772.25	0.00546141	0.00602905	0.00602889	0.00000017	0.00683009	0.0057091	0.00570897	0.00000013
590323.88	2357933.00	0.00468114	0.0050652	0.00506505	0.00000015	0.00594851	0.00482049	0.00482037	0.00000012
590132.38	2358093.75	0.00406467	0.00431123	0.0043111	0.00000014	0.00525222	0.00412567	0.00412556	0.00000011
589940.88	2358254.25	0.00357202	0.00371475	0.00371462	0.00000013	0.00469136	0.00357466	0.00357455	0.00000011
589557.81	2358575.75	0.00284278	0.00284671	0.0028466	0.00000011	0.00385122	0.00276976	0.00276966	0.00000009
589174.81	2358897.25	0.00233871	0.00226209	0.002262	0.0000001	0.00325699	0.00222385	0.00222376	0.00000008
588791.81	2359218.50	0.00197758	0.00185273	0.00185264	0.00000009	0.00281728	0.00183842	0.00183834	0.00000008
588408.75	2359540.00	0.00171068	0.00155622	0.00155614	0.00000008	0.00248093	0.00155688	0.00155681	0.00000007
590953.44	2357858.00	0.00572604	0.00703502	0.00703482	0.00000021	0.00813126	0.00768921	0.00768906	0.00000015
590792.75	2358049.50	0.00478686	0.00578455	0.00578437	0.00000018	0.00688171	0.00630942	0.00630928	0.00000013
590632.00	2358241.00	0.00407085	0.00483072	0.00483055	0.00000016	0.00592775	0.00526498	0.00526486	0.00000012
590471.31	2358432.50	0.00351192	0.00409142	0.00409127	0.00000015	0.00518228	0.00446038	0.00446026	0.00000011
590310.63	2358624.25	0.00306983	0.00350892	0.00350878	0.00000013	0.00458769	0.00382973	0.00382963	0.00000011
589989.25	2359007.25	0.00242351	0.00266929	0.00266918	0.00000011	0.00370921	0.00292334	0.00292324	0.00000009
589667.88	2359390.25	0.00198277	0.00210863	0.00210853	0.0000001	0.00309738	0.0023187	0.00231862	0.00000008
589346.44	2359773.25	0.00166993	0.00171883	0.00171874	0.00000009	0.0026513	0.0018974	0.00189732	0.00000008
589025.06	2360156.25	0.00143978	0.00143829	0.00143821	0.00000008	0.00231477	0.00159338	0.00159331	0.00000007
588382.25	2360922.25	0.00112911	0.00107208	0.00107201	0.00000007	0.00184397	0.00119333	0.00119327	0.00000006
590489.00	2359357.00	0.00236374	0.00239872	0.00239842	0.00000031	0.00345252	0.00267113	0.002671	0.00000013
590239.00	2359790.00	0.00194828	0.0018974	0.00189714	0.00000026	0.00288787	0.00209848	0.00209836	0.00000012
589989.00	2360223.00	0.00165024	0.00155027	0.00155003	0.00000023	0.00247447	0.00170894	0.00170883	0.00000011
589739.00	2360656.25	0.00142933	0.00130095	0.00130074	0.00000021	0.00216432	0.00143258	0.00143248	0.0000001
589239.00	2361522.25	0.00112724	0.00097584	0.00097567	0.00000017	0.00173286	0.00107596	0.00107587	0.00000009
588739.00	2362388.25	0.00093311	0.00077941	0.00077926	0.00000014	0.00144875	0.00086161	0.00086153	0.00000008
588239.00	2363254.25	0.00079961	0.00065117	0.00065105	0.00000013	0.00124799	0.00072083	0.00072075	0.00000008
591373.00	2356826.00	0.01346488	0.01413795	0.01413762	0.00000033	0.01631273	0.0138397	0.01383951	0.0000002
591166.56	2357226.00	0.01033133	0.01218702	0.01218676	0.00000026	0.01248797	0.01138677	0.0113866	0.00000018
592239.00	2355526.00	0.00163808	0.00125731	0.0012572	0.00000011	0.00875079	0.00661887	0.00661878	0.0000001
598239.00	2356326.00	0.00176565	0.00009775	0.00009683	0.00000091	0.00262107	0.00012999	0.00012928	0.00000071
599239.00	2356326.00	0.00143844	0.0000796	0.00007882	0.00000078	0.00207727	0.00010255	0.00010195	0.00000061
595685.81	2355718.25	0.0038542	0.00046416	0.00046394	0.00000022	0.00645202	0.00085584	0.00085563	0.00000021
594118.38	2355642.00	0.00929515	0.0033163	0.00331624	0.00000007	0.01845994	0.01069346	0.0106934	0.00000006
594353.31	2355556.50	0.00797539	0.00274233	0.00274227	0.00000006	0.01529436	0.00797857	0.00797851	0.00000006
594588.25	2355471.00	0.00692053	0.00230335	0.00230329	0.00000005	0.01285561	0.00612862	0.00612857	0.00000005
593364.81	2355676.00	0.01365071	0.01205727	0.0120572	0.00000008	0.02801319	0.02629609	0.02629599	0.0000001
593451.44	2355626.00	0.01264097	0.01101602	0.01101595	0.00000007	0.02604552	0.02425898	0.02425888	0.00000009
593538.06	2355576.00	0.01178296	0.01011731	0.01011724	0.00000007	0.02414118	0.02218447	0.02218439	0.00000009
593754.56	2355451.00	0.00995261	0.00823411	0.00823406	0.00000006	0.01966603	0.01725801	0.01725794	0.00000007
592698.63	2355940.25	0.01474771	0.01492594	0.01492576	0.00000018	0.00544103	0.00408279	0.00408262	0.00000018
592775.25	2355876.00	0.01591084	0.01647845	0.01647829	0.00000015	0.00686132	0.0053108	0.00531065	0.00000015
592851.81	2355811.75	0.01627383	0.01709197	0.01709184	0.00000013	0.00859785	0.00681953	0.0068194	0.00000013
592928.44	2355747.50	0.01590485	0.01679871	0.0167986	0.00000012	0.01041371	0.00830656	0.00830644	0.00000012
593005.06	2355683.25	0.0150903	0.01592448	0.01592438	0.0000001	0.01208516	0.00955241	0.0095523	0.00000011
593081.63	2355619.00	0.01422795	0.01495112	0.01495103	0.0000001	0.01352879	0.01057886	0.01057876	0.0000001
593158.25	2355554.75	0.01336726	0.0139371	0.01393701	0.00000009	0.01467108	0.01135729	0.01135719	0.0000001
593234.88	2355490.50	0.01252552	0.01292758	0.0129275	0.00000008	0.01541037	0.01182357	0.01182348	0.00000009
593311.44	2355426.00	0.01171699	0.0119615	0.01196142	0.00000008	0.01576773	0.01201268	0.0120126	0.00000009
593388.06	2355361.75	0.01095608	0.01105816	0.01105809	0.00000007	0.01583393	0.01199588	0.0119958	0.00000008
592431.81	2356096.25	0.00286654	0.00228658	0.00228619	0.00000038	0.00981486	0.00732193	0.00732152	0.00000041
592496.13	2356019.50	0.0052275	0.00450792	0.00450764	0.00000028	0.00608175	0.00444657	0.00444635	0.00000021
592560.38	2355943.00	0.00742438	0.00684117	0.00684094	0.00000022	0.00488589	0.00361966	0.00361948	0.00000018
592624.69	2355866.25	0.00904715	0.00871097	0.00871078	0.00000019	0.00479171	0.00362672	0.00362657	0.00000015
592688.94	2355789.75	0.01023794	0.01015176	0.0101516	0.00000016	0.00502377	0.00383511	0.00383498	0.00000013
592753.25	2355713.25	0.01041136	0.01043025	0.01043011	0.00000014	0.00508344	0.00389792	0.0038978	0.00000012
592817.50	2355636.50	0.01039226	0.01043146	0.01043134	0.00000012	0.00529581	0.00402913	0.00402902	0.00000011
592881.81	2355560.00	0.01016025	0.01014357	0.01014346	0.00000011	0.00559442	0.00417531	0.00417522	0.0000001
592946.06	2355483.25	0.0098046	0.00969191	0.00969181	0.0000001	0.0059584	0.00431114	0.00431105	0.00000009
593010.38	2355406.75	0.00940347	0.0091687	0.00916861	0.00000009	0.00637054	0.00442758	0.0044275	0.00000008
593074.63	2355330.25	0.00898702	0.00862136	0.00862127	0.00000009	0.00677215	0.00450133	0.00450125	0.00000008
592339.00	2356152.75	0.00052812	0.0003663	0.00036577	0.00000053	0.03736502	0.03132166	0.03131935	0.00000232
592389.00	2356066.25	0.00178897	0.00135757	0.00135723	0.00000034	0.01440102	0.0111362	0.01113578	0.00000043
592439.00	2355979.50	0.00310687	0.00247829	0.00247804	0.00000025	0.00897641	0.0068084	0.0068082	0.00000021
592489.00	2355893.00	0.00414228	0.00342728	0.00342709	0.0000002	0.00614657	0.00464975	0.0046496	0.00000016
592539.00	2355806.50	0.00481581	0.00408227	0.00408211	0.00000016	0.00491444	0.00374146	0.00374133	0.00000014
592589.00	2355719.75	0.00517256	0.00446408	0.00446394	0.00000014	0.00437499	0.00335353	0.00335341	0.00000012

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592639.00	2355633.25	0.0052543	0.00457316	0.00457304	0.00000012	0.00403781	0.0030966	0.00309649	0.00000011
592689.00	2355546.50	0.00515937	0.00449236	0.00449226	0.00000011	0.0037648	0.00287129	0.00287119	0.0000001
592739.00	2355460.00	0.00498068	0.0043171	0.004317	0.0000001	0.00354066	0.00266609	0.002666	0.00000009
592789.00	2355373.25	0.00477202	0.00410365	0.00410356	0.00000009	0.00337357	0.00248321	0.00248313	0.00000008
592307.38	2356138.00	0.00032028	0.00020163	0.00020113	0.0000005	0.05158198	0.0445007	0.04449723	0.00000347
592341.63	2356044.00	0.00107003	0.00075668	0.00075636	0.00000032	0.02121176	0.01693394	0.01693349	0.00000044
592375.81	2355950.00	0.00180375	0.00134112	0.00134089	0.00000024	0.0130101	0.0101121	0.01011187	0.00000023
592410.00	2355856.25	0.00237187	0.00182783	0.00182765	0.00000019	0.00876694	0.00674544	0.00674529	0.00000015
592444.19	2355762.25	0.0027237	0.00214335	0.0021432	0.00000015	0.0062706	0.00480796	0.00480784	0.00000013
592478.44	2355668.25	0.00286416	0.0022797	0.00227957	0.00000013	0.00487208	0.00372477	0.00372466	0.00000011
592512.63	2355574.25	0.00285559	0.00228346	0.00228335	0.00000011	0.00403053	0.00307141	0.00307131	0.0000001
592546.81	2355480.25	0.00275981	0.00220674	0.00220664	0.0000001	0.00346427	0.00262806	0.00262796	0.00000009
592581.00	2355386.25	0.00262043	0.00208883	0.00208874	0.00000009	0.00304428	0.00229386	0.00229377	0.00000008
592273.75	2356129.00	0.00021843	0.00012049	0.00012	0.0000005	0.07154545	0.06351273	0.06350602	0.00000672
592291.06	2356030.50	0.00070819	0.00045871	0.00045839	0.00000032	0.03203739	0.0264401	0.02643966	0.00000044
592308.44	2355932.00	0.00120276	0.00083809	0.00083786	0.00000023	0.01927566	0.01535716	0.01535686	0.0000003
592325.81	2355833.50	0.00158868	0.00116324	0.00116306	0.00000019	0.01325906	0.01037621	0.01037603	0.00000017
592343.19	2355735.00	0.00182097	0.00137287	0.00137272	0.00000015	0.00947268	0.00732444	0.00732432	0.00000013
592360.56	2355636.75	0.00191301	0.00146609	0.00146596	0.00000013	0.00698803	0.00534824	0.00534813	0.00000011
592377.94	2355538.25	0.00190499	0.00147105	0.00147094	0.00000011	0.00535826	0.00405777	0.00405767	0.0000001
592395.25	2355439.75	0.001837	0.00142168	0.00142158	0.0000001	0.00428245	0.00320037	0.00320028	0.00000009
592239.00	2356126.00	0.00018577	0.00009355	0.00009305	0.0000005	0.09824153	0.08958422	0.08956931	0.00001491
592239.00	2356026.00	0.00058352	0.00035499	0.00035468	0.00000032	0.04932526	0.04217905	0.04217858	0.0000048
592239.00	2355926.00	0.00101151	0.00067878	0.00067855	0.00000023	0.02975157	0.02441549	0.02441515	0.00000035
592239.00	2355826.00	0.00134678	0.0009611	0.00096092	0.00000018	0.02053745	0.01641453	0.01641429	0.00000024
592239.00	2355726.00	0.00155237	0.0011512	0.00115104	0.00000015	0.01505086	0.01177908	0.01177892	0.00000016
592239.00	2355626.00	0.00163953	0.00124367	0.00124354	0.00000013	0.01134039	0.00872213	0.00872201	0.00000012
592204.25	2356129.00	0.00018366	0.00009002	0.00008952	0.0000005	0.13043124	0.12170515	0.12167406	0.0000311
592186.94	2356030.50	0.00058726	0.00035243	0.00035211	0.00000032	0.07724036	0.06860607	0.06860463	0.00000145
592169.56	2355932.00	0.0010439	0.00069765	0.00069742	0.00000023	0.04818621	0.0409813	0.04098096	0.00000035
592152.19	2355833.50	0.00142052	0.00101334	0.00101316	0.00000019	0.03320956	0.02731503	0.02731473	0.0000003
592134.81	2355735.00	0.00166768	0.00123866	0.00123851	0.00000015	0.02456233	0.01964347	0.01964323	0.00000024
592117.44	2355636.75	0.00178805	0.0013599	0.00135977	0.00000013	0.01898199	0.01477401	0.01477382	0.00000018
592170.63	2356138.00	0.00020175	0.00010108	0.0001005	0.00000058	0.1664843	0.15837627	0.15832399	0.00005231
592136.38	2356044.00	0.00071434	0.00044697	0.00044661	0.00000036	0.1175168	0.10812286	0.10811386	0.00000898
592102.19	2355950.00	0.00137407	0.00095709	0.00095683	0.00000026	0.08012997	0.07103179	0.07103096	0.00000084
592068.00	2355856.25	0.00197923	0.00146121	0.00146101	0.0000002	0.0566933	0.04852171	0.04852141	0.00000031
592033.81	2355762.25	0.00244387	0.00186527	0.0018651	0.00000017	0.04214492	0.03489399	0.03489373	0.00000027
592189.00	2356239.50	0.00000732	0.00000507	0.00000241	0.00000266	0.19959856	0.1905936	0.19055002	0.00004359
592139.00	2356152.75	0.00023895	0.00012661	0.00012577	0.00000084	0.19992352	0.1930145	0.19295056	0.00006392
592089.00	2356066.25	0.00099218	0.00066223	0.0006617	0.00000054	0.16733571	0.15850037	0.15846741	0.00003298
592039.00	2355979.50	0.00211987	0.00156128	0.00156088	0.0000004	0.12875632	0.11882195	0.11881289	0.00000905
591989.00	2355893.00	0.00330834	0.00255878	0.00255846	0.00000031	0.09780707	0.08774566	0.08774366	0.000002
591939.00	2355806.50	0.00435836	0.00345961	0.00345935	0.00000026	0.07536034	0.06564289	0.06564235	0.00000055
592174.75	2356249.50	0.00000782	0.00002189	0.00000273	0.00001916	0.20078722	0.19322618	0.19319435	0.00003185
592110.44	2356172.75	0.00031883	0.00018497	0.00018177	0.0000032	0.22565814	0.22038602	0.22033177	0.00005429
592046.19	2356096.25	0.00159231	0.00113152	0.00113035	0.00000117	0.21565811	0.2086812	0.20862627	0.00005494
591981.88	2356019.50	0.00381454	0.00295577	0.0029551	0.00000067	0.18710811	0.17824707	0.17820915	0.00003789
591917.63	2355943.00	0.00642227	0.00519904	0.00519855	0.00000048	0.1562261	0.1460269	0.14600575	0.00002117
592085.81	2356197.50	0.00052558	0.00037455	0.00033588	0.00003867	0.2345183	0.2308373	0.23080341	0.00003392
592009.19	2356133.25	0.00340021	0.00267118	0.00265027	0.00002091	0.24556985	0.24104301	0.24100046	0.00004256
591932.56	2356069.00	0.0091885	0.00779419	0.00778126	0.00001292	0.23386984	0.22764322	0.22759743	0.00004581
591856.00	2356004.50	0.01628984	0.01438093	0.01437235	0.00000858	0.21218942	0.20412337	0.20407951	0.00004388
592065.81	2356226.00	0.00088033	0.00073668	0.00061379	0.00012289	0.22338313	0.22069835	0.22067979	0.00001856
591979.19	2356176.00	0.00688889	0.00589254	0.00580238	0.00009016	0.24317329	0.24067393	0.24065329	0.00002064
592130.25	2356186.50	0.00016827	0.00008903	0.00008636	0.00000267	0.21985214	0.21456569	0.21451152	0.00005419
591806.00	2356076.00	0.0370413	0.03542585	0.03536532	0.00006053	0.23187624	0.22707945	0.22705656	0.00002291
592051.06	2356257.50	0.00106842	0.00085343	0.00075905	0.00009438	0.19555736	0.19289952	0.19288969	0.00000986
591957.06	2356223.50	0.00831442	0.00716521	0.00710433	0.00006089	0.20930042	0.20735426	0.20734482	0.00000948
591863.13	2356189.25	0.02445203	0.02293381	0.02288977	0.00004404	0.20863905	0.20648006	0.20647112	0.00000897
591769.13	2356155.00	0.04464457	0.04367869	0.04364475	0.00003395	0.19973036	0.19681808	0.19680966	0.00000846
592042.06	2356291.25	0.00092449	0.00064919	0.00063422	0.00001497	0.15872684	0.15524167	0.15523701	0.00000463
591943.56	2356274.00	0.00590045	0.00480993	0.00480267	0.00000726	0.15933379	0.15639577	0.15639214	0.00000366
591845.06	2356256.50	0.01543939	0.01380933	0.01380473	0.0000046	0.15120132	0.14818654	0.14818355	0.000003
591746.63	2356239.25	0.02667135	0.02508157	0.02507828	0.00000329	0.13897739	0.13554427	0.13554175	0.00000254
592039.00	2356326.00	0.00075155	0.00049687	0.00049544	0.00000143	0.12172705	0.11709461	0.1170928	0.00000182
591939.00	2356326.00	0.00374634	0.00287068	0.00286985	0.00000083	0.11110085	0.10667486	0.10667383	0.00000104
591839.00	2356326.00	0.00817955	0.00675012	0.00674953	0.00000058	0.09743353	0.09295634	0.09295567	0.00000068
591739.00	2356326.00	0.0127092	0.01095605	0.0109556	0.00000045	0.08396404	0.07938834	0.07938786	0.00000049
591639.00	2356326.00	0.01665947	0.01475858	0.01475822	0.00000037	0.07213134	0.06741824	0.06741786	0.00000038

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591943.56	2356378.00	0.00311045	0.00239402	0.00239309	0.00000093	0.07497711	0.06953739	0.06953704	0.00000037
591845.06	2356395.50	0.00619796	0.00506647	0.00506577	0.0000007	0.06118584	0.05592844	0.05592818	0.00000027
591746.63	2356412.75	0.00902258	0.00761002	0.00760946	0.00000055	0.05014996	0.04516654	0.04516631	0.00000023
591648.13	2356430.25	0.01119232	0.00961915	0.00961869	0.00000046	0.04147337	0.03678989	0.03678968	0.00000021
591863.13	2356462.75	0.00645	0.00568939	0.00568865	0.00000075	0.04201226	0.03678814	0.03678787	0.00000028
591769.13	2356497.00	0.00932276	0.00850148	0.00850089	0.00000059	0.03450126	0.02979593	0.02979567	0.00000026
591675.19	2356531.25	0.01139052	0.01056058	0.01056009	0.00000049	0.02894642	0.02471901	0.02471877	0.00000025
591581.25	2356565.50	0.01245282	0.01161584	0.01161543	0.00000041	0.02470802	0.0208888	0.02088857	0.00000023
591719.38	2356626.00	0.01346548	0.01431105	0.01431049	0.00000056	0.025542	0.0219005	0.02190022	0.00000028
591632.75	2356676.00	0.01453571	0.01546699	0.01546651	0.00000048	0.02259537	0.0193704	0.01937015	0.00000025
591546.19	2356726.00	0.01466042	0.01555447	0.01555405	0.00000042	0.02014064	0.01723813	0.0172379	0.00000023
591459.56	2356776.00	0.01421401	0.01500963	0.01500926	0.00000037	0.01806862	0.01541066	0.01541044	0.00000022
591549.56	2356904.50	0.0153649	0.01874711	0.01874671	0.0000004	0.01982179	0.01824617	0.01824594	0.00000023
591472.94	2356968.75	0.01436349	0.01741595	0.01741559	0.00000036	0.01799856	0.01660461	0.0166044	0.00000021
591396.38	2357033.00	0.01329158	0.01600877	0.01600844	0.00000033	0.01636521	0.01509651	0.01509631	0.0000002
591319.75	2357097.25	0.01224007	0.01464015	0.01463984	0.00000031	0.01491213	0.0137258	0.01372561	0.00000019
591243.13	2357161.50	0.01124698	0.01335918	0.01335889	0.00000028	0.01362408	0.01249095	0.01249077	0.00000018
591467.63	2357245.25	0.01140487	0.01461346	0.01461311	0.00000036	0.01613001	0.01635585	0.01635564	0.00000022
591403.38	2357321.75	0.01039627	0.01325599	0.01325566	0.00000033	0.0146072	0.01475309	0.01475288	0.00000021
591339.13	2357398.50	0.00947751	0.01202741	0.01202711	0.0000003	0.01327511	0.01332971	0.01332951	0.00000019
590438.50	2356953.50	0.00621278	0.00541873	0.00541858	0.00000015	0.00795979	0.00542451	0.00542438	0.00000013
591489.00	2357625.00	0.00834368	0.01003576	0.01003502	0.00000075	0.01181692	0.0129399	0.0129397	0.0000002
591364.00	2357841.50	0.0066831	0.00792111	0.00792047	0.00000064	0.00931089	0.00983437	0.00983419	0.00000018
591239.00	2358058.00	0.00547672	0.00637635	0.0063758	0.00000055	0.0076077	0.0076761	0.00767593	0.00000017
591114.00	2358274.50	0.00458704	0.00522712	0.00522663	0.00000049	0.00639823	0.00614379	0.00614363	0.00000016
590989.00	2358491.00	0.00391172	0.00435475	0.00435432	0.00000044	0.00549992	0.00502732	0.00502716	0.00000015
590864.00	2358707.50	0.00338513	0.00368172	0.00368133	0.00000039	0.00480846	0.00419416	0.00419402	0.00000015
592204.81	2356232.00	0.00000674	0.00000348	0.00000217	0.0000013	0.19154463	0.18187367	0.1818177	0.00005599
592221.63	2356227.50	0.00000629	0.0000031	0.000002	0.0000011	0.17904439	0.16884604	0.1687795	0.00006658
592162.38	2356261.75	0.00000869	0.00009839	0.0000033	0.00009509	0.19521085	0.18910925	0.18908693	0.0000223
592622.00	2356004.50	0.01242028	0.01213083	0.01213062	0.00000021	0.00442409	0.00319074	0.00319053	0.00000021
592239.00	2356226.00	0.00000618	0.00000304	0.00000199	0.00000105	0.16399008	0.15342877	0.15335472	0.00007407
592152.38	2356276.00	0.00000987	0.00020873	0.0000041	0.00020464	0.1819239	0.17819373	0.17817859	0.00001518
591806.00	2356576.00	0.0111604	0.01174472	0.01174404	0.00000068	0.02915933	0.02499559	0.02499528	0.0000003
592239.00	2356426.00	0.00002624	0.00001311	0.00000702	0.00000609	0.03511634	0.02930988	0.02930932	0.00000056
592273.19	2356420.00	0.00004374	0.00001442	0.00001245	0.00000197	0.03083625	0.02533792	0.0253373	0.00000062
592289.00	2356412.50	0.00005335	0.00001576	0.00001393	0.00000184	0.03001213	0.02457887	0.02457819	0.00000068
592303.25	2356402.50	0.00005598	0.00001381	0.00001064	0.00000317	0.03029527	0.02484692	0.02484609	0.00000083
592315.63	2356390.25	0.00005223	0.00001718	0.00000543	0.00001175	0.03209193	0.02653091	0.02652956	0.00000135
592325.63	2356376.00	0.0000448	0.00003745	0.00000238	0.00003507	0.03594177	0.03016842	0.03016538	0.00000304
592333.00	2356360.25	0.00003967	0.00006663	0.00000167	0.00006496	0.04205973	0.03601007	0.0360024	0.00000767
592337.50	2356343.25	0.00004053	0.00007892	0.00000197	0.00007695	0.05031876	0.04397116	0.04395326	0.0000179
592339.00	2356326.00	0.00004497	0.00006307	0.00000393	0.00005914	0.06027929	0.05373043	0.05369527	0.00003517
592439.00	2356326.00	0.00231547	0.00025334	0.00022289	0.00003045	0.01348285	0.01028849	0.01014885	0.00013964
592337.50	2356308.75	0.00004709	0.00003763	0.00000891	0.00002872	0.07086942	0.0632861	0.06322881	0.0000573
592435.94	2356291.25	0.00257205	0.00060147	0.00059032	0.00001115	0.01459924	0.01090819	0.01082691	0.00008128
592534.44	2356274.00	0.00789423	0.00185895	0.00185263	0.00000632	0.00106655	0.00053787	0.00053688	0.00000099
592333.00	2356291.75	0.00004377	0.00002309	0.00001497	0.00000812	0.08063443	0.07176649	0.07168932	0.00007719
592426.94	2356257.50	0.00255768	0.00110843	0.00110631	0.00000212	0.01544543	0.01147913	0.01145758	0.00002155
592520.94	2356223.50	0.00827865	0.00399416	0.00399315	0.00000101	0.00232228	0.00138685	0.00138624	0.00000061
592614.88	2356189.25	0.01333929	0.00656724	0.00656664	0.00000061	0.00170249	0.00099081	0.00099042	0.00000039
592708.88	2356155.00	0.01744719	0.00857174	0.00857132	0.00000042	0.00428121	0.0029759	0.00297557	0.00000032
592802.81	2356120.75	0.01966342	0.0095561	0.0095558	0.00000031	0.01161797	0.00940927	0.00940899	0.00000028
592896.75	2356086.50	0.02041736	0.00972926	0.00972902	0.00000024	0.02428708	0.02280354	0.0228033	0.00000025
592990.75	2356052.50	0.02021173	0.00940364	0.00940344	0.0000002	0.03675845	0.03700191	0.03700171	0.0000002
593883.44	2355727.50	0.01103801	0.00409377	0.0040937	0.00000008	0.02279602	0.01486944	0.01486937	0.00000007
592325.63	2356276.00	0.00003622	0.00001931	0.00001747	0.00000184	0.08965099	0.07985345	0.07976559	0.00008787
592412.19	2356226.00	0.0019925	0.00129778	0.00129719	0.00000059	0.01751273	0.01341173	0.01340568	0.00000605
592498.81	2356176.00	0.00688385	0.0051842	0.00518384	0.00000036	0.0041467	0.00277033	0.00276986	0.00000047
592585.44	2356126.00	0.01166914	0.00947612	0.00947586	0.00000026	0.00282092	0.00180779	0.00180748	0.0000003
592672.00	2356076.00	0.0156497	0.01338426	0.01338407	0.0000002	0.0041509	0.00289662	0.00289636	0.00000025
592758.63	2356026.00	0.01797035	0.01593509	0.01593493	0.00000016	0.00741103	0.00565382	0.00565361	0.00000021
592845.25	2355976.00	0.01874457	0.0169876	0.01698746	0.00000014	0.01229521	0.01011872	0.01011855	0.00000018
592931.81	2355926.00	0.01853103	0.01697716	0.01697704	0.00000012	0.01797664	0.0157733	0.01577314	0.00000016
593018.44	2355876.00	0.01777312	0.01632181	0.01632171	0.00000011	0.02363631	0.02153655	0.0215364	0.00000015
593105.00	2355826.00	0.01683937	0.01539141	0.01539132	0.0000001	0.0279062	0.02588578	0.02588565	0.00000014
593191.63	2355776.00	0.01575916	0.01427622	0.01427613	0.00000009	0.02953636	0.02769801	0.02769789	0.00000012
593278.25	2355726.00	0.01476401	0.01320249	0.01320241	0.00000008	0.02959727	0.02771109	0.02771098	0.00000011
592315.63	2356261.75	0.00002731	0.00001641	0.0000152	0.00000121	0.09828135	0.08823797	0.08814793	0.00009006
592392.19	2356197.50	0.00132037	0.0009832	0.00098263	0.00000057	0.02131692	0.01697453	0.01697175	0.00000278

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592468.81	2356133.25	0.0047795	0.00405035	0.00404998	0.00000037	0.00662462	0.00472301	0.00472259	0.00000042
592545.44	2356069.00	0.00884576	0.0081765	0.00817623	0.00000027	0.00421489	0.00292268	0.00292243	0.00000025
592303.25	2356249.50	0.00001906	0.0000115	0.00001027	0.00000123	0.10827141	0.09807127	0.09798351	0.00008778
592367.56	2356172.75	0.00084475	0.00061716	0.00061657	0.00000059	0.02781577	0.02270597	0.02270388	0.00000209
592289.00	2356239.50	0.00001239	0.00000695	0.00000584	0.00000111	0.11973625	0.10924388	0.10915949	0.00008443
592273.19	2356232.00	0.0000084	0.00000436	0.00000331	0.00000106	0.13317892	0.12250545	0.12242401	0.00008145
592256.38	2356227.50	0.0000067	0.00000333	0.00000228	0.00000105	0.14821782	0.13751239	0.13743381	0.00007862
592145.00	2356291.75	0.0000114	0.0001868	0.00000499	0.00018181	0.16553912	0.16156062	0.16155061	0.00001002
592140.50	2356308.75	0.00001348	0.00005791	0.00000594	0.00005197	0.14602629	0.14155594	0.14154967	0.00000627
592139.00	2356326.00	0.00001722	0.00001339	0.0000075	0.0000059	0.12546417	0.12036401	0.12036028	0.00000375
592140.50	2356343.25	0.00002267	0.00001279	0.00000982	0.00000297	0.10606425	0.10037332	0.10037116	0.00000216
592042.06	2356360.75	0.0007112	0.0004717	0.00047028	0.00000142	0.09073739	0.08516573	0.08516503	0.0000007
592145.00	2356360.25	0.0000284	0.00001567	0.00001244	0.00000323	0.08896822	0.08282619	0.08282495	0.00000125
592051.06	2356394.50	0.00077558	0.00054845	0.00054689	0.00000156	0.0683428	0.06228479	0.06228439	0.0000004
591957.06	2356428.50	0.00326093	0.00269612	0.00269511	0.00000101	0.05253176	0.04682084	0.04682053	0.0000003
592152.38	2356376.00	0.00003221	0.00001807	0.00001458	0.00000349	0.07478841	0.06836627	0.06836548	0.0000008
592065.81	2356426.00	0.00090899	0.00073692	0.00073519	0.00000173	0.05374567	0.04758243	0.04758206	0.00000037
591979.19	2356476.00	0.003905	0.00373176	0.00373061	0.00000114	0.04103598	0.03552644	0.03552609	0.00000035
591892.56	2356526.00	0.00770418	0.00784739	0.00784654	0.00000085	0.0338348	0.02904898	0.02904865	0.00000033
592162.38	2356390.25	0.00003326	0.00001944	0.00001559	0.00000385	0.06337076	0.05683829	0.05683771	0.00000059
592085.81	2356454.50	0.00105112	0.00099411	0.00099226	0.00000185	0.04391566	0.03790699	0.03790659	0.00000041
592009.19	2356518.75	0.00484078	0.00549643	0.00549521	0.00000122	0.03619448	0.03098671	0.03098632	0.0000004
591932.56	2356583.00	0.00925052	0.01108404	0.01108313	0.00000092	0.03164829	0.0275214	0.02752104	0.00000036
591856.00	2356647.50	0.01312928	0.01613292	0.01613219	0.00000073	0.02879652	0.02546521	0.02546489	0.00000032
591779.38	2356711.75	0.015454	0.01909356	0.01909295	0.00000061	0.02633509	0.02363917	0.02363888	0.00000029
591702.75	2356776.00	0.01628304	0.02008076	0.02008023	0.00000052	0.02400929	0.02180814	0.02180788	0.00000026
591626.19	2356840.25	0.01610453	0.01976572	0.01976526	0.00000046	0.02183092	0.01999673	0.01999648	0.00000024
592174.75	2356402.50	0.00003196	0.00002079	0.00001499	0.0000058	0.05475149	0.04824442	0.04824391	0.00000052
592110.44	2356479.25	0.00123866	0.00127685	0.00127437	0.00000248	0.03838066	0.03237232	0.03237186	0.00000046
591596.19	2357092.00	0.01365545	0.01767068	0.01767024	0.00000044	0.01984597	0.02012704	0.0201268	0.00000025
591531.94	2357168.75	0.01249902	0.01609508	0.01609468	0.00000039	0.0178709	0.01814948	0.01814925	0.00000023
592189.00	2356412.50	0.00002989	0.00002462	0.00001319	0.00001143	0.04795961	0.04156837	0.04156788	0.0000005
591639.00	2357365.25	0.01109123	0.01354152	0.01354058	0.00000094	0.01642168	0.01847078	0.01847055	0.00000023
591589.00	2357451.75	0.01007733	0.0122451	0.01224423	0.00000086	0.01464833	0.01637315	0.01637293	0.00000022
591539.00	2357538.50	0.00914069	0.01105311	0.01105231	0.0000008	0.01309484	0.01451592	0.01451571	0.00000021
592204.81	2356420.00	0.00002837	0.00002648	0.00001093	0.00001555	0.04270167	0.03648156	0.03648106	0.00000051
591760.19	2357641.50	0.00990887	0.01092416	0.01092276	0.00000139	0.01267763	0.01407643	0.01407604	0.00000038
591726.00	2357735.50	0.00906597	0.0099214	0.00992009	0.00000131	0.01148736	0.01243625	0.01243586	0.00000039
592221.63	2356424.50	0.00002658	0.00002002	0.00000835	0.00001166	0.03854726	0.03253125	0.03253072	0.00000053
592435.94	2356360.75	0.00222799	0.00015022	0.00010652	0.0000437	0.01085014	0.00792152	0.00787272	0.0000488
592632.94	2356256.50	0.01239563	0.00296348	0.00295931	0.00000418	0.00073738	0.00035557	0.00035499	0.00000057
592256.38	2356424.50	0.00003207	0.00001181	0.00000871	0.0000031	0.0325578	0.02692642	0.02692584	0.00000059
592239.00	2356526.00	0.00137827	0.00087012	0.00086738	0.00000275	0.02777106	0.02394299	0.02394234	0.00000066
592239.00	2356626.00	0.00471424	0.00336633	0.00336457	0.00000176	0.03561517	0.03669081	0.03669017	0.00000064
592239.00	2356726.00	0.00794111	0.00587386	0.00587255	0.00000131	0.04273337	0.05018562	0.05018502	0.00000061
592239.00	2356826.00	0.00966166	0.00740161	0.00740055	0.00000106	0.04183063	0.05300206	0.05300143	0.00000063
592239.00	2356926.00	0.01040213	0.00799651	0.00799563	0.00000088	0.03816573	0.04812184	0.04812099	0.00000085
592239.00	2357026.00	0.0102977	0.00789532	0.00789457	0.00000075	0.03430305	0.04197718	0.04197603	0.00000115
592239.00	2357126.00	0.00976847	0.00744484	0.0074442	0.00000065	0.03096722	0.03655131	0.03654992	0.00000139
592239.00	2357226.00	0.00908377	0.00687089	0.00687032	0.00000057	0.02797432	0.03173663	0.03173513	0.00000151
592239.00	2357326.00	0.00830851	0.00623443	0.00623393	0.0000005	0.02503266	0.0272552	0.0272537	0.0000015
592239.00	2357426.00	0.00764912	0.00567476	0.00567431	0.00000045	0.02247962	0.02330538	0.02330396	0.00000143
592273.75	2356523.00	0.00167165	0.00100017	0.00099878	0.00000139	0.02486987	0.02131912	0.02131841	0.00000072
592291.06	2356621.50	0.00500883	0.00335927	0.00335838	0.00000089	0.03352493	0.03605484	0.03605408	0.00000075
592308.44	2356720.00	0.00805367	0.00551488	0.00551423	0.00000066	0.04205215	0.05192442	0.05192368	0.00000075
592325.81	2356818.50	0.00958324	0.00675196	0.00675144	0.00000053	0.0425022	0.05392165	0.05392046	0.00000119
592343.19	2356917.00	0.01013674	0.00715364	0.00715321	0.00000044	0.04169576	0.05047142	0.05046955	0.00000188
592360.56	2357015.25	0.009978	0.00702938	0.00702901	0.00000037	0.03938547	0.04520549	0.04520331	0.00000218
592377.94	2357113.75	0.0094405	0.00662017	0.00661986	0.00000031	0.03510665	0.0379048	0.03790279	0.00000203
592412.63	2357310.75	0.00803966	0.00556023	0.00555999	0.00000024	0.02507682	0.0234415	0.02344016	0.00000134
592430.00	2357409.25	0.00743945	0.00506773	0.00506751	0.00000022	0.02106535	0.01821593	0.01821487	0.00000106
592307.38	2356514.00	0.00238779	0.00140428	0.00140335	0.00000092	0.02130136	0.01786495	0.01786415	0.0000008
592341.63	2356608.00	0.00658036	0.00434475	0.00434415	0.0000006	0.02868777	0.03163482	0.03163395	0.00000088
592375.81	2356702.00	0.01030326	0.00688104	0.00688059	0.00000045	0.0384651	0.04807629	0.04807514	0.00000116
592410.00	2356795.75	0.01202162	0.008234	0.00823364	0.00000036	0.0439427	0.05332093	0.05331844	0.00000249
592444.19	2356889.75	0.01246214	0.00854986	0.00854957	0.0000003	0.0450693	0.05054136	0.05053847	0.0000029
592478.44	2356983.75	0.0122388	0.00838617	0.00838591	0.00000025	0.03940261	0.0397372	0.03973502	0.00000218
592512.63	2357077.75	0.01148358	0.00783545	0.00783523	0.00000022	0.03128514	0.02822048	0.02821905	0.00000144
592546.81	2357171.75	0.01061463	0.00720052	0.00720033	0.0000002	0.02480707	0.02031485	0.02031389	0.00000096
592581.00	2357265.75	0.00972641	0.00655146	0.00655129	0.00000018	0.02008763	0.01525657	0.01525588	0.00000068

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592615.25	2357359.75	0.00891833	0.00594933	0.00594917	0.00000016	0.01677669	0.01197496	0.01197445	0.00000051
592649.44	2357453.75	0.00820828	0.00539444	0.0053943	0.00000015	0.01439468	0.00970028	0.00969988	0.0000004
592339.00	2356499.25	0.00282127	0.00149156	0.00149068	0.00000088	0.01721458	0.01383348	0.01383259	0.0000009
592389.00	2356585.75	0.00722438	0.00434356	0.00434298	0.00000058	0.02148341	0.02363011	0.02362906	0.00000105
592439.00	2356672.50	0.01100015	0.00674423	0.0067438	0.00000043	0.03151167	0.0381234	0.0381213	0.0000021
592489.00	2356759.00	0.01276932	0.00798902	0.00798868	0.00000035	0.04265496	0.04704564	0.04704173	0.0000039
592539.00	2356845.50	0.01281104	0.00816251	0.00816222	0.00000029	0.03812742	0.03630229	0.03629985	0.00000244
592589.00	2356932.25	0.01238075	0.00792312	0.00792288	0.00000025	0.03037062	0.02468644	0.02468521	0.00000124
592639.00	2357018.75	0.01152394	0.00738094	0.00738073	0.00000021	0.02489435	0.01844005	0.01843934	0.00000071
592689.00	2357105.50	0.01053137	0.00673967	0.00673948	0.00000019	0.02180463	0.01521396	0.01521349	0.00000047
592739.00	2357192.00	0.00960126	0.00612456	0.00612439	0.00000017	0.02038759	0.01325752	0.01325718	0.00000034
592789.00	2357278.75	0.00870283	0.00552744	0.00552729	0.00000016	0.01927365	0.01173849	0.01173822	0.00000026
592839.00	2357365.25	0.00792338	0.00498646	0.00498631	0.00000015	0.01812189	0.01041887	0.01041865	0.00000022
592889.00	2357451.75	0.00718921	0.00449607	0.00449594	0.00000013	0.01679449	0.00924918	0.00924899	0.00000019
592939.00	2357538.50	0.00653669	0.00406902	0.0040689	0.00000013	0.01551363	0.00829015	0.00828998	0.00000017
592367.56	2356479.25	0.00285315	0.0010859	0.00108483	0.00000108	0.01305597	0.0099524	0.0099514	0.00000101
592431.81	2356555.75	0.00708915	0.00305135	0.00305069	0.00000066	0.01317388	0.01368485	0.01368357	0.00000128
592496.13	2356632.50	0.01042709	0.00464861	0.00464813	0.00000048	0.02059297	0.02402498	0.02402092	0.00000407
592560.38	2356709.00	0.01228203	0.00551463	0.00551425	0.00000038	0.02890516	0.02665615	0.0266525	0.00000366
592624.69	2356785.75	0.0124056	0.00568826	0.00568795	0.00000031	0.02626366	0.01947912	0.01947782	0.00000131
592688.94	2356862.25	0.01174641	0.00541398	0.00541372	0.00000027	0.02683239	0.01875712	0.01875651	0.00000062
592753.25	2356938.75	0.01101787	0.00507648	0.00507624	0.00000023	0.02933327	0.01961556	0.01961518	0.00000039
592817.50	2357015.50	0.01007286	0.00462144	0.00462123	0.00000021	0.02879111	0.01875615	0.01875585	0.00000029
592881.81	2357092.00	0.00916601	0.0041693	0.00416911	0.00000019	0.02624633	0.01681098	0.01681074	0.00000024
592946.06	2357168.75	0.00839546	0.00377008	0.00376991	0.00000017	0.02322931	0.01459239	0.01459217	0.00000021
593010.38	2357245.25	0.00772424	0.0033971	0.00339694	0.00000016	0.02021506	0.01242649	0.0124263	0.00000019
593074.63	2357321.75	0.00709415	0.00306332	0.00306317	0.00000015	0.01753237	0.01053462	0.01053444	0.00000018
592392.19	2356454.50	0.00273184	0.00053269	0.00052921	0.00000349	0.00954986	0.00702352	0.00702243	0.00000109
592468.81	2356518.75	0.00708874	0.00154144	0.00153968	0.00000175	0.00584324	0.00511392	0.00511229	0.00000163
592545.44	2356583.00	0.01029969	0.00237836	0.00237726	0.0000011	0.00850257	0.00877133	0.00876382	0.00000751
592622.00	2356647.50	0.01218954	0.0029065	0.00290573	0.00000077	0.01291293	0.00864476	0.00864273	0.00000203
592698.63	2356711.75	0.01262415	0.0030537	0.00305312	0.00000058	0.02543089	0.01650211	0.01650143	0.00000068
592775.25	2356776.00	0.01210748	0.00298604	0.00298557	0.00000046	0.0343721	0.02232974	0.0223293	0.00000044
592851.81	2356840.25	0.01125961	0.00278054	0.00278016	0.00000038	0.03353037	0.02119486	0.0211945	0.00000036
592928.44	2356904.50	0.0104746	0.00256491	0.00256459	0.00000032	0.03024683	0.01792553	0.01792522	0.00000031
593005.06	2356968.75	0.00973671	0.0023458	0.00234552	0.00000028	0.02688443	0.01452924	0.01452897	0.00000027
593081.63	2357033.00	0.0089615	0.00212406	0.00212382	0.00000025	0.02361545	0.01165392	0.01165368	0.00000024
592412.19	2356426.00	0.00254542	0.00021075	0.00019599	0.00001475	0.00766801	0.0053905	0.00538941	0.00000109
592498.81	2356476.00	0.00712377	0.00067334	0.00066462	0.00000872	0.00169766	0.00109352	0.00109141	0.00000211
592585.44	2356526.00	0.01062785	0.0011353	0.00112934	0.00000596	0.00121309	0.00064636	0.00063467	0.0000117
592672.00	2356576.00	0.01254632	0.00144906	0.00144464	0.00000442	0.00778057	0.00439699	0.00439588	0.00000111
592758.63	2356626.00	0.01312021	0.00161686	0.00161341	0.00000345	0.02206057	0.0118185	0.0118178	0.0000007
592845.25	2356676.00	0.01294181	0.00166296	0.00166017	0.00000279	0.03117705	0.01318841	0.01318784	0.00000057
592931.81	2356726.00	0.01230448	0.00161376	0.00161144	0.00000232	0.03310456	0.01140748	0.01140697	0.00000051
593018.44	2356776.00	0.01140508	0.00151464	0.00151267	0.00000197	0.03186198	0.00931894	0.00931846	0.00000048
592426.94	2356394.50	0.00234366	0.00013515	0.00010059	0.00003457	0.00810585	0.0056635	0.00565991	0.0000036
592520.94	2356428.50	0.00672661	0.00040889	0.00038538	0.00002351	0.00040713	0.00020555	0.00020299	0.00000256
592614.88	2356462.75	0.01042334	0.00075053	0.00073282	0.00001772	0.000017	0.00001746	0.0000021	0.00001536
592708.88	2356497.00	0.01258803	0.00102677	0.00101259	0.00001418	0.0024656	0.0004751	0.00047165	0.00000345
592802.81	2356531.25	0.01315536	0.0011962	0.0011844	0.0000118	0.01564954	0.00187704	0.00187058	0.00000646
592896.75	2356565.50	0.01287634	0.00126532	0.00125523	0.00001009	0.02938957	0.00318729	0.00318043	0.00000686
592990.75	2356599.50	0.01217827	0.00125479	0.00124597	0.00000882	0.03511103	0.00389478	0.00388834	0.00000645
593883.44	2356924.50	0.00583762	0.00060625	0.0006022	0.00000406	0.01357281	0.00142306	0.00142	0.00000306
594118.38	2357010.00	0.00490558	0.00049509	0.00049153	0.00000355	0.01063319	0.00104403	0.00104134	0.00000269
594353.31	2357095.50	0.00418692	0.00041231	0.00040916	0.00000316	0.00870438	0.00080872	0.00080632	0.0000024
592534.44	2356378.00	0.00656366	0.00041723	0.00038645	0.00003079	0.00021285	0.00034888	0.0001038	0.00024508
592632.94	2356395.50	0.01011996	0.00073429	0.00071042	0.00002386	0.0000001	0.00000485	0.00000003	0.00000482
592731.38	2356412.75	0.01243621	0.00100313	0.0009836	0.00001953	0.00143413	0.00018741	0.0001523	0.00003511
592829.88	2356430.25	0.01338803	0.00118117	0.00116461	0.00001656	0.0136138	0.00109672	0.0010712	0.00002552
592928.38	2356447.50	0.01329838	0.00124996	0.00123557	0.00001439	0.02830531	0.00242113	0.00240208	0.00001906
593026.88	2356465.00	0.01276339	0.00124244	0.0012297	0.00001274	0.03605449	0.00333919	0.00332407	0.00001513
592539.00	2356326.00	0.00686557	0.00071665	0.0006964	0.00002025	0.00039408	0.00018555	0.00017903	0.00000652
592639.00	2356326.00	0.0107121	0.00117336	0.00115831	0.00001505	0.00009492	0.00003821	0.00003718	0.00000104
592739.00	2356326.00	0.01341567	0.00150786	0.00149594	0.00001192	0.00377257	0.00248564	0.00248496	0.00000068
592839.00	2356326.00	0.0146033	0.00167502	0.00166519	0.00000983	0.022086	0.01139458	0.01139383	0.00000075
592939.00	2356326.00	0.01477452	0.00170707	0.00169873	0.00000834	0.03976191	0.01386509	0.01386373	0.00000136
593039.00	2356326.00	0.0143787	0.00165217	0.00164494	0.00000723	0.04708877	0.01241349	0.01241163	0.00000186
593139.00	2356326.00	0.01378134	0.00155888	0.00155251	0.00000637	0.04769913	0.01009299	0.01009088	0.00000211
596739.00	2356326.00	0.00258844	0.00015063	0.0001494	0.00000122	0.00413162	0.00021748	0.00021653	0.00000095
592731.38	2356239.25	0.01578068	0.00371001	0.00370698	0.00000303	0.00463542	0.0032151	0.00321462	0.00000048

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592829.88	2356221.75	0.01729072	0.00400178	0.00399947	0.00000231	0.0194861	0.01676185	0.01676147	0.00000038
592928.38	2356204.50	0.01747054	0.00396152	0.00395967	0.00000184	0.03948937	0.03543983	0.03543959	0.00000025
593026.88	2356187.00	0.0169662	0.00374125	0.00373974	0.00000151	0.05101925	0.04170532	0.04170511	0.0000002
593125.31	2356169.75	0.0161026	0.00344447	0.00344321	0.00000126	0.05484722	0.03710332	0.03710313	0.00000018
593223.81	2356152.25	0.01511519	0.0031315	0.00313043	0.00000107	0.05323216	0.02945647	0.02945631	0.00000017
593322.31	2356135.00	0.01419134	0.00284159	0.00284065	0.00000094	0.04903897	0.02279088	0.02279071	0.00000017
593420.75	2356117.50	0.01327333	0.00257111	0.00257029	0.00000083	0.04381926	0.01760981	0.01760965	0.00000016
593519.25	2356100.25	0.01241327	0.00232532	0.00232457	0.00000074	0.03880077	0.01378891	0.01378874	0.00000016
594208.63	2355978.75	0.00792852	0.00122168	0.00122125	0.00000043	0.01790012	0.00378461	0.00378444	0.00000018
594454.81	2355935.25	0.00689314	0.00100357	0.0010032	0.00000037	0.01439977	0.00271434	0.00271416	0.00000018
594701.00	2355892.00	0.00605817	0.00083715	0.00083682	0.00000033	0.0118436	0.00202283	0.00202264	0.00000018
594947.25	2355848.50	0.00534608	0.00070898	0.00070869	0.00000029	0.0099729	0.00157492	0.00157473	0.00000019
593084.75	2356018.25	0.01945678	0.00883247	0.00883231	0.00000017	0.04219618	0.04278899	0.04278883	0.00000016
593178.69	2355984.00	0.01844854	0.00813854	0.0081384	0.00000015	0.04227781	0.04174158	0.04174145	0.00000014
593272.69	2355949.75	0.01735423	0.00745034	0.00745022	0.00000013	0.03993245	0.03773894	0.03773883	0.00000012
593366.63	2355915.50	0.01623268	0.00678293	0.00678282	0.00000012	0.03683462	0.03303328	0.03303317	0.00000011
593460.63	2355881.25	0.01513089	0.0061669	0.00616679	0.00000011	0.03369694	0.02854264	0.02854255	0.0000001
593554.56	2355847.25	0.01409835	0.00561064	0.00561055	0.0000001	0.03085462	0.0246075	0.02460741	0.00000009
593648.56	2355813.00	0.01315801	0.00512106	0.00512097	0.00000009	0.02832277	0.02125521	0.02125513	0.00000008
592046.19	2356555.75	0.00543701	0.0066393	0.00663774	0.00000156	0.03416808	0.02976224	0.0297618	0.00000043
591981.88	2356632.50	0.01021586	0.01307135	0.0130702	0.00000114	0.03259335	0.02951981	0.02951943	0.00000038
591917.63	2356709.00	0.01406149	0.01835208	0.01835115	0.00000093	0.03123795	0.02932812	0.02932779	0.00000034
591853.31	2356785.75	0.01598682	0.0209684	0.02096761	0.00000078	0.02931513	0.02830379	0.02830348	0.00000031
591789.06	2356862.25	0.0162873	0.02133934	0.02133867	0.00000066	0.02689211	0.02650817	0.02650788	0.00000029
591724.75	2356938.75	0.01576974	0.02059089	0.02059032	0.00000057	0.02443242	0.02444019	0.02443992	0.00000028
591660.50	2357015.50	0.0147976	0.01923767	0.01923717	0.00000049	0.02204549	0.02225445	0.02225419	0.00000026
591114.13	2357666.50	0.00697788	0.00869821	0.00869797	0.00000024	0.00980369	0.00954436	0.00954419	0.00000016
592139.00	2356499.25	0.00152365	0.00160728	0.00160158	0.0000057	0.03483717	0.02927352	0.02927301	0.00000051
592089.00	2356585.75	0.00636405	0.00760975	0.00760598	0.00000377	0.0340038	0.03055267	0.03055221	0.00000046
592039.00	2356672.50	0.01145731	0.01409938	0.01409655	0.00000284	0.03519175	0.0337991	0.03379869	0.00000041
591989.00	2356759.00	0.01506626	0.01878399	0.0187817	0.0000023	0.03461267	0.03505387	0.03505349	0.00000038
591939.00	2356845.50	0.01664064	0.02079738	0.02079544	0.00000194	0.03262214	0.03435612	0.03435577	0.00000036
591889.00	2356932.25	0.01686302	0.02104139	0.02103974	0.00000165	0.03002489	0.03244074	0.03244041	0.00000033
591839.00	2357018.75	0.01595221	0.01982917	0.01982774	0.00000143	0.02676506	0.0295496	0.0295493	0.00000031
591789.00	2357105.50	0.01477885	0.01829187	0.0182906	0.00000127	0.02374713	0.02653608	0.02653579	0.00000028
591739.00	2357192.00	0.0135312	0.01667394	0.01667281	0.00000113	0.02103354	0.02361693	0.02361667	0.00000026
591689.00	2357278.75	0.01223627	0.01500899	0.01500797	0.00000103	0.01852558	0.02088081	0.02088057	0.00000024
592170.63	2356514.00	0.00177372	0.00174976	0.00174114	0.00000862	0.03227752	0.02738703	0.02738647	0.00000055
592136.38	2356608.00	0.00730291	0.00804045	0.00803446	0.00000599	0.03489078	0.03270323	0.03270274	0.0000005
592102.19	2356702.00	0.0129242	0.01456322	0.01455866	0.00000457	0.03870361	0.03951869	0.03951822	0.00000047
592068.00	2356795.75	0.01642265	0.01875831	0.01875465	0.00000367	0.03808928	0.04203868	0.04203825	0.00000044
592033.81	2356889.75	0.01789084	0.02047534	0.0204723	0.00000305	0.0354119	0.0410011	0.04100071	0.0000004
591999.56	2356983.75	0.01790629	0.02046028	0.02045764	0.00000264	0.03171083	0.03779103	0.03779066	0.00000036
591965.38	2357077.75	0.01698031	0.01933396	0.01933162	0.00000234	0.02760782	0.03336472	0.03336438	0.00000034
591931.19	2357171.75	0.01572904	0.01783644	0.01783435	0.0000021	0.02385421	0.02890189	0.02890155	0.00000034
591897.00	2357265.75	0.01436179	0.01621436	0.01621246	0.0000019	0.02060788	0.0248074	0.02480706	0.00000034
591862.75	2357359.75	0.01307072	0.01468168	0.01467994	0.00000174	0.01795579	0.02132135	0.021321	0.00000035
591828.56	2357453.75	0.01189336	0.01328491	0.0132833	0.00000161	0.01582153	0.01842459	0.01842424	0.00000036
591794.38	2357547.50	0.01083636	0.01202841	0.01202693	0.00000149	0.01407954	0.01603566	0.01603529	0.00000037
591640.44	2357970.50	0.00736921	0.00789269	0.00789156	0.00000113	0.00925369	0.00941576	0.00941535	0.00000041
591554.94	2358205.50	0.00612029	0.00639269	0.00639169	0.000001	0.00770619	0.00740038	0.00739997	0.00000042
592204.25	2356523.00	0.00160768	0.00128298	0.00127717	0.00000581	0.03001598	0.02582541	0.02582481	0.0000006
592186.94	2356621.50	0.00619388	0.00559678	0.00559295	0.00000383	0.03569263	0.03507194	0.03507138	0.00000056
592169.56	2356720.00	0.01082976	0.01000936	0.01000649	0.00000288	0.04144497	0.0453797	0.04537916	0.00000054
592152.19	2356818.50	0.01344952	0.01281941	0.01281709	0.00000232	0.04075362	0.04894887	0.04894839	0.00000049
592134.81	2356917.00	0.01457325	0.01390041	0.01389843	0.00000198	0.03707032	0.04617057	0.0461701	0.00000047
592117.44	2357015.25	0.0144649	0.01373768	0.01373599	0.00000169	0.0322776	0.04039755	0.04039703	0.00000051
592100.06	2357113.75	0.01371644	0.0129349	0.01293343	0.00000147	0.02785741	0.03441151	0.03441091	0.0000006
592082.75	2357212.25	0.01270719	0.01188501	0.01188371	0.0000013	0.02426335	0.02930084	0.02930014	0.00000069
592065.38	2357310.75	0.01159841	0.01075427	0.0107531	0.00000117	0.02135925	0.02510505	0.02510427	0.00000078
592048.00	2357409.25	0.01062297	0.00975393	0.00975287	0.00000106	0.01915403	0.02182935	0.0218285	0.00000085
592030.63	2357507.75	0.0096596	0.00877985	0.00877889	0.00000097	0.01724898	0.01906613	0.01906524	0.00000089
592013.25	2357606.25	0.00884025	0.00794578	0.00794489	0.00000089	0.01571762	0.01682699	0.01682607	0.00000092
591995.88	2357704.75	0.0080795	0.00718285	0.00718202	0.00000083	0.01435385	0.01491238	0.01491145	0.00000093
591978.50	2357803.25	0.00740758	0.0065082	0.00650743	0.00000077	0.0131642	0.01328195	0.01328103	0.00000092
593158.25	2357097.25	0.00831484	0.00192218	0.00192196	0.00000022	0.02096882	0.00938919	0.00938898	0.00000022
594947.25	2356803.50	0.00358566	0.00029293	0.00028884	0.00000409	0.00717975	0.00050113	0.00049806	0.00000307
593617.75	2356083.00	0.01158412	0.00210384	0.00210317	0.00000067	0.03426551	0.01096886	0.0109687	0.00000016
592239.00	2357526.00	0.0069479	0.0051185	0.00511809	0.00000041	0.0198735	0.01977663	0.01977532	0.00000132
592239.00	2357626.00	0.00635147	0.00463334	0.00463296	0.00000038	0.01765488	0.01676324	0.01676205	0.00000119

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592395.25	2357212.25	0.0087854	0.00612203	0.00612175	0.00000027	0.03007833	0.0302028	0.03020111	0.00000168
592447.38	2357507.75	0.00679844	0.00459412	0.00459392	0.0000002	0.01772289	0.01435468	0.01435383	0.00000085
592464.75	2357606.25	0.00623484	0.00415683	0.00415665	0.00000018	0.01504615	0.01148199	0.0114813	0.00000069
592683.63	2357547.50	0.00748526	0.00487978	0.00487965	0.00000014	0.01266276	0.00816129	0.00816096	0.00000033
593138.88	2357398.50	0.00653094	0.00276842	0.00276828	0.00000014	0.01533165	0.00895035	0.00895018	0.00000016
593234.88	2357161.50	0.00768784	0.00173811	0.00173791	0.0000002	0.01860449	0.00762517	0.00762497	0.0000002
593311.44	2357226.00	0.00711173	0.00157418	0.00157399	0.00000018	0.01664941	0.00628607	0.00628589	0.00000018
593105.00	2356826.00	0.01056052	0.00139931	0.0013976	0.0000017	0.02951586	0.00748092	0.00748045	0.00000047
593191.63	2356876.00	0.00978243	0.00128917	0.00128767	0.0000015	0.02677258	0.00606363	0.00606318	0.00000046
593278.25	2356926.00	0.00907831	0.0011835	0.00118216	0.00000134	0.02403882	0.00495166	0.00495121	0.00000045
593364.81	2356976.00	0.00839296	0.00108022	0.00107902	0.00000121	0.02121239	0.00405571	0.00405526	0.00000045
593451.44	2357026.00	0.00773064	0.00098003	0.00097893	0.0000011	0.01873696	0.00335972	0.00335928	0.00000045
593754.56	2357201.00	0.00592977	0.00072079	0.00071996	0.00000084	0.01274923	0.00195312	0.00195269	0.00000043
593084.75	2356633.75	0.01137733	0.00120323	0.00119541	0.00000783	0.03530716	0.00403824	0.00403239	0.00000585
593178.69	2356668.00	0.01055158	0.00112957	0.00112251	0.00000706	0.03291093	0.00380985	0.00380456	0.00000529
593272.69	2356702.25	0.00970574	0.00104546	0.00103903	0.00000643	0.02931547	0.00341343	0.00340862	0.00000481
593366.63	2356736.50	0.00894008	0.00096485	0.00095896	0.0000059	0.02589288	0.00300457	0.00300014	0.00000443
593460.63	2356770.75	0.00825677	0.00088912	0.00088367	0.00000545	0.02286877	0.00262508	0.00262098	0.0000041
593648.56	2356839.00	0.00703398	0.00074848	0.00074376	0.00000473	0.01786834	0.0019825	0.00197893	0.00000357
593125.31	2356482.25	0.01201564	0.00119127	0.0011798	0.00001147	0.03731563	0.00364156	0.00362904	0.00001252
593223.81	2356499.75	0.01121398	0.00111813	0.00110766	0.00001047	0.03566064	0.00353081	0.00352013	0.00001068
593322.31	2356517.00	0.01042512	0.00103913	0.0010295	0.00000963	0.03248698	0.00320959	0.00320025	0.00000934
593420.75	2356534.50	0.00966729	0.00095852	0.00094961	0.0000089	0.02907443	0.00285118	0.00284286	0.00000832
593962.44	2356630.00	0.0064516	0.00060024	0.00059396	0.00000628	0.015706	0.0013759	0.00137073	0.00000517
594208.63	2356673.25	0.00545502	0.00048861	0.00048307	0.00000554	0.01235883	0.0010157	0.00101129	0.00000441
602087.06	2358062.50	0.00072274	0.00004908	0.00004788	0.00000121	0.00115436	0.00005947	0.00005861	0.00000085
593239.00	2356326.00	0.01304117	0.00143935	0.00143364	0.00000571	0.04497764	0.0080362	0.00803399	0.00000221
593339.00	2356326.00	0.01231209	0.00132	0.00131483	0.00000518	0.04118784	0.0064212	0.00641898	0.00000222
593439.00	2356326.00	0.01151421	0.00120365	0.00119892	0.00000473	0.0369501	0.00518624	0.00518403	0.00000221
593539.00	2356326.00	0.01082242	0.00109682	0.00109246	0.00000436	0.03320773	0.00423944	0.00423728	0.00000217
593639.00	2356326.00	0.01015946	0.00099906	0.00099502	0.00000404	0.02987193	0.00350842	0.0035063	0.00000212
594239.00	2356326.00	0.00714653	0.00059123	0.00058843	0.0000028	0.01673962	0.00140061	0.00139886	0.00000175
594739.00	2356326.00	0.00553307	0.00040816	0.00040593	0.00000223	0.01131207	0.00079969	0.00079818	0.00000151
594989.00	2356326.00	0.00491783	0.00034671	0.00034469	0.00000202	0.00957537	0.00063725	0.00063583	0.00000142
597239.00	2356326.00	0.00224921	0.00012766	0.00012656	0.0000011	0.00348084	0.00017753	0.00017668	0.00000085
593716.19	2356065.50	0.01081424	0.0019081	0.00190749	0.00000061	0.03030923	0.00887557	0.0088754	0.00000017
593962.44	2356022.00	0.00919926	0.00151276	0.00151226	0.0000005	0.02287024	0.00558155	0.00558138	0.00000017
595193.44	2355805.00	0.00473862	0.0006075	0.00060723	0.00000026	0.00847284	0.00125528	0.00125509	0.00000019
590739.00	2358924.00	0.00296936	0.00315455	0.00315419	0.00000036	0.00426162	0.00355858	0.00355844	0.00000014
591469.44	2358440.25	0.00519215	0.00527413	0.00527323	0.0000009	0.00658115	0.00599268	0.00599226	0.00000042
591383.94	2358675.25	0.00446043	0.00441169	0.00441087	0.00000082	0.0056828	0.00496171	0.0049613	0.00000041
593538.06	2357076.00	0.00713143	0.00088969	0.00088868	0.00000101	0.01660906	0.00281392	0.00281348	0.00000044
589160.81	2364783.25	0.00083804	0.0006253	0.00062504	0.00000026	0.00118291	0.00069468	0.00069447	0.00000021
592239.00	2357726.00	0.00581091	0.00419876	0.0041984	0.00000035	0.015702	0.01422386	0.01422279	0.00000107
592482.13	2357704.75	0.00575866	0.00377614	0.00377597	0.00000017	0.01299881	0.0093587	0.00935813	0.00000058
592717.81	2357641.50	0.00689427	0.00443261	0.00443248	0.00000013	0.01138287	0.00698393	0.00698366	0.00000027
593203.19	2357475.00	0.00602781	0.00250773	0.00250761	0.00000013	0.01359359	0.0076597	0.00765955	0.00000015
593388.06	2357290.25	0.00657037	0.00141987	0.00141971	0.00000017	0.01490536	0.00521538	0.0052152	0.00000017
593971.06	2357326.00	0.00497878	0.00057989	0.00057917	0.00000072	0.00996109	0.00137471	0.0013743	0.00000042
593554.56	2356804.75	0.0076267	0.00081699	0.00081193	0.00000507	0.02021695	0.00227992	0.0022761	0.00000382
593519.25	2356551.75	0.008957	0.0008809	0.00087262	0.00000828	0.02600046	0.00252202	0.00251452	0.00000749
593617.75	2356569.00	0.00829162	0.0008082	0.00080046	0.00000773	0.02313111	0.00220107	0.00219426	0.00000681
593716.19	2356586.50	0.00769511	0.00074131	0.00073406	0.00000726	0.02061435	0.00192055	0.00191431	0.00000625
594454.81	2356716.75	0.00467902	0.00040495	0.0004	0.00000495	0.01005588	0.00077791	0.00077406	0.00000385
601102.25	2357888.75	0.00081143	0.0000544	0.00005307	0.00000133	0.00131577	0.00006689	0.00006595	0.00000094
593739.00	2356326.00	0.0095433	0.00091071	0.00090695	0.00000376	0.0268952	0.00293732	0.00293526	0.00000206
593989.00	2356326.00	0.00822531	0.0007287	0.00072549	0.00000321	0.02099689	0.00197237	0.00197047	0.0000019
594489.00	2356326.00	0.00625894	0.00048744	0.00048496	0.00000248	0.01362876	0.0010407	0.00103908	0.00000162
595239.00	2356326.00	0.00440857	0.00029841	0.00029656	0.00000185	0.00822274	0.00051924	0.00051789	0.00000134
596239.00	2356326.00	0.00303196	0.00018265	0.00018127	0.00000138	0.00501599	0.00027428	0.00027322	0.00000106
591298.44	2358910.25	0.00390245	0.00375396	0.00375321	0.00000075	0.0050092	0.00419175	0.00419134	0.00000041
591935.13	2358049.50	0.00605404	0.00514786	0.0051472	0.00000066	0.01075	0.01012467	0.01012379	0.00000088
591891.69	2358295.50	0.00506707	0.00415364	0.00415307	0.00000058	0.00894615	0.0078957	0.00789489	0.00000081
591848.31	2358541.75	0.00431572	0.00340568	0.00340517	0.00000051	0.00754579	0.00627809	0.00627736	0.00000073
592989.00	2357625.00	0.00598953	0.00369596	0.00369585	0.00000012	0.01429113	0.00739922	0.00739907	0.00000015
592239.00	2357826.00	0.00533247	0.00381324	0.00381292	0.00000033	0.01401042	0.01211013	0.01210917	0.00000096
592499.50	2357803.25	0.00534255	0.00343788	0.00343772	0.00000016	0.01136763	0.00776047	0.00775999	0.00000049
594701.00	2356760.00	0.0040579	0.00033952	0.00033504	0.00000448	0.00837778	0.00061069	0.00060728	0.00000342
598147.88	2357368.00	0.00128924	0.00008664	0.0000847	0.00000195	0.00220443	0.00011376	0.00011238	0.00000138
600117.44	2357715.25	0.00092297	0.00006139	0.0000599	0.00000149	0.00151538	0.00007659	0.00007554	0.00000105

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
595739.00	2356326.00	0.00361029	0.00022766	0.00022608	0.00000158	0.00627951	0.00036231	0.00036111	0.0000012
591212.94	2359145.00	0.00344452	0.00323243	0.00323173	0.00000069	0.00444253	0.00359535	0.00359495	0.0000004
590699.94	2360554.50	0.00196266	0.00163786	0.00163737	0.00000049	0.00259762	0.00180938	0.00180904	0.00000033
591631.25	2359772.75	0.00236329	0.00156621	0.00156589	0.00000033	0.00389615	0.00253984	0.00253938	0.00000046
593579.56	2357451.00	0.0054994	0.00113136	0.00113122	0.00000014	0.01170918	0.00349946	0.00349931	0.00000015
594187.56	2357451.00	0.00425002	0.00047919	0.00047857	0.00000063	0.00809629	0.00103088	0.00103048	0.00000041
599132.63	2357541.50	0.00107573	0.00007154	0.00006985	0.00000168	0.00179789	0.00009128	0.00009009	0.00000119
591041.94	2359615.00	0.00277422	0.00248442	0.00248381	0.00000061	0.00361141	0.00275004	0.00274967	0.00000038
592752.00	2357735.50	0.00637707	0.00403576	0.00403565	0.00000012	0.01039481	0.00607429	0.00607406	0.00000023
591804.88	2358788.00	0.00374266	0.00283911	0.00283865	0.00000046	0.00645821	0.00508274	0.00508208	0.00000066
592239.00	2358076.00	0.00437137	0.00303315	0.00303288	0.00000028	0.01076794	0.0082937	0.00829296	0.00000073
601635.94	2359746.25	0.00066683	0.00004887	0.00004816	0.00000071	0.00111366	0.00005929	0.00005875	0.00000054
595193.44	2356847.00	0.00318562	0.00025339	0.00024963	0.00000377	0.00622602	0.00041487	0.00041208	0.00000279
595685.81	2356933.75	0.0025685	0.00019389	0.00019063	0.00000325	0.00484236	0.0002959	0.00029354	0.00000237
596670.63	2357107.50	0.00183908	0.00012976	0.0001272	0.00000256	0.00330405	0.00018204	0.0001802	0.00000183
597163.06	2357194.25	0.00160619	0.00011073	0.00010841	0.00000232	0.00283274	0.00015106	0.00014941	0.00000165
590870.94	2360084.75	0.00230959	0.0019857	0.00198516	0.00000054	0.00302517	0.00219205	0.00219169	0.00000035
594588.25	2357181.00	0.00362555	0.00034693	0.00034409	0.00000284	0.00726789	0.00063272	0.00063055	0.00000217
592239.00	2358326.00	0.00366576	0.00245972	0.00245948	0.00000024	0.00858132	0.00591291	0.00591234	0.00000057
592542.88	2358049.50	0.00450467	0.00275132	0.00275119	0.00000013	0.00855766	0.00518975	0.00518941	0.00000034
593114.00	2357841.50	0.00487433	0.00293448	0.00293438	0.0000001	0.01148118	0.00560812	0.00560799	0.00000012
593239.00	2358058.00	0.00406576	0.00237886	0.00237877	0.00000009	0.0093497	0.00433574	0.00433564	0.00000011
593363.88	2357666.50	0.00501955	0.00198463	0.00198452	0.00000011	0.01035587	0.00530435	0.00530422	0.00000013
594404.06	2357576.00	0.00368143	0.00040305	0.0004025	0.00000055	0.00676698	0.00080305	0.00080265	0.00000039
596178.25	2357020.50	0.00214407	0.00015558	0.00015272	0.00000286	0.00393524	0.00022605	0.00022399	0.00000206
592837.56	2357970.50	0.00533751	0.00323201	0.00323191	0.0000001	0.00867146	0.00450641	0.00450624	0.00000017
592923.06	2358205.50	0.00456996	0.00263599	0.0026359	0.00000009	0.0075059	0.00349398	0.00349385	0.00000013
593364.00	2358274.50	0.00344693	0.00195557	0.00195549	0.00000008	0.00769135	0.00340623	0.00340614	0.0000001
593524.56	2357858.00	0.00425314	0.00160127	0.00160117	0.0000001	0.00825482	0.0038354	0.00383529	0.00000011
593771.06	2357611.50	0.00464487	0.00091221	0.00091209	0.00000012	0.00939009	0.00247831	0.00247818	0.00000013
593962.63	2357772.25	0.00396623	0.00074174	0.00074163	0.00000011	0.00763564	0.00181438	0.00181426	0.00000012
600899.25	2361326.00	0.00064409	0.00005277	0.00005265	0.00000011	0.00107137	0.00006535	0.00006524	0.00000011
599756.56	2359062.25	0.00083647	0.0000606	0.00005971	0.00000089	0.0014253	0.00007588	0.0000752	0.00000068
600696.25	2359404.25	0.00074006	0.00005369	0.0000529	0.00000079	0.00124647	0.00006601	0.00006541	0.0000006
591761.50	2359034.25	0.0032728	0.00240084	0.00240042	0.00000042	0.00558195	0.00418418	0.00418358	0.0000006
592239.00	2358576.00	0.00313475	0.00202786	0.00202765	0.00000021	0.00706424	0.00438239	0.00438194	0.00000046
592586.31	2358295.50	0.00386379	0.00223535	0.00223524	0.00000012	0.00679011	0.00369996	0.0036997	0.00000026
594823.13	2357266.50	0.00316579	0.00029346	0.00029088	0.00000258	0.0061996	0.00050621	0.00050422	0.00000199
592239.00	2359826.00	0.00171237	0.00093329	0.00093317	0.00000013	0.00356291	0.0014642	0.00146399	0.00000021
593685.25	2358049.50	0.0036492	0.00130878	0.0013087	0.00000009	0.00672241	0.00286139	0.00286129	0.0000001
591718.06	2359280.50	0.00290729	0.00205985	0.00205947	0.00000038	0.00489976	0.0034974	0.00349685	0.00000055
592239.00	2358826.00	0.00272072	0.00169922	0.00169903	0.00000019	0.0059665	0.00336386	0.00336349	0.00000038
593008.56	2358440.25	0.00391962	0.00217296	0.00217288	0.00000008	0.00657609	0.00278318	0.00278307	0.00000011
594620.56	2357701.00	0.00320791	0.00033783	0.00033733	0.0000005	0.00573795	0.00063095	0.00063057	0.00000038
594837.06	2357826.00	0.00284855	0.00029297	0.00029252	0.00000045	0.00500368	0.00052076	0.00052038	0.00000038
595058.06	2357352.00	0.0027975	0.00025149	0.00024913	0.00000237	0.00538322	0.00041398	0.00041214	0.00000184
595527.94	2357523.00	0.00225871	0.00019258	0.00019055	0.00000203	0.00424036	0.00029533	0.00029376	0.00000158
595997.75	2357694.00	0.00189156	0.00015485	0.00015307	0.00000178	0.00349019	0.00022616	0.00022479	0.00000137
598816.88	2358720.25	0.00096423	0.00007008	0.00006907	0.00000102	0.00166408	0.00008956	0.00008879	0.00000077
590186.88	2361964.25	0.00134872	0.00105542	0.00105505	0.00000038	0.00183252	0.00116859	0.00116831	0.00000028
592629.69	2358541.75	0.00332494	0.00184058	0.00184048	0.0000001	0.00559495	0.00278722	0.00278702	0.0000002
593846.00	2358241.00	0.00319591	0.001096	0.00109592	0.00000008	0.00568907	0.00223011	0.00223001	0.00000009
594154.13	2357933.00	0.00343733	0.00061685	0.00061675	0.0000001	0.00638435	0.00139356	0.00139346	0.00000011
594345.63	2358093.75	0.00301555	0.00052204	0.00052195	0.00000009	0.00544732	0.00110741	0.00110731	0.0000001
600033.25	2360826.00	0.00071781	0.00005823	0.00005811	0.00000013	0.00119158	0.00007324	0.00007312	0.00000012
596467.63	2357865.00	0.00162539	0.00012867	0.00012709	0.00000158	0.00295709	0.00018128	0.00018006	0.00000122
596937.44	2358036.00	0.00142315	0.00010941	0.00010799	0.00000142	0.00255658	0.00014973	0.00014865	0.00000109
597877.19	2358378.00	0.00114724	0.00008503	0.00008384	0.00000119	0.00201523	0.00011181	0.00011091	0.0000009
594537.13	2358254.25	0.0026763	0.00044886	0.00044877	0.00000008	0.00472868	0.00090416	0.00090407	0.00000009
593094.06	2358675.25	0.00344391	0.00183382	0.00183375	0.00000007	0.00591379	0.00230826	0.00230817	0.00000009
593489.00	2358491.00	0.00297611	0.00163867	0.00163859	0.00000007	0.00647019	0.00274722	0.00274714	0.00000009
594006.69	2358432.50	0.00281799	0.00092715	0.00092707	0.00000007	0.00487612	0.00177876	0.00177868	0.00000009
595703.13	2358326.00	0.00190297	0.00017571	0.00017538	0.00000033	0.0032141	0.00027137	0.00027106	0.0000003
596569.13	2358826.00	0.00141778	0.00012247	0.00012222	0.00000025	0.00236441	0.00017525	0.00017502	0.00000024
599167.19	2360326.00	0.00081346	0.00006575	0.0000656	0.00000015	0.00134847	0.00008433	0.00008419	0.00000014
596136.13	2358576.00	0.00162758	0.00014517	0.00014489	0.00000028	0.00272851	0.00021498	0.00021471	0.00000027
592239.00	2359076.00	0.0023985	0.00144517	0.001445	0.00000017	0.00514233	0.00265486	0.00265454	0.00000032
592673.13	2358788.00	0.00293079	0.00155673	0.00155664	0.00000009	0.00482784	0.00222336	0.00222319	0.00000017
594920.19	2358575.75	0.00214806	0.0003379	0.00033783	0.00000007	0.00367447	0.00062852	0.00062844	0.00000008
595270.06	2358076.00	0.00229185	0.00022263	0.00022225	0.00000038	0.00392572	0.00036497	0.00036461	0.00000036

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598301.19	2359826.00	0.00094556	0.00007722	0.00007705	0.00000017	0.00156971	0.00010178	0.00010162	0.00000016
597435.13	2359326.00	0.00113525	0.00009506	0.00009485	0.00000021	0.00188876	0.00013002	0.00012982	0.0000002
592239.00	2359326.00	0.00211797	0.00123243	0.00123228	0.00000015	0.0044801	0.00212992	0.00212965	0.00000027
592716.50	2359034.25	0.00256562	0.00131352	0.00131344	0.00000008	0.00416149	0.00178508	0.00178494	0.00000014
593614.00	2358707.50	0.00261337	0.00139661	0.00139655	0.00000007	0.00554783	0.00226507	0.00226499	0.00000008
594167.38	2358624.25	0.00251823	0.00079842	0.00079836	0.00000007	0.00426468	0.00145855	0.00145847	0.00000008
595686.19	2359218.50	0.001531	0.00022309	0.00022303	0.00000006	0.0025258	0.00037549	0.00037542	0.00000007
591544.44	2360265.25	0.00197998	0.00124134	0.00124105	0.00000028	0.00321483	0.00193431	0.00193392	0.00000039
592846.75	2359772.75	0.00190076	0.0008873	0.00088724	0.00000006	0.00311424	0.00112221	0.00112212	0.00000009
593179.56	2358910.25	0.00308069	0.00157784	0.00157777	0.00000007	0.0053964	0.00196952	0.00196944	0.00000008
593739.00	2358924.00	0.00229395	0.00119425	0.00119419	0.00000006	0.00473837	0.00187784	0.00187777	0.00000007
594810.13	2359390.25	0.00172225	0.0004863	0.00048625	0.00000005	0.00274832	0.00077728	0.00077722	0.00000006
595303.19	2358897.25	0.00179087	0.00026971	0.00026965	0.00000006	0.00299826	0.00047403	0.00047396	0.00000007
596069.25	2359540.00	0.00133472	0.00018971	0.00018966	0.00000005	0.00217889	0.00030824	0.00030818	0.00000006
592759.94	2359280.50	0.00230403	0.00114004	0.00113997	0.00000007	0.00373209	0.00150244	0.00150232	0.00000012
596835.25	2360182.75	0.0010611	0.00014605	0.000146	0.00000004	0.00170811	0.00022428	0.00022423	0.00000005
593265.06	2359145.00	0.00275471	0.00136388	0.00136381	0.00000006	0.00491387	0.00168252	0.00168244	0.00000007
594488.75	2359007.25	0.00204963	0.00060867	0.00060861	0.00000006	0.00334836	0.00102884	0.00102877	0.00000007
590528.88	2361024.50	0.0017046	0.00138647	0.00138603	0.00000044	0.00227591	0.00153252	0.00153221	0.00000032
599899.44	2362754.00	0.00058984	0.00007982	0.00007979	0.00000003	0.00092531	0.00010709	0.00010706	0.00000003
593436.06	2359615.00	0.0022771	0.00106061	0.00106056	0.00000005	0.00418503	0.00129201	0.00129195	0.00000006
593989.00	2359357.00	0.00185432	0.00091683	0.00091678	0.00000005	0.00367012	0.00137276	0.00137269	0.00000006
595131.56	2359773.25	0.00148976	0.00040617	0.00040613	0.00000005	0.00234227	0.00062314	0.00062309	0.00000005
597601.31	2360825.50	0.00088008	0.00011909	0.00011905	0.00000004	0.00140234	0.00017474	0.0001747	0.00000004
598367.38	2361468.25	0.00075416	0.00010143	0.0001014	0.00000003	0.0011929	0.00014367	0.00014363	0.00000004
599133.38	2362111.00	0.00066088	0.00008894	0.00008891	0.00000003	0.00104003	0.00012233	0.0001223	0.00000003
593607.06	2360084.75	0.00195648	0.00086547	0.00086542	0.00000005	0.00364689	0.00105215	0.0010521	0.00000005
591457.56	2360757.75	0.00168868	0.00100803	0.00100778	0.00000025	0.0027156	0.00152332	0.00152299	0.00000033
589844.88	2362903.75	0.0011137	0.00085245	0.00085212	0.00000033	0.00153718	0.00094691	0.00094666	0.00000025
595452.94	2360156.25	0.00130857	0.0003476	0.00034755	0.00000004	0.00203424	0.00051609	0.00051604	0.00000005
592933.56	2360265.25	0.00161689	0.00072013	0.00072008	0.00000005	0.00270423	0.0008891	0.00088903	0.00000007
592239.00	2360326.00	0.00145863	0.00075043	0.00075032	0.00000011	0.00300566	0.00110318	0.00110301	0.00000017
596095.75	2360922.25	0.00104244	0.00026794	0.00026791	0.00000004	0.00159252	0.00037821	0.00037817	0.00000004
597381.31	2362454.25	0.00074896	0.00019007	0.00019004	0.00000003	0.00112552	0.0002524	0.00025237	0.00000003
594239.00	2359790.00	0.00155711	0.00073606	0.00073602	0.00000005	0.00298727	0.00106239	0.00106233	0.00000006
596738.50	2361688.25	0.00086725	0.00022	0.00021997	0.00000003	0.0013163	0.00030009	0.00030006	0.00000003
598024.06	2363220.50	0.00065588	0.00016733	0.0001673	0.00000003	0.00098254	0.00021709	0.00021706	0.00000003
598666.88	2363986.50	0.00058503	0.00015057	0.00015055	0.00000002	0.00087347	0.00019171	0.00019169	0.00000003
588818.81	2365723.00	0.0007418	0.00055442	0.00055417	0.00000024	0.00104438	0.00061253	0.00061234	0.00000019
591370.75	2361250.00	0.00144838	0.00082223	0.00082201	0.00000022	0.00236594	0.00122119	0.00122091	0.00000028
592239.00	2360826.00	0.00124407	0.00060666	0.00060657	0.00000009	0.00258557	0.00084303	0.0008429	0.00000013
594489.00	2360223.00	0.00132613	0.00060486	0.00060482	0.00000004	0.00247602	0.00084722	0.00084717	0.00000005
593020.44	2360757.75	0.00137927	0.00059078	0.00059073	0.00000005	0.00244612	0.00071209	0.00071204	0.00000006
594739.00	2360656.25	0.00115084	0.00050579	0.00050575	0.00000004	0.0022313	0.00069188	0.00069184	0.00000004
590502.50	2366174.00	0.00068447	0.00032229	0.00032218	0.00000011	0.00107429	0.00040439	0.00040427	0.00000012
593778.06	2360554.50	0.00170613	0.00072409	0.00072404	0.00000004	0.00324498	0.00087727	0.00087723	0.00000005
596239.00	2363254.25	0.00118044	0.00027595	0.00027592	0.00000003	0.00255934	0.00034078	0.00034075	0.00000003
597239.00	2364986.25	0.00056878	0.00021495	0.00021492	0.00000002	0.0012139	0.00026126	0.00026124	0.00000002
595239.00	2361522.25	0.0009446	0.00039036	0.00039033	0.00000003	0.0019607	0.00051462	0.00051458	0.00000003
593949.13	2361024.50	0.00152165	0.00062191	0.00062187	0.00000004	0.00306344	0.00075224	0.0007522	0.00000004
592239.00	2361326.00	0.00114265	0.00050505	0.00050496	0.00000008	0.00298724	0.00066913	0.00066902	0.00000011
596739.00	2364120.25	0.00065473	0.00023996	0.00023993	0.00000002	0.00155918	0.00029566	0.00029563	0.00000002
593107.25	2361250.00	0.00122127	0.00050462	0.00050458	0.00000004	0.00248254	0.00059804	0.00059799	0.00000005
591197.13	2362234.75	0.00116989	0.00061403	0.00061385	0.00000018	0.0019539	0.0008687	0.00086848	0.00000022
589502.81	2363843.50	0.00095683	0.00071927	0.00071898	0.00000029	0.00133877	0.00079934	0.00079911	0.00000023
590676.19	2365189.25	0.00261808	0.00035488	0.00035476	0.00000011	0.00172136	0.00044493	0.0004448	0.00000013
594975.19	2363843.50	0.00274724	0.00037347	0.00037345	0.00000002	0.00178381	0.00040033	0.00040031	0.00000002
594291.13	2361964.25	0.00213228	0.00049617	0.00049613	0.00000003	0.00544727	0.00058937	0.00058934	0.00000003
595739.00	2362388.25	0.00091818	0.00031987	0.00031984	0.00000003	0.00255906	0.00040988	0.00040985	0.00000003
593280.88	2362234.75	0.00227834	0.00040696	0.00040692	0.00000003	0.00603385	0.00045367	0.00045364	0.00000003
592239.00	2362326.00	0.00119442	0.00039068	0.00039061	0.00000007	0.0045381	0.00048888	0.0004888	0.00000008
594633.13	2362903.75	0.00323492	0.00042469	0.00042467	0.00000003	0.00301288	0.00047852	0.0004785	0.00000003
595659.19	2365723.00	0.00207357	0.00029624	0.00029622	0.00000002	0.00132609	0.00031516	0.00031514	0.00000002
591023.44	2363219.75	0.00221822	0.00048983	0.00048968	0.00000015	0.00335534	0.00066045	0.00066027	0.00000017
593454.56	2363219.75	0.00351678	0.00034385	0.00034383	0.00000003	0.00155429	0.00035033	0.0003503	0.00000002
590849.81	2364204.50	0.0029695	0.00041063	0.0004105	0.00000013	0.00190555	0.00052807	0.00052793	0.00000015
595317.19	2364783.25	0.00242387	0.00032951	0.00032949	0.00000002	0.00156831	0.00035306	0.00035304	0.00000002
592239.00	2363326.00	0.00283009	0.00031941	0.00031936	0.00000005	0.00135452	0.00036456	0.0003645	0.00000006
593628.19	2364204.50	0.00099421	0.00026206	0.00026203	0.00000002	0.00068032	0.00027293	0.00027291	0.00000002
592239.00	2364326.00	0.00106328	0.0002593	0.00025926	0.00000004	0.00077813	0.00029096	0.00029091	0.00000005

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593975.50	2366174.00	0.00038584	0.00018329	0.00018327	0.00000002	0.00044404	0.00019894	0.00019893	0.00000001
592239.00	2366326.00	0.00097271	0.00020369	0.00020365	0.00000003	0.00064381	0.00022239	0.00022235	0.00000004
593801.81	2365189.25	0.00106749	0.00023726	0.00023724	0.00000002	0.00064016	0.00024169	0.00024168	0.00000002
592239.00	2365326.00	0.00045001	0.00021113	0.0002111	0.00000004	0.00055865	0.00023862	0.00023857	0.00000004
596202.50	2360140.75	0.00119951	0.00021077	0.00021073	0.00000004	0.00189551	0.00032941	0.00032936	0.00000005
596702.50	2360140.75	0.00109108	0.00015513	0.00015508	0.00000004	0.0017535	0.00024014	0.00024009	0.00000005
597202.50	2360140.75	0.00100425	0.00011926	0.00011922	0.00000005	0.00163052	0.00017752	0.00017746	0.00000006
597702.50	2360140.75	0.00094413	0.00009646	0.00009639	0.00000007	0.00154581	0.00013646	0.00013638	0.00000007
598202.50	2360140.75	0.00090174	0.0000817	0.00008161	0.0000001	0.00148713	0.00011038	0.00011028	0.0000001
598702.50	2360140.75	0.0008676	0.00007188	0.00007174	0.00000014	0.00143812	0.00009383	0.0000937	0.00000014
599202.50	2360140.75	0.00083347	0.00006477	0.00006457	0.0000002	0.00138467	0.00008252	0.00008235	0.00000018
599702.50	2360140.75	0.0007978	0.00005963	0.00005936	0.00000027	0.00132729	0.00007472	0.00007449	0.00000023
600202.50	2360140.75	0.00076058	0.00005572	0.00005538	0.00000034	0.00126639	0.00006899	0.00006871	0.00000028
600702.50	2360140.75	0.00072315	0.00005254	0.00005213	0.00000041	0.00120387	0.00006446	0.00006413	0.00000033
596202.50	2360640.75	0.00110346	0.00024112	0.00024108	0.00000004	0.00169651	0.00035534	0.0003553	0.00000004
596702.50	2360640.75	0.00103674	0.0001813	0.00018126	0.00000004	0.0016197	0.00027317	0.00027312	0.00000004
597202.50	2360640.75	0.000956	0.00013861	0.00013857	0.00000004	0.00152223	0.00020773	0.00020768	0.00000004
597702.50	2360640.75	0.00088426	0.00010839	0.00010835	0.00000004	0.00142412	0.00015762	0.00015757	0.00000005
598202.50	2360640.75	0.00083363	0.00008855	0.0000885	0.00000005	0.00135545	0.00012352	0.00012346	0.00000006
598702.50	2360640.75	0.00079982	0.00007572	0.00007565	0.00000007	0.00131283	0.00010148	0.00010141	0.00000007
599202.50	2360640.75	0.00077582	0.00006739	0.00006729	0.0000001	0.00128342	0.00008756	0.00008746	0.0000001
599702.50	2360640.75	0.00075075	0.00006085	0.00006072	0.00000013	0.00124553	0.00007709	0.00007696	0.00000013
600202.50	2360640.75	0.00072614	0.00005622	0.00005604	0.00000018	0.00120633	0.00007	0.00006984	0.00000016
600702.50	2360640.75	0.00069984	0.00005269	0.00005246	0.00000023	0.00116276	0.00006482	0.00006461	0.0000002
596202.50	2361140.75	0.00098576	0.00026076	0.00026072	0.00000004	0.00150607	0.00036201	0.00036197	0.00000004
596702.50	2361140.75	0.00096619	0.00020564	0.0002056	0.00000004	0.00147418	0.00029512	0.00029508	0.00000004
597202.50	2361140.75	0.00091234	0.00015944	0.00015941	0.00000003	0.00141261	0.00023292	0.00023288	0.00000004
597702.50	2361140.75	0.00084448	0.00012377	0.00012373	0.00000003	0.00132954	0.00018026	0.00018022	0.00000004
598202.50	2361140.75	0.00078825	0.00009919	0.00009915	0.00000004	0.00125733	0.0001412	0.00014116	0.00000004
598702.50	2361140.75	0.00074911	0.00008271	0.00008266	0.00000004	0.00121062	0.00011391	0.00011386	0.00000005
599202.50	2361140.75	0.00072105	0.00007134	0.00007129	0.00000005	0.00117877	0.00009492	0.00009486	0.00000006
599702.50	2361140.75	0.00069862	0.00006313	0.00006306	0.00000007	0.00115097	0.00008142	0.00008135	0.00000007
600202.50	2361140.75	0.00068056	0.00005743	0.00005734	0.0000001	0.00112717	0.00007232	0.00007223	0.00000009
600702.50	2361140.75	0.00066461	0.00005362	0.0000535	0.00000013	0.00110495	0.0000665	0.00006638	0.00000012
596202.50	2361640.75	0.00088101	0.00027211	0.00027207	0.00000003	0.00136647	0.00036073	0.0003607	0.00000004
596702.50	2361640.75	0.00087535	0.00022172	0.00022169	0.00000003	0.00133075	0.00030304	0.00030301	0.00000003
597202.50	2361640.75	0.00085902	0.00017971	0.00017968	0.00000003	0.00130321	0.00025225	0.00025221	0.00000004
597702.50	2361640.75	0.00081444	0.00014256	0.00014253	0.00000003	0.00125183	0.000203	0.00020297	0.00000004
598202.50	2361640.75	0.00076181	0.0001139	0.00011387	0.00000003	0.00119058	0.00016184	0.0001618	0.00000004
598702.50	2361640.75	0.00071486	0.00009268	0.00009265	0.00000003	0.00113249	0.00012944	0.0001294	0.00000004
599202.50	2361640.75	0.00068052	0.00007787	0.00007783	0.00000004	0.00109257	0.00010585	0.00010581	0.00000004
599702.50	2361640.75	0.00065603	0.00006752	0.00006748	0.00000004	0.0010665	0.00008908	0.00008903	0.00000004
600202.50	2361640.75	0.00063856	0.00006033	0.00006028	0.00000005	0.00104928	0.00007745	0.0000774	0.00000006
600702.50	2361640.75	0.00062403	0.00005505	0.00005498	0.00000007	0.00103256	0.00006911	0.00006904	0.00000007
596202.50	2362140.75	0.00083198	0.00027379	0.00027375	0.00000003	0.00180801	0.00035256	0.00035253	0.00000003
596702.50	2362140.75	0.00079292	0.0002314	0.00023137	0.00000003	0.00128161	0.00030302	0.00030298	0.00000003
597202.50	2362140.75	0.00079276	0.00019514	0.0001951	0.00000003	0.00119325	0.0002629	0.00026287	0.00000003
597702.50	2362140.75	0.00077208	0.00015961	0.00015958	0.00000003	0.00116535	0.00021975	0.00021972	0.00000003
598202.50	2362140.75	0.00073598	0.00012945	0.00012942	0.00000003	0.0011247	0.00018028	0.00018025	0.00000003
598702.50	2362140.75	0.00069192	0.00010505	0.00010502	0.00000003	0.00107455	0.00014613	0.00014609	0.00000003
599202.50	2362140.75	0.00065487	0.00008741	0.00008738	0.00000003	0.00103141	0.00011993	0.0001199	0.00000003
599702.50	2362140.75	0.00062643	0.00007442	0.00007438	0.00000003	0.00100147	0.00009992	0.00009989	0.00000003
600202.50	2362140.75	0.00060592	0.00006512	0.00006508	0.00000004	0.0009825	0.0000853	0.00008526	0.00000004
600702.50	2362140.75	0.00059028	0.00005832	0.00005827	0.00000004	0.00096816	0.00007458	0.00007453	0.00000005
596202.50	2362640.75	0.00116047	0.00027832	0.0002783	0.00000003	0.00270301	0.00034891	0.00034888	0.00000003
596702.50	2362640.75	0.00076482	0.00023681	0.00023679	0.00000003	0.00166655	0.00030185	0.00030182	0.00000003
597202.50	2362640.75	0.00072656	0.00020533	0.0002053	0.00000003	0.00110017	0.00026689	0.00026686	0.00000003
597702.50	2362640.75	0.00072066	0.00017361	0.00017358	0.00000003	0.0010802	0.00023074	0.00023071	0.00000003
598202.50	2362640.75	0.00070182	0.0001442	0.00014417	0.00000003	0.00105585	0.00019498	0.00019495	0.00000003
598702.50	2362640.75	0.00067206	0.00011916	0.00011913	0.00000003	0.00102257	0.00016261	0.00016258	0.00000003
599202.50	2362640.75	0.0006365	0.00009866	0.00009863	0.00000003	0.00098168	0.00013453	0.0001345	0.00000003
599702.50	2362640.75	0.00060557	0.00008318	0.00008315	0.00000003	0.00094943	0.00011227	0.00011224	0.00000003
600202.50	2362640.75	0.00058	0.00007121	0.00007118	0.00000003	0.00092244	0.00009445	0.00009442	0.00000003
600702.50	2362640.75	0.00056818	0.00006428	0.00006425	0.00000003	0.00092643	0.00008399	0.00008395	0.00000004
596202.50	2363140.75	0.0015423	0.00028131	0.00028128	0.00000003	0.00228653	0.00034247	0.00034244	0.00000003
596702.50	2363140.75	0.00068655	0.00024008	0.00024005	0.00000003	0.00132955	0.00030029	0.00030026	0.00000003
597202.50	2363140.75	0.00066892	0.00021138	0.00021135	0.00000003	0.0010311	0.0002673	0.00026728	0.00000003
597702.50	2363140.75	0.00066723	0.0001832	0.00018317	0.00000003	0.00100452	0.00023595	0.00023592	0.00000003
598202.50	2363140.75	0.00065979	0.00015646	0.00015643	0.00000003	0.00098704	0.00020519	0.00020516	0.00000003
598702.50	2363140.75	0.00064426	0.00013216	0.00013213	0.00000003	0.00096639	0.00017577	0.00017575	0.00000003

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
599202.50	2363140.75	0.00061912	0.00011088	0.00011085	0.00000003	0.00093855	0.00014858	0.00014855	0.00000003
599702.50	2363140.75	0.00058922	0.00009305	0.00009302	0.00000003	0.00090625	0.00012466	0.00012463	0.00000003
600202.50	2363140.75	0.00056858	0.00008086	0.00008083	0.00000003	0.0008938	0.00010746	0.00010743	0.00000003
600702.50	2363140.75	0.00054771	0.00007055	0.00007052	0.00000003	0.00087667	0.00009284	0.00009281	0.00000003
596202.50	2363640.75	0.00085254	0.00027642	0.00027639	0.00000003	0.00240164	0.00034472	0.0003447	0.00000002
596702.50	2363640.75	0.00064716	0.00024168	0.00024165	0.00000003	0.00127526	0.00029946	0.00029943	0.00000003
597202.50	2363640.75	0.00062191	0.00021393	0.0002139	0.00000003	0.00100799	0.0002654	0.00026537	0.00000003
597702.50	2363640.75	0.00062092	0.00018992	0.00018989	0.00000003	0.00094251	0.00023884	0.00023882	0.00000003
598202.50	2363640.75	0.00061908	0.00016633	0.0001663	0.00000003	0.00092534	0.00021251	0.00021248	0.00000003
598702.50	2363640.75	0.00060997	0.00014314	0.00014311	0.00000003	0.00090938	0.00018547	0.00018545	0.00000003
599202.50	2363640.75	0.00059533	0.00012212	0.00012209	0.00000003	0.00089105	0.00016002	0.00016	0.00000003
599702.50	2363640.75	0.00057346	0.00010359	0.00010356	0.00000003	0.00086701	0.00013657	0.00013655	0.00000003
600202.50	2363640.75	0.00055735	0.00009091	0.00009088	0.00000003	0.000863	0.00011968	0.00011965	0.00000003
600702.50	2363640.75	0.00053398	0.00007827	0.00007824	0.00000003	0.00084102	0.00010275	0.00010272	0.00000003
596202.50	2364140.75	0.00102525	0.00027673	0.00027671	0.00000002	0.00258446	0.00034189	0.00034187	0.00000002
596702.50	2364140.75	0.00067676	0.00024219	0.00024217	0.00000002	0.00170567	0.00029839	0.00029837	0.00000002
597202.50	2364140.75	0.00058695	0.00021614	0.00021611	0.00000002	0.00096947	0.00026535	0.00026532	0.00000003
597702.50	2364140.75	0.00057854	0.00019268	0.00019266	0.00000002	0.0009096	0.00023773	0.00023771	0.00000003
598202.50	2364140.75	0.00057655	0.00017173	0.00017171	0.00000002	0.00087362	0.00021451	0.00021448	0.00000003
598702.50	2364140.75	0.00057303	0.00015122	0.00015119	0.00000002	0.00085816	0.00019137	0.00019135	0.00000003
599202.50	2364140.75	0.00056643	0.00013185	0.00013183	0.00000002	0.00084333	0.0001689	0.00016888	0.00000003
599702.50	2364140.75	0.00055447	0.00011411	0.00011408	0.00000002	0.00082768	0.00014752	0.00014749	0.00000003
600202.50	2364140.75	0.00053791	0.00009881	0.00009879	0.00000002	0.00081335	0.00012837	0.00012834	0.00000003
600702.50	2364140.75	0.00052257	0.00008669	0.00008667	0.00000002	0.00080801	0.00011255	0.00011252	0.00000003
596202.50	2364640.75	0.00187937	0.00028315	0.00028313	0.00000002	0.00129577	0.00032339	0.00032337	0.00000002
596702.50	2364640.75	0.00125415	0.00024587	0.00024585	0.00000002	0.00203921	0.00029461	0.00029459	0.00000002
597202.50	2364640.75	0.00057047	0.00021628	0.00021626	0.00000002	0.00110067	0.00026375	0.00026373	0.00000002
597702.50	2364640.75	0.00054805	0.00019431	0.00019429	0.00000002	0.00091867	0.00023673	0.00023671	0.00000002
598202.50	2364640.75	0.00054131	0.0001754	0.00017538	0.00000002	0.00083672	0.00021541	0.00021538	0.00000002
598702.50	2364640.75	0.00054014	0.00015754	0.00015752	0.00000002	0.00081076	0.0001957	0.00019567	0.00000002
599202.50	2364640.75	0.00053654	0.00013972	0.0001397	0.00000002	0.00079817	0.00017544	0.00017541	0.00000002
599702.50	2364640.75	0.00053346	0.00012378	0.00012376	0.00000002	0.0007932	0.00015705	0.00015702	0.00000003
600202.50	2364640.75	0.00051791	0.00010678	0.00010676	0.00000002	0.00077192	0.00013633	0.00013631	0.00000002
600702.50	2364640.75	0.00050331	0.00009321	0.00009318	0.00000002	0.00075882	0.00011949	0.00011947	0.00000002
590370.00	2357440.00	0.00577382	0.00563067	0.00563051	0.00000016	0.00693843	0.00521406	0.00521394	0.00000012
590870.00	2357440.00	0.00771024	0.00873768	0.00873747	0.00000021	0.00932344	0.00816919	0.00816903	0.00000015
591370.00	2357440.00	0.00913372	0.01153783	0.01153749	0.00000035	0.01317522	0.01351251	0.01351232	0.00000019
591870.00	2357440.00	0.0120667	0.01317632	0.01317472	0.00000161	0.0163539	0.01907574	0.01907534	0.00000041
592370.00	2357440.00	0.00699039	0.00486935	0.00486908	0.00000027	0.02148246	0.01965468	0.01965347	0.00000122
592870.00	2357440.00	0.00734169	0.00463633	0.0046362	0.00000014	0.01675911	0.00932125	0.00932106	0.00000019
593370.00	2357440.00	0.00594126	0.00171381	0.00171368	0.00000013	0.01277324	0.00561409	0.00561394	0.00000015
593870.00	2357440.00	0.00489308	0.00069493	0.00069465	0.00000029	0.00984575	0.00180811	0.00180792	0.00000019
594370.00	2357440.00	0.00394313	0.0004082	0.00040725	0.00000095	0.00747783	0.00081132	0.00081066	0.00000066
594870.00	2357440.00	0.00304547	0.00027746	0.00027573	0.00000173	0.00577771	0.00047245	0.00047111	0.00000134
595370.00	2357440.00	0.00241818	0.00020964	0.0002074	0.00000223	0.00458664	0.0003282	0.00032647	0.00000173
595870.00	2357440.00	0.00201843	0.00016753	0.00016509	0.00000244	0.0038049	0.0002483	0.00024647	0.00000183
596370.00	2357440.00	0.00175409	0.00013879	0.00013634	0.00000245	0.00326662	0.00019774	0.00019595	0.0000018
596870.00	2357440.00	0.00156392	0.00011781	0.00011546	0.00000235	0.00286036	0.00016272	0.00016102	0.0000017
597370.00	2357440.00	0.00142357	0.00010269	0.00010049	0.00000221	0.00254669	0.00013853	0.00013695	0.00000158
597870.00	2357440.00	0.00131652	0.00009171	0.00008967	0.00000204	0.00230047	0.00012154	0.00012008	0.00000145
598370.00	2357440.00	0.00122409	0.00008269	0.00008081	0.00000189	0.00208999	0.00010788	0.00010654	0.00000133
598870.00	2357440.00	0.0011418	0.00007526	0.00007352	0.00000174	0.0019123	0.00009712	0.00009589	0.00000123
599370.00	2357440.00	0.00107057	0.00006909	0.00006749	0.0000016	0.00175183	0.00008766	0.00008653	0.00000113
599870.00	2357440.00	0.00100886	0.00006431	0.00006283	0.00000148	0.00162199	0.00008075	0.0000797	0.00000105
600370.00	2357440.00	0.00095196	0.00006019	0.00005882	0.00000137	0.00150889	0.0000751	0.00007413	0.00000097
600870.00	2357440.00	0.00090177	0.00005668	0.00005541	0.00000127	0.00140672	0.00007009	0.00006919	0.0000009
601370.00	2357440.00	0.00085752	0.00005372	0.00005254	0.00000118	0.00131978	0.00006588	0.00006504	0.00000084
601870.00	2357440.00	0.00081592	0.00005109	0.00004999	0.0000011	0.0012395	0.00006219	0.0000614	0.00000079
602370.00	2357440.00	0.00077879	0.00004883	0.0000478	0.00000103	0.0011702	0.00005904	0.0000583	0.00000074
602870.00	2357440.00	0.00074467	0.00004683	0.00004586	0.00000097	0.00110791	0.00005627	0.00005558	0.00000069
603370.00	2357440.00	0.00071321	0.00004504	0.00004414	0.00000091	0.00105186	0.00005382	0.00005317	0.00000065
603870.00	2357440.00	0.00068357	0.00004342	0.00004256	0.00000086	0.00099965	0.0000516	0.00005099	0.00000062
604370.00	2357440.00	0.00065664	0.00004196	0.00004116	0.00000081	0.00095341	0.00004964	0.00004906	0.00000058
604870.00	2357440.00	0.00063162	0.00004065	0.00003988	0.00000077	0.00091105	0.00004787	0.00004732	0.00000055
605370.00	2357440.00	0.00060833	0.00003944	0.00003871	0.00000073	0.00087215	0.00004625	0.00004573	0.00000052
605870.00	2357440.00	0.00058658	0.00003833	0.00003764	0.00000069	0.0008364	0.00004478	0.00004428	0.0000005
606370.00	2357440.00	0.00056626	0.00003731	0.00003665	0.00000066	0.00080344	0.00004342	0.00004294	0.00000047
606870.00	2357440.00	0.00054722	0.00003636	0.00003574	0.00000063	0.00077293	0.00004216	0.00004171	0.00000045
607370.00	2357440.00	0.00052936	0.00003548	0.00003488	0.0000006	0.00074463	0.00004099	0.00004056	0.00000043
607870.00	2357440.00	0.00051257	0.00003466	0.00003408	0.00000058	0.00071833	0.00003991	0.00003949	0.00000041

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2357440.00	0.00049676	0.00003389	0.00003333	0.00000055	0.00069385	0.00003889	0.0000385	0.0000004
608870.00	2357440.00	0.00048185	0.00003316	0.00003263	0.00000053	0.00067099	0.00003795	0.00003757	0.00000038
609370.00	2357440.00	0.00046774	0.00003247	0.00003196	0.00000051	0.00064962	0.00003705	0.00003669	0.00000036
609870.00	2357440.00	0.00045433	0.00003183	0.00003133	0.0000005	0.00062961	0.00003621	0.00003586	0.00000035
610370.00	2357440.00	0.00044174	0.00003121	0.00003073	0.00000048	0.00061082	0.00003542	0.00003508	0.00000034
610870.00	2357440.00	0.00042983	0.00003063	0.00003017	0.00000046	0.00059317	0.00003467	0.00003434	0.00000032
611370.00	2357440.00	0.00041852	0.00003007	0.00002963	0.00000044	0.00057655	0.00003396	0.00003364	0.00000031
611870.00	2357440.00	0.00040777	0.00002954	0.00002911	0.00000043	0.00056089	0.00003328	0.00003298	0.0000003
612370.00	2357440.00	0.00039753	0.00002904	0.00002862	0.00000041	0.0005461	0.00003264	0.00003235	0.00000029
612870.00	2357440.00	0.00038779	0.00002855	0.00002815	0.0000004	0.00053212	0.00003202	0.00003174	0.00000028
613370.00	2357440.00	0.00037851	0.00002809	0.0000277	0.00000039	0.0005189	0.00003144	0.00003117	0.00000027
613870.00	2357440.00	0.00036964	0.00002765	0.00002727	0.00000037	0.00050636	0.00003088	0.00003062	0.00000026
614370.00	2357440.00	0.00036117	0.00002722	0.00002686	0.00000036	0.00049448	0.00003034	0.00003009	0.00000025
614870.00	2357440.00	0.00035307	0.00002681	0.00002646	0.00000035	0.00048319	0.00002983	0.00002958	0.00000025
615370.00	2357440.00	0.00034554	0.00002643	0.00002609	0.00000034	0.00047313	0.00002935	0.00002912	0.00000024
615870.00	2357440.00	0.00033812	0.00002605	0.00002572	0.00000033	0.00046291	0.00002888	0.00002865	0.00000023
616370.00	2357440.00	0.0003308	0.00002567	0.00002535	0.00000032	0.00045265	0.00002842	0.00002819	0.00000022
616870.00	2357440.00	0.00032395	0.00002532	0.00002501	0.00000031	0.00044329	0.00002798	0.00002776	0.00000022
617370.00	2357440.00	0.0003174	0.00002498	0.00002468	0.0000003	0.00043445	0.00002756	0.00002735	0.00000021
617870.00	2357440.00	0.00031176	0.00002469	0.0000244	0.00000029	0.00042793	0.00002719	0.00002698	0.00000021
618370.00	2357440.00	0.00030606	0.00002438	0.00002409	0.00000029	0.00042012	0.00002676	0.00002656	0.0000002
618870.00	2357440.00	0.00029914	0.00002385	0.00002358	0.00000028	0.00040957	0.00002609	0.0000259	0.00000019
619370.00	2357440.00	0.00029012	0.00002206	0.00002181	0.00000025	0.00043359	0.00002394	0.00002377	0.00000017
619870.00	2357440.00	0.00028421	0.00002193	0.00002168	0.00000025	0.00041274	0.00002377	0.0000236	0.00000017
590370.00	2357940.00	0.00474038	0.0052055	0.00520535	0.00000015	0.00605969	0.00495857	0.00495845	0.00000012
590870.00	2357940.00	0.0052823	0.00644169	0.00644149	0.00000019	0.00751365	0.00698055	0.00698041	0.00000014
591370.00	2357940.00	0.00637568	0.00741767	0.00741695	0.00000072	0.00860588	0.00893056	0.00893036	0.00000019
591870.00	2357940.00	0.00713278	0.00663164	0.00663076	0.00000088	0.01103355	0.01094799	0.01094722	0.00000077
592370.00	2357940.00	0.00454729	0.00306167	0.00306146	0.00000021	0.01127891	0.00815996	0.00815934	0.00000062
592870.00	2357940.00	0.00535784	0.00330723	0.00330713	0.0000001	0.00919293	0.00467858	0.00467842	0.00000016
593370.00	2357940.00	0.00414363	0.0020495	0.00204941	0.00000009	0.00864484	0.00441463	0.00441452	0.00000011
593870.00	2357940.00	0.0037639	0.0009432	0.00094311	0.00000009	0.0070203	0.00220772	0.00220761	0.00000011
594370.00	2357940.00	0.00316102	0.00047004	0.00046992	0.00000012	0.00573313	0.0009964	0.00099628	0.00000012
594870.00	2357940.00	0.00269068	0.00028938	0.00028907	0.00000031	0.00467109	0.00051692	0.00051664	0.00000028
595370.00	2357940.00	0.00231719	0.00020798	0.00020731	0.00000066	0.00404613	0.00033028	0.00032969	0.00000059
595870.00	2357940.00	0.0019615	0.00016144	0.00016039	0.00000105	0.0034922	0.00023909	0.00023822	0.00000087
596370.00	2357940.00	0.00167021	0.00013246	0.00013109	0.00000137	0.00301205	0.00018783	0.00018676	0.00000107
596870.00	2357940.00	0.00145392	0.00011262	0.00011105	0.00000158	0.00263106	0.00015486	0.00015366	0.0000012
597370.00	2357940.00	0.00130035	0.00009871	0.00009702	0.00000169	0.00234338	0.00013271	0.00013145	0.00000125
597870.00	2357940.00	0.0011833	0.00008765	0.00008593	0.00000172	0.00211073	0.00011553	0.00011428	0.00000126
598370.00	2357940.00	0.0010948	0.00007939	0.00007768	0.00000171	0.00192809	0.00010306	0.00010183	0.00000123
598870.00	2357940.00	0.00102216	0.00007265	0.00007099	0.00000166	0.0017739	0.00009305	0.00009186	0.00000119
599370.00	2357940.00	0.00096029	0.00006703	0.00006543	0.0000016	0.00164039	0.00008478	0.00008365	0.00000114
599870.00	2357940.00	0.00090786	0.0000625	0.00006098	0.00000152	0.00152738	0.00007822	0.00007714	0.00000108
600370.00	2357940.00	0.00086189	0.00005869	0.00005724	0.00000145	0.00142866	0.00007275	0.00007172	0.00000102
600870.00	2357940.00	0.00082295	0.00005568	0.00005431	0.00000137	0.00134557	0.0000685	0.00006753	0.00000097
601370.00	2357940.00	0.00078573	0.00005282	0.00005153	0.0000013	0.0012693	0.00006467	0.00006375	0.00000092
601870.00	2357940.00	0.00075145	0.00005022	0.000049	0.00000122	0.00119444	0.00006078	0.00005991	0.00000087
602370.00	2357940.00	0.0007185	0.00004806	0.0000469	0.00000116	0.0011293	0.00005803	0.00005721	0.00000082
602870.00	2357940.00	0.00069012	0.00004612	0.00004503	0.00000109	0.00107233	0.00005535	0.00005458	0.00000078
603370.00	2357940.00	0.00066342	0.00004438	0.00004334	0.00000104	0.00101976	0.00005296	0.00005222	0.00000074
603870.00	2357940.00	0.00063923	0.00004284	0.00004186	0.00000098	0.0009734	0.00005086	0.00005016	0.0000007
604370.00	2357940.00	0.00061661	0.00004144	0.00004051	0.00000093	0.00093086	0.00004897	0.00004831	0.00000066
604870.00	2357940.00	0.00059507	0.00004015	0.00003927	0.00000088	0.00089064	0.00004724	0.00004661	0.00000063
605370.00	2357940.00	0.00057462	0.00003896	0.00003812	0.00000084	0.000853	0.00004565	0.00004504	0.0000006
605870.00	2357940.00	0.00055583	0.00003789	0.00003709	0.0000008	0.00081931	0.00004421	0.00004364	0.00000057
606370.00	2357940.00	0.00053801	0.00003689	0.00003613	0.00000076	0.00078779	0.00004288	0.00004234	0.00000055
606870.00	2357940.00	0.00052128	0.00003597	0.00003524	0.00000073	0.00075867	0.00004166	0.00004114	0.00000052
607370.00	2357940.00	0.00050548	0.00003511	0.00003441	0.0000007	0.00073158	0.00004053	0.00004003	0.0000005
607870.00	2357940.00	0.00049054	0.0000343	0.00003364	0.00000067	0.00070633	0.00003947	0.00003899	0.00000048
608370.00	2357940.00	0.00047639	0.00003355	0.00003291	0.00000064	0.00068276	0.00003848	0.00003802	0.00000046
608870.00	2357940.00	0.00046298	0.00003284	0.00003223	0.00000062	0.00066071	0.00003755	0.00003712	0.00000044
609370.00	2357940.00	0.00045022	0.00003217	0.00003158	0.00000059	0.00064005	0.00003668	0.00003626	0.00000042
609870.00	2357940.00	0.000438	0.00003154	0.00003097	0.00000057	0.00062066	0.00003586	0.00003546	0.00000041
610370.00	2357940.00	0.00042657	0.00003094	0.00003039	0.00000055	0.00060243	0.00003509	0.0000347	0.00000039
610870.00	2357940.00	0.00041599	0.00003039	0.00002986	0.00000053	0.00058605	0.00003438	0.000034	0.00000038
611370.00	2357940.00	0.00040561	0.00002984	0.00002933	0.00000051	0.00056986	0.00003368	0.00003332	0.00000036
611870.00	2357940.00	0.00039571	0.00002933	0.00002883	0.00000049	0.00055458	0.00003302	0.00003267	0.00000035
612370.00	2357940.00	0.00038597	0.00002882	0.00002834	0.00000048	0.00053942	0.00003237	0.00003203	0.00000034
612870.00	2357940.00	0.00037695	0.00002834	0.00002788	0.00000046	0.00052577	0.00003177	0.00003145	0.00000033

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2357940.00	0.00036832	0.00002789	0.00002745	0.00000044	0.00051284	0.0000312	0.00003088	0.00000031
613870.00	2357940.00	0.00036006	0.00002746	0.00002703	0.00000043	0.00050058	0.00003065	0.00003035	0.0000003
614370.00	2357940.00	0.00035214	0.00002704	0.00002662	0.00000042	0.00048895	0.00003013	0.00002983	0.00000029
614870.00	2357940.00	0.00034454	0.00002664	0.00002623	0.0000004	0.00047789	0.00002962	0.00002934	0.00000028
615370.00	2357940.00	0.00033726	0.00002625	0.00002586	0.00000039	0.00046739	0.00002914	0.00002887	0.00000028
615870.00	2357940.00	0.00033028	0.00002588	0.0000255	0.00000038	0.00045738	0.00002868	0.00002841	0.00000027
616370.00	2357940.00	0.00032358	0.00002552	0.00002515	0.00000037	0.00044785	0.00002823	0.00002797	0.00000026
616870.00	2357940.00	0.00031751	0.0000252	0.00002484	0.00000036	0.00043983	0.00002783	0.00002758	0.00000025
617370.00	2357940.00	0.00031147	0.00002487	0.00002453	0.00000035	0.00043164	0.00002743	0.00002718	0.00000024
617870.00	2357940.00	0.00030528	0.00002454	0.0000242	0.00000034	0.00042257	0.00002701	0.00002678	0.00000024
618370.00	2357940.00	0.00029967	0.00002423	0.0000239	0.00000033	0.00041506	0.00002664	0.00002641	0.00000023
618870.00	2357940.00	0.0002921	0.00002344	0.00002313	0.00000031	0.00040281	0.00002559	0.00002537	0.00000022
619370.00	2357940.00	0.00028553	0.00002186	0.00002157	0.00000029	0.00044527	0.0000237	0.0000235	0.0000002
619870.00	2357940.00	0.00029899	0.00002128	0.000021	0.00000028	0.00056313	0.00002298	0.0000228	0.00000019
590370.00	2358440.00	0.00346926	0.0040158	0.00401567	0.00000014	0.00504928	0.0042382	0.00423808	0.00000011
590870.00	2358440.00	0.00377328	0.00429777	0.00429747	0.0000003	0.00554649	0.00510564	0.00510551	0.00000013
591370.00	2358440.00	0.00500572	0.00525446	0.0052536	0.00000086	0.0062942	0.00574857	0.00574825	0.00000033
591870.00	2358440.00	0.00459597	0.00366866	0.00366813	0.00000053	0.0080998	0.00688495	0.00688419	0.00000076
592370.00	2358440.00	0.00324095	0.00205502	0.00205485	0.00000017	0.00722172	0.0042345	0.00423412	0.00000039
592870.00	2358440.00	0.00404149	0.00214566	0.00214558	0.00000008	0.00593904	0.00275102	0.00275088	0.00000013
593370.00	2358440.00	0.00320831	0.001849	0.00184892	0.00000008	0.00723349	0.00297516	0.00297507	0.00000009
593870.00	2358440.00	0.00285327	0.00109902	0.00109895	0.00000007	0.0050476	0.00206824	0.00206815	0.00000009
594370.00	2358440.00	0.00265232	0.00059704	0.00059697	0.00000007	0.00459437	0.00117526	0.00117518	0.00000008
594870.00	2358440.00	0.00226538	0.00033839	0.00033831	0.00000008	0.00390306	0.00063661	0.00063651	0.00000009
595370.00	2358440.00	0.00197307	0.00022091	0.00022077	0.00000014	0.00331985	0.00037096	0.00037081	0.00000015
595870.00	2358440.00	0.0017782	0.00016309	0.0001628	0.00000029	0.00299038	0.00024795	0.00024767	0.00000028
596370.00	2358440.00	0.00160848	0.00013239	0.00013188	0.00000051	0.00274369	0.00018991	0.00018945	0.00000046
596870.00	2358440.00	0.00142997	0.00011003	0.00010929	0.00000074	0.00247101	0.00015148	0.00015086	0.00000061
597370.00	2358440.00	0.00127214	0.00009499	0.00009405	0.00000094	0.00221916	0.0001272	0.00012646	0.00000075
597870.00	2358440.00	0.00114896	0.00008521	0.0000841	0.00000111	0.00201154	0.00011218	0.00011133	0.00000085
598370.00	2358440.00	0.00105564	0.00007821	0.00007699	0.00000122	0.00184875	0.0001017	0.00010077	0.00000093
598870.00	2358440.00	0.00096847	0.0000706	0.00006931	0.00000129	0.00168522	0.00009023	0.00008928	0.00000095
599370.00	2358440.00	0.00090383	0.00006528	0.00006396	0.00000132	0.00156074	0.00008242	0.00008145	0.00000096
599870.00	2358440.00	0.00085049	0.0000609	0.00005957	0.00000133	0.00145504	0.00007604	0.00007508	0.00000096
600370.00	2358440.00	0.00080782	0.00005754	0.00005622	0.00000132	0.00136936	0.00007125	0.0000703	0.00000095
600870.00	2358440.00	0.00077097	0.00005477	0.00005347	0.00000129	0.00129807	0.00006755	0.00006663	0.00000092
601370.00	2358440.00	0.00073595	0.00005201	0.00005076	0.00000126	0.00122422	0.00006364	0.00006274	0.00000089
601870.00	2358440.00	0.00070424	0.00004958	0.00004836	0.00000122	0.00115702	0.00006022	0.00005935	0.00000086
602370.00	2358440.00	0.00067541	0.00004743	0.00004626	0.00000117	0.0010964	0.00005722	0.00005639	0.00000083
602870.00	2358440.00	0.00065012	0.00004558	0.00004445	0.00000113	0.00104444	0.00005465	0.00005385	0.0000008
603370.00	2358440.00	0.00062861	0.00004397	0.00004289	0.00000108	0.00099889	0.00005223	0.00005146	0.00000077
603870.00	2358440.00	0.00060603	0.00004246	0.00004142	0.00000104	0.00095637	0.00005034	0.00004961	0.00000074
604370.00	2358440.00	0.000584	0.00004103	0.00004003	0.00000099	0.0009116	0.00004844	0.00004773	0.00000071
604870.00	2358440.00	0.00056568	0.00003982	0.00003887	0.00000095	0.00087613	0.0000468	0.00004612	0.00000068
605370.00	2358440.00	0.00054637	0.00003862	0.00003771	0.00000091	0.00083791	0.0000452	0.00004455	0.00000065
605870.00	2358440.00	0.00052921	0.00003756	0.00003668	0.00000087	0.00080512	0.00004378	0.00004316	0.00000062
606370.00	2358440.00	0.00051322	0.00003658	0.00003575	0.00000084	0.00077514	0.00004249	0.00004189	0.0000006
606870.00	2358440.00	0.00049801	0.00003568	0.00003487	0.0000008	0.00074691	0.00004129	0.00004072	0.00000057
607370.00	2358440.00	0.0004837	0.00003483	0.00003406	0.00000077	0.0007208	0.00004018	0.00003963	0.00000055
607870.00	2358440.00	0.00047014	0.00003405	0.00003331	0.00000074	0.00069639	0.00003914	0.00003861	0.00000053
608370.00	2358440.00	0.00045738	0.00003331	0.0000326	0.00000071	0.00067385	0.00003818	0.00003767	0.00000051
608870.00	2358440.00	0.00044503	0.00003261	0.00003193	0.00000068	0.00065215	0.00003726	0.00003677	0.00000049
609370.00	2358440.00	0.00043334	0.00003195	0.0000313	0.00000066	0.00063205	0.00003641	0.00003594	0.00000047
609870.00	2358440.00	0.00042247	0.00003135	0.00003072	0.00000064	0.00061399	0.00003562	0.00003517	0.00000045
610370.00	2358440.00	0.00041172	0.00003075	0.00003013	0.00000061	0.00059553	0.00003485	0.00003441	0.00000044
610870.00	2358440.00	0.00040195	0.0000302	0.00002961	0.00000059	0.00057938	0.00003414	0.00003372	0.00000042
611370.00	2358440.00	0.00039238	0.00002967	0.0000291	0.00000057	0.00056353	0.00003346	0.00003305	0.00000041
611870.00	2358440.00	0.00038296	0.00002914	0.00002859	0.00000055	0.00054781	0.00003279	0.0000324	0.00000039
612370.00	2358440.00	0.00037421	0.00002865	0.00002812	0.00000053	0.00053365	0.00003217	0.00003179	0.00000038
612870.00	2358440.00	0.00036584	0.00002819	0.00002767	0.00000051	0.00052025	0.00003158	0.00003121	0.00000037
613370.00	2358440.00	0.00035782	0.00002774	0.00002725	0.0000005	0.00050755	0.00003102	0.00003066	0.00000035
613870.00	2358440.00	0.00035012	0.00002732	0.00002683	0.00000048	0.0004955	0.00003048	0.00003013	0.00000034
614370.00	2358440.00	0.00034273	0.0000269	0.00002644	0.00000047	0.00048405	0.00002996	0.00002963	0.00000033
614870.00	2358440.00	0.00033567	0.00002651	0.00002606	0.00000045	0.00047336	0.00002947	0.00002915	0.00000032
615370.00	2358440.00	0.00032927	0.00002616	0.00002572	0.00000044	0.00046415	0.00002902	0.00002871	0.00000031
615870.00	2358440.00	0.00032245	0.00002577	0.00002535	0.00000042	0.00045349	0.00002855	0.00002825	0.0000003
616370.00	2358440.00	0.00031604	0.00002541	0.000025	0.00000041	0.00044379	0.0000281	0.00002781	0.00000029
616870.00	2358440.00	0.00031008	0.00002508	0.00002468	0.0000004	0.00043512	0.00002769	0.0000274	0.00000028
617370.00	2358440.00	0.00030427	0.00002475	0.00002436	0.00000039	0.00042653	0.00002728	0.000027	0.00000028
617870.00	2358440.00	0.0002993	0.00002446	0.00002409	0.00000038	0.00042044	0.00002691	0.00002664	0.00000027

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2358440.00	0.000294	0.00002415	0.00002379	0.00000037	0.00041197	0.00002647	0.00002621	0.00000026
618870.00	2358440.00	0.00028538	0.00002324	0.00002288	0.00000035	0.00039802	0.00002534	0.00002509	0.00000025
619370.00	2358440.00	0.00027891	0.00002264	0.0000223	0.00000034	0.00039099	0.00002461	0.00002438	0.00000024
619870.00	2358440.00	0.00027322	0.00002213	0.0000218	0.00000033	0.00038798	0.00002399	0.00002376	0.00000023
590370.00	2358940.00	0.00260161	0.00285199	0.00285182	0.00000017	0.0040175	0.00332957	0.00332947	0.0000001
590870.00	2358940.00	0.00316462	0.00330529	0.00330481	0.00000048	0.0043272	0.00359893	0.00359876	0.00000018
591370.00	2358940.00	0.00388898	0.00361894	0.00361821	0.00000073	0.00509644	0.00424442	0.00424395	0.00000047
591870.00	2358940.00	0.00323685	0.00228289	0.00228253	0.00000036	0.00594222	0.0043238	0.0043232	0.00000059
592370.00	2358940.00	0.00244467	0.00146082	0.00146068	0.00000014	0.00522198	0.00257131	0.00257103	0.00000027
592870.00	2358940.00	0.00301018	0.00146252	0.00146245	0.00000007	0.00438289	0.00184277	0.00184265	0.00000011
593370.00	2358940.00	0.00273999	0.0014895	0.00148944	0.00000007	0.00573757	0.00200369	0.00200362	0.00000008
593870.00	2358940.00	0.00221059	0.00107029	0.00107023	0.00000006	0.00423128	0.00172146	0.00172139	0.00000007
594370.00	2358940.00	0.00213329	0.0006781	0.00067804	0.00000006	0.00351784	0.0011526	0.00115253	0.00000007
594870.00	2358940.00	0.00199223	0.00041169	0.00041163	0.00000006	0.00329901	0.0007317	0.00073163	0.00000007
595370.00	2358940.00	0.00174614	0.00025975	0.00025968	0.00000006	0.00291688	0.0004529	0.00045283	0.00000007
595870.00	2358940.00	0.00155085	0.00018001	0.00017992	0.00000009	0.00257262	0.00029077	0.00029067	0.0000001
596370.00	2358940.00	0.0014235	0.00013671	0.00013655	0.00000015	0.002361	0.00020345	0.00020329	0.00000016
596870.00	2358940.00	0.001332	0.00011397	0.0001137	0.00000027	0.00223578	0.00016148	0.00016121	0.00000027
597370.00	2358940.00	0.00122267	0.00009396	0.00009355	0.00000041	0.00205925	0.00012645	0.00012609	0.00000035
597870.00	2358940.00	0.00112231	0.00008239	0.00008183	0.00000056	0.00190551	0.00010803	0.00010757	0.00000046
598370.00	2358940.00	0.00102942	0.00007438	0.00007368	0.0000007	0.00175703	0.00009588	0.00009533	0.00000055
598870.00	2358940.00	0.00095011	0.0000686	0.00006777	0.00000083	0.00162519	0.0000874	0.00008676	0.00000064
599370.00	2358940.00	0.00088167	0.00006364	0.00006272	0.00000092	0.00150735	0.00008016	0.00007946	0.0000007
599870.00	2358940.00	0.00082575	0.00005973	0.00005874	0.000001	0.00140871	0.00007454	0.0000738	0.00000074
600370.00	2358940.00	0.00078084	0.00005671	0.00005566	0.00000104	0.00132813	0.00007024	0.00006946	0.00000077
600870.00	2358940.00	0.00074161	0.00005387	0.00005279	0.00000107	0.00125447	0.00006618	0.00006539	0.00000079
601370.00	2358940.00	0.00070646	0.00005124	0.00005015	0.00000109	0.00118879	0.00006265	0.00006186	0.00000079
601870.00	2358940.00	0.00067408	0.0000486	0.00004751	0.00000109	0.00112002	0.00005868	0.0000579	0.00000078
602370.00	2358940.00	0.00064902	0.00004691	0.00004583	0.00000108	0.0010713	0.00005636	0.00005558	0.00000077
602870.00	2358940.00	0.00062341	0.00004509	0.00004403	0.00000106	0.00102244	0.00005404	0.00005328	0.00000076
603370.00	2358940.00	0.00060094	0.00004348	0.00004244	0.00000104	0.00097727	0.00005181	0.00005106	0.00000074
603870.00	2358940.00	0.00058016	0.00004201	0.000041	0.00000101	0.00093569	0.0000498	0.00004908	0.00000072
604370.00	2358940.00	0.00056064	0.00004067	0.00003969	0.00000099	0.00089655	0.00004799	0.00004729	0.0000007
604870.00	2358940.00	0.0005426	0.00003946	0.0000385	0.00000096	0.0008606	0.00004635	0.00004567	0.00000068
605370.00	2358940.00	0.00052615	0.00003836	0.00003744	0.00000093	0.00082865	0.00004486	0.0000442	0.00000066
605870.00	2358940.00	0.00050901	0.00003728	0.00003639	0.0000009	0.00079437	0.00004344	0.0000428	0.00000064
606370.00	2358940.00	0.00049358	0.00003631	0.00003544	0.00000087	0.00076439	0.00004214	0.00004152	0.00000062
606870.00	2358940.00	0.00047944	0.00003543	0.00003459	0.00000084	0.00073748	0.00004097	0.00004037	0.0000006
607370.00	2358940.00	0.00046605	0.0000346	0.00003379	0.00000081	0.00071228	0.00003988	0.0000393	0.00000058
607870.00	2358940.00	0.00045373	0.00003385	0.00003307	0.00000078	0.00068966	0.00003889	0.00003833	0.00000056
608370.00	2358940.00	0.00044129	0.00003311	0.00003235	0.00000075	0.00066648	0.00003791	0.00003737	0.00000054
608870.00	2358940.00	0.00042981	0.00003242	0.00003169	0.00000073	0.00064563	0.00003702	0.0000365	0.00000052
609370.00	2358940.00	0.00041883	0.00003178	0.00003107	0.0000007	0.00062601	0.00003618	0.00003568	0.0000005
609870.00	2358940.00	0.00040834	0.00003116	0.00003048	0.00000068	0.00060752	0.00003539	0.0000349	0.00000049
610370.00	2358940.00	0.00039901	0.00003061	0.00002995	0.00000066	0.00059143	0.00003467	0.0000342	0.00000047
610870.00	2358940.00	0.00038911	0.00003003	0.0000294	0.00000064	0.0005736	0.00003393	0.00003348	0.00000046
611370.00	2358940.00	0.00038014	0.00002951	0.00002889	0.00000062	0.00055802	0.00003326	0.00003282	0.00000044
611870.00	2358940.00	0.00037156	0.00002901	0.00002841	0.0000006	0.00054328	0.00003262	0.00003219	0.00000043
612370.00	2358940.00	0.00036335	0.00002853	0.00002795	0.00000058	0.00052932	0.00003201	0.00003159	0.00000041
612870.00	2358940.00	0.00035564	0.00002808	0.00002752	0.00000056	0.0005165	0.00003144	0.00003104	0.0000004
613370.00	2358940.00	0.00034845	0.00002766	0.00002712	0.00000054	0.00050495	0.0000309	0.00003051	0.00000039
613870.00	2358940.00	0.00034068	0.0000272	0.00002668	0.00000053	0.00049159	0.00003034	0.00002996	0.00000038
614370.00	2358940.00	0.0003337	0.0000268	0.00002629	0.00000051	0.00048026	0.00002983	0.00002946	0.00000036
614870.00	2358940.00	0.00032772	0.00002645	0.00002596	0.00000049	0.00047154	0.00002938	0.00002903	0.00000035
615370.00	2358940.00	0.00032163	0.00002608	0.0000256	0.00000048	0.00046179	0.0000289	0.00002856	0.00000034
615870.00	2358940.00	0.00031498	0.0000257	0.00002524	0.00000047	0.00045108	0.00002845	0.00002812	0.00000033
616370.00	2358940.00	0.00030947	0.00002537	0.00002491	0.00000045	0.00044261	0.00002802	0.00002769	0.00000032
616870.00	2358940.00	0.00030293	0.000025	0.00002456	0.00000044	0.00043169	0.00002758	0.00002727	0.00000031
617370.00	2358940.00	0.00029808	0.0000247	0.00002428	0.00000043	0.00042529	0.0000272	0.0000269	0.0000003
617870.00	2358940.00	0.00029156	0.00002417	0.00002375	0.00000041	0.00041342	0.00002648	0.00002618	0.00000029
618370.00	2358940.00	0.00028384	0.00002342	0.00002302	0.0000004	0.00040135	0.00002555	0.00002526	0.00000028
618870.00	2358940.00	0.00027799	0.00002295	0.00002256	0.00000039	0.00039367	0.00002498	0.00002471	0.00000027
619370.00	2358940.00	0.0002714	0.00002219	0.00002182	0.00000037	0.00039427	0.00002406	0.0000238	0.00000026
619870.00	2358940.00	0.00027765	0.00002128	0.00002093	0.00000036	0.00051992	0.00002302	0.00002277	0.00000025
590370.00	2359440.00	0.00220666	0.00223427	0.00223401	0.00000026	0.0033001	0.00252091	0.00252079	0.00000012
590870.00	2359440.00	0.00276175	0.00265401	0.00265345	0.00000057	0.00360269	0.00278882	0.00278856	0.00000026
591370.00	2359440.00	0.00302959	0.0024877	0.00248714	0.00000056	0.00423761	0.00324664	0.00324613	0.00000051
591870.00	2359440.00	0.00245689	0.0015611	0.00156084	0.00000027	0.00454471	0.00280536	0.00280492	0.00000044
592370.00	2359440.00	0.00191466	0.00107861	0.0010785	0.00000012	0.00401844	0.00170383	0.00170362	0.00000021
592870.00	2359440.00	0.0022806	0.00106714	0.00106707	0.00000007	0.00351571	0.00134237	0.00134227	0.0000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2359440.00	0.00243574	0.00115824	0.00115818	0.00000006	0.004423	0.00141518	0.00141512	0.00000007
593870.00	2359440.00	0.00187794	0.00097115	0.00097109	0.00000005	0.00400965	0.00140098	0.00140091	0.00000006
594370.00	2359440.00	0.00172139	0.00069364	0.00069359	0.00000005	0.00291784	0.00105778	0.00105772	0.00000006
594870.00	2359440.00	0.00168832	0.00046804	0.00046799	0.00000005	0.0026883	0.00074535	0.00074529	0.00000006
595370.00	2359440.00	0.00158959	0.0003119	0.00031185	0.00000005	0.00256241	0.00051867	0.00051861	0.00000006
595870.00	2359440.00	0.00141594	0.0002105	0.00021045	0.00000005	0.00231583	0.00034768	0.00034762	0.00000006
596370.00	2359440.00	0.00127401	0.00015198	0.00015191	0.00000006	0.00208951	0.00023793	0.00023786	0.00000007
596870.00	2359440.00	0.00118467	0.000119	0.00011891	0.0000001	0.00195331	0.00017451	0.00017441	0.00000011
597370.00	2359440.00	0.00111374	0.00009731	0.00009716	0.00000015	0.00184413	0.00013458	0.00013442	0.00000015
597870.00	2359440.00	0.00105571	0.00008411	0.00008387	0.00000024	0.00175887	0.00011197	0.00011175	0.00000022
598370.00	2359440.00	0.0009938	0.00007455	0.0000742	0.00000034	0.0016632	0.00009664	0.00009634	0.00000029
598870.00	2359440.00	0.00093117	0.00006781	0.00006736	0.00000045	0.00156411	0.00008643	0.00008606	0.00000037
599370.00	2359440.00	0.00086952	0.00006246	0.00006191	0.00000055	0.00146357	0.00007854	0.0000781	0.00000044
599870.00	2359440.00	0.00081476	0.00005854	0.0000579	0.00000065	0.00137243	0.0000729	0.0000724	0.0000005
600370.00	2359440.00	0.00076653	0.00005531	0.00005458	0.00000073	0.00129083	0.00006829	0.00006774	0.00000056
600870.00	2359440.00	0.00072564	0.00005273	0.00005194	0.00000079	0.00122058	0.00006465	0.00006406	0.0000006
601370.00	2359440.00	0.00068854	0.00005017	0.00004932	0.00000084	0.00115356	0.00006102	0.00006039	0.00000063
601870.00	2359440.00	0.0006577	0.00004826	0.00004738	0.00000088	0.00110111	0.00005856	0.00005791	0.00000065
602370.00	2359440.00	0.0006302	0.0000463	0.0000454	0.0000009	0.00104774	0.00005573	0.00005507	0.00000066
602870.00	2359440.00	0.00060408	0.00004454	0.00004362	0.00000092	0.00099881	0.00005338	0.00005271	0.00000067
603370.00	2359440.00	0.00058185	0.00004298	0.00004206	0.00000092	0.00095604	0.00005122	0.00005055	0.00000067
603870.00	2359440.00	0.0005625	0.00004158	0.00004066	0.00000092	0.00091633	0.00004911	0.00004845	0.00000066
604370.00	2359440.00	0.00054278	0.00004016	0.00003924	0.00000091	0.00087736	0.00004716	0.00004651	0.00000066
604870.00	2359440.00	0.00052636	0.00003912	0.00003822	0.0000009	0.00084579	0.00004577	0.00004513	0.00000065
605370.00	2359440.00	0.00050935	0.00003803	0.00003714	0.00000089	0.00081481	0.00004446	0.00004383	0.00000064
605870.00	2359440.00	0.00049369	0.00003701	0.00003614	0.00000087	0.00078412	0.0000431	0.00004248	0.00000062
606370.00	2359440.00	0.00047853	0.00003604	0.00003519	0.00000085	0.00075429	0.00004181	0.0000412	0.00000061
606870.00	2359440.00	0.00046505	0.00003518	0.00003435	0.00000083	0.00072861	0.00004067	0.00004007	0.0000006
607370.00	2359440.00	0.00045229	0.00003438	0.00003357	0.00000081	0.00070448	0.0000396	0.00003902	0.00000058
607870.00	2359440.00	0.00044056	0.00003364	0.00003285	0.00000079	0.0006828	0.00003863	0.00003806	0.00000057
608370.00	2359440.00	0.00042866	0.00003291	0.00003214	0.00000077	0.0006604	0.00003767	0.00003712	0.00000055
608870.00	2359440.00	0.00041768	0.00003224	0.0000315	0.00000075	0.00064022	0.0000368	0.00003626	0.00000054
609370.00	2359440.00	0.00040754	0.00003163	0.0000309	0.00000073	0.00062225	0.000036	0.00003548	0.00000052
609870.00	2359440.00	0.00039731	0.00003102	0.00003031	0.0000007	0.00060359	0.0000352	0.0000347	0.00000051
610370.00	2359440.00	0.00038805	0.00003046	0.00002977	0.00000068	0.00058697	0.00003448	0.00003399	0.00000049
610870.00	2359440.00	0.00037893	0.00002991	0.00002924	0.00000067	0.00057048	0.00003377	0.00003329	0.00000048
611370.00	2359440.00	0.00037045	0.00002939	0.00002875	0.00000065	0.00055548	0.00003311	0.00003265	0.00000046
611870.00	2359440.00	0.00036224	0.0000289	0.00002827	0.00000063	0.00054094	0.00003248	0.00003203	0.00000045
612370.00	2359440.00	0.00035437	0.00002843	0.00002782	0.00000061	0.00052714	0.00003188	0.00003144	0.00000044
612870.00	2359440.00	0.00034682	0.00002797	0.00002738	0.00000059	0.00051403	0.00003131	0.00003088	0.00000043
613370.00	2359440.00	0.00033933	0.00002753	0.00002695	0.00000058	0.00050085	0.00003074	0.00003033	0.00000041
613870.00	2359440.00	0.00033315	0.00002715	0.00002659	0.00000056	0.0004912	0.00003026	0.00002986	0.0000004
614370.00	2359440.00	0.00032569	0.00002671	0.00002616	0.00000054	0.00047776	0.00002971	0.00002932	0.00000039
614870.00	2359440.00	0.00031933	0.00002632	0.0000258	0.00000053	0.00046716	0.00002923	0.00002885	0.00000038
615370.00	2359440.00	0.00031331	0.00002596	0.00002545	0.00000051	0.00045723	0.00002877	0.00002841	0.00000037
615870.00	2359440.00	0.00030817	0.00002564	0.00002514	0.0000005	0.00044972	0.00002836	0.000028	0.00000036
616370.00	2359440.00	0.00030262	0.00002529	0.00002481	0.00000049	0.00043949	0.00002785	0.0000275	0.00000035
616870.00	2359440.00	0.00029578	0.00002475	0.00002427	0.00000047	0.00042758	0.00002718	0.00002684	0.00000034
617370.00	2359440.00	0.00029162	0.00002463	0.00002417	0.00000046	0.00042289	0.00002711	0.00002678	0.00000033
617870.00	2359440.00	0.00028379	0.00002386	0.00002341	0.00000045	0.0004079	0.00002609	0.00002577	0.00000032
618370.00	2359440.00	0.00027546	0.00002294	0.00002251	0.00000043	0.00039844	0.00002496	0.00002465	0.00000031
618870.00	2359440.00	0.00026971	0.00002232	0.00002191	0.00000042	0.00040078	0.00002422	0.00002392	0.0000003
619370.00	2359440.00	0.00026535	0.0000219	0.0000215	0.00000041	0.00040624	0.00002372	0.00002343	0.00000029
619870.00	2359440.00	0.00026141	0.00002158	0.00002119	0.0000004	0.0004079	0.00002335	0.00002307	0.00000028
590370.00	2359940.00	0.00200196	0.00189486	0.0018945	0.00000036	0.00280324	0.00201469	0.00201454	0.00000016
590870.00	2359940.00	0.00240186	0.00212172	0.00212117	0.00000055	0.0031343	0.00230684	0.0023065	0.00000034
591370.00	2359940.00	0.00241007	0.00175762	0.0017572	0.00000042	0.00354511	0.00247743	0.00247696	0.00000047
591870.00	2359940.00	0.00195138	0.00113	0.0011298	0.00000021	0.003621	0.00190293	0.0019026	0.00000033
592370.00	2359940.00	0.00159605	0.00084873	0.00084862	0.0000001	0.00332015	0.00125139	0.00125122	0.00000017
592870.00	2359940.00	0.00178927	0.0008232	0.00082314	0.00000006	0.00296098	0.00103355	0.00103346	0.00000009
593370.00	2359940.00	0.00213865	0.00091176	0.00091171	0.00000005	0.0035142	0.00107102	0.00107096	0.00000006
593870.00	2359940.00	0.00174496	0.00085977	0.00085972	0.00000005	0.00376687	0.00114505	0.001145	0.00000005
594370.00	2359940.00	0.00145246	0.00066612	0.00066608	0.00000005	0.00269806	0.00095209	0.00095204	0.00000005
594870.00	2359940.00	0.00141906	0.00049336	0.00049332	0.00000005	0.00227909	0.00072024	0.00072019	0.00000005
595370.00	2359940.00	0.00139423	0.00035261	0.00035257	0.00000005	0.00217735	0.0005378	0.00053775	0.00000005
595870.00	2359940.00	0.00131118	0.0002474	0.00024736	0.00000004	0.00207289	0.00039167	0.00039162	0.00000005
596370.00	2359940.00	0.00118926	0.00017744	0.00017739	0.00000004	0.00191413	0.0002806	0.00028055	0.00000005
596870.00	2359940.00	0.00108393	0.00013296	0.00013291	0.00000005	0.0017611	0.00020245	0.00020239	0.00000006
597370.00	2359940.00	0.00100848	0.00010476	0.00010469	0.00000007	0.00164829	0.00015086	0.00015079	0.00000007
597870.00	2359940.00	0.00096063	0.00008783	0.00008773	0.0000001	0.00158337	0.00012031	0.00012021	0.0000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2359940.00	0.00092098	0.00007642	0.00007627	0.00000015	0.00152653	0.00010077	0.00010063	0.00000014
598870.00	2359940.00	0.00088108	0.00006818	0.00006796	0.00000022	0.0014645	0.00008749	0.00008729	0.00000019
599370.00	2359940.00	0.00083995	0.00006237	0.00006208	0.00000029	0.00139875	0.00007863	0.00007839	0.00000025
599870.00	2359940.00	0.00079702	0.00005793	0.00005756	0.00000037	0.00132905	0.0000721	0.0000718	0.00000031
600370.00	2359940.00	0.00075547	0.00005463	0.00005418	0.00000045	0.00126076	0.00006739	0.00006702	0.00000036
600870.00	2359940.00	0.00071557	0.00005175	0.00005123	0.00000052	0.00119354	0.00006331	0.0000629	0.00000041
601370.00	2359940.00	0.00067904	0.00004931	0.00004872	0.00000059	0.00113099	0.00005988	0.00005942	0.00000045
601870.00	2359940.00	0.00064708	0.00004733	0.00004669	0.00000065	0.00107585	0.00005713	0.00005664	0.00000049
602370.00	2359940.00	0.00061738	0.00004536	0.00004467	0.00000069	0.00102258	0.00005438	0.00005386	0.00000052
602870.00	2359940.00	0.00059358	0.00004403	0.0000433	0.00000073	0.0009811	0.00005257	0.00005202	0.00000054
603370.00	2359940.00	0.00057038	0.00004251	0.00004175	0.00000076	0.00093907	0.00005051	0.00004995	0.00000056
603870.00	2359940.00	0.0005492	0.00004114	0.00004036	0.00000078	0.00090167	0.00004875	0.00004818	0.00000057
604370.00	2359940.00	0.00052977	0.00003988	0.00003909	0.00000079	0.00086471	0.00004704	0.00004646	0.00000058
604870.00	2359940.00	0.00051292	0.00003875	0.00003795	0.0000008	0.00083313	0.00004549	0.00004491	0.00000058
605370.00	2359940.00	0.00049729	0.0000377	0.0000369	0.0000008	0.00080114	0.00004392	0.00004334	0.00000058
605870.00	2359940.00	0.0004817	0.00003673	0.00003592	0.0000008	0.00077348	0.00004276	0.00004218	0.00000058
606370.00	2359940.00	0.00046689	0.00003578	0.00003498	0.0000008	0.00074461	0.0000415	0.00004093	0.00000057
606870.00	2359940.00	0.00045351	0.00003492	0.00003414	0.00000079	0.00071909	0.00004036	0.0000398	0.00000057
607370.00	2359940.00	0.00044249	0.00003421	0.00003343	0.00000078	0.00069954	0.00003938	0.00003883	0.00000056
607870.00	2359940.00	0.00043033	0.00003345	0.00003268	0.00000076	0.00067641	0.00003839	0.00003784	0.00000055
608370.00	2359940.00	0.00041885	0.00003273	0.00003198	0.00000075	0.00065485	0.00003746	0.00003692	0.00000054
608870.00	2359940.00	0.00040822	0.00003207	0.00003134	0.00000074	0.00063532	0.00003659	0.00003606	0.00000053
609370.00	2359940.00	0.00039806	0.00003146	0.00003074	0.00000072	0.00061709	0.00003579	0.00003527	0.00000052
609870.00	2359940.00	0.0003883	0.00003086	0.00003015	0.0000007	0.00059923	0.00003501	0.0000345	0.00000051
610370.00	2359940.00	0.00037937	0.00003031	0.00002962	0.00000069	0.00058318	0.0000343	0.0000338	0.0000005
610870.00	2359940.00	0.00037065	0.00002977	0.0000291	0.00000067	0.00056742	0.00003361	0.00003312	0.00000048
611370.00	2359940.00	0.00036236	0.00002927	0.00002861	0.00000066	0.00055258	0.00003296	0.00003248	0.00000047
611870.00	2359940.00	0.00035472	0.0000288	0.00002816	0.00000064	0.00053929	0.00003235	0.00003189	0.00000046
612370.00	2359940.00	0.00034651	0.0000283	0.00002767	0.00000063	0.00052412	0.00003172	0.00003127	0.00000045
612870.00	2359940.00	0.00033956	0.00002787	0.00002726	0.00000061	0.00051227	0.00003118	0.00003074	0.00000044
613370.00	2359940.00	0.00033278	0.00002746	0.00002687	0.00000059	0.0005007	0.00003065	0.00003022	0.00000043
613870.00	2359940.00	0.00032601	0.00002705	0.00002647	0.00000058	0.00048898	0.00003013	0.00002971	0.00000042
614370.00	2359940.00	0.00031944	0.00002665	0.00002608	0.00000057	0.00047766	0.00002963	0.00002922	0.00000041
614870.00	2359940.00	0.00031282	0.00002624	0.00002569	0.00000055	0.00046574	0.00002913	0.00002873	0.0000004
615370.00	2359940.00	0.00030683	0.00002587	0.00002534	0.00000054	0.00045544	0.00002867	0.00002828	0.00000039
615870.00	2359940.00	0.00030152	0.00002554	0.00002502	0.00000052	0.00044685	0.00002825	0.00002787	0.00000038
616370.00	2359940.00	0.00029327	0.0000247	0.00002419	0.00000051	0.00043081	0.00002711	0.00002674	0.00000037
616870.00	2359940.00	0.00028686	0.0000242	0.0000237	0.0000005	0.00042022	0.00002649	0.00002613	0.00000036
617370.00	2359940.00	0.0002821	0.00002393	0.00002345	0.00000048	0.00041246	0.00002617	0.00002582	0.00000035
617870.00	2359940.00	0.00027538	0.00002332	0.00002285	0.00000047	0.00040302	0.00002541	0.00002507	0.00000034
618370.00	2359940.00	0.00027556	0.00002202	0.00002156	0.00000046	0.00050753	0.00002388	0.00002356	0.00000033
618870.00	2359940.00	0.00028103	0.00002165	0.00002121	0.00000045	0.00057972	0.00002344	0.00002313	0.00000032
619370.00	2359940.00	0.00026202	0.00002165	0.00002122	0.00000044	0.00043863	0.00002344	0.00002313	0.00000031
619870.00	2359940.00	0.00025918	0.00002136	0.00002093	0.00000042	0.0004456	0.00002309	0.00002279	0.0000003
590370.00	2360440.00	0.00183484	0.00163973	0.00163931	0.00000042	0.00247302	0.00171761	0.0017174	0.00000021
590870.00	2360440.00	0.00207848	0.00168369	0.0016832	0.00000049	0.00277459	0.00194083	0.00194045	0.00000038
591370.00	2360440.00	0.00196164	0.00129148	0.00129115	0.00000032	0.0029948	0.00188956	0.00188915	0.0000004
591870.00	2360440.00	0.00162834	0.00087641	0.00087624	0.00000017	0.00303555	0.00138418	0.00138393	0.00000025
592370.00	2360440.00	0.00135389	0.00068388	0.00068379	0.00000009	0.00281328	0.00095633	0.0009562	0.00000014
592870.00	2360440.00	0.00145733	0.0006625	0.00066244	0.00000005	0.00257478	0.00082812	0.00082804	0.00000008
593370.00	2360440.00	0.00181834	0.00072974	0.0007297	0.00000005	0.0029158	0.00084443	0.00084438	0.00000005
593870.00	2360440.00	0.00166286	0.00074408	0.00074404	0.00000004	0.0033596	0.00093252	0.00093247	0.00000005
594370.00	2360440.00	0.00129739	0.00061515	0.00061511	0.00000004	0.00278123	0.00084511	0.00084506	0.00000004
594870.00	2360440.00	0.00119569	0.0004832	0.00048316	0.00000004	0.00204122	0.00066792	0.00066788	0.00000004
595370.00	2360440.00	0.00120399	0.00037522	0.00037518	0.00000004	0.0018805	0.00053126	0.00053121	0.00000005
595870.00	2360440.00	0.00117847	0.00027939	0.00027935	0.00000004	0.0018156	0.00041226	0.00041221	0.00000004
596370.00	2360440.00	0.00111912	0.00020754	0.0002075	0.00000004	0.00174658	0.000316	0.00031596	0.00000004
596870.00	2360440.00	0.00103004	0.00015579	0.00015575	0.00000004	0.00163968	0.00023757	0.00023752	0.00000005
597370.00	2360440.00	0.00094672	0.00011962	0.00011958	0.00000004	0.00152579	0.00017747	0.00017742	0.00000005
597870.00	2360440.00	0.00088809	0.00009642	0.00009636	0.00000005	0.00144594	0.00013698	0.00013692	0.00000006
598370.00	2360440.00	0.00084655	0.00008106	0.00008099	0.00000007	0.00138968	0.00011012	0.00011005	0.00000007
598870.00	2360440.00	0.00081553	0.00007075	0.00007065	0.0000001	0.00134696	0.00009266	0.00009256	0.0000001
599370.00	2360440.00	0.00078826	0.00006358	0.00006343	0.00000014	0.00130661	0.00008106	0.00008093	0.00000013
599870.00	2360440.00	0.00076069	0.00005845	0.00005825	0.0000002	0.00126329	0.00007316	0.00007299	0.00000017
600370.00	2360440.00	0.00073176	0.00005474	0.00005448	0.00000025	0.00121642	0.0000677	0.00006748	0.00000022
600870.00	2360440.00	0.0007	0.00005147	0.00005115	0.00000032	0.0011627	0.00006298	0.00006272	0.00000026
601370.00	2360440.00	0.000669	0.00004897	0.00004859	0.00000038	0.00111025	0.00005946	0.00005916	0.0000003
601870.00	2360440.00	0.00063925	0.00004687	0.00004644	0.00000044	0.00105936	0.00005655	0.00005621	0.00000034
602370.00	2360440.00	0.00061173	0.00004513	0.00004464	0.00000049	0.00101207	0.00005414	0.00005376	0.00000038
602870.00	2360440.00	0.00058617	0.00004359	0.00004305	0.00000054	0.00096998	0.0000522	0.00005178	0.00000041

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2360440.00	0.00056244	0.00004207	0.00004149	0.00000058	0.0009278	0.00005011	0.00004967	0.00000044
603870.00	2360440.00	0.00054035	0.00004057	0.00003996	0.00000062	0.00088519	0.00004788	0.00004742	0.00000046
604370.00	2360440.00	0.00052175	0.0000395	0.00003885	0.00000065	0.00085286	0.00004651	0.00004603	0.00000048
604870.00	2360440.00	0.000504	0.00003838	0.00003771	0.00000067	0.00081942	0.00004491	0.00004442	0.00000049
605370.00	2360440.00	0.0004875	0.00003736	0.00003667	0.00000069	0.00079115	0.00004366	0.00004316	0.0000005
605870.00	2360440.00	0.00047186	0.0000364	0.0000357	0.0000007	0.00076168	0.00004238	0.00004187	0.00000051
606370.00	2360440.00	0.00045702	0.00003547	0.00003476	0.00000071	0.00073321	0.00004114	0.00004063	0.00000051
606870.00	2360440.00	0.00044416	0.00003465	0.00003394	0.00000071	0.00070942	0.00004005	0.00003953	0.00000051
607370.00	2360440.00	0.00043391	0.00003396	0.00003325	0.00000071	0.00069072	0.00003904	0.00003853	0.00000051
607870.00	2360440.00	0.00042149	0.00003322	0.00003251	0.00000071	0.00066828	0.00003812	0.00003761	0.00000051
608370.00	2360440.00	0.00041018	0.00003251	0.00003181	0.00000071	0.00064707	0.0000372	0.00003669	0.00000051
608870.00	2360440.00	0.00039992	0.00003187	0.00003117	0.0000007	0.00062847	0.00003636	0.00003585	0.0000005
609370.00	2360440.00	0.00039035	0.00003129	0.00003059	0.00000069	0.00061177	0.00003558	0.00003509	0.0000005
609870.00	2360440.00	0.00038092	0.0000307	0.00003002	0.00000068	0.00059446	0.00003482	0.00003433	0.00000049
610370.00	2360440.00	0.00037262	0.00003018	0.00002951	0.00000067	0.00058	0.00003414	0.00003366	0.00000048
610870.00	2360440.00	0.00036398	0.00002965	0.00002899	0.00000066	0.00056427	0.00003345	0.00003298	0.00000048
611370.00	2360440.00	0.00035581	0.00002914	0.00002849	0.00000065	0.00054957	0.0000328	0.00003234	0.00000047
611870.00	2360440.00	0.00034832	0.00002868	0.00002804	0.00000064	0.00053654	0.00003221	0.00003175	0.00000046
612370.00	2360440.00	0.00034127	0.00002824	0.00002761	0.00000062	0.00052451	0.00003163	0.00003118	0.00000045
612870.00	2360440.00	0.00033188	0.00002742	0.00002681	0.00000061	0.00050502	0.0000305	0.00003006	0.00000044
613370.00	2360440.00	0.00032592	0.00002714	0.00002654	0.0000006	0.00049536	0.00003015	0.00002972	0.00000043
613870.00	2360440.00	0.00032091	0.00002697	0.00002638	0.00000059	0.00048816	0.00002997	0.00002955	0.00000042
614370.00	2360440.00	0.00031353	0.00002654	0.00002596	0.00000058	0.00047529	0.0000295	0.00002908	0.00000042
614870.00	2360440.00	0.00030734	0.00002616	0.00002559	0.00000056	0.00046421	0.00002902	0.00002861	0.00000041
615370.00	2360440.00	0.00030242	0.0000258	0.00002525	0.00000055	0.00045569	0.00002847	0.00002808	0.0000004
615870.00	2360440.00	0.00029388	0.000025	0.00002446	0.00000054	0.00043935	0.00002748	0.00002709	0.00000039
616370.00	2360440.00	0.00028675	0.00002438	0.00002386	0.00000053	0.0004271	0.00002671	0.00002633	0.00000038
616870.00	2360440.00	0.00027962	0.00002371	0.0000232	0.00000051	0.00041784	0.00002588	0.00002551	0.00000037
617370.00	2360440.00	0.00027416	0.00002329	0.00002279	0.0000005	0.0004113	0.00002537	0.00002501	0.00000036
617870.00	2360440.00	0.00027233	0.00002232	0.00002183	0.00000049	0.00048206	0.00002424	0.00002389	0.00000035
618370.00	2360440.00	0.00028318	0.00002186	0.00002138	0.00000048	0.00061097	0.00002368	0.00002334	0.00000035
618870.00	2360440.00	0.00040467	0.00002151	0.00002104	0.00000047	0.00107102	0.00002298	0.00002264	0.00000034
619370.00	2360440.00	0.00029656	0.00002129	0.00002084	0.00000046	0.00073884	0.00002296	0.00002263	0.00000033
619870.00	2360440.00	0.00025792	0.00002125	0.0000208	0.00000045	0.000473	0.00002296	0.00002264	0.00000032
590370.00	2360940.00	0.00167751	0.00141796	0.00141752	0.00000043	0.0022433	0.00151418	0.00151392	0.00000027
590870.00	2360940.00	0.00179124	0.0013363	0.00133589	0.00000041	0.00246046	0.00163271	0.00163233	0.00000038
591370.00	2360940.00	0.00162896	0.00098029	0.00098003	0.00000025	0.00256228	0.00144861	0.00144828	0.00000033
591870.00	2360940.00	0.00136268	0.00068373	0.0006836	0.00000014	0.00257438	0.00102275	0.00102255	0.0000002
592370.00	2360940.00	0.00116524	0.00055704	0.00055696	0.00000008	0.00259038	0.00074266	0.00074255	0.00000011
592870.00	2360940.00	0.00120074	0.00053951	0.00053946	0.00000005	0.00251789	0.00066455	0.00066449	0.00000006
593370.00	2360940.00	0.00153139	0.00059683	0.00059679	0.00000004	0.00258951	0.0006864	0.00068635	0.00000004
593870.00	2360940.00	0.00157398	0.00063905	0.00063901	0.00000004	0.0030494	0.00076512	0.00076508	0.00000004
594370.00	2360940.00	0.00143054	0.00057187	0.00057183	0.00000004	0.00471846	0.00076004	0.00076001	0.00000004
594870.00	2360940.00	0.00107559	0.00046837	0.00046834	0.00000004	0.00211041	0.00063225	0.00063221	0.00000004
595370.00	2360940.00	0.00103702	0.00037642	0.00037638	0.00000004	0.00169296	0.00050717	0.00050713	0.00000004
595870.00	2360940.00	0.00104406	0.00030069	0.00030065	0.00000004	0.00160505	0.00041645	0.00041641	0.00000004
596370.00	2360940.00	0.00102586	0.00023364	0.00023361	0.00000004	0.00156613	0.00033587	0.00033583	0.00000004
596870.00	2360940.00	0.00097659	0.00017968	0.00017965	0.00000004	0.00151011	0.00026483	0.00026479	0.00000004
597370.00	2360940.00	0.00090392	0.00013788	0.00013784	0.00000004	0.00142228	0.00020362	0.00020358	0.00000004
597870.00	2360940.00	0.00083677	0.00010819	0.00010816	0.00000004	0.0013342	0.00015654	0.0001565	0.00000004
598370.00	2360940.00	0.00078997	0.00008875	0.00008871	0.00000004	0.00127536	0.00012406	0.00012402	0.00000005
598870.00	2360940.00	0.00075727	0.00007562	0.00007556	0.00000005	0.00123645	0.00010183	0.00010177	0.00000006
599370.00	2360940.00	0.00073266	0.0000665	0.00006642	0.00000007	0.00120661	0.00008661	0.00008654	0.00000007
599870.00	2360940.00	0.00071216	0.00006004	0.00005994	0.0000001	0.00117907	0.00007619	0.00007609	0.0000001
600370.00	2360940.00	0.00069345	0.00005559	0.00005546	0.00000014	0.00115191	0.00006931	0.00006918	0.00000013
600870.00	2360940.00	0.00067177	0.00005187	0.00005169	0.00000018	0.00111585	0.00006374	0.00006358	0.00000016
601370.00	2360940.00	0.00064867	0.0000489	0.00004868	0.00000023	0.00107586	0.00005945	0.00005926	0.00000019
601870.00	2360940.00	0.00062714	0.00004713	0.00004686	0.00000027	0.00104057	0.00005701	0.00005677	0.00000023
602370.00	2360940.00	0.00060249	0.00004506	0.00004473	0.00000032	0.00099916	0.00005429	0.00005403	0.00000027
602870.00	2360940.00	0.00057826	0.00004328	0.0000429	0.00000037	0.00095581	0.00005183	0.00005153	0.0000003
603370.00	2360940.00	0.00055519	0.0000417	0.00004128	0.00000042	0.00091432	0.00004968	0.00004935	0.00000033
603870.00	2360940.00	0.00053409	0.00004033	0.00003987	0.00000046	0.00087684	0.0000478	0.00004745	0.00000035
604370.00	2360940.00	0.00051471	0.00003912	0.00003862	0.0000005	0.00084234	0.00004615	0.00004577	0.00000037
604870.00	2360940.00	0.00049646	0.00003783	0.0000373	0.00000053	0.00080748	0.00004421	0.00004382	0.00000039
605370.00	2360940.00	0.00048073	0.00003703	0.00003647	0.00000056	0.00078188	0.00004328	0.00004287	0.00000041
605870.00	2360940.00	0.00046397	0.00003603	0.00003545	0.00000058	0.00074987	0.00004195	0.00004153	0.00000043
606370.00	2360940.00	0.00044995	0.00003517	0.00003457	0.0000006	0.00072449	0.0000408	0.00004036	0.00000044
606870.00	2360940.00	0.00043696	0.00003438	0.00003376	0.00000062	0.00070091	0.00003973	0.00003928	0.00000045
607370.00	2360940.00	0.00042486	0.00003363	0.00003301	0.00000063	0.00067893	0.00003873	0.00003828	0.00000045
607870.00	2360940.00	0.00041487	0.000033	0.00003237	0.00000063	0.00066215	0.00003786	0.0000374	0.00000046

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2360940.00	0.00040378	0.00003233	0.00003169	0.00000064	0.00064166	0.00003698	0.00003652	0.00000046
608870.00	2360940.00	0.00039365	0.0000317	0.00003106	0.00000064	0.00062345	0.00003615	0.00003569	0.00000046
609370.00	2360940.00	0.00038374	0.0000311	0.00003046	0.00000064	0.00060567	0.00003537	0.0000349	0.00000046
609870.00	2360940.00	0.00037488	0.00003054	0.00002991	0.00000064	0.00058986	0.00003464	0.00003418	0.00000046
610370.00	2360940.00	0.00036656	0.00003002	0.00002939	0.00000063	0.00057526	0.00003395	0.00003349	0.00000046
610870.00	2360940.00	0.00035672	0.0000292	0.00002857	0.00000063	0.00055473	0.00003279	0.00003233	0.00000045
611370.00	2360940.00	0.00034948	0.00002881	0.00002819	0.00000062	0.00054247	0.00003228	0.00003184	0.00000045
611870.00	2360940.00	0.00034169	0.00002831	0.00002769	0.00000062	0.00052859	0.00003164	0.00003119	0.00000044
612370.00	2360940.00	0.00033029	0.00002718	0.00002658	0.00000061	0.00050499	0.00003019	0.00002975	0.00000044
612870.00	2360940.00	0.00032293	0.00002668	0.00002608	0.0000006	0.00049221	0.00002954	0.00002911	0.00000043
613370.00	2360940.00	0.00031711	0.00002641	0.00002582	0.00000059	0.00048285	0.00002922	0.00002879	0.00000043
613870.00	2360940.00	0.0003125	0.00002631	0.00002573	0.00000058	0.00047644	0.00002911	0.00002869	0.00000042
614370.00	2360940.00	0.00030942	0.00002648	0.0000259	0.00000057	0.00047516	0.00002941	0.000029	0.00000041
614870.00	2360940.00	0.00030353	0.00002611	0.00002554	0.00000056	0.000465	0.00002895	0.00002854	0.00000041
615370.00	2360940.00	0.0002972	0.00002571	0.00002516	0.00000055	0.00045316	0.00002847	0.00002807	0.0000004
615870.00	2360940.00	0.00028754	0.00002457	0.00002403	0.00000054	0.00043389	0.00002694	0.00002655	0.00000039
616370.00	2360940.00	0.00028055	0.00002392	0.00002338	0.00000053	0.00042475	0.00002613	0.00002574	0.00000039
616870.00	2360940.00	0.00027522	0.00002354	0.00002302	0.00000052	0.00041759	0.00002567	0.00002529	0.00000038
617370.00	2360940.00	0.00026982	0.00002308	0.00002256	0.00000051	0.00041412	0.00002511	0.00002474	0.00000037
617870.00	2360940.00	0.00026862	0.00002228	0.00002178	0.0000005	0.00047914	0.00002419	0.00002382	0.00000036
618370.00	2360940.00	0.00044926	0.00002172	0.00002123	0.00000049	0.00114748	0.00002316	0.0000228	0.00000036
618870.00	2360940.00	0.0007987	0.00002143	0.00002095	0.00000049	0.00072464	0.00002213	0.00002178	0.00000035
619370.00	2360940.00	0.00082641	0.00002089	0.00002041	0.00000048	0.0004354	0.00002126	0.00002092	0.00000034
619870.00	2360940.00	0.00037134	0.00002099	0.00002052	0.00000046	0.00101886	0.00002241	0.00002208	0.00000033
590370.00	2361440.00	0.00151735	0.00121556	0.00121515	0.00000041	0.00203591	0.00134064	0.00134035	0.0000003
590870.00	2361440.00	0.0015286	0.00105268	0.00105234	0.00000034	0.00215394	0.00135533	0.00135499	0.00000035
591370.00	2361440.00	0.00136872	0.00074991	0.00074971	0.0000002	0.0022936	0.00110874	0.00110848	0.00000026
591870.00	2361440.00	0.0012	0.00055503	0.00055491	0.00000012	0.00242072	0.00078839	0.00078823	0.00000015
592370.00	2361440.00	0.00110512	0.00047591	0.00047584	0.00000007	0.00330166	0.00061287	0.00061278	0.00000009
592870.00	2361440.00	0.0011627	0.00046352	0.00046347	0.00000004	0.00445749	0.00056087	0.00056081	0.00000005
593370.00	2361440.00	0.00139405	0.00050299	0.00050295	0.00000004	0.00397442	0.00057408	0.00057404	0.00000004
593870.00	2361440.00	0.00149412	0.00055281	0.00055278	0.00000004	0.00336508	0.00064113	0.0006411	0.00000003
594370.00	2361440.00	0.00136782	0.00053161	0.00053158	0.00000004	0.0041276	0.00067707	0.00067704	0.00000003
594870.00	2361440.00	0.00110238	0.00045146	0.00045142	0.00000003	0.00314257	0.00060099	0.00060096	0.00000003
595370.00	2361440.00	0.00093303	0.00037479	0.00037476	0.00000003	0.00161813	0.00049348	0.00049345	0.00000004
595870.00	2361440.00	0.00091752	0.00030599	0.00030596	0.00000003	0.00147672	0.0004047	0.00040467	0.00000004
596370.00	2361440.00	0.00092185	0.00025083	0.00025079	0.00000003	0.00140429	0.00034185	0.00034181	0.00000004
596870.00	2361440.00	0.00090771	0.00020125	0.00020121	0.00000003	0.00137717	0.00028297	0.00028294	0.00000004
597370.00	2361440.00	0.00086534	0.00015851	0.00015847	0.00000003	0.00132803	0.00022741	0.00022737	0.00000004
597870.00	2361440.00	0.00080892	0.00012524	0.00012521	0.00000003	0.00126286	0.00018008	0.00018004	0.00000004
598370.00	2361440.00	0.00075534	0.00010053	0.0001005	0.00000003	0.00119621	0.00014237	0.00014234	0.00000004
598870.00	2361440.00	0.00071503	0.0000833	0.00008326	0.00000004	0.00114728	0.00011477	0.00011473	0.00000004
599370.00	2361440.00	0.0006863	0.00007136	0.00007132	0.00000004	0.00111459	0.00009524	0.00009519	0.00000005
599870.00	2361440.00	0.00066652	0.00006327	0.00006322	0.00000006	0.00109464	0.000082	0.00008194	0.00000006
600370.00	2361440.00	0.00064986	0.00005731	0.00005724	0.00000007	0.00107484	0.00007246	0.00007239	0.00000007
600870.00	2361440.00	0.00063507	0.00005299	0.00005289	0.0000001	0.00105443	0.00006576	0.00006566	0.00000009
601370.00	2361440.00	0.00062038	0.00004984	0.00004971	0.00000013	0.00103185	0.00006104	0.00006092	0.00000012
601870.00	2361440.00	0.00060189	0.00004675	0.00004658	0.00000016	0.00099826	0.00005652	0.00005638	0.00000014
602370.00	2361440.00	0.00058336	0.00004444	0.00004424	0.0000002	0.0009649	0.00005325	0.00005309	0.00000017
602870.00	2361440.00	0.00056695	0.00004321	0.00004297	0.00000024	0.00093769	0.00005159	0.00005139	0.0000002
603370.00	2361440.00	0.00054757	0.00004157	0.00004128	0.00000028	0.00090262	0.00004933	0.00004911	0.00000023
603870.00	2361440.00	0.00052664	0.00004007	0.00003975	0.00000032	0.00086482	0.00004749	0.00004723	0.00000026
604370.00	2361440.00	0.0005089	0.00003885	0.00003849	0.00000036	0.00083361	0.00004582	0.00004554	0.00000028
604870.00	2361440.00	0.00049156	0.00003773	0.00003734	0.0000004	0.00080264	0.0000443	0.000044	0.0000003
605370.00	2361440.00	0.00047518	0.00003672	0.00003629	0.00000043	0.00077328	0.00004293	0.0000426	0.00000032
605870.00	2361440.00	0.00045903	0.00003575	0.00003529	0.00000046	0.00074332	0.00004162	0.00004128	0.00000034
606370.00	2361440.00	0.00044493	0.0000349	0.00003442	0.00000049	0.00071818	0.00004048	0.00004012	0.00000036
606870.00	2361440.00	0.00043167	0.00003411	0.0000336	0.00000051	0.00069432	0.00003942	0.00003905	0.00000037
607370.00	2361440.00	0.0004206	0.00003344	0.00003291	0.00000053	0.00067578	0.0000385	0.00003811	0.00000038
607870.00	2361440.00	0.00040904	0.00003275	0.00003221	0.00000055	0.00065491	0.00003758	0.00003718	0.00000039
608370.00	2361440.00	0.00039874	0.00003211	0.00003155	0.00000056	0.00063648	0.00003672	0.00003632	0.0000004
608870.00	2361440.00	0.00038777	0.00003137	0.0000308	0.00000057	0.00061497	0.00003563	0.00003522	0.00000041
609370.00	2361440.00	0.000379	0.00003092	0.00003034	0.00000058	0.00060003	0.00003504	0.00003463	0.00000041
609870.00	2361440.00	0.00036996	0.00003036	0.00002978	0.00000058	0.00058373	0.0000343	0.00003388	0.00000042
610370.00	2361440.00	0.00036028	0.00002966	0.00002908	0.00000058	0.00056579	0.0000334	0.00003298	0.00000042
610870.00	2361440.00	0.00034946	0.00002873	0.00002815	0.00000058	0.0005441	0.00003219	0.00003178	0.00000042
611370.00	2361440.00	0.0003417	0.00002825	0.00002767	0.00000058	0.00053042	0.00003157	0.00003115	0.00000042
611870.00	2361440.00	0.00033227	0.00002744	0.00002687	0.00000058	0.00051187	0.00003053	0.00003012	0.00000041
612370.00	2361440.00	0.00032468	0.0000269	0.00002633	0.00000057	0.00049838	0.00002984	0.00002943	0.00000041
612870.00	2361440.00	0.00032413	0.00002754	0.00002697	0.00000057	0.00050467	0.00003078	0.00003036	0.00000041

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2361440.00	0.00031683	0.0000271	0.00002653	0.00000057	0.00049124	0.00003022	0.00002981	0.00000041
613870.00	2361440.00	0.00030824	0.0000262	0.00002564	0.00000056	0.00047312	0.00002898	0.00002858	0.00000041
614370.00	2361440.00	0.00030495	0.00002635	0.0000258	0.00000056	0.00047137	0.00002928	0.00002888	0.0000004
614870.00	2361440.00	0.00029973	0.00002599	0.00002544	0.00000055	0.00046169	0.00002872	0.00002832	0.0000004
615370.00	2361440.00	0.00028811	0.00002461	0.00002407	0.00000054	0.00043855	0.00002698	0.00002659	0.00000039
615870.00	2361440.00	0.00028255	0.00002423	0.00002369	0.00000053	0.00043006	0.00002651	0.00002613	0.00000039
616370.00	2361440.00	0.00027604	0.00002335	0.00002282	0.00000053	0.00044004	0.00002545	0.00002507	0.00000038
616870.00	2361440.00	0.00028822	0.00002256	0.00002203	0.00000052	0.00062554	0.00002453	0.00002415	0.00000038
617370.00	2361440.00	0.00026657	0.00002277	0.00002226	0.00000051	0.00042653	0.00002475	0.00002438	0.00000037
617870.00	2361440.00	0.00026195	0.00002258	0.00002208	0.0000005	0.00041293	0.00002452	0.00002415	0.00000036
618370.00	2361440.00	0.00026609	0.00002186	0.00002136	0.0000005	0.00051681	0.00002369	0.00002333	0.00000036
618870.00	2361440.00	0.00078375	0.00002139	0.0000209	0.00000049	0.0007732	0.00002214	0.00002178	0.00000035
619370.00	2361440.00	0.00068447	0.00002119	0.00002071	0.00000048	0.00090533	0.00002208	0.00002173	0.00000035
619870.00	2361440.00	0.00048414	0.0000196	0.00001913	0.00000048	0.00030129	0.00001998	0.00001964	0.00000034
590370.00	2361940.00	0.00135509	0.00103237	0.00103199	0.00000037	0.00184451	0.00118429	0.00118398	0.0000003
590870.00	2361940.00	0.00133397	0.00083851	0.00083824	0.00000027	0.00204327	0.00112099	0.00112069	0.0000003
591370.00	2361940.00	0.00126269	0.00060637	0.0006062	0.00000016	0.00261115	0.00087575	0.00087554	0.00000021
591870.00	2361940.00	0.00122234	0.00047187	0.00047177	0.0000001	0.0035087	0.00064068	0.00064056	0.00000013
592370.00	2361940.00	0.00118313	0.00041858	0.00041852	0.00000006	0.00465	0.00052493	0.00052485	0.00000008
592870.00	2361940.00	0.00194822	0.00041345	0.00041341	0.00000004	0.00698128	0.00048608	0.00048603	0.00000005
593370.00	2361940.00	0.00213	0.00044467	0.00044464	0.00000003	0.00637389	0.00049466	0.00049463	0.00000003
593870.00	2361940.00	0.00198018	0.00048817	0.00048813	0.00000003	0.00581594	0.0005465	0.00054647	0.00000003
594370.00	2361940.00	0.00226558	0.00049594	0.00049591	0.00000003	0.0052427	0.0005971	0.00059707	0.00000003
594870.00	2361940.00	0.00108622	0.00043625	0.00043622	0.00000003	0.00313165	0.00056896	0.00056893	0.00000003
595370.00	2361940.00	0.00091962	0.00036624	0.00036621	0.00000003	0.00228852	0.00047788	0.00047784	0.00000003
595870.00	2361940.00	0.00083257	0.00030785	0.00030782	0.00000003	0.00144801	0.00039708	0.00039705	0.00000003
596370.00	2361940.00	0.00083195	0.0002567	0.00025667	0.00000003	0.00148264	0.00033556	0.00033552	0.00000003
596870.00	2361940.00	0.00082525	0.00021546	0.00021543	0.00000003	0.00125008	0.00028976	0.00028973	0.00000003
597370.00	2361940.00	0.00081279	0.00017688	0.00017685	0.00000003	0.0012268	0.00024401	0.00024398	0.00000003
597870.00	2361940.00	0.00077772	0.00014255	0.00014252	0.00000003	0.0011864	0.00019979	0.00019976	0.00000003
598370.00	2361940.00	0.00073082	0.0001146	0.00011456	0.00000003	0.00113261	0.00016101	0.00016098	0.00000003
598870.00	2361940.00	0.00068682	0.00009368	0.00009365	0.00000003	0.00107956	0.00013008	0.00013005	0.00000003
599370.00	2361940.00	0.00065349	0.00007875	0.00007872	0.00000003	0.00104211	0.00010698	0.00010694	0.00000004
599870.00	2361940.00	0.00062948	0.00006814	0.0000681	0.00000004	0.00101767	0.00009014	0.0000901	0.00000004
600370.00	2361940.00	0.00061201	0.00006059	0.00006054	0.00000005	0.00100139	0.00007808	0.00007804	0.00000005
600870.00	2361940.00	0.00060001	0.00005547	0.00005541	0.00000006	0.00099228	0.00006998	0.00006992	0.00000006
601370.00	2361940.00	0.00058902	0.00005175	0.00005167	0.00000007	0.00098269	0.00006444	0.00006437	0.00000008
601870.00	2361940.00	0.00057503	0.000048	0.00004791	0.0000001	0.00095694	0.00005858	0.00005849	0.00000009
602370.00	2361940.00	0.0005603	0.00004501	0.00004489	0.00000012	0.00093001	0.00005421	0.0000541	0.00000011
602870.00	2361940.00	0.00054802	0.00004331	0.00004316	0.00000015	0.00090935	0.00005181	0.00005167	0.00000013
603370.00	2361940.00	0.00053238	0.0000416	0.00004142	0.00000018	0.00088161	0.00004962	0.00004947	0.00000016
603870.00	2361940.00	0.00051782	0.00004009	0.00003987	0.00000022	0.00085361	0.00004735	0.00004717	0.00000018
604370.00	2361940.00	0.00050054	0.00003871	0.00003845	0.00000025	0.00082196	0.00004565	0.00004545	0.0000002
604870.00	2361940.00	0.00048433	0.0000375	0.00003722	0.00000029	0.00079169	0.00004402	0.0000438	0.00000022
605370.00	2361940.00	0.0004691	0.00003646	0.00003614	0.00000032	0.00076412	0.00004261	0.00004237	0.00000024
605870.00	2361940.00	0.00045489	0.00003554	0.00003519	0.00000035	0.00073896	0.00004137	0.00004111	0.00000026
606370.00	2361940.00	0.00044218	0.00003473	0.00003435	0.00000038	0.00071732	0.00004026	0.00003998	0.00000028
606870.00	2361940.00	0.00042755	0.00003387	0.00003347	0.00000041	0.00068938	0.00003913	0.00003884	0.0000003
607370.00	2361940.00	0.00041562	0.00003316	0.00003273	0.00000043	0.00066845	0.00003818	0.00003787	0.00000031
607870.00	2361940.00	0.00040372	0.00003246	0.00003201	0.00000045	0.00064684	0.00003725	0.00003692	0.00000033
608370.00	2361940.00	0.00039447	0.00003189	0.00003142	0.00000047	0.00063091	0.00003641	0.00003608	0.00000034
608870.00	2361940.00	0.0003833	0.00003126	0.00003077	0.00000049	0.00061143	0.00003565	0.0000353	0.00000035
609370.00	2361940.00	0.0003732	0.00003066	0.00003016	0.0000005	0.00059313	0.0000347	0.00003451	0.00000036
609870.00	2361940.00	0.00036467	0.00003015	0.00002964	0.00000051	0.00057846	0.00003419	0.00003382	0.00000036
610370.00	2361940.00	0.00035462	0.0000293	0.00002878	0.00000052	0.00055787	0.00003296	0.00003259	0.00000037
610870.00	2361940.00	0.00034347	0.00002832	0.00002781	0.00000052	0.00053539	0.00003169	0.00003132	0.00000037
611370.00	2361940.00	0.00033353	0.00002745	0.00002693	0.00000052	0.00051601	0.00003056	0.00003019	0.00000037
611870.00	2361940.00	0.00032372	0.00002634	0.00002582	0.00000052	0.00050594	0.00002915	0.00002878	0.00000037
612370.00	2361940.00	0.00032062	0.0000268	0.00002627	0.00000053	0.00049447	0.00002974	0.00002936	0.00000038
612870.00	2361940.00	0.00031967	0.00002739	0.00002686	0.00000053	0.00049963	0.00003061	0.00003023	0.00000038
613370.00	2361940.00	0.00031311	0.00002699	0.00002646	0.00000053	0.00048825	0.0000301	0.00002971	0.00000038
613870.00	2361940.00	0.00030695	0.0000266	0.00002607	0.00000053	0.00047779	0.00002961	0.00002923	0.00000038
614370.00	2361940.00	0.00029483	0.00002504	0.00002451	0.00000053	0.00045149	0.00002753	0.00002715	0.00000038
614870.00	2361940.00	0.00029257	0.00002531	0.00002478	0.00000052	0.00044916	0.00002788	0.0000275	0.00000038
615370.00	2361940.00	0.00028308	0.00002414	0.00002362	0.00000052	0.00043631	0.00002641	0.00002604	0.00000037
615870.00	2361940.00	0.00027808	0.00002385	0.00002334	0.00000052	0.00042816	0.00002606	0.00002569	0.00000037
616370.00	2361940.00	0.00027765	0.00002291	0.0000224	0.00000051	0.00050347	0.00002496	0.0000246	0.00000037
616870.00	2361940.00	0.00038429	0.00002234	0.00002184	0.00000051	0.00110586	0.00002409	0.00002373	0.00000036
617370.00	2361940.00	0.00039026	0.00002208	0.00002158	0.0000005	0.00111382	0.00002375	0.00002339	0.00000036
617870.00	2361940.00	0.0002636	0.00002213	0.00002163	0.0000005	0.00047646	0.00002401	0.00002366	0.00000036

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2361940.00	0.00025927	0.00002188	0.00002139	0.00000049	0.00046833	0.00002372	0.00002336	0.00000035
618870.00	2361940.00	0.000472	0.00002137	0.00002089	0.00000048	0.00112549	0.00002269	0.00002234	0.00000035
619370.00	2361940.00	0.00062296	0.00002115	0.00002067	0.00000048	0.00100182	0.00002216	0.00002182	0.00000035
619870.00	2361940.00	0.00041963	0.00001936	0.00001889	0.00000048	0.00028907	0.00001977	0.00001943	0.00000034
590370.00	2362440.00	0.00124946	0.00088918	0.00088886	0.00000033	0.00172904	0.00105765	0.00105735	0.0000003
590870.00	2362440.00	0.00118732	0.0007041	0.00070387	0.00000023	0.0017757	0.0009496	0.00094934	0.00000026
591370.00	2362440.00	0.00112447	0.00051343	0.00051329	0.00000014	0.00230865	0.00071969	0.00071952	0.00000017
591870.00	2362440.00	0.00236312	0.00041615	0.00041606	0.00000009	0.00503901	0.00053744	0.00053733	0.00000011
592370.00	2362440.00	0.00133032	0.00037458	0.00037452	0.00000006	0.00534698	0.00045935	0.00045928	0.00000007
592870.00	2362440.00	0.00310543	0.00037336	0.00037332	0.00000004	0.00534148	0.00042769	0.00042765	0.00000004
593370.00	2362440.00	0.00301974	0.00039769	0.00039766	0.00000003	0.00506056	0.00043324	0.00043321	0.00000003
593870.00	2362440.00	0.00288417	0.00043781	0.00043778	0.00000003	0.00486812	0.00047253	0.0004725	0.00000003
594370.00	2362440.00	0.00243301	0.00045515	0.00045512	0.00000003	0.00474909	0.00052591	0.00052589	0.00000003
594870.00	2362440.00	0.00251745	0.00042738	0.00042735	0.00000003	0.00351515	0.0005228	0.00052277	0.00000003
595370.00	2362440.00	0.00104704	0.00036144	0.00036141	0.00000003	0.00317325	0.00046667	0.00046665	0.00000003
595870.00	2362440.00	0.00092823	0.0003065	0.00030648	0.00000003	0.00258604	0.00039094	0.00039091	0.00000003
596370.00	2362440.00	0.00084562	0.00026121	0.00026118	0.00000003	0.00212348	0.00033326	0.00033323	0.00000003
596870.00	2362440.00	0.00075185	0.00022289	0.00022286	0.00000003	0.00124886	0.0002885	0.00028847	0.00000003
597370.00	2362440.00	0.0007507	0.00019045	0.00019042	0.00000003	0.00112832	0.00025302	0.00025299	0.00000003
597870.00	2362440.00	0.00073503	0.00015795	0.00015792	0.00000003	0.00110497	0.00021421	0.00021418	0.00000003
598370.00	2362440.00	0.00070583	0.00012967	0.00012964	0.00000003	0.00107171	0.00017809	0.00017806	0.00000003
598870.00	2362440.00	0.00066761	0.0001063	0.00010627	0.00000003	0.00102918	0.00014627	0.00014624	0.00000003
599370.00	2362440.00	0.00063104	0.00008825	0.00008822	0.00000003	0.00098601	0.00012034	0.00012031	0.00000003
599870.00	2362440.00	0.00060302	0.00007509	0.00007506	0.00000003	0.00095653	0.00010063	0.0001006	0.00000003
600370.00	2362440.00	0.0005865	0.00006643	0.00006639	0.00000003	0.00094863	0.00008721	0.00008717	0.00000004
600870.00	2362440.00	0.00056999	0.00005911	0.00005907	0.00000004	0.00093268	0.00007588	0.00007584	0.00000004
601370.00	2362440.00	0.00055789	0.00005416	0.00005411	0.00000005	0.00092336	0.00006845	0.0000684	0.00000005
601870.00	2362440.00	0.00054621	0.00004991	0.00004985	0.00000006	0.00090827	0.00006194	0.00006188	0.00000006
602370.00	2362440.00	0.00053677	0.00004669	0.00004662	0.00000007	0.00089461	0.00005691	0.00005684	0.00000007
602870.00	2362440.00	0.00052428	0.00004403	0.00004394	0.00000009	0.00087264	0.00005319	0.00005311	0.00000009
603370.00	2362440.00	0.00051262	0.00004192	0.00004181	0.00000012	0.00085081	0.00005017	0.00005006	0.0000001
603870.00	2362440.00	0.00050065	0.00004019	0.00004005	0.00000014	0.000828	0.00004773	0.00004761	0.00000012
604370.00	2362440.00	0.00048805	0.00003872	0.00003856	0.00000017	0.00080443	0.00004571	0.00004557	0.00000014
604870.00	2362440.00	0.00047627	0.00003753	0.00003733	0.0000002	0.00078406	0.00004406	0.0000439	0.00000016
605370.00	2362440.00	0.00046303	0.00003642	0.00003619	0.00000023	0.00075924	0.00004256	0.00004238	0.00000018
605870.00	2362440.00	0.00045011	0.00003544	0.00003519	0.00000026	0.00073556	0.00004123	0.00004104	0.0000002
606370.00	2362440.00	0.00043602	0.00003449	0.00003421	0.00000028	0.00070807	0.00003999	0.00003977	0.00000021
606870.00	2362440.00	0.00042343	0.00003368	0.00003337	0.00000031	0.00068495	0.0000389	0.00003867	0.00000023
607370.00	2362440.00	0.00041222	0.00003298	0.00003264	0.00000034	0.00066549	0.00003796	0.00003771	0.00000025
607870.00	2362440.00	0.00040016	0.00003225	0.00003189	0.00000036	0.000643	0.00003701	0.00003674	0.00000026
608370.00	2362440.00	0.00038939	0.00003162	0.00003123	0.00000039	0.00062378	0.00003616	0.00003588	0.00000028
608870.00	2362440.00	0.00037914	0.00003102	0.00003061	0.00000041	0.0006057	0.00003537	0.00003508	0.00000029
609370.00	2362440.00	0.00036953	0.00003046	0.00003003	0.00000042	0.0005887	0.00003462	0.00003432	0.0000003
609870.00	2362440.00	0.00036096	0.00002995	0.00002951	0.00000044	0.00057409	0.00003396	0.00003364	0.00000031
610370.00	2362440.00	0.00035022	0.00002899	0.00002854	0.00000044	0.00055197	0.00003259	0.00003227	0.00000031
610870.00	2362440.00	0.00034268	0.0000286	0.00002814	0.00000046	0.00053916	0.00003208	0.00003176	0.00000032
611370.00	2362440.00	0.00033205	0.00002767	0.00002721	0.00000046	0.00051803	0.00003088	0.00003056	0.00000033
611870.00	2362440.00	0.00031994	0.000026	0.00002554	0.00000046	0.00050882	0.00002876	0.00002844	0.00000032
612370.00	2362440.00	0.00031419	0.00002546	0.000025	0.00000047	0.00051274	0.0000281	0.00002777	0.00000033
612870.00	2362440.00	0.0003076	0.00002565	0.00002518	0.00000048	0.00047658	0.00002831	0.00002798	0.00000034
613370.00	2362440.00	0.00030945	0.00002685	0.00002636	0.00000049	0.00048435	0.00002994	0.00002959	0.00000035
613870.00	2362440.00	0.00029931	0.0000257	0.00002521	0.00000049	0.00046146	0.00002837	0.00002803	0.00000035
614370.00	2362440.00	0.00029453	0.0000255	0.00002501	0.00000049	0.00045428	0.00002814	0.00002779	0.00000035
614870.00	2362440.00	0.00028457	0.00002405	0.00002356	0.00000049	0.00044889	0.00002632	0.00002598	0.00000035
615370.00	2362440.00	0.00027948	0.00002375	0.00002326	0.00000049	0.00044115	0.00002595	0.00002561	0.00000035
615870.00	2362440.00	0.00027476	0.00002339	0.0000229	0.00000048	0.00043919	0.00002552	0.00002517	0.00000035
616370.00	2362440.00	0.00027766	0.00002275	0.00002226	0.00000048	0.00052017	0.00002478	0.00002443	0.00000035
616870.00	2362440.00	0.00035156	0.00002225	0.00002177	0.00000048	0.00097823	0.00002405	0.0000237	0.00000034
617370.00	2362440.00	0.00088355	0.00002193	0.00002145	0.00000048	0.00062476	0.00002251	0.00002216	0.00000034
617870.00	2362440.00	0.00087859	0.00002175	0.00002127	0.00000048	0.00069929	0.00002239	0.00002204	0.00000034
618370.00	2362440.00	0.0002636	0.00002168	0.00002121	0.00000047	0.00052252	0.00002349	0.00002315	0.00000034
618870.00	2362440.00	0.00032791	0.00002128	0.00002081	0.00000047	0.00092507	0.00002288	0.00002254	0.00000034
619370.00	2362440.00	0.00078699	0.0000206	0.00002013	0.00000047	0.00041105	0.00002093	0.00002059	0.00000034
619870.00	2362440.00	0.00087461	0.00002072	0.00002026	0.00000046	0.00054106	0.00002112	0.00002078	0.00000033
590370.00	2362940.00	0.00112852	0.00075861	0.00075833	0.00000028	0.00158452	0.00093028	0.00093001	0.00000027
590870.00	2362940.00	0.00106726	0.00058397	0.00058378	0.00000019	0.00172105	0.00079027	0.00079005	0.00000022
591370.00	2362940.00	0.00338333	0.00044458	0.00044446	0.00000012	0.00293103	0.00059023	0.00059009	0.00000014
591870.00	2362940.00	0.00396958	0.00037153	0.00037146	0.00000008	0.00220505	0.00045205	0.00045196	0.00000009
592370.00	2362940.00	0.00431188	0.00034431	0.00034426	0.00000005	0.00287858	0.0003984	0.00039834	0.00000006
592870.00	2362940.00	0.0044679	0.00034041	0.00034038	0.00000003	0.00272682	0.00037724	0.00037721	0.00000004

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2362940.00	0.00385213	0.00036034	0.00036031	0.00000003	0.00172943	0.00036964	0.00036961	0.00000003
593870.00	2362940.00	0.0039788	0.00039795	0.00039793	0.00000003	0.00266352	0.00040707	0.00040705	0.00000002
594370.00	2362940.00	0.00365842	0.00042613	0.00042611	0.00000003	0.00265618	0.00045281	0.00045279	0.00000002
594870.00	2362940.00	0.00307831	0.00041567	0.00041565	0.00000003	0.00236087	0.00047379	0.00047377	0.00000003
595370.00	2362940.00	0.00166715	0.00035882	0.00035879	0.00000003	0.00326316	0.00045057	0.00045054	0.00000003
595870.00	2362940.00	0.00217365	0.00031594	0.00031592	0.00000003	0.0016566	0.00037341	0.00037338	0.00000003
596370.00	2362940.00	0.00107539	0.00026506	0.00026504	0.00000003	0.00256848	0.00032992	0.0003299	0.00000003
596870.00	2362940.00	0.00070755	0.00022781	0.00022778	0.00000003	0.00138056	0.00028773	0.0002877	0.00000003
597370.00	2362940.00	0.00069147	0.00019958	0.00019955	0.00000003	0.0010463	0.00025671	0.00025668	0.00000003
597870.00	2362940.00	0.00068511	0.00017007	0.00017004	0.00000003	0.00102699	0.00022308	0.00022305	0.00000003
598370.00	2362940.00	0.00067114	0.0001431	0.00014307	0.00000003	0.0010068	0.00019089	0.00019086	0.00000003
598870.00	2362940.00	0.00064689	0.00011949	0.00011947	0.00000003	0.00097886	0.00016105	0.00016102	0.00000003
599370.00	2362940.00	0.00061596	0.00009984	0.00009982	0.00000003	0.00094371	0.00013481	0.00013478	0.00000003
599870.00	2362940.00	0.00058521	0.00008398	0.00008395	0.00000003	0.00091033	0.00011263	0.0001126	0.00000003
600370.00	2362940.00	0.00056792	0.00007385	0.00007382	0.00000003	0.00090494	0.00009775	0.00009772	0.00000003
600870.00	2362940.00	0.00054881	0.00006496	0.00006493	0.00000003	0.00088842	0.00008484	0.00008481	0.00000003
601370.00	2362940.00	0.00053245	0.00005779	0.00005775	0.00000003	0.00087029	0.00007406	0.00007402	0.00000004
601870.00	2362940.00	0.00051999	0.00005243	0.00005239	0.00000004	0.0008569	0.00006594	0.0000659	0.00000004
602370.00	2362940.00	0.00050961	0.00004835	0.00004831	0.00000005	0.00084452	0.00005979	0.00005974	0.00000005
602870.00	2362940.00	0.00050031	0.0000452	0.00004514	0.00000006	0.00083154	0.00005507	0.00005502	0.00000006
603370.00	2362940.00	0.00049133	0.0000427	0.00004263	0.00000007	0.00081683	0.00005141	0.00005134	0.00000007
603870.00	2362940.00	0.00048355	0.00004067	0.00004058	0.00000009	0.00080362	0.00004829	0.00004821	0.00000008
604370.00	2362940.00	0.00047288	0.00003903	0.00003892	0.00000011	0.00078403	0.00004619	0.00004609	0.0000001
604870.00	2362940.00	0.00046228	0.0000376	0.00003747	0.00000013	0.00076332	0.00004421	0.0000441	0.00000011
605370.00	2362940.00	0.00045271	0.00003646	0.0000363	0.00000016	0.00074655	0.00004263	0.0000425	0.00000013
605870.00	2362940.00	0.00044203	0.0000354	0.00003522	0.00000018	0.00072635	0.0000412	0.00004106	0.00000014
606370.00	2362940.00	0.00042933	0.00003439	0.00003419	0.00000021	0.0007005	0.00003987	0.00003971	0.00000016
606870.00	2362940.00	0.00041815	0.00003355	0.00003332	0.00000023	0.00067951	0.00003875	0.00003858	0.00000017
607370.00	2362940.00	0.00040863	0.00003284	0.00003258	0.00000026	0.00066165	0.00003764	0.00003745	0.00000019
607870.00	2362940.00	0.00039676	0.00003211	0.00003183	0.00000028	0.00064045	0.00003683	0.00003662	0.0000002
608370.00	2362940.00	0.00038603	0.00003144	0.00003113	0.00000031	0.00062054	0.00003595	0.00003573	0.00000022
608870.00	2362940.00	0.00037602	0.00003084	0.00003051	0.00000033	0.00060265	0.00003515	0.00003492	0.00000023
609370.00	2362940.00	0.00036704	0.0000303	0.00002995	0.00000035	0.00058712	0.00003444	0.0000342	0.00000024
609870.00	2362940.00	0.00035856	0.0000298	0.00002943	0.00000036	0.00057262	0.00003377	0.00003351	0.00000026
610370.00	2362940.00	0.0003457	0.00002855	0.00002818	0.00000037	0.00054519	0.00003203	0.00003177	0.00000026
610870.00	2362940.00	0.00033928	0.00002835	0.00002796	0.00000039	0.00053505	0.00003179	0.00003152	0.00000027
611370.00	2362940.00	0.00032707	0.00002715	0.00002676	0.00000039	0.00051055	0.00003023	0.00002996	0.00000027
611870.00	2362940.00	0.00031854	0.00002647	0.00002607	0.0000004	0.00049574	0.00002937	0.00002909	0.00000028
612370.00	2362940.00	0.00031609	0.00002687	0.00002645	0.00000042	0.00049352	0.00002989	0.00002959	0.0000003
612870.00	2362940.00	0.00031009	0.00002657	0.00002614	0.00000043	0.0004836	0.00002951	0.00002921	0.0000003
613370.00	2362940.00	0.00030408	0.00002623	0.0000258	0.00000043	0.00047343	0.00002908	0.00002878	0.00000031
613870.00	2362940.00	0.00029327	0.00002498	0.00002455	0.00000043	0.00045258	0.0000275	0.00002719	0.00000031
614370.00	2362940.00	0.00028676	0.00002421	0.00002377	0.00000044	0.00045229	0.00002655	0.00002624	0.00000031
614870.00	2362940.00	0.00028902	0.00002347	0.00002303	0.00000044	0.00052447	0.00002569	0.00002538	0.00000031
615370.00	2362940.00	0.00031216	0.000023	0.00002256	0.00000044	0.00071661	0.00002508	0.00002477	0.00000031
615870.00	2362940.00	0.00032362	0.0000227	0.00002225	0.00000044	0.00079932	0.00002468	0.00002436	0.00000031
616370.00	2362940.00	0.00027136	0.00002271	0.00002227	0.00000045	0.00047446	0.00002475	0.00002443	0.00000032
616870.00	2362940.00	0.00057825	0.00002221	0.00002176	0.00000044	0.00100494	0.00002346	0.00002314	0.00000032
617370.00	2362940.00	0.00083496	0.00002191	0.00002147	0.00000044	0.00070331	0.00002261	0.00002229	0.00000032
617870.00	2362940.00	0.00067701	0.00002083	0.00002038	0.00000044	0.00036365	0.00002122	0.00002091	0.00000032
618370.00	2362940.00	0.0005838	0.00002147	0.00002102	0.00000045	0.00097487	0.00002257	0.00002225	0.00000032
618870.00	2362940.00	0.0002714	0.00002127	0.00002083	0.00000045	0.00061057	0.00002299	0.00002267	0.00000032
619370.00	2362940.00	0.0004369	0.00002099	0.00002055	0.00000044	0.00102807	0.0000228	0.00002196	0.00000032
619870.00	2362940.00	0.00085084	0.00002059	0.00002015	0.00000044	0.00047846	0.00002094	0.00002062	0.00000032
590370.00	2363440.00	0.00101885	0.00064244	0.0006422	0.00000024	0.00150728	0.00080716	0.00080692	0.00000025
590870.00	2363440.00	0.00204714	0.00049889	0.00049874	0.00000016	0.00319572	0.00066624	0.00066606	0.00000018
591370.00	2363440.00	0.00265027	0.00038513	0.00038503	0.0000001	0.00145926	0.00049067	0.00049054	0.00000012
591870.00	2363440.00	0.00361897	0.00033517	0.0003351	0.00000007	0.00192219	0.00039882	0.00039873	0.00000008
592370.00	2363440.00	0.00192076	0.00030447	0.00030443	0.00000004	0.00106937	0.00034216	0.0003421	0.00000005
592870.00	2363440.00	0.00175741	0.00029756	0.00029753	0.00000003	0.00096373	0.00032346	0.00032343	0.00000003
593370.00	2363440.00	0.00238402	0.0003186	0.00031858	0.00000003	0.00112345	0.00032741	0.00032738	0.00000002
593870.00	2363440.00	0.00339396	0.00035701	0.00035699	0.00000003	0.00166509	0.00035548	0.00035546	0.00000002
594370.00	2363440.00	0.00326518	0.00039024	0.00039022	0.00000003	0.00185029	0.00039476	0.00039473	0.00000002
594870.00	2363440.00	0.00295806	0.00039476	0.00039474	0.00000003	0.00199039	0.00042899	0.00042896	0.00000002
595370.00	2363440.00	0.00241595	0.00035581	0.00035579	0.00000003	0.00240487	0.00042488	0.00042486	0.00000002
595870.00	2363440.00	0.00131628	0.00030613	0.0003061	0.00000003	0.00279866	0.00038096	0.00038093	0.00000002
596370.00	2363440.00	0.00080694	0.00026382	0.0002638	0.00000003	0.00220812	0.00032839	0.00032836	0.00000003
596870.00	2363440.00	0.00065716	0.00023069	0.00023066	0.00000003	0.00127163	0.0002867	0.00028668	0.00000003
597370.00	2363440.00	0.00063837	0.00020436	0.00020433	0.00000003	0.00098874	0.00025638	0.00025635	0.00000003
597870.00	2363440.00	0.0006377	0.00017903	0.000179	0.00000003	0.00095939	0.00022837	0.00022835	0.00000003

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2363440.00	0.00063197	0.0001545	0.00015447	0.00000003	0.0009433	0.00020036	0.00020033	0.00000003
598870.00	2363440.00	0.00061932	0.00013175	0.00013172	0.00000003	0.0009257	0.00017317	0.00017314	0.00000003
599370.00	2363440.00	0.00059724	0.00011104	0.00011102	0.00000003	0.00090141	0.00014717	0.00014715	0.00000003
599870.00	2363440.00	0.00057079	0.00009385	0.00009382	0.00000003	0.00087267	0.0001246	0.00012458	0.00000003
600370.00	2363440.00	0.00055383	0.00008282	0.0000828	0.00000003	0.00086887	0.00010956	0.00010953	0.00000003
600870.00	2363440.00	0.00053164	0.00007152	0.00007149	0.00000003	0.00084583	0.00009374	0.00009371	0.00000003
601370.00	2363440.00	0.00051342	0.00006275	0.00006273	0.00000003	0.00082712	0.00008114	0.00008111	0.00000003
601870.00	2363440.00	0.00049939	0.00005609	0.00005606	0.00000003	0.00081352	0.00007136	0.00007133	0.00000003
602370.00	2363440.00	0.00048775	0.00005096	0.00005093	0.00000003	0.00080092	0.00006377	0.00006373	0.00000004
602870.00	2363440.00	0.00047839	0.00004704	0.000047	0.00000004	0.00079044	0.00005794	0.0000579	0.00000004
603370.00	2363440.00	0.00047076	0.00004383	0.00004378	0.00000005	0.00078084	0.00005299	0.00005294	0.00000005
603870.00	2363440.00	0.00046397	0.00004164	0.00004158	0.00000006	0.0007737	0.00004997	0.00004991	0.00000006
604370.00	2363440.00	0.00045616	0.00003967	0.0000396	0.00000007	0.00076054	0.00004715	0.00004708	0.00000007
604870.00	2363440.00	0.00044723	0.00003799	0.00003791	0.00000009	0.00074261	0.00004481	0.00004474	0.00000008
605370.00	2363440.00	0.00043942	0.00003666	0.00003656	0.00000011	0.00072856	0.00004296	0.00004287	0.00000009
605870.00	2363440.00	0.00043038	0.00003532	0.00003519	0.00000013	0.00070948	0.00004096	0.00004087	0.0000001
606370.00	2363440.00	0.00042043	0.00003442	0.00003427	0.00000015	0.00069018	0.00003992	0.0000398	0.00000011
606870.00	2363440.00	0.00041092	0.00003351	0.00003335	0.00000017	0.00067171	0.00003871	0.00003858	0.00000013
607370.00	2363440.00	0.0004016	0.00003273	0.00003254	0.00000019	0.00065419	0.00003766	0.00003752	0.00000014
607870.00	2363440.00	0.00039258	0.00003203	0.00003182	0.00000021	0.00063785	0.00003673	0.00003657	0.00000015
608370.00	2363440.00	0.00038284	0.00003135	0.00003112	0.00000024	0.00061942	0.00003584	0.00003567	0.00000017
608870.00	2363440.00	0.00037261	0.00003069	0.00003043	0.00000026	0.00059962	0.00003498	0.0000348	0.00000018
609370.00	2363440.00	0.00036353	0.00003012	0.00002984	0.00000028	0.00058303	0.00003423	0.00003403	0.00000019
609870.00	2363440.00	0.00035492	0.00002959	0.00002929	0.00000029	0.00056763	0.00003353	0.00003333	0.00000021
610370.00	2363440.00	0.00034767	0.00002913	0.00002882	0.00000031	0.0005554	0.00003291	0.00003269	0.00000022
610870.00	2363440.00	0.00033916	0.00002864	0.00002831	0.00000033	0.00054019	0.00003229	0.00003206	0.00000023
611370.00	2363440.00	0.00032695	0.00002738	0.00002705	0.00000033	0.00051411	0.00003056	0.00003033	0.00000023
611870.00	2363440.00	0.0003169	0.00002646	0.00002612	0.00000034	0.0004955	0.00002937	0.00002914	0.00000023
612370.00	2363440.00	0.00030845	0.00002569	0.00002535	0.00000035	0.00048304	0.00002841	0.00002817	0.00000024
612870.00	2363440.00	0.00030176	0.00002494	0.00002459	0.00000035	0.00048461	0.0000275	0.00002725	0.00000024
613370.00	2363440.00	0.0003024	0.00002423	0.00002387	0.00000036	0.00054347	0.00002666	0.00002642	0.00000025
613870.00	2363440.00	0.00028976	0.00002435	0.00002398	0.00000037	0.00045964	0.00002675	0.00002649	0.00000026
614370.00	2363440.00	0.00028523	0.00002455	0.00002416	0.00000039	0.00044074	0.00002698	0.00002671	0.00000027
614870.00	2363440.00	0.00028172	0.00002347	0.00002309	0.00000039	0.00047353	0.0000257	0.00002543	0.00000027
615370.00	2363440.00	0.00036095	0.00002283	0.00002244	0.00000039	0.00087315	0.00002476	0.00002449	0.00000027
615870.00	2363440.00	0.00055791	0.00002262	0.00002223	0.00000039	0.00093736	0.00002395	0.00002368	0.00000027
616370.00	2363440.00	0.00059794	0.00002236	0.00002196	0.0000004	0.00091017	0.00002357	0.0000233	0.00000028
616870.00	2363440.00	0.00029203	0.0000221	0.00002169	0.00000041	0.00064828	0.000024	0.00002371	0.00000029
617370.00	2363440.00	0.00083257	0.00002155	0.00002115	0.0000004	0.00047574	0.00002196	0.00002167	0.00000028
617870.00	2363440.00	0.00076508	0.00002158	0.00002117	0.00000041	0.0007016	0.00002231	0.00002202	0.00000029
618370.00	2363440.00	0.00062968	0.0000204	0.00001999	0.00000041	0.00034621	0.00002075	0.00002047	0.00000029
618870.00	2363440.00	0.00081686	0.00002085	0.00002044	0.00000041	0.00045316	0.0000212	0.00002091	0.00000029
619370.00	2363440.00	0.0003995	0.0000209	0.00002049	0.00000042	0.0009581	0.00002224	0.00002194	0.0000003
619870.00	2363440.00	0.00035729	0.00002068	0.00002026	0.00000042	0.00092	0.00002205	0.00002176	0.0000003
590370.00	2363940.00	0.00229242	0.00055946	0.00055926	0.0000002	0.00236205	0.00070865	0.00070844	0.00000021
590870.00	2363940.00	0.00274782	0.00043576	0.00043563	0.00000013	0.00245634	0.0005685	0.00056834	0.00000016
591370.00	2363940.00	0.00213102	0.00033988	0.00033979	0.00000009	0.00109991	0.00041965	0.00041954	0.00000011
591870.00	2363940.00	0.00200513	0.00029764	0.00029758	0.00000006	0.00100968	0.00034395	0.00034387	0.00000007
592370.00	2363940.00	0.00128892	0.00027343	0.00027339	0.00000004	0.00082897	0.00030602	0.00030597	0.00000005
592870.00	2363940.00	0.00114375	0.00026405	0.00026403	0.00000003	0.00074619	0.0002899	0.00028987	0.00000003
593370.00	2363940.00	0.00145018	0.0002767	0.00027667	0.00000002	0.00076591	0.00028762	0.0002876	0.00000002
593870.00	2363940.00	0.00221449	0.00031504	0.00031502	0.00000002	0.00103596	0.00030788	0.00030786	0.00000002
594370.00	2363940.00	0.00311888	0.00035407	0.00035405	0.00000002	0.00172076	0.00035603	0.00035601	0.00000002
594870.00	2363940.00	0.00265787	0.00037071	0.00037069	0.00000002	0.00163743	0.0003862	0.00038618	0.00000002
595370.00	2363940.00	0.00138172	0.00033827	0.00033825	0.00000002	0.0034561	0.00041308	0.00041306	0.00000002
595870.00	2363940.00	0.0010448	0.00030201	0.00030198	0.00000002	0.00286852	0.0003769	0.00037688	0.00000002
596370.00	2363940.00	0.00072455	0.00026369	0.00026366	0.00000002	0.0019088	0.00032809	0.00032806	0.00000002
596870.00	2363940.00	0.00061078	0.00023323	0.00023321	0.00000003	0.00106164	0.00028761	0.00028759	0.00000003
597370.00	2363940.00	0.00059691	0.00020727	0.00020725	0.00000003	0.00095048	0.00025582	0.00025579	0.00000003
597870.00	2363940.00	0.00059384	0.00018437	0.00018435	0.00000003	0.00090601	0.00023007	0.00023004	0.00000003
598370.00	2363940.00	0.00059126	0.00016242	0.00016239	0.00000003	0.00088696	0.00020552	0.0002055	0.00000003
598870.00	2363940.00	0.00058569	0.00014152	0.00014149	0.00000002	0.00087242	0.00018153	0.0001815	0.00000003
599370.00	2363940.00	0.00057397	0.00012187	0.00012184	0.00000002	0.00085647	0.00015802	0.000158	0.00000003
599870.00	2363940.00	0.00056129	0.00010634	0.00010631	0.00000002	0.00085048	0.0001388	0.00013877	0.00000003
600370.00	2363940.00	0.00054096	0.00009165	0.00009163	0.00000002	0.00083274	0.00011971	0.00011969	0.00000003
600870.00	2363940.00	0.00051456	0.00007773	0.0000777	0.00000002	0.00079839	0.00010123	0.0001012	0.00000003
601370.00	2363940.00	0.00048902	0.00006292	0.00006289	0.00000002	0.00087223	0.00008116	0.00008114	0.00000002
601870.00	2363940.00	0.00046829	0.00005642	0.0000564	0.00000003	0.00076258	0.00007172	0.0000717	0.00000002
602370.00	2363940.00	0.00046067	0.00004932	0.00004929	0.00000003	0.00084815	0.00006147	0.00006145	0.00000002
602870.00	2363940.00	0.00044955	0.00004499	0.00004496	0.00000003	0.0008173	0.00005505	0.00005503	0.00000002

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2363940.00	0.00043834	0.00004239	0.00004235	0.00000003	0.00073885	0.00005114	0.00005111	0.00000003
603870.00	2363940.00	0.00043976	0.0000387	0.00003867	0.00000003	0.00085417	0.00004586	0.00004584	0.00000003
604370.00	2363940.00	0.0004317	0.00003671	0.00003667	0.00000004	0.00081624	0.00004301	0.00004298	0.00000003
604870.00	2363940.00	0.00042081	0.00003561	0.00003556	0.00000005	0.00072601	0.0000414	0.00004136	0.00000004
605370.00	2363940.00	0.00042267	0.00003354	0.00003348	0.00000006	0.00080649	0.00003862	0.00003859	0.00000004
605870.00	2363940.00	0.00041496	0.00003242	0.00003235	0.00000007	0.00076759	0.00003711	0.00003706	0.00000005
606370.00	2363940.00	0.00040237	0.00003195	0.00003186	0.00000009	0.00068357	0.00003644	0.00003638	0.00000006
606870.00	2363940.00	0.000403	0.00003045	0.00003036	0.0000001	0.00074579	0.00003455	0.00003449	0.00000006
607370.00	2363940.00	0.00039328	0.00002973	0.00002962	0.00000011	0.00070945	0.00003361	0.00003354	0.00000007
607870.00	2363940.00	0.00037886	0.00002954	0.0000294	0.00000014	0.00063153	0.00003331	0.00003322	0.00000009
608370.00	2363940.00	0.00037799	0.00002835	0.00002821	0.00000014	0.00068326	0.00003186	0.00003177	0.00000009
608870.00	2363940.00	0.00036746	0.00002784	0.00002768	0.00000016	0.00065664	0.00003122	0.00003111	0.0000001
609370.00	2363940.00	0.00035294	0.00002777	0.00002758	0.00000019	0.00057995	0.00003107	0.00003095	0.00000012
609870.00	2363940.00	0.00035179	0.00002678	0.00002658	0.00000019	0.00063513	0.00002988	0.00002976	0.00000013
610370.00	2363940.00	0.00034707	0.00002625	0.00002604	0.00000021	0.00064464	0.00002923	0.00002909	0.00000014
610870.00	2363940.00	0.00032822	0.00002636	0.00002612	0.00000024	0.00053304	0.00002929	0.00002913	0.00000016
611370.00	2363940.00	0.00032855	0.00002548	0.00002523	0.00000024	0.00059314	0.00002825	0.00002809	0.00000016
611870.00	2363940.00	0.00032441	0.00002504	0.00002479	0.00000026	0.00060108	0.00002772	0.00002755	0.00000017
612370.00	2363940.00	0.000307	0.00002508	0.0000248	0.00000028	0.00050116	0.0000277	0.00002751	0.00000019
612870.00	2363940.00	0.00031464	0.0000243	0.00002402	0.00000028	0.00059988	0.00002679	0.0000266	0.00000019
613370.00	2363940.00	0.00032571	0.00002387	0.00002358	0.00000029	0.00067413	0.00002622	0.00002602	0.0000002
613870.00	2363940.00	0.00034317	0.00002351	0.0000232	0.0000003	0.00073837	0.00002569	0.00002549	0.00000021
614370.00	2363940.00	0.0003098	0.00002333	0.00002301	0.00000032	0.00063097	0.00002555	0.00002533	0.00000022
614870.00	2363940.00	0.00027672	0.00002366	0.00002332	0.00000034	0.0004364	0.00002591	0.00002567	0.00000024
615370.00	2363940.00	0.00027183	0.0000233	0.00002295	0.00000035	0.00043169	0.00002547	0.00002523	0.00000024
615870.00	2363940.00	0.00044232	0.00002247	0.00002213	0.00000034	0.00090638	0.00002406	0.00002383	0.00000023
616370.00	2363940.00	0.0007764	0.00002183	0.00002149	0.00000034	0.00045923	0.00002229	0.00002206	0.00000023
616870.00	2363940.00	0.0007651	0.00002148	0.00002113	0.00000035	0.00043802	0.00002187	0.00002163	0.00000024
617370.00	2363940.00	0.00082241	0.00002144	0.00002108	0.00000036	0.00047386	0.00002186	0.00002161	0.00000025
617870.00	2363940.00	0.00083253	0.00002137	0.00002101	0.00000036	0.000533	0.00002185	0.00002159	0.00000025
618370.00	2363940.00	0.00035694	0.00001933	0.00001897	0.00000037	0.00028117	0.00001978	0.00001952	0.00000025
618870.00	2363940.00	0.00061789	0.00002005	0.00001967	0.00000037	0.00034475	0.00002042	0.00002016	0.00000026
619370.00	2363940.00	0.00051272	0.00001953	0.00001915	0.00000038	0.0003125	0.00001995	0.00001968	0.00000026
619870.00	2363940.00	0.00080682	0.00002031	0.00001993	0.00000038	0.00042941	0.00002061	0.00002035	0.00000027
590370.00	2364440.00	0.00238342	0.00048624	0.00048607	0.00000017	0.00134947	0.00060762	0.00060743	0.00000019
590870.00	2364440.00	0.00223329	0.00037756	0.00037744	0.00000012	0.00117969	0.00047884	0.00047871	0.00000013
591370.00	2364440.00	0.00195135	0.00030772	0.00030764	0.00000008	0.00100866	0.00037151	0.00037141	0.00000009
591870.00	2364440.00	0.00085347	0.0002648	0.00026474	0.00000006	0.00075842	0.00030419	0.00030413	0.00000007
592370.00	2364440.00	0.00102384	0.00025161	0.00025158	0.00000004	0.00074986	0.00028069	0.00028064	0.00000004
592870.00	2364440.00	0.00063478	0.00023592	0.00023589	0.00000003	0.00063043	0.00026429	0.00026426	0.00000003
593370.00	2364440.00	0.00061312	0.00023578	0.00023576	0.00000002	0.00059447	0.00025788	0.00025786	0.00000002
593870.00	2364440.00	0.00144687	0.0002767	0.00027668	0.00000002	0.00076778	0.00027448	0.00027446	0.00000002
594370.00	2364440.00	0.00239686	0.00032071	0.00032069	0.00000002	0.00121767	0.0003149	0.00031488	0.00000002
594870.00	2364440.00	0.0029282	0.00034198	0.00034196	0.00000002	0.00188393	0.00035975	0.00035972	0.00000002
595370.00	2364440.00	0.00216884	0.0003398	0.00033978	0.00000002	0.00142172	0.00036536	0.00036534	0.00000002
595870.00	2364440.00	0.00206427	0.00030391	0.00030389	0.00000002	0.00202174	0.00035908	0.00035905	0.00000002
596370.00	2364440.00	0.00147884	0.00026715	0.00026713	0.00000002	0.00209477	0.00032007	0.00032004	0.00000002
596870.00	2364440.00	0.00067087	0.00023295	0.00023293	0.00000002	0.00173487	0.00028521	0.00028519	0.00000002
597370.00	2364440.00	0.00056527	0.00020896	0.00020894	0.00000002	0.00092887	0.00025541	0.00025538	0.00000002
597870.00	2364440.00	0.00055658	0.00018692	0.00018689	0.00000002	0.00088544	0.00022932	0.0002293	0.00000002
598370.00	2364440.00	0.00055441	0.00016785	0.00016782	0.00000002	0.00084023	0.00020827	0.00020825	0.00000002
598870.00	2364440.00	0.00055147	0.00014889	0.00014886	0.00000002	0.00082486	0.00018694	0.00018692	0.00000002
599370.00	2364440.00	0.00054617	0.00013084	0.00013081	0.00000002	0.00081155	0.00016611	0.00016609	0.00000002
599870.00	2364440.00	0.00053621	0.00011401	0.00011399	0.00000002	0.0007982	0.00014602	0.000146	0.00000002
600370.00	2364440.00	0.0005208	0.00009885	0.00009883	0.00000002	0.00078274	0.00012729	0.00012726	0.00000003
600870.00	2364440.00	0.00050249	0.0000857	0.00008568	0.00000002	0.00076595	0.00011051	0.00011048	0.00000003
601370.00	2364440.00	0.00065275	0.00006881	0.00006879	0.00000002	0.00129065	0.00008735	0.00008732	0.00000002
601870.00	2364440.00	0.00058401	0.00005958	0.00005955	0.00000002	0.00127098	0.00007523	0.00007521	0.00000002
602370.00	2364440.00	0.00057745	0.00005242	0.0000524	0.00000002	0.0012522	0.00006514	0.00006512	0.00000002
602870.00	2364440.00	0.00060545	0.00004695	0.00004693	0.00000002	0.00121874	0.00005703	0.00005701	0.00000002
603370.00	2364440.00	0.00056466	0.00004285	0.00004283	0.00000002	0.00123241	0.00005136	0.00005134	0.00000002
603870.00	2364440.00	0.00055678	0.00003968	0.00003966	0.00000002	0.00121482	0.0000468	0.00004678	0.00000002
604370.00	2364440.00	0.00059338	0.00003719	0.00003716	0.00000003	0.00120177	0.00004301	0.00004299	0.00000002
604870.00	2364440.00	0.00055351	0.00003521	0.00003519	0.00000003	0.00119547	0.00004046	0.00004043	0.00000002
605370.00	2364440.00	0.00054402	0.0000336	0.00003357	0.00000003	0.0011765	0.00003828	0.00003825	0.00000002
605870.00	2364440.00	0.0005776	0.00003227	0.00003223	0.00000004	0.00115008	0.00003628	0.00003626	0.00000003
606370.00	2364440.00	0.00053164	0.00003114	0.00003109	0.00000005	0.00112049	0.000035	0.00003497	0.00000003
606870.00	2364440.00	0.00052402	0.00003017	0.00003012	0.00000006	0.00108607	0.00003375	0.00003371	0.00000003
607370.00	2364440.00	0.00055082	0.00002934	0.00002927	0.00000006	0.00104456	0.0000325	0.00003246	0.00000004
607870.00	2364440.00	0.00050566	0.00002859	0.00002852	0.00000008	0.001013	0.00003174	0.0000317	0.00000005

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2364440.00	0.00049569	0.00002793	0.00002784	0.00000009	0.00097715	0.00003092	0.00003086	0.00000005
608870.00	2364440.00	0.00051801	0.00002734	0.00002724	0.0000001	0.00093886	0.00003001	0.00002995	0.00000006
609370.00	2364440.00	0.00047542	0.0000268	0.00002668	0.00000012	0.00091664	0.00002951	0.00002944	0.00000007
609870.00	2364440.00	0.00046442	0.00002632	0.00002619	0.00000013	0.00094209	0.00002896	0.00002888	0.00000008
610370.00	2364440.00	0.00048783	0.00002586	0.00002571	0.00000014	0.00089279	0.0000282	0.00002812	0.00000009
610870.00	2364440.00	0.00045451	0.00002543	0.00002527	0.00000016	0.00087316	0.0000278	0.0000277	0.0000001
611370.00	2364440.00	0.00040393	0.00002504	0.00002487	0.00000018	0.00083891	0.00002752	0.00002741	0.00000011
611870.00	2364440.00	0.00047614	0.00002464	0.00002446	0.00000019	0.00078532	0.00002663	0.00002651	0.00000012
612370.00	2364440.00	0.00046411	0.00002429	0.00002409	0.0000002	0.00077874	0.00002622	0.00002609	0.00000013
612870.00	2364440.00	0.00040029	0.00002397	0.00002375	0.00000022	0.00079833	0.0000261	0.00002596	0.00000014
613370.00	2364440.00	0.00050968	0.00002362	0.0000234	0.00000023	0.00072292	0.00002519	0.00002504	0.00000015
613870.00	2364440.00	0.00036889	0.00002343	0.00002318	0.00000025	0.00080331	0.00002554	0.00002538	0.00000016
614370.00	2364440.00	0.00028301	0.00002353	0.00002326	0.00000027	0.00047075	0.00002581	0.00002563	0.00000018
614870.00	2364440.00	0.00034163	0.00002286	0.00002258	0.00000027	0.00074647	0.00002488	0.0000247	0.00000018
615370.00	2364440.00	0.0003384	0.00002259	0.0000223	0.00000028	0.00074465	0.00002453	0.00002434	0.00000019
615870.00	2364440.00	0.00026731	0.0000227	0.0000224	0.0000003	0.00044191	0.00002478	0.00002457	0.00000021
616370.00	2364440.00	0.00032	0.00002208	0.00002177	0.0000003	0.00070932	0.00002393	0.00002372	0.00000021
616870.00	2364440.00	0.00074685	0.00002182	0.00002152	0.0000003	0.00062188	0.00002253	0.00002232	0.00000021
617370.00	2364440.00	0.000789	0.00002131	0.000021	0.00000031	0.00046172	0.00002172	0.00002151	0.00000021
617870.00	2364440.00	0.00056335	0.00002024	0.00001992	0.00000031	0.00034608	0.00002068	0.00002047	0.00000021
618370.00	2364440.00	0.00071203	0.00002113	0.0000208	0.00000033	0.00063467	0.00002183	0.0000216	0.00000023
618870.00	2364440.00	0.00031897	0.00001882	0.00001849	0.00000033	0.00026565	0.00001926	0.00001903	0.00000022
619370.00	2364440.00	0.00027215	0.00001825	0.00001792	0.00000033	0.00024685	0.0000188	0.00001857	0.00000023
619870.00	2364440.00	0.00029911	0.00001839	0.00001805	0.00000034	0.00025441	0.00001882	0.00001858	0.00000023
590370.00	2364940.00	0.00201993	0.00043105	0.0004309	0.00000015	0.00222672	0.00054535	0.00054519	0.00000016
590870.00	2364940.00	0.00139525	0.00033117	0.00033107	0.0000001	0.00085542	0.00041122	0.0004111	0.00000012
591370.00	2364940.00	0.00091615	0.00027368	0.0002736	0.00000007	0.00075097	0.00032529	0.0003252	0.00000008
591870.00	2364940.00	0.00071906	0.00024384	0.00024379	0.00000005	0.00069566	0.0002784	0.00027834	0.00000006
592370.00	2364940.00	0.00051911	0.00022607	0.00022604	0.00000003	0.00061508	0.00025566	0.00025562	0.00000004
592870.00	2364940.00	0.00050886	0.00021815	0.00021813	0.00000003	0.00057175	0.00024515	0.00024512	0.00000003
593370.00	2364940.00	0.00064988	0.00022255	0.00022253	0.00000002	0.00057434	0.00024156	0.00024154	0.00000002
593870.00	2364940.00	0.00134306	0.0002545	0.00025448	0.00000002	0.00071303	0.00025476	0.00025474	0.00000002
594370.00	2364940.00	0.00102537	0.00026633	0.00026631	0.00000002	0.00072103	0.00026553	0.00026552	0.00000002
594870.00	2364940.00	0.0017052	0.00031367	0.00031365	0.00000002	0.00100787	0.00030409	0.00030407	0.00000002
595370.00	2364940.00	0.00211379	0.00032431	0.00032428	0.00000002	0.00133757	0.00034093	0.00034091	0.00000002
595870.00	2364940.00	0.00213178	0.00030249	0.00030246	0.00000002	0.00151032	0.00034192	0.0003419	0.00000002
596370.00	2364940.00	0.00148999	0.0002664	0.00026638	0.00000002	0.0020957	0.00032026	0.00032024	0.00000002
596870.00	2364940.00	0.00086429	0.00023466	0.00023464	0.00000002	0.00214194	0.00028392	0.0002839	0.00000002
597370.00	2364940.00	0.00055185	0.000209	0.00020898	0.00000002	0.0010684	0.00025374	0.00025372	0.00000002
597870.00	2364940.00	0.00053145	0.00018832	0.0001883	0.00000002	0.00092599	0.00022837	0.00022835	0.00000002
598370.00	2364940.00	0.00052191	0.00017048	0.00017046	0.00000002	0.00082836	0.00020814	0.00020811	0.00000002
598870.00	2364940.00	0.00052092	0.00015452	0.0001545	0.00000002	0.00078172	0.00019079	0.00019076	0.00000002
599370.00	2364940.00	0.00051692	0.00013763	0.0001376	0.00000002	0.00077052	0.0001715	0.00017147	0.00000002
599870.00	2364940.00	0.00051153	0.00012172	0.0001217	0.00000002	0.00075877	0.00015303	0.00015301	0.00000002
600370.00	2364940.00	0.000504	0.00010745	0.00010742	0.00000002	0.00075039	0.00013609	0.00013606	0.00000002
600870.00	2364940.00	0.00049028	0.00009397	0.00009395	0.00000002	0.00073759	0.00011952	0.00011949	0.00000002
601370.00	2364940.00	0.00061105	0.00007688	0.00007686	0.00000002	0.00123485	0.0000971	0.00009708	0.00000002
601870.00	2364940.00	0.00059072	0.00006624	0.00006622	0.00000002	0.00127121	0.00008348	0.00008346	0.00000002
602370.00	2364940.00	0.00059738	0.00005766	0.00005764	0.00000002	0.0012398	0.00007188	0.00007186	0.00000002
602870.00	2364940.00	0.00057582	0.00005099	0.00005097	0.00000002	0.00117309	0.00006277	0.00006275	0.00000002
603370.00	2364940.00	0.00057437	0.00004585	0.00004583	0.00000002	0.00114623	0.00005548	0.00005546	0.00000002
603870.00	2364940.00	0.00058503	0.00004189	0.00004187	0.00000002	0.00114138	0.00004975	0.00004973	0.00000002
604370.00	2364940.00	0.00056663	0.00003883	0.00003881	0.00000002	0.00113413	0.00004548	0.00004547	0.00000002
604870.00	2364940.00	0.00056374	0.00003642	0.0000364	0.00000002	0.00112915	0.00004208	0.00004206	0.00000002
605370.00	2364940.00	0.00056052	0.00003449	0.00003447	0.00000003	0.00112117	0.00003939	0.00003937	0.00000002
605870.00	2364940.00	0.00055649	0.00003292	0.00003289	0.00000003	0.00110834	0.00003724	0.00003722	0.00000002
606370.00	2364940.00	0.00055139	0.00003161	0.00003158	0.00000003	0.00108993	0.00003549	0.00003547	0.00000002
606870.00	2364940.00	0.00054513	0.00003051	0.00003047	0.00000004	0.00106627	0.00003404	0.00003402	0.00000002
607370.00	2364940.00	0.00053777	0.00002956	0.00002952	0.00000004	0.00103841	0.00003282	0.00003279	0.00000003
607870.00	2364940.00	0.00052946	0.00002874	0.00002869	0.00000005	0.00100773	0.00003178	0.00003174	0.00000003
608370.00	2364940.00	0.00052039	0.00002802	0.00002796	0.00000006	0.00097563	0.00003087	0.00003083	0.00000004
608870.00	2364940.00	0.0005108	0.00002737	0.0000273	0.00000007	0.0009433	0.00003007	0.00003002	0.00000004
609370.00	2364940.00	0.00049102	0.00002679	0.00002671	0.00000008	0.00091428	0.0000294	0.00002935	0.00000005
609870.00	2364940.00	0.00052033	0.00002629	0.0000262	0.00000009	0.00093141	0.00002863	0.00002858	0.00000005
610370.00	2364940.00	0.00044881	0.0000258	0.0000257	0.00000011	0.00091581	0.00002834	0.00002828	0.00000006
610870.00	2364940.00	0.00044879	0.00002536	0.00002524	0.00000012	0.00088735	0.00002775	0.00002768	0.00000007
611370.00	2364940.00	0.00052102	0.00002494	0.00002481	0.00000013	0.00081214	0.00002685	0.00002677	0.00000008
611870.00	2364940.00	0.00049534	0.00002455	0.00002441	0.00000014	0.0008028	0.00002645	0.00002636	0.00000009
612370.00	2364940.00	0.00038321	0.00002421	0.00002405	0.00000016	0.00079197	0.00002651	0.00002641	0.0000001
612870.00	2364940.00	0.00037245	0.00002388	0.0000237	0.00000017	0.00076926	0.00002611	0.000026	0.00000011

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2364940.00	0.00042336	0.00002353	0.00002335	0.00000018	0.00077241	0.00002543	0.00002531	0.00000012
613870.00	2364940.00	0.00051128	0.00002332	0.00002313	0.00000019	0.00080983	0.00002488	0.00002475	0.00000012
614370.00	2364940.00	0.00031646	0.00002306	0.00002284	0.00000022	0.0006456	0.00002523	0.00002509	0.00000014
614870.00	2364940.00	0.00033175	0.00002275	0.00002252	0.00000023	0.00070391	0.00002478	0.00002463	0.00000015
615370.00	2364940.00	0.00028143	0.00002262	0.00002238	0.00000024	0.00051414	0.00002473	0.00002456	0.00000016
615870.00	2364940.00	0.00040183	0.00002223	0.00002198	0.00000024	0.00080503	0.00002387	0.00002371	0.00000016
616370.00	2364940.00	0.00077134	0.00002186	0.00002161	0.00000024	0.00052667	0.0000224	0.00002224	0.00000016
616870.00	2364940.00	0.00029572	0.00002174	0.00002147	0.00000027	0.0006193	0.00002358	0.0000234	0.00000018
617370.00	2364940.00	0.00028473	0.00002152	0.00002124	0.00000028	0.00058693	0.00002332	0.00002313	0.00000019
617870.00	2364940.00	0.00073455	0.00002121	0.00002094	0.00000027	0.00055545	0.00002178	0.0000216	0.00000018
618370.00	2364940.00	0.00047224	0.00001962	0.00001934	0.00000028	0.00031015	0.00001998	0.0000198	0.00000018
618870.00	2364940.00	0.00067224	0.00002021	0.00001992	0.00000029	0.00037926	0.00002051	0.00002031	0.00000019
619370.00	2364940.00	0.00058419	0.00001966	0.00001937	0.00000029	0.00033828	0.00002001	0.00001981	0.0000002
619870.00	2364940.00	0.00050879	0.00001923	0.00001893	0.0000003	0.00030998	0.00001959	0.00001939	0.0000002
590370.00	2365440.00	0.00075394	0.00039061	0.00039047	0.00000014	0.00114863	0.00049524	0.00049509	0.00000015
590870.00	2365440.00	0.00219043	0.0003134	0.00031331	0.0000001	0.002301	0.00038952	0.00038941	0.00000011
591370.00	2365440.00	0.00245678	0.00026436	0.00026429	0.00000007	0.00115419	0.00031025	0.00031017	0.00000008
591870.00	2365440.00	0.00118299	0.0002348	0.00023475	0.00000005	0.0007461	0.00026246	0.0002624	0.00000005
592370.00	2365440.00	0.00041316	0.00020447	0.00020444	0.00000003	0.00051646	0.00023048	0.00023045	0.00000004
592870.00	2365440.00	0.00037442	0.0001953	0.00019528	0.00000002	0.00047376	0.00021949	0.00021947	0.00000002
593370.00	2365440.00	0.00045398	0.00020169	0.00020167	0.00000002	0.00050613	0.00022351	0.00022349	0.00000002
593870.00	2365440.00	0.00053913	0.00021247	0.00021245	0.00000002	0.00052659	0.00022668	0.00022666	0.00000002
594370.00	2365440.00	0.00068648	0.00023276	0.00023274	0.00000002	0.00060442	0.0002394	0.00023939	0.00000002
594870.00	2365440.00	0.00100515	0.00026909	0.00026907	0.00000002	0.00074851	0.00026788	0.00026787	0.00000002
595370.00	2365440.00	0.00150377	0.00030241	0.00030239	0.00000002	0.0009664	0.00030102	0.000301	0.00000002
595870.00	2365440.00	0.00217598	0.00029163	0.00029161	0.00000002	0.00188173	0.0003323	0.00033228	0.00000002
596370.00	2365440.00	0.00109525	0.00026254	0.00026252	0.00000002	0.00245925	0.00031867	0.00031865	0.00000002
596870.00	2365440.00	0.00076718	0.0002345	0.00023448	0.00000002	0.0020636	0.00028482	0.0002848	0.00000002
597370.00	2365440.00	0.00056974	0.00020963	0.00020961	0.00000002	0.0013375	0.00025339	0.00025337	0.00000002
597870.00	2365440.00	0.00050631	0.00019018	0.00019016	0.00000002	0.00085576	0.00022926	0.00022924	0.00000002
598370.00	2365440.00	0.00050392	0.00017197	0.00017194	0.00000002	0.00091604	0.00020743	0.00020741	0.00000002
598870.00	2365440.00	0.00049147	0.00015745	0.00015743	0.00000002	0.00075361	0.00019156	0.00019154	0.00000002
599370.00	2365440.00	0.00048874	0.00014185	0.00014183	0.00000002	0.00075601	0.00017384	0.00017382	0.00000002
599870.00	2365440.00	0.00048521	0.00012744	0.00012742	0.00000002	0.00073109	0.0001575	0.00015748	0.00000002
600370.00	2365440.00	0.00048043	0.00011364	0.00011362	0.00000002	0.00071303	0.00014153	0.00014151	0.00000002
600870.00	2365440.00	0.00047275	0.00010074	0.00010072	0.00000002	0.00070206	0.00012622	0.0001262	0.00000002
601370.00	2365440.00	0.00056048	0.00008502	0.000085	0.00000002	0.00125683	0.00010632	0.0001063	0.00000002
601870.00	2365440.00	0.00052271	0.00007362	0.0000736	0.00000002	0.00120619	0.00009256	0.00009254	0.00000002
602370.00	2365440.00	0.00055181	0.00006387	0.00006385	0.00000002	0.00119855	0.0000798	0.00007978	0.00000002
602870.00	2365440.00	0.00054217	0.00005597	0.00005595	0.00000002	0.00111721	0.0000694	0.00006939	0.00000002
603370.00	2365440.00	0.00055318	0.0000497	0.00004968	0.00000002	0.00110486	0.00006078	0.00006076	0.00000002
603870.00	2365440.00	0.00053216	0.00004485	0.00004483	0.00000002	0.00111306	0.00005417	0.00005415	0.00000002
604370.00	2365440.00	0.00054243	0.00004103	0.00004101	0.00000002	0.00107468	0.0000487	0.00004869	0.00000002
604870.00	2365440.00	0.00053951	0.00003807	0.00003805	0.00000002	0.0010705	0.00004452	0.0000445	0.00000002
605370.00	2365440.00	0.0005373	0.00003572	0.0000357	0.00000002	0.00107727	0.00004123	0.00004121	0.00000002
605870.00	2365440.00	0.00053477	0.00003384	0.00003381	0.00000002	0.00107161	0.00003861	0.00003859	0.00000002
606370.00	2365440.00	0.00052422	0.00003229	0.00003227	0.00000002	0.00105574	0.00003653	0.00003651	0.00000002
606870.00	2365440.00	0.00052746	0.00003101	0.00003098	0.00000003	0.00103917	0.00003477	0.00003475	0.00000002
607370.00	2365440.00	0.00052245	0.00002993	0.0000299	0.00000003	0.00102077	0.00003335	0.00003332	0.00000002
607870.00	2365440.00	0.00051368	0.000029	0.00002896	0.00000004	0.00099847	0.00003216	0.00003213	0.00000002
608370.00	2365440.00	0.00051739	0.00002819	0.00002815	0.00000004	0.00097653	0.00003109	0.00003106	0.00000003
608870.00	2365440.00	0.00052478	0.0000275	0.00002745	0.00000005	0.00101009	0.00003019	0.00003016	0.00000003
609370.00	2365440.00	0.00046923	0.00002687	0.00002681	0.00000006	0.00099091	0.00002962	0.00002959	0.00000003
609870.00	2365440.00	0.00048148	0.00002631	0.00002624	0.00000007	0.00095546	0.00002882	0.00002878	0.00000004
610370.00	2365440.00	0.00054427	0.00002578	0.00002571	0.00000007	0.0008682	0.00002785	0.00002781	0.00000004
610870.00	2365440.00	0.00039081	0.00002535	0.00002526	0.00000009	0.00084928	0.00002798	0.00002793	0.00000005
611370.00	2365440.00	0.00053678	0.00002487	0.00002478	0.00000009	0.00079839	0.00002671	0.00002665	0.00000006
611870.00	2365440.00	0.00032351	0.00002471	0.00002459	0.00000012	0.00061866	0.00002734	0.00002727	0.00000007
612370.00	2365440.00	0.00062002	0.00002396	0.00002385	0.00000011	0.00061048	0.00002516	0.00002509	0.00000007
612870.00	2365440.00	0.00040115	0.00002386	0.00002373	0.00000013	0.00085067	0.00002601	0.00002592	0.00000008
613370.00	2365440.00	0.00054641	0.00002337	0.00002323	0.00000013	0.00064797	0.00002469	0.00002461	0.00000008
613870.00	2365440.00	0.00034811	0.00002322	0.00002306	0.00000016	0.00073546	0.00002537	0.00002527	0.0000001
614370.00	2365440.00	0.00048333	0.00002297	0.00002281	0.00000016	0.00082208	0.00002456	0.00002446	0.0000001
614870.00	2365440.00	0.00042678	0.00002266	0.00002249	0.00000018	0.00080903	0.00002435	0.00002424	0.00000011
615370.00	2365440.00	0.00074975	0.00002208	0.00002191	0.00000017	0.00050028	0.00002262	0.00002251	0.00000011
615870.00	2365440.00	0.00075504	0.00002198	0.0000218	0.00000019	0.0005249	0.00002254	0.00002242	0.00000012
616370.00	2365440.00	0.00037771	0.00002186	0.00002165	0.00000021	0.00076092	0.00002348	0.00002335	0.00000014
616870.00	2365440.00	0.00052815	0.00002029	0.00002009	0.0000002	0.00034616	0.00002069	0.00002057	0.00000013
617370.00	2365440.00	0.00061541	0.0000205	0.00002028	0.00000021	0.00037726	0.00002089	0.00002075	0.00000014
617870.00	2365440.00	0.00040254	0.00002117	0.00002093	0.00000024	0.00075547	0.00002253	0.00002237	0.00000016

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2365440.00	0.00048464	0.00002096	0.00002072	0.00000025	0.00072735	0.00002205	0.00002189	0.00000016
618870.00	2365440.00	0.00064613	0.0000201	0.00001985	0.00000024	0.00037802	0.00002041	0.00002025	0.00000016
619370.00	2365440.00	0.00042268	0.000019	0.00001875	0.00000025	0.00028723	0.00001931	0.00001915	0.00000016
619870.00	2365440.00	0.00028384	0.00001796	0.00001771	0.00000026	0.00023844	0.00001842	0.00001825	0.00000017
590370.00	2365940.00	0.00070883	0.00035302	0.0003529	0.00000012	0.00109204	0.00044446	0.00044432	0.00000013
590870.00	2365940.00	0.00069696	0.00028841	0.00028832	0.00000009	0.00133169	0.00036036	0.00036027	0.0000001
591370.00	2365940.00	0.001291	0.00024983	0.00024977	0.00000007	0.00304217	0.00029823	0.00029816	0.00000007
591870.00	2365940.00	0.00270523	0.0002285	0.00022845	0.00000005	0.00120821	0.00025553	0.00025548	0.00000005
592370.00	2365940.00	0.00079194	0.00020781	0.00020777	0.00000003	0.00062333	0.00022829	0.00022826	0.00000004
592870.00	2365940.00	0.00034676	0.00018193	0.00018191	0.00000002	0.00044266	0.00020328	0.00020326	0.00000002
593370.00	2365940.00	0.00036127	0.00018299	0.00018297	0.00000002	0.00042945	0.0002016	0.00020158	0.00000002
593870.00	2365940.00	0.00037776	0.00018545	0.00018543	0.00000002	0.00043577	0.00020129	0.00020128	0.00000002
594370.00	2365940.00	0.00057413	0.00021308	0.00021306	0.00000002	0.00054446	0.00022209	0.00022207	0.00000002
594870.00	2365940.00	0.00102215	0.00025631	0.00025629	0.00000002	0.00071195	0.00024948	0.00024947	0.00000002
595370.00	2365940.00	0.00176724	0.00028824	0.00028822	0.00000002	0.00105754	0.00028743	0.00028741	0.00000002
595870.00	2365940.00	0.00217017	0.00028532	0.0002853	0.00000002	0.00147583	0.0003126	0.00031258	0.00000002
596370.00	2365940.00	0.00141905	0.00026099	0.00026097	0.00000002	0.00222066	0.00031076	0.00031074	0.00000002
596870.00	2365940.00	0.00087506	0.00023483	0.00023481	0.00000002	0.00214851	0.00028354	0.00028352	0.00000002
597370.00	2365940.00	0.0006223	0.00021056	0.00021054	0.00000002	0.00164013	0.00025333	0.00025331	0.00000002
597870.00	2365940.00	0.00049807	0.00019055	0.00019053	0.00000002	0.00095667	0.00022854	0.00022852	0.00000002
598370.00	2365940.00	0.00048944	0.00017331	0.00017329	0.00000002	0.00095307	0.00020727	0.00020725	0.00000002
598870.00	2365940.00	0.0004763	0.00015849	0.00015847	0.00000002	0.00086235	0.00019037	0.00019035	0.00000002
599370.00	2365940.00	0.00046856	0.00014483	0.00014481	0.00000002	0.00079317	0.00017513	0.00017511	0.00000002
599870.00	2365940.00	0.00046334	0.00013167	0.00013165	0.00000002	0.00074089	0.00016036	0.00016034	0.00000002
600370.00	2365940.00	0.00045814	0.00011885	0.00011883	0.00000002	0.00069931	0.00014577	0.00014575	0.00000002
600870.00	2365940.00	0.0004538	0.00010694	0.00010692	0.00000002	0.00067169	0.00013205	0.00013203	0.00000002
601370.00	2365940.00	0.00058391	0.00009263	0.00009261	0.00000002	0.0012325	0.0001136	0.00011358	0.00000002
601870.00	2365940.00	0.00055697	0.0000809	0.00008088	0.00000002	0.00122256	0.00009998	0.00009996	0.00000002
602370.00	2365940.00	0.00055221	0.00007048	0.00007046	0.00000002	0.0010967	0.00008725	0.00008723	0.00000002
602870.00	2365940.00	0.0005133	0.00006168	0.00006166	0.00000002	0.00107419	0.00007645	0.00007643	0.00000002
603370.00	2365940.00	0.0005363	0.00005433	0.00005431	0.00000002	0.00105222	0.00006672	0.0000667	0.00000002
603870.00	2365940.00	0.00053539	0.00004847	0.00004845	0.00000002	0.00103875	0.00005889	0.00005887	0.00000002
604370.00	2365940.00	0.00052963	0.00004385	0.00004383	0.00000002	0.00103416	0.0000526	0.00005258	0.00000002
604870.00	2365940.00	0.00046866	0.0000403	0.00004028	0.00000002	0.00102745	0.00004803	0.00004801	0.00000002
605370.00	2365940.00	0.00040747	0.00003758	0.00003756	0.00000002	0.00093371	0.00004456	0.00004455	0.00000002
605870.00	2365940.00	0.00051297	0.00003507	0.00003505	0.00000002	0.00101064	0.00004042	0.00004041	0.00000002
606370.00	2365940.00	0.00051095	0.00003323	0.0000332	0.00000002	0.00100713	0.00003787	0.00003785	0.00000002
606870.00	2365940.00	0.00050854	0.00003171	0.00003169	0.00000002	0.0010011	0.0000358	0.00003579	0.00000002
607370.00	2365940.00	0.00050544	0.00003045	0.00003043	0.00000002	0.00099134	0.00003411	0.00003409	0.00000002
607870.00	2365940.00	0.00050173	0.00002939	0.00002936	0.00000003	0.00098853	0.00003271	0.00003269	0.00000002
608370.00	2365940.00	0.00046523	0.0000285	0.00002847	0.00000003	0.00104705	0.00003175	0.00003173	0.00000002
608870.00	2365940.00	0.0004949	0.0000277	0.00002767	0.00000003	0.00101647	0.00003055	0.00003053	0.00000002
609370.00	2365940.00	0.00045662	0.00002701	0.00002697	0.00000004	0.00099214	0.00002983	0.00002981	0.00000003
609870.00	2365940.00	0.00043038	0.0000264	0.00002635	0.00000005	0.00095354	0.00002915	0.00002912	0.00000003
610370.00	2365940.00	0.00036419	0.00002592	0.00002586	0.00000006	0.00080502	0.0000288	0.00002876	0.00000004
610870.00	2365940.00	0.00053747	0.00002532	0.00002526	0.00000006	0.00083503	0.00002727	0.00002723	0.00000003
611370.00	2365940.00	0.00064948	0.0000247	0.00002464	0.00000006	0.00063573	0.000026	0.00002596	0.00000004
611870.00	2365940.00	0.00034045	0.00002455	0.00002447	0.00000008	0.00071273	0.00002711	0.00002706	0.00000005
612370.00	2365940.00	0.00048045	0.00002405	0.00002397	0.00000008	0.00078976	0.00002586	0.00002581	0.00000005
612870.00	2365940.00	0.00045447	0.00002383	0.00002374	0.0000001	0.00088489	0.00002578	0.00002572	0.00000006
613370.00	2365940.00	0.00037447	0.00002346	0.00002335	0.00000011	0.0007982	0.00002559	0.00002552	0.00000007
613870.00	2365940.00	0.0003226	0.00002317	0.00002304	0.00000012	0.00066025	0.00002538	0.0000253	0.00000008
614370.00	2365940.00	0.00027669	0.00002355	0.00002341	0.00000015	0.00044347	0.00002584	0.00002575	0.0000001
614870.00	2365940.00	0.00074475	0.0000225	0.00002237	0.00000013	0.0005813	0.0000232	0.00002312	0.00000008
615370.00	2365940.00	0.0006682	0.00002157	0.00002143	0.00000013	0.00044406	0.00002207	0.00002199	0.00000008
615870.00	2365940.00	0.00063291	0.00002109	0.00002095	0.00000014	0.00040819	0.00002156	0.00002147	0.00000009
616370.00	2365940.00	0.00070726	0.00002132	0.00002117	0.00000016	0.00045772	0.00002175	0.00002165	0.0000001
616870.00	2365940.00	0.00046291	0.00002155	0.00002137	0.00000018	0.00073736	0.00002283	0.00002271	0.00000011
617370.00	2365940.00	0.00050889	0.00001994	0.00001977	0.00000017	0.00033759	0.00002034	0.00002024	0.00000011
617870.00	2365940.00	0.00036678	0.00001902	0.00001884	0.00000018	0.00027782	0.0000194	0.00001928	0.00000011
618370.00	2365940.00	0.0006945	0.00002073	0.00002053	0.0000002	0.00049109	0.0000212	0.00002107	0.00000013
618870.00	2365940.00	0.00050008	0.00002065	0.00002043	0.00000021	0.0006764	0.00002163	0.00002149	0.00000014
619370.00	2365940.00	0.00066931	0.00002035	0.00002013	0.00000022	0.00051076	0.00002086	0.00002071	0.00000014
619870.00	2365940.00	0.00063987	0.00001971	0.00001949	0.00000022	0.00038244	0.00001999	0.00001984	0.00000015
590370.00	2366440.00	0.00066923	0.00031797	0.00031786	0.00000011	0.00109156	0.00039716	0.00039704	0.00000012
590870.00	2366440.00	0.00065347	0.00026711	0.00026703	0.00000008	0.00120022	0.00032953	0.00032944	0.00000009
591370.00	2366440.00	0.00141101	0.00023407	0.00023401	0.00000006	0.00285781	0.00027519	0.00027512	0.00000007
591870.00	2366440.00	0.00170862	0.00021228	0.00021224	0.00000004	0.00081495	0.00023387	0.00023382	0.00000005
592370.00	2366440.00	0.0005398	0.00019267	0.00019264	0.00000003	0.0005519	0.00021306	0.00021303	0.00000003
592870.00	2366440.00	0.00032863	0.00017226	0.00017224	0.00000002	0.0004141	0.00019169	0.00019167	0.00000002

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2366440.00	0.00032746	0.00017221	0.0001722	0.00000002	0.00039196	0.00018925	0.00018923	0.00000002
593870.00	2366440.00	0.00036311	0.00017627	0.00017625	0.00000002	0.00040751	0.00019021	0.0001902	0.00000001
594370.00	2366440.00	0.00056665	0.00020121	0.00020119	0.00000002	0.00051837	0.00020902	0.000209	0.00000001
594870.00	2366440.00	0.00086148	0.00023112	0.0002311	0.00000002	0.00064161	0.00023058	0.00023057	0.00000002
595370.00	2366440.00	0.00119069	0.0002623	0.00026228	0.00000002	0.00078036	0.00025659	0.00025658	0.00000002
595870.00	2366440.00	0.00124587	0.00027054	0.00027052	0.00000002	0.00085141	0.00027368	0.00027366	0.00000002
596370.00	2366440.00	0.00184005	0.0002584	0.00025838	0.00000002	0.0017355	0.00029566	0.00029564	0.00000002
596870.00	2366440.00	0.00099597	0.00023451	0.00023449	0.00000002	0.00213764	0.00028103	0.00028101	0.00000002
597370.00	2366440.00	0.00054322	0.00021121	0.00021119	0.00000002	0.00121838	0.00025575	0.00025574	0.00000002
597870.00	2366440.00	0.00055827	0.00019119	0.00019117	0.00000002	0.0014121	0.00022755	0.00022753	0.00000002
598370.00	2366440.00	0.00049416	0.00017427	0.00017425	0.00000002	0.00109569	0.00020691	0.00020689	0.00000002
598870.00	2366440.00	0.00047253	0.00015985	0.00015983	0.00000002	0.00097183	0.00019017	0.00019015	0.00000002
599370.00	2366440.00	0.00045539	0.00014697	0.00014695	0.00000002	0.00084815	0.00017579	0.00017577	0.00000002
599870.00	2366440.00	0.00044832	0.0001348	0.00013478	0.00000002	0.00078918	0.0001622	0.00016218	0.00000002
600370.00	2366440.00	0.00043802	0.00012329	0.00012327	0.00000002	0.00068207	0.00014933	0.00014931	0.00000002
600870.00	2366440.00	0.00043359	0.00011172	0.0001117	0.00000002	0.00064941	0.00013608	0.00013606	0.00000002
601370.00	2366440.00	0.0004333	0.00009934	0.00009932	0.00000002	0.00072983	0.00012153	0.00012151	0.00000002
601870.00	2366440.00	0.0005308	0.00008775	0.00008773	0.00000002	0.00116353	0.00010699	0.00010697	0.00000002
602370.00	2366440.00	0.00046052	0.00007727	0.00007725	0.00000002	0.00103285	0.00009525	0.00009523	0.00000002
602870.00	2366440.00	0.00050508	0.00006773	0.00006772	0.00000002	0.00103472	0.00008327	0.00008326	0.00000002
603370.00	2366440.00	0.00051147	0.00005959	0.00005958	0.00000002	0.00102023	0.00007311	0.00007309	0.00000002
603870.00	2366440.00	0.00050723	0.00005283	0.00005281	0.00000002	0.00100072	0.00006446	0.00006444	0.00000002
604370.00	2366440.00	0.0005087	0.00004733	0.00004731	0.00000002	0.00099476	0.0000572	0.00005719	0.00000002
604870.00	2366440.00	0.00050366	0.00004297	0.00004295	0.00000002	0.0010746	0.00005139	0.00005138	0.00000002
605370.00	2366440.00	0.00050797	0.00003945	0.00003943	0.00000002	0.00099008	0.00004651	0.00004649	0.00000002
605870.00	2366440.00	0.00050804	0.00003667	0.00003666	0.00000002	0.00096632	0.00004266	0.00004264	0.00000002
606370.00	2366440.00	0.0004854	0.00003447	0.00003445	0.00000002	0.0009682	0.00003971	0.0000397	0.00000002
606870.00	2366440.00	0.0004643	0.00003268	0.00003266	0.00000002	0.00100771	0.00003737	0.00003736	0.00000002
607370.00	2366440.00	0.00048868	0.00003118	0.00003116	0.00000002	0.00099237	0.00003518	0.00003516	0.00000002
607870.00	2366440.00	0.00041936	0.00002997	0.00002995	0.00000002	0.00095841	0.0000339	0.00003388	0.00000002
608370.00	2366440.00	0.00048432	0.0000289	0.00002888	0.00000002	0.00100886	0.00003216	0.00003214	0.00000002
608870.00	2366440.00	0.00041028	0.00002803	0.00002801	0.00000003	0.00097624	0.00003137	0.00003135	0.00000002
609370.00	2366440.00	0.00047729	0.00002723	0.0000272	0.00000003	0.00098114	0.00002999	0.00002997	0.00000002
609870.00	2366440.00	0.00060908	0.00002649	0.00002646	0.00000003	0.00079838	0.00002846	0.00002844	0.00000002
610370.00	2366440.00	0.00044697	0.00002594	0.0000259	0.00000004	0.00093579	0.00002846	0.00002844	0.00000002
610870.00	2366440.00	0.00037642	0.00002543	0.00002539	0.00000005	0.00085152	0.00002811	0.00002808	0.00000003
611370.00	2366440.00	0.00053376	0.00002488	0.00002483	0.00000005	0.00080014	0.0000267	0.00002667	0.00000003
611870.00	2366440.00	0.00053158	0.0000244	0.00002437	0.00000005	0.00076839	0.00002613	0.0000261	0.00000003
612370.00	2366440.00	0.00047544	0.00002416	0.0000241	0.00000006	0.00091396	0.0000261	0.00002606	0.00000004
612870.00	2366440.00	0.00042496	0.00002378	0.00002371	0.00000007	0.00088079	0.00002582	0.00002577	0.00000004
613370.00	2366440.00	0.00036402	0.00002341	0.00002332	0.00000008	0.0007862	0.00002556	0.00002551	0.00000005
613870.00	2366440.00	0.00029915	0.00002319	0.00002309	0.0000001	0.00056882	0.00002546	0.0000254	0.00000006
614370.00	2366440.00	0.00042239	0.00002279	0.00002269	0.0000001	0.00081646	0.00002454	0.00002448	0.00000006
614870.00	2366440.00	0.00030853	0.0000225	0.00002239	0.00000011	0.00062439	0.00002457	0.0000245	0.00000007
615370.00	2366440.00	0.00073627	0.0000219	0.00002179	0.0000001	0.00050403	0.00002243	0.00002237	0.00000006
615870.00	2366440.00	0.00061099	0.00002089	0.00002078	0.00000011	0.00040491	0.00002141	0.00002135	0.00000007
616370.00	2366440.00	0.00050375	0.0000202	0.00002008	0.00000012	0.00034854	0.00002065	0.00002058	0.00000007
616870.00	2366440.00	0.00042428	0.00001959	0.00001946	0.00000013	0.00030787	0.00001996	0.00001988	0.00000007
617370.00	2366440.00	0.00064436	0.00002116	0.00002102	0.00000015	0.0005734	0.00002188	0.00002178	0.00000009
617870.00	2366440.00	0.00066665	0.00002053	0.00002038	0.00000015	0.0004293	0.0000209	0.00002081	0.00000009
618370.00	2366440.00	0.00038752	0.00001891	0.00001876	0.00000015	0.00028308	0.00001926	0.00001917	0.00000009
618870.00	2366440.00	0.00056775	0.00001967	0.00001951	0.00000017	0.00035622	0.00002002	0.00001992	0.0000001
619370.00	2366440.00	0.00066754	0.00002018	0.00002	0.00000018	0.0004565	0.00002058	0.00002047	0.00000012
619870.00	2366440.00	0.00064276	0.00001974	0.00001956	0.00000019	0.00039864	0.00002003	0.00001991	0.00000012
590370.00	2366940.00	0.0009792	0.00028834	0.00028824	0.0000001	0.00227969	0.00035478	0.00035467	0.0000001
590870.00	2366940.00	0.00068548	0.00024661	0.00024654	0.00000008	0.00165981	0.00029976	0.00029968	0.00000008
591370.00	2366940.00	0.00124007	0.00022022	0.00022016	0.00000006	0.00278543	0.00025662	0.00025655	0.00000006
591870.00	2366940.00	0.00157169	0.00020085	0.00020081	0.00000004	0.00075622	0.00022003	0.00021999	0.00000004
592370.00	2366940.00	0.00083641	0.0001888	0.00018877	0.00000003	0.00058505	0.00020501	0.00020498	0.00000003
592870.00	2366940.00	0.00035666	0.00016858	0.00016855	0.00000002	0.00043446	0.00018674	0.00018672	0.00000002
593370.00	2366940.00	0.00030592	0.00016198	0.00016196	0.00000002	0.00036496	0.00017727	0.00017725	0.00000002
593870.00	2366940.00	0.0003482	0.00016739	0.00016738	0.00000002	0.00039263	0.00018085	0.00018084	0.00000001
594370.00	2366940.00	0.00058838	0.000191	0.00019099	0.00000002	0.00050126	0.00019832	0.0001983	0.00000001
594870.00	2366940.00	0.00079088	0.00021494	0.00021493	0.00000002	0.00059614	0.00021531	0.00021529	0.00000001
595370.00	2366940.00	0.00135954	0.00025036	0.00025035	0.00000002	0.00081639	0.00024444	0.00024442	0.00000002
595870.00	2366940.00	0.00187466	0.0002633	0.00026328	0.00000002	0.00115031	0.00027454	0.00027453	0.00000002
596370.00	2366940.00	0.00167598	0.0002511	0.00025108	0.00000002	0.00194326	0.00028594	0.00028592	0.00000002
596870.00	2366940.00	0.00097535	0.00023274	0.00023272	0.00000002	0.00216071	0.00027774	0.00027772	0.00000002
597370.00	2366940.00	0.00065616	0.00021151	0.00021149	0.00000002	0.00174558	0.00025393	0.00025392	0.00000002
597870.00	2366940.00	0.000609	0.00019216	0.00019214	0.00000002	0.0015855	0.00022764	0.00022762	0.00000002

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2366940.00	0.00053848	0.00017531	0.00017529	0.00000002	0.00135684	0.00020644	0.00020642	0.00000002
598870.00	2366940.00	0.00047983	0.00016093	0.00016091	0.00000002	0.00109784	0.00018982	0.0001898	0.00000002
599370.00	2366940.00	0.00043741	0.00014853	0.00014851	0.00000002	0.00082416	0.00017616	0.00017614	0.00000002
599870.00	2366940.00	0.00043306	0.00013709	0.00013707	0.00000002	0.00080058	0.00016334	0.00016332	0.00000002
600370.00	2366940.00	0.00042413	0.00012624	0.00012622	0.00000002	0.00072419	0.00015121	0.00015119	0.00000002
600870.00	2366940.00	0.00041884	0.00011543	0.00011541	0.00000002	0.00067443	0.00013888	0.00013886	0.00000002
601370.00	2366940.00	0.0005124	0.00010449	0.00010447	0.00000002	0.00110739	0.00012498	0.00012497	0.00000002
601870.00	2366940.00	0.00056189	0.00009385	0.00009383	0.00000002	0.00109698	0.00011234	0.00011232	0.00000002
602370.00	2366940.00	0.00055728	0.00008346	0.00008344	0.00000002	0.00108948	0.00010052	0.0001005	0.00000002
602870.00	2366940.00	0.00049901	0.00007379	0.00007377	0.00000002	0.00100179	0.00008966	0.00008965	0.00000002
603370.00	2366940.00	0.00047076	0.00006521	0.0000652	0.00000002	0.00099512	0.00007962	0.0000796	0.00000002
603870.00	2366940.00	0.00047939	0.00005772	0.0000577	0.00000002	0.00101165	0.00007036	0.00007034	0.00000002
604370.00	2366940.00	0.00056365	0.00005126	0.00005125	0.00000002	0.00092008	0.00006169	0.00006167	0.00000002
604870.00	2366940.00	0.00047614	0.00004629	0.00004627	0.00000002	0.00103673	0.00005576	0.00005575	0.00000002
605370.00	2366940.00	0.00045964	0.00004214	0.00004212	0.00000002	0.00102681	0.00005035	0.00005033	0.00000002
605870.00	2366940.00	0.00049711	0.00003873	0.00003871	0.00000002	0.00099743	0.0000455	0.00004548	0.00000002
606370.00	2366940.00	0.00046837	0.00003606	0.00003604	0.00000002	0.00091594	0.00004196	0.00004194	0.00000002
606870.00	2366940.00	0.0004685	0.00003389	0.00003387	0.00000002	0.00091729	0.00003898	0.00003896	0.00000002
607370.00	2366940.00	0.00041953	0.00003217	0.00003215	0.00000002	0.00095465	0.00003691	0.00003689	0.00000002
607870.00	2366940.00	0.00044673	0.00003069	0.00003067	0.00000002	0.00098838	0.00003475	0.00003473	0.00000002
608370.00	2366940.00	0.00045173	0.00002947	0.00002945	0.00000002	0.00098226	0.00003307	0.00003305	0.00000002
608870.00	2366940.00	0.00042426	0.00002845	0.00002843	0.00000002	0.0009755	0.00003184	0.00003183	0.00000002
609370.00	2366940.00	0.00044772	0.00002756	0.00002753	0.00000002	0.00096538	0.00003054	0.00003052	0.00000002
609870.00	2366940.00	0.00041723	0.0000268	0.00002677	0.00000003	0.00094758	0.00002969	0.00002967	0.00000002
610370.00	2366940.00	0.00033565	0.00002626	0.00002623	0.00000003	0.0007413	0.0000293	0.00002928	0.00000002
610870.00	2366940.00	0.00057141	0.00002546	0.00002543	0.00000003	0.00077094	0.00002728	0.00002726	0.00000002
611370.00	2366940.00	0.00057521	0.00002492	0.00002488	0.00000003	0.00073599	0.00002657	0.00002655	0.00000002
611870.00	2366940.00	0.0005989	0.00002439	0.00002435	0.00000004	0.00067178	0.0000258	0.00002578	0.00000002
612370.00	2366940.00	0.00028939	0.00002509	0.00002503	0.00000006	0.00047653	0.00002775	0.00002771	0.00000004
612870.00	2366940.00	0.00059221	0.00002383	0.00002378	0.00000005	0.00083747	0.0000253	0.00002527	0.00000003
613370.00	2366940.00	0.00072107	0.0000234	0.00002334	0.00000005	0.00067687	0.00002437	0.00002434	0.00000003
613870.00	2366940.00	0.00044695	0.00002307	0.000023	0.00000007	0.00084876	0.00002481	0.00002477	0.00000004
614370.00	2366940.00	0.00071618	0.0000223	0.00002223	0.00000006	0.00050665	0.00002285	0.00002281	0.00000004
614870.00	2366940.00	0.00068576	0.00002241	0.00002233	0.00000008	0.00063976	0.00002328	0.00002323	0.00000004
615370.00	2366940.00	0.00030568	0.00002215	0.00002205	0.00000009	0.00062356	0.00002413	0.00002407	0.00000006
615870.00	2366940.00	0.00040292	0.00002187	0.00002177	0.0000001	0.00076025	0.00002343	0.00002337	0.00000006
616370.00	2366940.00	0.00060129	0.0000206	0.00002051	0.00000009	0.00040036	0.00002109	0.00002103	0.00000005
616870.00	2366940.00	0.0003879	0.0000192	0.00001911	0.0000001	0.00029182	0.00001964	0.00001959	0.00000006
617370.00	2366940.00	0.00032214	0.00001852	0.00001842	0.0000001	0.00026519	0.00001906	0.000019	0.00000006
617870.00	2366940.00	0.00044425	0.00001931	0.0000192	0.00000011	0.00031183	0.00001969	0.00001962	0.00000007
618370.00	2366940.00	0.0005336	0.00001961	0.00001949	0.00000012	0.00035119	0.00002002	0.00001995	0.00000008
618870.00	2366940.00	0.00027263	0.00001778	0.00001765	0.00000013	0.00023975	0.00001832	0.00001824	0.00000008
619370.00	2366940.00	0.0004327	0.00001883	0.00001869	0.00000014	0.00029848	0.0000192	0.00001911	0.00000009
619870.00	2366940.00	0.00041213	0.00001859	0.00001844	0.00000015	0.00028676	0.0000189	0.00001881	0.00000009
590370.00	2367440.00	0.00206456	0.00026395	0.00026386	0.00000009	0.00116362	0.00031549	0.0003154	0.00000009
590870.00	2367440.00	0.00075934	0.00023029	0.00023022	0.00000007	0.00208445	0.00027597	0.0002759	0.00000007
591370.00	2367440.00	0.00206321	0.00020826	0.00020821	0.00000005	0.00207172	0.00023737	0.00023732	0.00000006
591870.00	2367440.00	0.00255069	0.00019469	0.00019465	0.00000004	0.00119256	0.00021444	0.0002144	0.00000004
592370.00	2367440.00	0.00139139	0.00018431	0.00018428	0.00000003	0.00066997	0.00019893	0.0001989	0.00000003
592870.00	2367440.00	0.00050216	0.00017057	0.00017055	0.00000002	0.00047704	0.00018658	0.00018656	0.00000002
593370.00	2367440.00	0.00029028	0.00015454	0.00015452	0.00000002	0.00034347	0.00016834	0.00016832	0.00000002
593870.00	2367440.00	0.00032278	0.00015861	0.0001586	0.00000002	0.00036852	0.00017141	0.0001714	0.00000001
594370.00	2367440.00	0.00046928	0.00017706	0.00017704	0.00000002	0.00045192	0.0001858	0.00018579	0.00000001
594870.00	2367440.00	0.00083915	0.00020711	0.00020709	0.00000002	0.00057707	0.00020398	0.00020396	0.00000001
595370.00	2367440.00	0.00127937	0.00023418	0.00023416	0.00000002	0.0007528	0.00022837	0.00022835	0.00000001
595870.00	2367440.00	0.00209338	0.00024909	0.00024907	0.00000002	0.00130736	0.00026164	0.00026162	0.00000002
596370.00	2367440.00	0.00154027	0.00024412	0.0002441	0.00000002	0.002056	0.00027871	0.00027869	0.00000002
596870.00	2367440.00	0.00097484	0.00023001	0.00023	0.00000002	0.00216519	0.00027244	0.00027242	0.00000002
597370.00	2367440.00	0.00079257	0.00021171	0.00021169	0.00000002	0.00191149	0.00025202	0.00025201	0.00000002
597870.00	2367440.00	0.00069327	0.00019303	0.00019301	0.00000002	0.00169188	0.00022759	0.00022757	0.00000002
598370.00	2367440.00	0.00055988	0.00017615	0.00017613	0.00000002	0.00142983	0.00020654	0.00020652	0.00000002
598870.00	2367440.00	0.00046003	0.0001617	0.00016168	0.00000002	0.00103641	0.00018991	0.00018989	0.00000002
599370.00	2367440.00	0.00046077	0.00014958	0.00014956	0.00000002	0.001056	0.0001756	0.00017558	0.00000002
599870.00	2367440.00	0.00042485	0.00013862	0.00013861	0.00000002	0.00084518	0.00016372	0.0001637	0.00000002
600370.00	2367440.00	0.00041352	0.00012845	0.00012843	0.00000002	0.00076321	0.00015244	0.00015242	0.00000002
600870.00	2367440.00	0.00040622	0.00011851	0.00011849	0.00000002	0.00069116	0.00014116	0.00014114	0.00000002
601370.00	2367440.00	0.00047713	0.00010863	0.00010861	0.00000002	0.00103815	0.00012878	0.00012876	0.00000002
601870.00	2367440.00	0.00048882	0.00009873	0.00009871	0.00000002	0.0010528	0.00011738	0.00011737	0.00000002
602370.00	2367440.00	0.00047999	0.00008893	0.00008891	0.00000002	0.00104733	0.00010633	0.00010632	0.00000002
602870.00	2367440.00	0.00049557	0.00007951	0.0000795	0.00000002	0.0010162	0.00009538	0.00009536	0.00000002

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2367440.00	0.00048572	0.00007073	0.00007071	0.00000002	0.00100154	0.00008526	0.00008525	0.00000002
603870.00	2367440.00	0.0004794	0.0000628	0.00006279	0.00000002	0.00093951	0.00007589	0.00007588	0.00000002
604370.00	2367440.00	0.00044268	0.000056	0.00005599	0.00000002	0.00100324	0.00006791	0.0000679	0.00000002
604870.00	2367440.00	0.00043499	0.00005017	0.00005015	0.00000002	0.00099105	0.00006067	0.00006065	0.00000002
605370.00	2367440.00	0.00048295	0.00004519	0.00004518	0.00000002	0.00097715	0.000054	0.00005398	0.00000002
605870.00	2367440.00	0.00043301	0.00004133	0.00004131	0.00000002	0.00097669	0.00004922	0.00004921	0.00000002
606370.00	2367440.00	0.00043841	0.0000381	0.00003808	0.00000002	0.00097347	0.00004487	0.00004485	0.00000002
606870.00	2367440.00	0.00042664	0.0000355	0.00003548	0.00000002	0.00092391	0.00004139	0.00004137	0.00000002
607370.00	2367440.00	0.00045587	0.00003336	0.00003334	0.00000002	0.00094522	0.00003831	0.00003829	0.00000001
607870.00	2367440.00	0.00053739	0.00003157	0.00003155	0.00000002	0.00084645	0.00003548	0.00003547	0.00000001
608370.00	2367440.00	0.00043146	0.00003022	0.0000302	0.00000002	0.00095649	0.00003418	0.00003417	0.00000001
608870.00	2367440.00	0.0004269	0.00002902	0.00002901	0.00000002	0.00095087	0.00003258	0.00003257	0.00000001
609370.00	2367440.00	0.00048276	0.00002799	0.00002797	0.00000002	0.00091441	0.00003093	0.00003092	0.00000001
609870.00	2367440.00	0.00052862	0.00002709	0.00002707	0.00000002	0.00083519	0.00002956	0.00002954	0.00000001
610370.00	2367440.00	0.00043883	0.00002637	0.00002635	0.00000002	0.000917	0.00002901	0.00002899	0.00000002
610870.00	2367440.00	0.00032651	0.00002585	0.00002582	0.00000003	0.00072695	0.00002879	0.00002877	0.00000002
611370.00	2367440.00	0.00030029	0.00002549	0.00002546	0.00000003	0.00057178	0.00002835	0.00002833	0.00000002
611870.00	2367440.00	0.00061704	0.00002441	0.00002439	0.00000003	0.00061428	0.00002576	0.00002575	0.00000002
612370.00	2367440.00	0.00048828	0.00002424	0.00002421	0.00000003	0.00091649	0.00002613	0.00002611	0.00000002
612870.00	2367440.00	0.00055573	0.00002386	0.00002382	0.00000004	0.00086749	0.00002545	0.00002543	0.00000002
613370.00	2367440.00	0.00027857	0.00002393	0.00002387	0.00000005	0.00047203	0.00002634	0.00002631	0.00000003
613870.00	2367440.00	0.00056335	0.00002308	0.00002304	0.00000005	0.00080355	0.00002447	0.00002444	0.00000003
614370.00	2367440.00	0.00053743	0.00002124	0.00002119	0.00000004	0.00039975	0.00002191	0.00002189	0.00000003
614870.00	2367440.00	0.00045389	0.00002059	0.00002054	0.00000005	0.00035942	0.00002119	0.00002117	0.00000003
615370.00	2367440.00	0.00058398	0.0000208	0.00002075	0.00000006	0.00040067	0.00002134	0.00002131	0.00000003
615870.00	2367440.00	0.00068867	0.00002174	0.00002167	0.00000007	0.00057867	0.00002244	0.0000224	0.00000004
616370.00	2367440.00	0.0003206	0.00002153	0.00002144	0.00000008	0.00066717	0.00002328	0.00002323	0.00000005
616870.00	2367440.00	0.00069068	0.00002102	0.00002094	0.00000008	0.00048431	0.00002149	0.00002144	0.00000005
617370.00	2367440.00	0.00041467	0.00001914	0.00001906	0.00000008	0.00030254	0.00001955	0.0000195	0.00000005
617870.00	2367440.00	0.00029783	0.0000181	0.00001801	0.00000009	0.00025477	0.00001868	0.00001863	0.00000005
618370.00	2367440.00	0.0003413	0.00001832	0.00001823	0.00000009	0.00026563	0.00001877	0.00001872	0.00000005
618870.00	2367440.00	0.00027395	0.00001768	0.00001758	0.0000001	0.00024113	0.00001823	0.00001817	0.00000006
619370.00	2367440.00	0.00029143	0.00001768	0.00001757	0.00000011	0.00024179	0.00001819	0.00001812	0.00000006
619870.00	2367440.00	0.00019405	0.00001653	0.00001642	0.00000012	0.00020974	0.00001722	0.00001716	0.00000007
590370.00	2367940.00	0.00186149	0.0002437	0.00024363	0.00000008	0.00098625	0.00028798	0.0002879	0.00000008
590870.00	2367940.00	0.00223219	0.00021515	0.00021509	0.00000006	0.00134033	0.00024859	0.00024852	0.00000007
591370.00	2367940.00	0.00227325	0.0001954	0.00019535	0.00000005	0.00109451	0.00021845	0.0002184	0.00000005
591870.00	2367940.00	0.00202247	0.00018401	0.00018397	0.00000004	0.00088142	0.0002012	0.00020116	0.00000004
592370.00	2367940.00	0.00075055	0.00017189	0.00017187	0.00000003	0.00053526	0.0001855	0.00018547	0.00000003
592870.00	2367940.00	0.00043442	0.00016238	0.00016236	0.00000002	0.00045012	0.00017757	0.00017755	0.00000002
593370.00	2367940.00	0.00027784	0.0001477	0.00014768	0.00000002	0.00032763	0.00016056	0.00016054	0.00000001
593870.00	2367940.00	0.00030809	0.00015141	0.00015139	0.00000002	0.00035451	0.00016364	0.00016362	0.00000001
594370.00	2367940.00	0.00046383	0.00016872	0.00016871	0.00000002	0.00043474	0.000177	0.00017699	0.00000001
594870.00	2367940.00	0.00093942	0.00019774	0.00019772	0.00000002	0.0005743	0.00019494	0.00019493	0.00000001
595370.00	2367940.00	0.00157676	0.00022277	0.00022275	0.00000002	0.00085772	0.00022177	0.00022176	0.00000001
595870.00	2367940.00	0.00209203	0.00023527	0.00023525	0.00000002	0.00143611	0.00024734	0.00024733	0.00000002
596370.00	2367940.00	0.00165263	0.00023553	0.00023551	0.00000002	0.00188116	0.00026085	0.00026084	0.00000002
596870.00	2367940.00	0.00125974	0.00022729	0.00022727	0.00000002	0.00196245	0.00026392	0.00026391	0.00000002
597370.00	2367940.00	0.00093449	0.00021126	0.00021124	0.00000002	0.00189249	0.00024919	0.00024917	0.00000002
597870.00	2367940.00	0.00073599	0.00019346	0.00019344	0.00000002	0.00170889	0.00022772	0.0002277	0.00000002
598370.00	2367940.00	0.00057786	0.00017684	0.00017682	0.00000002	0.00146778	0.00020695	0.00020693	0.00000002
598870.00	2367940.00	0.00051601	0.00016264	0.00016262	0.00000002	0.00129362	0.00018929	0.00018927	0.00000002
599370.00	2367940.00	0.00047968	0.00015051	0.00015049	0.00000002	0.00116605	0.00017515	0.00017514	0.00000002
599870.00	2367940.00	0.00044741	0.0001398	0.00013978	0.00000002	0.00103407	0.0001634	0.00016339	0.00000002
600370.00	2367940.00	0.0004124	0.00013001	0.00012999	0.00000002	0.00084688	0.00015292	0.0001529	0.00000002
600870.00	2367940.00	0.00039492	0.00012076	0.00012074	0.00000002	0.00070367	0.00014261	0.00014259	0.00000002
601370.00	2367940.00	0.00046659	0.00011181	0.0001118	0.00000002	0.00100195	0.00013128	0.00013127	0.00000002
601870.00	2367940.00	0.00048646	0.00010274	0.00010272	0.00000002	0.0010114	0.00012074	0.00012073	0.00000002
602370.00	2367940.00	0.00047735	0.00009359	0.00009358	0.00000002	0.00100868	0.00011052	0.0001105	0.00000002
602870.00	2367940.00	0.00049238	0.00008462	0.00008461	0.00000002	0.00097286	0.0001002	0.00010018	0.00000002
603370.00	2367940.00	0.00048404	0.00007597	0.00007595	0.00000002	0.0009629	0.00009045	0.00009043	0.00000002
603870.00	2367940.00	0.00045056	0.00006794	0.00006793	0.00000002	0.00098395	0.00008147	0.00008146	0.00000002
604370.00	2367940.00	0.00045373	0.00006066	0.00006064	0.00000002	0.00097776	0.00007288	0.00007286	0.00000002
604870.00	2367940.00	0.00045286	0.00005426	0.00005425	0.00000002	0.00096549	0.00006519	0.00006517	0.00000002
605370.00	2367940.00	0.00038454	0.00004903	0.00004902	0.00000002	0.0008858	0.00005912	0.0000591	0.00000002
605870.00	2367940.00	0.00052686	0.00004407	0.00004405	0.00000002	0.00085066	0.00005206	0.00005205	0.00000002
606370.00	2367940.00	0.00042626	0.00004051	0.00004049	0.00000002	0.00093643	0.00004798	0.00004797	0.00000002
606870.00	2367940.00	0.00038828	0.00003751	0.0000375	0.00000002	0.00090715	0.00004424	0.00004423	0.00000002
607370.00	2367940.00	0.00040389	0.00003495	0.00003493	0.00000002	0.00092081	0.00004072	0.0000407	0.00000001
607870.00	2367940.00	0.00046508	0.00003281	0.00003279	0.00000002	0.0008851	0.00003748	0.00003747	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2367940.00	0.0003255	0.00003144	0.00003143	0.00000002	0.00072134	0.00003631	0.0000363	0.00000001
608870.00	2367940.00	0.00031246	0.00003011	0.00003009	0.00000002	0.00065295	0.00003453	0.00003451	0.00000001
609370.00	2367940.00	0.00055093	0.0000285	0.00002848	0.00000002	0.00076265	0.0000313	0.00003129	0.00000001
609870.00	2367940.00	0.00040639	0.0000276	0.00002758	0.00000002	0.00090552	0.00003076	0.00003075	0.00000001
610370.00	2367940.00	0.00037628	0.00002676	0.00002674	0.00000002	0.00087994	0.00002979	0.00002977	0.00000001
610870.00	2367940.00	0.00054582	0.00002591	0.0000259	0.00000002	0.00074502	0.00002794	0.00002792	0.00000001
611370.00	2367940.00	0.00054513	0.00002526	0.00002524	0.00000002	0.00073129	0.0000271	0.00002709	0.00000001
611870.00	2367940.00	0.00032448	0.0000249	0.00002487	0.00000003	0.00073571	0.00002757	0.00002755	0.00000002
612370.00	2367940.00	0.00027737	0.00002532	0.00002528	0.00000004	0.00046277	0.00002807	0.00002804	0.00000002
612870.00	2367940.00	0.00060782	0.00002349	0.00002346	0.00000003	0.00054869	0.00002461	0.0000246	0.00000002
613370.00	2367940.00	0.00027192	0.00002422	0.00002418	0.00000004	0.00045336	0.00002669	0.00002667	0.00000003
613870.00	2367940.00	0.00052066	0.0000231	0.00002306	0.00000004	0.000835	0.0000246	0.00002458	0.00000002
614370.00	2367940.00	0.00072358	0.00002266	0.00002262	0.00000004	0.00062701	0.0000235	0.00002347	0.00000002
614870.00	2367940.00	0.00074004	0.00002223	0.00002219	0.00000004	0.0005681	0.0000229	0.00002287	0.00000002
615370.00	2367940.00	0.00051888	0.00002041	0.00002037	0.00000004	0.00036202	0.0000209	0.00002087	0.00000002
615870.00	2367940.00	0.00030757	0.00001903	0.00001899	0.00000004	0.00029469	0.00001981	0.00001979	0.00000002
616370.00	2367940.00	0.00069616	0.00002135	0.0000213	0.00000006	0.00053188	0.00002192	0.00002189	0.00000003
616870.00	2367940.00	0.00048957	0.00002125	0.00002118	0.00000007	0.00070274	0.00002238	0.00002234	0.00000004
617370.00	2367940.00	0.00054683	0.00002098	0.00002091	0.00000007	0.00064256	0.0000219	0.00002186	0.00000004
617870.00	2367940.00	0.00058553	0.00002072	0.00002064	0.00000008	0.00058936	0.00002148	0.00002144	0.00000005
618370.00	2367940.00	0.00065223	0.00002034	0.00002026	0.00000008	0.00047257	0.00002079	0.00002074	0.00000005
618870.00	2367940.00	0.00060042	0.0000197	0.00001962	0.00000008	0.00039606	0.00002003	0.00001998	0.00000005
619370.00	2367940.00	0.0004398	0.00001869	0.00001861	0.00000009	0.0003054	0.00001908	0.00001902	0.00000005
619870.00	2367940.00	0.00022452	0.00001679	0.00001669	0.00000009	0.00022174	0.00001743	0.00001738	0.00000005
590370.00	2368440.00	0.00130892	0.00022379	0.00022372	0.00000007	0.00069495	0.00026021	0.00026013	0.00000008
590870.00	2368440.00	0.00060997	0.0001917	0.00019164	0.00000006	0.00053177	0.00021718	0.00021712	0.00000006
591370.00	2368440.00	0.00047143	0.00017416	0.00017412	0.00000004	0.00050164	0.00019322	0.00019318	0.00000005
591870.00	2368440.00	0.00067794	0.00016937	0.00016934	0.00000003	0.00053111	0.00018342	0.00018338	0.00000003
592370.00	2368440.00	0.00046324	0.00016042	0.0001604	0.00000002	0.00046639	0.00017464	0.00017462	0.00000003
592870.00	2368440.00	0.00028648	0.00014618	0.00014616	0.00000002	0.00034939	0.0001606	0.00016058	0.00000002
593370.00	2368440.00	0.00025644	0.00013592	0.00013591	0.00000002	0.00029891	0.00014734	0.00014733	0.00000001
593870.00	2368440.00	0.00029072	0.00014458	0.00014456	0.00000002	0.00033652	0.0001562	0.00015619	0.00000001
594370.00	2368440.00	0.00042871	0.00016011	0.0001601	0.00000002	0.00041237	0.00016849	0.00016848	0.00000001
594870.00	2368440.00	0.00074476	0.00018321	0.0001832	0.00000002	0.00051133	0.00018218	0.00018217	0.00000001
595370.00	2368440.00	0.00157977	0.00020964	0.00020962	0.00000002	0.00083711	0.00020918	0.00020917	0.00000001
595870.00	2368440.00	0.00181151	0.00022415	0.00022413	0.00000002	0.00103043	0.00022857	0.00022856	0.00000001
596370.00	2368440.00	0.00189449	0.00022832	0.00022831	0.00000002	0.00146133	0.00024596	0.00024595	0.00000002
596870.00	2368440.00	0.00146091	0.00022327	0.00022325	0.00000002	0.00174618	0.00025035	0.00025034	0.00000002
597370.00	2368440.00	0.00094116	0.00020955	0.00020954	0.00000002	0.00189896	0.00024594	0.00024592	0.00000002
597870.00	2368440.00	0.00068822	0.00019327	0.00019326	0.00000002	0.00169586	0.00022804	0.00022803	0.00000002
598370.00	2368440.00	0.00058417	0.00017736	0.00017735	0.00000002	0.00147756	0.00020758	0.00020756	0.00000002
598870.00	2368440.00	0.00055545	0.00016338	0.00016336	0.00000002	0.00137099	0.00018917	0.00018916	0.00000002
599370.00	2368440.00	0.00049497	0.00015123	0.00015121	0.00000002	0.00122037	0.00017481	0.00017479	0.00000002
599870.00	2368440.00	0.00045285	0.00014064	0.00014063	0.00000002	0.00108116	0.0001631	0.00016308	0.00000002
600370.00	2368440.00	0.00041711	0.00013115	0.00013113	0.00000002	0.00092803	0.00015295	0.00015293	0.00000002
600870.00	2368440.00	0.00039229	0.00012234	0.00012232	0.00000002	0.00075197	0.00014322	0.00014321	0.00000002
601370.00	2368440.00	0.0005032	0.00011435	0.00011433	0.00000002	0.00095066	0.00013243	0.00013241	0.00000002
601870.00	2368440.00	0.00043441	0.00010569	0.00010567	0.00000002	0.00093798	0.00012369	0.00012368	0.00000002
602370.00	2368440.00	0.00046547	0.00009736	0.00009734	0.00000002	0.00096606	0.00011385	0.00011384	0.00000002
602870.00	2368440.00	0.00046632	0.00008895	0.00008894	0.00000002	0.00096149	0.00010438	0.00010436	0.00000002
603370.00	2368440.00	0.00047286	0.00008068	0.00008066	0.00000002	0.00088486	0.00009495	0.00009493	0.00000002
603870.00	2368440.00	0.00044884	0.00007275	0.00007273	0.00000002	0.00095239	0.00008623	0.00008621	0.00000002
604370.00	2368440.00	0.00036846	0.0000656	0.00006558	0.00000002	0.00075992	0.00007853	0.00007851	0.00000002
604870.00	2368440.00	0.00043587	0.00005863	0.00005861	0.00000002	0.00093416	0.00006999	0.00006997	0.00000002
605370.00	2368440.00	0.00044076	0.00005266	0.00005264	0.00000002	0.00086901	0.0000628	0.00006279	0.00000002
605870.00	2368440.00	0.00039504	0.0000477	0.00004768	0.00000002	0.00089734	0.00005703	0.00005701	0.00000002
606370.00	2368440.00	0.00044043	0.00004326	0.00004324	0.00000002	0.00089979	0.00005122	0.00005121	0.00000002
606870.00	2368440.00	0.00055969	0.00003941	0.0000394	0.00000002	0.00070951	0.0000457	0.00004569	0.00000001
607370.00	2368440.00	0.00044081	0.00003673	0.00003671	0.00000002	0.00087969	0.00004279	0.00004277	0.00000001
607870.00	2368440.00	0.00044449	0.0000343	0.00003429	0.00000002	0.00087058	0.00003956	0.00003954	0.00000001
608370.00	2368440.00	0.00040949	0.00003236	0.00003235	0.00000002	0.00088293	0.00003714	0.00003712	0.00000001
608870.00	2368440.00	0.00044634	0.00003068	0.00003066	0.00000002	0.00086153	0.00003468	0.00003467	0.00000001
609370.00	2368440.00	0.00054789	0.0000292	0.00002919	0.00000002	0.00070724	0.00003225	0.00003223	0.00000001
609870.00	2368440.00	0.00046737	0.00002814	0.00002813	0.00000002	0.00083016	0.00003119	0.00003117	0.00000001
610370.00	2368440.00	0.00050478	0.00002713	0.00002712	0.00000002	0.00077029	0.0000297	0.00002969	0.00000001
610870.00	2368440.00	0.00028528	0.00002682	0.0000268	0.00000002	0.00053755	0.00003014	0.00003012	0.00000002
611370.00	2368440.00	0.00052315	0.00002554	0.00002553	0.00000002	0.00072664	0.00002755	0.00002754	0.00000001
611870.00	2368440.00	0.0003642	0.00002508	0.00002506	0.00000002	0.00087275	0.00002766	0.00002765	0.00000001
612370.00	2368440.00	0.00027745	0.00002485	0.00002482	0.00000003	0.00051113	0.00002756	0.00002754	0.00000002
612870.00	2368440.00	0.00027107	0.0000258	0.00002576	0.00000004	0.00044665	0.00002868	0.00002866	0.00000003

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2368440.00	0.00067596	0.00002354	0.00002352	0.00000002	0.00072522	0.00002473	0.00002472	0.00000002
613870.00	2368440.00	0.00064162	0.00002313	0.0000231	0.00000003	0.00073538	0.00002431	0.0000243	0.00000002
614370.00	2368440.00	0.00073797	0.00002216	0.00002214	0.00000003	0.0005032	0.00002277	0.00002276	0.00000002
614870.00	2368440.00	0.00062935	0.00002123	0.0000212	0.00000003	0.00042785	0.00002185	0.00002183	0.00000002
615370.00	2368440.00	0.00072866	0.00002187	0.00002184	0.00000003	0.00054457	0.00002249	0.00002247	0.00000002
615870.00	2368440.00	0.00070051	0.00002126	0.00002122	0.00000004	0.00048602	0.00002175	0.00002173	0.00000002
616370.00	2368440.00	0.0004958	0.00001985	0.00001981	0.00000004	0.00034573	0.0000203	0.00002028	0.00000002
616870.00	2368440.00	0.00032589	0.00001845	0.00001841	0.00000004	0.00026956	0.00001908	0.00001906	0.00000002
617370.00	2368440.00	0.00067259	0.00002063	0.00002058	0.00000005	0.00047267	0.00002108	0.00002105	0.00000003
617870.00	2368440.00	0.00055323	0.00001965	0.0000196	0.00000005	0.00037432	0.00002009	0.00002006	0.00000003
618370.00	2368440.00	0.00063676	0.00002003	0.00001997	0.00000006	0.00043474	0.0000204	0.00002036	0.00000003
618870.00	2368440.00	0.00039929	0.00001846	0.0000184	0.00000006	0.00028907	0.00001882	0.00001879	0.00000003
619370.00	2368440.00	0.00045691	0.0000187	0.00001863	0.00000007	0.00031541	0.00001906	0.00001902	0.00000004
619870.00	2368440.00	0.00019048	0.00001626	0.00001619	0.00000007	0.0002099	0.00001696	0.00001692	0.00000004
590370.00	2368940.00	0.00068204	0.0002168	0.00021673	0.00000007	0.00176821	0.0002574	0.00025733	0.00000007
590870.00	2368940.00	0.00160984	0.00018901	0.00018896	0.00000005	0.00077047	0.00021337	0.00021331	0.00000006
591370.00	2368940.00	0.00038557	0.00016457	0.00016453	0.00000004	0.00045034	0.00018199	0.00018195	0.00000004
591870.00	2368940.00	0.0004841	0.00015936	0.00015933	0.00000003	0.00047598	0.00017327	0.00017324	0.00000003
592370.00	2368940.00	0.00033826	0.0001469	0.00014688	0.00000002	0.00040926	0.0001606	0.00016058	0.00000002
592870.00	2368940.00	0.00027485	0.000139	0.00013898	0.00000002	0.00033374	0.00015175	0.00015173	0.00000002
593370.00	2368940.00	0.00024728	0.00013023	0.00013021	0.00000002	0.00029079	0.00014142	0.0001414	0.00000001
593870.00	2368940.00	0.00027195	0.00013817	0.00013816	0.00000001	0.00031544	0.00014906	0.00014904	0.00000001
594370.00	2368940.00	0.00035895	0.00014837	0.00014835	0.00000001	0.00037798	0.00015841	0.00015839	0.00000001
594870.00	2368940.00	0.00061792	0.00016902	0.00016901	0.00000002	0.00046721	0.00017159	0.00017158	0.00000001
595370.00	2368940.00	0.00115393	0.00019487	0.00019485	0.00000002	0.00065339	0.0001914	0.00019139	0.00000001
595870.00	2368940.00	0.0017546	0.00021194	0.00021192	0.00000002	0.00097976	0.00021507	0.00021505	0.00000001
596370.00	2368940.00	0.00187818	0.00021896	0.00021894	0.00000002	0.00136397	0.00023267	0.00023266	0.00000001
596870.00	2368940.00	0.00149711	0.00021659	0.00021657	0.00000002	0.0016653	0.00024063	0.00024061	0.00000002
597370.00	2368940.00	0.00093942	0.00020698	0.00020696	0.00000002	0.0019013	0.00024128	0.00024126	0.00000002
597870.00	2368940.00	0.00074283	0.00019292	0.0001929	0.00000002	0.00172472	0.00022664	0.00022663	0.00000002
598370.00	2368940.00	0.0007199	0.00017809	0.00017807	0.00000002	0.00154754	0.00020695	0.00020694	0.00000002
598870.00	2368940.00	0.00060315	0.00016403	0.00016401	0.00000002	0.00140824	0.00018923	0.00018921	0.00000002
599370.00	2368940.00	0.00053049	0.00015187	0.00015186	0.00000002	0.00127979	0.00017447	0.00017446	0.00000002
599870.00	2368940.00	0.0004766	0.00014137	0.00014136	0.00000002	0.00115572	0.0001626	0.00016258	0.00000002
600370.00	2368940.00	0.00042113	0.00013198	0.00013196	0.00000002	0.00088432	0.00015226	0.00015224	0.00000002
600870.00	2368940.00	0.00037469	0.00012346	0.00012345	0.00000002	0.000707	0.00014375	0.00014373	0.00000002
601370.00	2368940.00	0.00046738	0.00011593	0.00011592	0.00000002	0.00088858	0.00013362	0.0001336	0.00000002
601870.00	2368940.00	0.00043973	0.00010803	0.00010801	0.00000002	0.00092537	0.00012526	0.00012525	0.00000002
602370.00	2368940.00	0.00046474	0.00010033	0.00010031	0.00000002	0.00092497	0.00011625	0.00011623	0.00000002
602870.00	2368940.00	0.00043575	0.00009248	0.00009246	0.00000002	0.00091884	0.00010776	0.00010774	0.00000002
603370.00	2368940.00	0.00045693	0.00008473	0.00008472	0.00000002	0.00085233	0.00009877	0.00009875	0.00000002
603870.00	2368940.00	0.00043376	0.0000771	0.00007708	0.00000002	0.00090398	0.00009046	0.00009045	0.00000002
604370.00	2368940.00	0.00043233	0.00006979	0.00006977	0.00000002	0.00091166	0.00008224	0.00008222	0.00000002
604870.00	2368940.00	0.00049492	0.00006287	0.00006285	0.00000002	0.00085102	0.00007397	0.00007395	0.00000002
605370.00	2368940.00	0.0004196	0.00005673	0.00005672	0.00000002	0.00089031	0.00006731	0.0000673	0.00000002
605870.00	2368940.00	0.00041061	0.00005121	0.0000512	0.00000002	0.00083308	0.00006081	0.00006079	0.00000002
606370.00	2368940.00	0.00046061	0.00004633	0.00004631	0.00000002	0.00084697	0.00005465	0.00005463	0.00000001
606870.00	2368940.00	0.00040126	0.0000424	0.00004238	0.00000002	0.00086713	0.0000501	0.00005009	0.00000001
607370.00	2368940.00	0.00029379	0.00004024	0.00004022	0.00000002	0.00048994	0.00004761	0.00004759	0.00000002
607870.00	2368940.00	0.00033615	0.00003637	0.00003636	0.00000002	0.00077268	0.00004273	0.00004272	0.00000001
608370.00	2368940.00	0.00058041	0.00003344	0.00003343	0.00000001	0.0005909	0.00003773	0.00003772	0.00000001
608870.00	2368940.00	0.00037954	0.00003191	0.00003189	0.00000002	0.00084442	0.00003664	0.00003663	0.00000001
609370.00	2368940.00	0.00032579	0.00003043	0.00003041	0.00000002	0.00075722	0.00003491	0.0000349	0.00000001
609870.00	2368940.00	0.00035719	0.00002897	0.00002896	0.00000002	0.00082689	0.00003282	0.00003281	0.00000001
610370.00	2368940.00	0.00053927	0.00002765	0.00002763	0.00000001	0.00066571	0.00003023	0.00003022	0.00000001
610870.00	2368940.00	0.00037336	0.00002684	0.00002682	0.00000002	0.00083539	0.0000299	0.00002988	0.00000001
611370.00	2368940.00	0.00059347	0.00002573	0.00002572	0.00000001	0.00055196	0.00002752	0.00002751	0.00000001
611870.00	2368940.00	0.00026634	0.00002625	0.00002623	0.00000002	0.00045073	0.00002934	0.00002932	0.00000002
612370.00	2368940.00	0.00033764	0.00002474	0.00002472	0.00000002	0.00080645	0.00002731	0.0000273	0.00000001
612870.00	2368940.00	0.00037297	0.00002417	0.00002415	0.00000002	0.00086717	0.00002644	0.00002643	0.00000001
613370.00	2368940.00	0.00026054	0.00002442	0.00002439	0.00000003	0.00044117	0.00002698	0.00002696	0.00000002
613870.00	2368940.00	0.00025948	0.00002377	0.00002374	0.00000003	0.00044605	0.00002618	0.00002616	0.00000002
614370.00	2368940.00	0.00063008	0.0000228	0.00002277	0.00000002	0.00071374	0.00002394	0.00002393	0.00000001
614870.00	2368940.00	0.0006573	0.00002144	0.00002142	0.00000002	0.00044087	0.00002207	0.00002206	0.00000001
615370.00	2368940.00	0.00053584	0.00002051	0.00002049	0.00000002	0.00036717	0.00002109	0.00002108	0.00000001
615870.00	2368940.00	0.0003641	0.00001912	0.00001909	0.00000003	0.00028458	0.00001977	0.00001976	0.00000001
616370.00	2368940.00	0.00042407	0.00001935	0.00001933	0.00000003	0.00030655	0.00001984	0.00001982	0.00000002
616870.00	2368940.00	0.00047194	0.00001947	0.00001944	0.00000003	0.00032895	0.00001992	0.0000199	0.00000002
617370.00	2368940.00	0.00032557	0.00001825	0.00001821	0.00000003	0.00026525	0.00001885	0.00001883	0.00000002
617870.00	2368940.00	0.00027825	0.00001773	0.00001769	0.00000004	0.00025081	0.00001839	0.00001837	0.00000002

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2368940.00	0.00023081	0.00001711	0.00001707	0.00000004	0.00023566	0.00001784	0.00001782	0.00000002
618870.00	2368940.00	0.00029446	0.00001759	0.00001754	0.00000005	0.00024835	0.00001815	0.00001812	0.00000003
619370.00	2368940.00	0.00025701	0.00001714	0.00001709	0.00000005	0.00023601	0.00001773	0.0000177	0.00000003
619870.00	2368940.00	0.00017438	0.00001562	0.00001557	0.00000006	0.00020009	0.0000163	0.00001627	0.00000003
590370.00	2369440.00	0.00051061	0.00020722	0.00020715	0.00000007	0.00087697	0.00024519	0.00024512	0.00000007
590870.00	2369440.00	0.00082981	0.00018401	0.00018396	0.00000005	0.00211664	0.00021138	0.00021132	0.00000005
591370.00	2369440.00	0.00211221	0.00017101	0.00017097	0.00000004	0.00138673	0.00018865	0.00018861	0.00000004
591870.00	2369440.00	0.00201443	0.00016233	0.0001623	0.00000003	0.0009042	0.00017578	0.00017575	0.00000003
592370.00	2369440.00	0.00113423	0.00015538	0.00015536	0.00000002	0.00056471	0.00016596	0.00016594	0.00000002
592870.00	2369440.00	0.00048533	0.00014676	0.00014674	0.00000002	0.0004248	0.00015781	0.00015779	0.00000002
593370.00	2369440.00	0.00024489	0.00012837	0.00012836	0.00000001	0.00028527	0.0001386	0.00013858	0.00000001
593870.00	2369440.00	0.00025665	0.00013179	0.00013178	0.00000001	0.00029582	0.0001416	0.00014159	0.00000001
594370.00	2369440.00	0.00030666	0.00013759	0.00013757	0.00000001	0.00034067	0.00014667	0.00014665	0.00000001
594870.00	2369440.00	0.00041067	0.00015271	0.0001527	0.00000001	0.00039805	0.0001591	0.00015909	0.00000001
595370.00	2369440.00	0.00099706	0.00018266	0.00018264	0.00000001	0.0005797	0.00017968	0.00017967	0.00000001
595870.00	2369440.00	0.00159306	0.00020037	0.00020036	0.00000002	0.00087448	0.00020182	0.00020181	0.00000001
596370.00	2369440.00	0.00181496	0.00020892	0.0002089	0.00000002	0.00136721	0.00022045	0.00022044	0.00000001
596870.00	2369440.00	0.00146141	0.00021078	0.00021076	0.00000002	0.00166313	0.00023058	0.00023056	0.00000001
597370.00	2369440.00	0.00124891	0.00020467	0.00020465	0.00000002	0.00164136	0.00023384	0.00023383	0.00000001
597870.00	2369440.00	0.00093423	0.0001924	0.00019238	0.00000002	0.00165855	0.00022346	0.00022344	0.00000002
598370.00	2369440.00	0.00080405	0.00017839	0.00017838	0.00000002	0.0015199	0.00020656	0.00020654	0.00000002
598870.00	2369440.00	0.00063929	0.00016454	0.00016453	0.00000002	0.00141536	0.00018951	0.0001895	0.00000002
599370.00	2369440.00	0.00055151	0.00015238	0.00015236	0.00000002	0.00129408	0.00017447	0.00017446	0.00000002
599870.00	2369440.00	0.00046901	0.00014179	0.00014177	0.00000002	0.00114222	0.00016243	0.00016242	0.00000002
600370.00	2369440.00	0.00041638	0.00013254	0.00013252	0.00000002	0.00088056	0.00015197	0.00015196	0.00000002
600870.00	2369440.00	0.00034527	0.00012483	0.00012482	0.00000002	0.00055753	0.00014536	0.00014535	0.00000002
601370.00	2369440.00	0.00044504	0.00011707	0.00011705	0.00000002	0.00086847	0.00013426	0.00013424	0.00000002
601870.00	2369440.00	0.00042258	0.00010968	0.00010966	0.00000002	0.00089429	0.00012647	0.00012646	0.00000002
602370.00	2369440.00	0.00059544	0.00010305	0.00010304	0.00000002	0.00071048	0.00011668	0.00011667	0.00000002
602870.00	2369440.00	0.00044781	0.00009535	0.00009533	0.00000002	0.00088792	0.00011	0.00010998	0.00000002
603370.00	2369440.00	0.00042012	0.00008807	0.00008806	0.00000002	0.00088182	0.00010214	0.00010212	0.00000002
603870.00	2369440.00	0.00043872	0.0000809	0.00008088	0.00000002	0.00088531	0.00009391	0.0000939	0.00000002
604370.00	2369440.00	0.0004484	0.00007384	0.00007382	0.00000002	0.00087813	0.00008596	0.00008595	0.00000002
604870.00	2369440.00	0.0004041	0.00006708	0.00006706	0.00000002	0.00086364	0.0000787	0.00007868	0.00000002
605370.00	2369440.00	0.0004342	0.0000607	0.00006069	0.00000002	0.00086099	0.00007127	0.00007126	0.00000001
605870.00	2369440.00	0.00041283	0.00005495	0.00005493	0.00000002	0.00085487	0.00006478	0.00006476	0.00000001
606370.00	2369440.00	0.00041176	0.00004979	0.00004978	0.00000002	0.00085054	0.00005874	0.00005872	0.00000001
606870.00	2369440.00	0.00030299	0.00004609	0.00004607	0.00000002	0.00055615	0.00005468	0.00005467	0.00000002
607370.00	2369440.00	0.00042168	0.00004143	0.00004142	0.00000001	0.00082275	0.00004856	0.00004855	0.00000001
607870.00	2369440.00	0.00042114	0.00003819	0.00003818	0.00000001	0.0008121	0.0000445	0.00004449	0.00000001
608370.00	2369440.00	0.00036191	0.00003562	0.0000356	0.00000001	0.00081136	0.00004151	0.0000415	0.00000001
608870.00	2369440.00	0.00041591	0.00003325	0.00003323	0.00000001	0.00080198	0.00003816	0.00003814	0.00000001
609370.00	2369440.00	0.00052949	0.00003117	0.00003116	0.00000001	0.00062596	0.00003492	0.00003491	0.00000001
609870.00	2369440.00	0.00036262	0.00002988	0.00002987	0.00000001	0.00080785	0.00003399	0.00003398	0.00000001
610370.00	2369440.00	0.00051042	0.00002838	0.00002837	0.00000001	0.00065601	0.00003132	0.00003131	0.00000001
610870.00	2369440.00	0.00035226	0.00002756	0.00002754	0.00000001	0.00084791	0.00003098	0.00003097	0.00000001
611370.00	2369440.00	0.00026646	0.00002706	0.00002705	0.00000002	0.00048078	0.00003052	0.00003051	0.00000001
611870.00	2369440.00	0.00032778	0.00002578	0.00002576	0.00000002	0.00078523	0.00002871	0.0000287	0.00000001
612370.00	2369440.00	0.00058879	0.00002506	0.00002504	0.00000001	0.00078857	0.00002692	0.00002691	0.00000001
612870.00	2369440.00	0.0004626	0.00002444	0.00002442	0.00000002	0.00087906	0.00002647	0.00002646	0.00000001
613370.00	2369440.00	0.00026773	0.00002406	0.00002404	0.00000002	0.0005217	0.00002661	0.0000266	0.00000001
613870.00	2369440.00	0.0005503	0.00002337	0.00002336	0.00000002	0.00078682	0.00002487	0.00002486	0.00000001
614370.00	2369440.00	0.0006558	0.00002288	0.00002286	0.00000002	0.00067443	0.00002398	0.00002397	0.00000001
614870.00	2369440.00	0.0004602	0.00002252	0.0000225	0.00000002	0.00081691	0.00002405	0.00002403	0.00000001
615370.00	2369440.00	0.00069852	0.00002152	0.0000215	0.00000002	0.00046999	0.00002209	0.00002208	0.00000001
615870.00	2369440.00	0.00049129	0.00002005	0.00002003	0.00000002	0.00033835	0.00002058	0.00002057	0.00000001
616370.00	2369440.00	0.0004517	0.00001956	0.00001953	0.00000002	0.00032003	0.00002004	0.00002003	0.00000001
616870.00	2369440.00	0.00042908	0.0000192	0.00001917	0.00000002	0.00030896	0.00001967	0.00001965	0.00000001
617370.00	2369440.00	0.00041191	0.00001889	0.00001887	0.00000003	0.00030035	0.00001934	0.00001932	0.00000002
617870.00	2369440.00	0.00038152	0.00001851	0.00001848	0.00000003	0.00028169	0.00001895	0.00001893	0.00000002
618370.00	2369440.00	0.00022529	0.00001706	0.00001703	0.00000003	0.00023046	0.0000178	0.00001779	0.00000002
618870.00	2369440.00	0.00018836	0.00001629	0.00001625	0.00000004	0.0002146	0.00001705	0.00001703	0.00000002
619370.00	2369440.00	0.00018153	0.00001599	0.00001595	0.00000004	0.00020787	0.00001671	0.00001669	0.00000002
619870.00	2369440.00	0.0001684	0.00001509	0.00001505	0.00000004	0.00019334	0.00001577	0.00001575	0.00000002
590370.00	2369940.00	0.00049015	0.00019731	0.00019725	0.00000006	0.0008131	0.00023183	0.00023176	0.00000006
590870.00	2369940.00	0.00049464	0.00017685	0.0001768	0.00000005	0.00102839	0.0002036	0.00020355	0.00000005
591370.00	2369940.00	0.00079987	0.00016449	0.00016445	0.00000004	0.00220977	0.00018422	0.00018418	0.00000004
591870.00	2369940.00	0.00210051	0.00015771	0.00015768	0.00000003	0.00149002	0.00017128	0.00017125	0.00000003
592370.00	2369940.00	0.0019327	0.00015229	0.00015227	0.00000002	0.0008454	0.00016366	0.00016363	0.00000002
592870.00	2369940.00	0.00072414	0.00014508	0.00014506	0.00000002	0.00045922	0.00015442	0.0001544	0.00000002

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2369940.00	0.00041454	0.00013866	0.00013865	0.00000002	0.00038313	0.00014894	0.00014893	0.00000001
593870.00	2369940.00	0.00024481	0.00012668	0.00012667	0.00000001	0.00028205	0.00013587	0.00013586	0.00000001
594370.00	2369940.00	0.00027069	0.00013057	0.00013056	0.00000001	0.00030614	0.00013934	0.00013933	0.00000001
594870.00	2369940.00	0.00041979	0.00014714	0.00014713	0.00000001	0.00038797	0.00015283	0.00015282	0.00000001
595370.00	2369940.00	0.00089459	0.00017206	0.00017204	0.00000001	0.0005311	0.00016983	0.00016981	0.00000001
595870.00	2369940.00	0.00158687	0.00018975	0.00018974	0.00000002	0.00085825	0.00019115	0.00019114	0.00000001
596370.00	2369940.00	0.00179934	0.00019992	0.0001999	0.00000002	0.00114914	0.00020755	0.00020753	0.00000001
596870.00	2369940.00	0.00165539	0.00020365	0.00020363	0.00000002	0.00134193	0.00021903	0.00021902	0.00000001
597370.00	2369940.00	0.00117816	0.00020013	0.00020012	0.00000002	0.00169135	0.00022712	0.0002271	0.00000001
597870.00	2369940.00	0.00113049	0.00019133	0.00019131	0.00000002	0.00149228	0.00021941	0.0002194	0.00000001
598370.00	2369940.00	0.00088473	0.00017834	0.00017833	0.00000002	0.00147471	0.0002057	0.00020569	0.00000001
598870.00	2369940.00	0.0006648	0.0001649	0.00016488	0.00000002	0.00141663	0.00018985	0.00018983	0.00000002
599370.00	2369940.00	0.00057496	0.00015283	0.00015281	0.00000002	0.0013016	0.00017464	0.00017463	0.00000002
599870.00	2369940.00	0.00048926	0.00014224	0.00014222	0.00000002	0.001175	0.0001622	0.00016218	0.00000002
600370.00	2369940.00	0.00039468	0.00013284	0.00013282	0.00000002	0.00083346	0.00015198	0.00015196	0.00000002
600870.00	2369940.00	0.00033555	0.00012554	0.00012553	0.00000002	0.00053649	0.0001457	0.00014568	0.00000002
601370.00	2369940.00	0.00042596	0.00011783	0.00011781	0.00000002	0.00086395	0.00013452	0.00013451	0.00000002
601870.00	2369940.00	0.00044371	0.00011102	0.00011101	0.00000002	0.00088076	0.00012677	0.00012676	0.00000002
602370.00	2369940.00	0.00044062	0.00010426	0.00010424	0.00000002	0.00086312	0.0001193	0.00011928	0.00000002
602870.00	2369940.00	0.00041582	0.00009748	0.00009747	0.00000002	0.0008548	0.00011204	0.00011202	0.00000002
603370.00	2369940.00	0.0004302	0.00009081	0.0000908	0.00000002	0.00085219	0.00010435	0.00010433	0.00000002
603870.00	2369940.00	0.00034415	0.00008404	0.00008403	0.00000002	0.0006797	0.00009774	0.00009772	0.00000002
604370.00	2369940.00	0.00044732	0.0000774	0.00007738	0.00000002	0.00083903	0.00008924	0.00008922	0.00000001
604870.00	2369940.00	0.00039307	0.00007083	0.00007082	0.00000002	0.00083907	0.00008237	0.00008235	0.00000001
605370.00	2369940.00	0.00043805	0.00006452	0.00006451	0.00000002	0.00082633	0.000075	0.00007499	0.00000001
605870.00	2369940.00	0.00044872	0.00005859	0.00005858	0.00000001	0.00079029	0.00006827	0.00006825	0.00000001
606370.00	2369940.00	0.00044262	0.00005319	0.00005318	0.00000001	0.00078742	0.00006214	0.00006213	0.00000001
606870.00	2369940.00	0.00040019	0.00004846	0.00004845	0.00000001	0.00081833	0.00005687	0.00005685	0.00000001
607370.00	2369940.00	0.00055362	0.00004378	0.00004376	0.00000001	0.00057612	0.00005063	0.00005061	0.00000001
607870.00	2369940.00	0.00039404	0.00004062	0.0000406	0.00000001	0.0007989	0.00004747	0.00004746	0.00000001
608370.00	2369940.00	0.00043628	0.00003743	0.00003742	0.00000001	0.00074725	0.00004332	0.00004331	0.00000001
608870.00	2369940.00	0.00037967	0.00003496	0.00003495	0.00000001	0.00078801	0.00004046	0.00004045	0.00000001
609370.00	2369940.00	0.00026533	0.00003444	0.00003443	0.00000002	0.00042356	0.00003997	0.00003996	0.00000001
609870.00	2369940.00	0.00050697	0.00003073	0.00003072	0.00000001	0.00061509	0.00003442	0.0000344	0.00000001
610370.00	2369940.00	0.00050409	0.00002924	0.00002923	0.00000001	0.00061784	0.00003247	0.00003245	0.00000001
610870.00	2369940.00	0.00052309	0.00002793	0.00002792	0.00000001	0.00058431	0.00003068	0.00003067	0.00000001
611370.00	2369940.00	0.00039705	0.00002703	0.00002702	0.00000001	0.00076689	0.00003003	0.00003002	0.00000001
611870.00	2369940.00	0.00031249	0.00002628	0.00002627	0.00000001	0.00073877	0.00002943	0.00002942	0.00000001
612370.00	2369940.00	0.00047299	0.00002545	0.00002543	0.00000001	0.00085414	0.00002775	0.00002774	0.00000001
612870.00	2369940.00	0.00043315	0.00002474	0.00002472	0.00000001	0.00086387	0.00002695	0.00002694	0.00000001
613370.00	2369940.00	0.00038347	0.0000241	0.00002409	0.00000002	0.00085014	0.00002631	0.0000263	0.00000001
613870.00	2369940.00	0.00054077	0.00002323	0.00002321	0.00000001	0.0005269	0.00002454	0.00002452	0.00000001
614370.00	2369940.00	0.00049721	0.00002127	0.00002126	0.00000001	0.00033888	0.000022	0.00002199	0.00000001
614870.00	2369940.00	0.00072182	0.00002215	0.00002213	0.00000002	0.00048434	0.00002284	0.00002282	0.00000001
615370.00	2369940.00	0.0004929	0.00002222	0.0000222	0.00000002	0.00076844	0.00002359	0.00002358	0.00000001
615870.00	2369940.00	0.00056899	0.00002183	0.00002181	0.00000002	0.00068803	0.00002291	0.0000229	0.00000001
616370.00	2369940.00	0.00062757	0.00002145	0.00002143	0.00000002	0.00061728	0.0000223	0.00002228	0.00000001
616870.00	2369940.00	0.00063653	0.00002047	0.00002045	0.00000002	0.00042556	0.00002094	0.00002093	0.00000001
617370.00	2369940.00	0.00054247	0.00001967	0.00001965	0.00000002	0.00036691	0.00002019	0.00002018	0.00000001
617870.00	2369940.00	0.00049641	0.00001923	0.00001921	0.00000002	0.00033991	0.00001968	0.00001967	0.00000001
618370.00	2369940.00	0.00023278	0.00001711	0.00001708	0.00000003	0.00023378	0.00001785	0.00001784	0.00000001
618870.00	2369940.00	0.00019423	0.00001645	0.00001643	0.00000003	0.0002165	0.00001721	0.0000172	0.00000001
619370.00	2369940.00	0.0001748	0.00001569	0.00001566	0.00000003	0.00020207	0.00001639	0.00001637	0.00000002
619870.00	2369940.00	0.00018577	0.00001601	0.00001598	0.00000003	0.00020886	0.00001673	0.00001671	0.00000002
590370.00	2370440.00	0.00047355	0.00018643	0.00018638	0.00000006	0.00080963	0.00021728	0.00021722	0.00000006
590870.00	2370440.00	0.00047065	0.00016944	0.0001694	0.00000005	0.00093619	0.00019388	0.00019383	0.00000005
591370.00	2370440.00	0.00064349	0.0001581	0.00015807	0.00000004	0.00194874	0.00017674	0.0001767	0.00000004
591870.00	2370440.00	0.00113432	0.00015215	0.00015212	0.00000003	0.00222887	0.0001668	0.00016677	0.00000003
592370.00	2370440.00	0.00211344	0.00014831	0.00014828	0.00000002	0.00136817	0.00015987	0.00015985	0.00000002
592870.00	2370440.00	0.00171499	0.00014455	0.00014453	0.00000002	0.00073729	0.00015454	0.00015452	0.00000002
593370.00	2370440.00	0.00080348	0.00014029	0.00014027	0.00000002	0.0004495	0.00014809	0.00014808	0.00000001
593870.00	2370440.00	0.00037192	0.00013332	0.0001333	0.00000001	0.00035582	0.00014212	0.0001421	0.00000001
594370.00	2370440.00	0.00026192	0.00012596	0.00012595	0.00000001	0.00029759	0.00013431	0.0001343	0.00000001
594870.00	2370440.00	0.00044976	0.00014303	0.00014301	0.00000001	0.00038545	0.00014776	0.00014775	0.00000001
595370.00	2370440.00	0.00080462	0.00016258	0.00016256	0.00000001	0.00049305	0.00016097	0.00016096	0.00000001
595870.00	2370440.00	0.00137783	0.00017938	0.00017936	0.00000001	0.00073569	0.00017953	0.00017952	0.00000001
596370.00	2370440.00	0.00170506	0.00019068	0.00019066	0.00000001	0.00099686	0.00019563	0.00019562	0.00000001
596870.00	2370440.00	0.00153772	0.00019548	0.00019546	0.00000002	0.00142356	0.00020924	0.00020922	0.00000001
597370.00	2370440.00	0.00146665	0.00019546	0.00019544	0.00000002	0.00133732	0.00021406	0.00021404	0.00000001
597870.00	2370440.00	0.00120945	0.00018834	0.00018833	0.00000002	0.00140716	0.0002113	0.00021128	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2370440.00	0.00094483	0.0001778	0.00017778	0.00000002	0.00143589	0.00020419	0.00020417	0.00000001
598870.00	2370440.00	0.00073698	0.00016519	0.00016518	0.00000002	0.00139618	0.00018962	0.00018961	0.00000001
599370.00	2370440.00	0.0005185	0.00015301	0.000153	0.00000002	0.00125882	0.00017566	0.00017564	0.00000001
599870.00	2370440.00	0.00047522	0.00014253	0.00014251	0.00000002	0.00115285	0.00016246	0.00016244	0.00000002
600370.00	2370440.00	0.0003388	0.00013369	0.00013367	0.00000002	0.00057571	0.00015454	0.00015453	0.00000002
600870.00	2370440.00	0.00040272	0.00012536	0.00012534	0.00000002	0.00084276	0.00014243	0.00014242	0.00000002
601370.00	2370440.00	0.00041584	0.00011836	0.00011834	0.00000002	0.00083666	0.00013441	0.00013439	0.00000002
601870.00	2370440.00	0.00039087	0.00011165	0.00011164	0.00000002	0.00084122	0.00012752	0.00012751	0.00000002
602370.00	2370440.00	0.00032642	0.0001052	0.00010518	0.00000002	0.00059636	0.00012161	0.0001216	0.00000002
602870.00	2370440.00	0.00040345	0.00009913	0.00009912	0.00000002	0.00082713	0.00011336	0.00011334	0.00000002
603370.00	2370440.00	0.00041003	0.00009291	0.00009289	0.00000002	0.00076957	0.0001062	0.00010619	0.00000001
603870.00	2370440.00	0.00048144	0.00008677	0.00008676	0.00000001	0.00075501	0.00009864	0.00009862	0.00000001
604370.00	2370440.00	0.00044865	0.00008043	0.00008041	0.00000001	0.00079229	0.00009191	0.00009189	0.00000001
604870.00	2370440.00	0.00041008	0.00007415	0.00007414	0.00000001	0.00080922	0.00008529	0.00008528	0.00000001
605370.00	2370440.00	0.00034302	0.00006812	0.0000681	0.00000002	0.00072243	0.0000791	0.00007908	0.00000001
605870.00	2370440.00	0.00041118	0.0000622	0.00006218	0.00000001	0.00079873	0.00007203	0.00007202	0.00000001
606370.00	2370440.00	0.00042996	0.00005668	0.00005666	0.00000001	0.00077537	0.00006574	0.00006573	0.00000001
606870.00	2370440.00	0.00034618	0.00005184	0.00005182	0.00000001	0.00076244	0.00006069	0.00006068	0.00000001
607370.00	2370440.00	0.00039974	0.00004718	0.00004716	0.00000001	0.0007833	0.00005503	0.00005502	0.00000001
607870.00	2370440.00	0.0002884	0.00004384	0.00004383	0.00000001	0.00055194	0.00005151	0.0000515	0.00000001
608370.00	2370440.00	0.00047816	0.00003955	0.00003953	0.00000001	0.00064653	0.0000456	0.00004559	0.00000001
608870.00	2370440.00	0.0005257	0.00003643	0.00003641	0.00000001	0.00053775	0.00004155	0.00004154	0.00000001
609370.00	2370440.00	0.00049189	0.0000341	0.00003409	0.00000001	0.00060241	0.00003877	0.00003876	0.00000001
609870.00	2370440.00	0.00054563	0.0000318	0.00003179	0.00000001	0.00048507	0.00003562	0.00003561	0.00000001
610370.00	2370440.00	0.0002546	0.00003233	0.00003231	0.00000002	0.00040493	0.0000372	0.00003719	0.00000001
610870.00	2370440.00	0.00025232	0.00003082	0.00003081	0.00000002	0.00040358	0.00003529	0.00003527	0.00000001
611370.00	2370440.00	0.00027026	0.00002816	0.00002815	0.00000001	0.00055102	0.00003203	0.00003202	0.00000001
611870.00	2370440.00	0.00052426	0.00002644	0.00002643	0.00000001	0.00051307	0.00002871	0.0000287	0.00000001
612370.00	2370440.00	0.00027435	0.00002605	0.00002604	0.00000001	0.00058847	0.00002925	0.00002923	0.00000001
612870.00	2370440.00	0.0003525	0.00002512	0.0000251	0.00000001	0.00081574	0.00002774	0.00002773	0.00000001
613370.00	2370440.00	0.00024624	0.00002489	0.00002487	0.00000002	0.00043567	0.00002772	0.00002771	0.00000001
613870.00	2370440.00	0.00054098	0.00002341	0.00002339	0.00000001	0.00048394	0.00002476	0.00002475	0.00000001
614370.00	2370440.00	0.00042092	0.00002107	0.00002106	0.00000001	0.00030363	0.0000219	0.00002189	0.00000001
614870.00	2370440.00	0.00040889	0.00002054	0.00002053	0.00000001	0.00029396	0.0000213	0.00002129	0.00000001
615370.00	2370440.00	0.00069723	0.00002181	0.0000218	0.00000001	0.0004622	0.00002249	0.00002247	0.00000001
615870.00	2370440.00	0.00066998	0.00002129	0.00002128	0.00000001	0.00044129	0.00002188	0.00002187	0.00000001
616370.00	2370440.00	0.00059314	0.00002053	0.00002051	0.00000002	0.00039303	0.00002114	0.00002113	0.00000001
616870.00	2370440.00	0.00058354	0.0000202	0.00002018	0.00000002	0.00038885	0.00002077	0.00002075	0.00000001
617370.00	2370440.00	0.0003473	0.00001847	0.00001846	0.00000002	0.00026415	0.00001908	0.00001907	0.00000001
617870.00	2370440.00	0.00022911	0.00001731	0.00001729	0.00000002	0.00023202	0.00001809	0.00001808	0.00000001
618370.00	2370440.00	0.00017954	0.00001628	0.00001626	0.00000002	0.00020831	0.00001705	0.00001704	0.00000001
618870.00	2370440.00	0.00018128	0.00001617	0.00001615	0.00000002	0.00020844	0.00001694	0.00001693	0.00000001
619370.00	2370440.00	0.00018932	0.00001626	0.00001623	0.00000002	0.00021151	0.00001697	0.00001696	0.00000001
619870.00	2370440.00	0.00061406	0.00001936	0.00001933	0.00000003	0.00043324	0.00001971	0.0000197	0.00000002
590370.00	2370940.00	0.00045691	0.00017785	0.0001778	0.00000006	0.00077461	0.00020587	0.00020581	0.00000006
590870.00	2370940.00	0.00045266	0.00016253	0.00016249	0.00000005	0.0008876	0.00018486	0.00018481	0.00000005
591370.00	2370940.00	0.00046899	0.00015276	0.00015272	0.00000004	0.00118624	0.00017081	0.00017077	0.00000004
591870.00	2370940.00	0.00069499	0.00014677	0.00014674	0.00000003	0.00214188	0.00016157	0.00016155	0.00000003
592370.00	2370940.00	0.0011523	0.0001399	0.00013988	0.00000002	0.00055153	0.00014874	0.00014872	0.00000002
592870.00	2370940.00	0.00100048	0.00013749	0.00013747	0.00000002	0.00049647	0.00014576	0.00014574	0.00000002
593370.00	2370940.00	0.000466	0.00013163	0.00013162	0.00000001	0.00038029	0.00013994	0.00013993	0.00000001
593870.00	2370940.00	0.00031563	0.00012716	0.00012714	0.00000001	0.00033217	0.00013616	0.00013615	0.00000001
594370.00	2370940.00	0.00025125	0.00012139	0.00012138	0.00000001	0.00028677	0.00012946	0.00012945	0.00000001
594870.00	2370940.00	0.00042119	0.00013689	0.00013688	0.00000001	0.00036731	0.00014169	0.00014168	0.00000001
595370.00	2370940.00	0.00080628	0.00015533	0.00015532	0.00000001	0.00047857	0.0001544	0.00015439	0.00000001
595870.00	2370940.00	0.00130465	0.00017019	0.00017018	0.00000001	0.00069038	0.00017044	0.00017042	0.00000001
596370.00	2370940.00	0.00164662	0.00018154	0.00018153	0.00000001	0.00094316	0.00018526	0.00018525	0.00000001
596870.00	2370940.00	0.00164948	0.00018893	0.00018892	0.00000001	0.00106271	0.00019742	0.00019741	0.00000001
597370.00	2370940.00	0.00153501	0.00019038	0.00019037	0.00000001	0.0011936	0.00020525	0.00020524	0.00000001
597870.00	2370940.00	0.00118563	0.00018592	0.0001859	0.00000002	0.00143207	0.00020993	0.00020992	0.00000001
598370.00	2370940.00	0.00088523	0.00017638	0.00017636	0.00000002	0.0014949	0.00020249	0.00020247	0.00000001
598870.00	2370940.00	0.00077746	0.00016514	0.00016513	0.00000002	0.00138109	0.00018926	0.00018924	0.00000001
599370.00	2370940.00	0.00061795	0.00015352	0.00015351	0.00000002	0.00130592	0.00017526	0.00017525	0.00000001
599870.00	2370940.00	0.00039858	0.00014265	0.00014263	0.00000002	0.00091651	0.00016387	0.00016386	0.00000001
600370.00	2370940.00	0.00034283	0.00013361	0.00013359	0.00000002	0.00064938	0.00015363	0.00015362	0.00000002
600870.00	2370940.00	0.00040013	0.00012564	0.00012562	0.00000002	0.00083855	0.00014212	0.00014211	0.00000001
601370.00	2370940.00	0.00042663	0.00011881	0.0001188	0.00000002	0.00083358	0.00013394	0.00013392	0.00000001
601870.00	2370940.00	0.00037317	0.00011217	0.00011215	0.00000002	0.00081112	0.00012764	0.00012763	0.00000001
602370.00	2370940.00	0.00030612	0.0001065	0.00010649	0.00000002	0.00048446	0.00012308	0.00012306	0.00000002
602870.00	2370940.00	0.00041812	0.00010044	0.00010043	0.00000001	0.00080424	0.00011395	0.00011393	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2370940.00	0.00040886	0.00009458	0.00009456	0.00000001	0.00079604	0.00010752	0.00010751	0.00000001
603870.00	2370940.00	0.00036689	0.00008867	0.00008866	0.00000001	0.0007735	0.00010141	0.0001014	0.00000001
604370.00	2370940.00	0.00043592	0.00008292	0.0000829	0.00000001	0.00076512	0.00009418	0.00009416	0.00000001
604870.00	2370940.00	0.00041067	0.00007701	0.00007699	0.00000001	0.00077745	0.00008787	0.00008786	0.00000001
605370.00	2370940.00	0.00043392	0.00007118	0.00007117	0.00000001	0.00075078	0.00008126	0.00008125	0.00000001
605870.00	2370940.00	0.00040198	0.00006549	0.00006547	0.00000001	0.00077997	0.00007523	0.00007521	0.00000001
606370.00	2370940.00	0.00041227	0.00006002	0.00006001	0.00000001	0.00076885	0.00006913	0.00006912	0.00000001
606870.00	2370940.00	0.00036819	0.00005496	0.00005495	0.00000001	0.00077358	0.00006373	0.00006372	0.00000001
607370.00	2370940.00	0.00043951	0.00005011	0.0000501	0.00000001	0.00071126	0.00005791	0.0000579	0.00000001
607870.00	2370940.00	0.00043126	0.00004588	0.00004586	0.00000001	0.0007071	0.00005309	0.00005307	0.00000001
608370.00	2370940.00	0.00051001	0.00004186	0.00004185	0.00000001	0.00056074	0.00004807	0.00004806	0.00000001
608870.00	2370940.00	0.00031224	0.00003922	0.00003921	0.00000001	0.00069491	0.00004574	0.00004573	0.00000001
609370.00	2370940.00	0.00025659	0.00003767	0.00003766	0.00000001	0.00040801	0.00004377	0.00004376	0.00000001
609870.00	2370940.00	0.0002527	0.00003535	0.00003534	0.00000001	0.00040146	0.00004094	0.00004093	0.00000001
610370.00	2370940.00	0.00043071	0.00003167	0.00003166	0.00000001	0.00064935	0.00003586	0.00003584	0.00000001
610870.00	2370940.00	0.00035354	0.00003012	0.0000301	0.00000001	0.00072605	0.00003421	0.0000342	0.00000001
611370.00	2370940.00	0.00028163	0.00002887	0.00002886	0.00000001	0.00062488	0.00003292	0.0000329	0.00000001
611870.00	2370940.00	0.00024523	0.00002974	0.00002973	0.00000002	0.00039286	0.00003385	0.00003383	0.00000002
612370.00	2370940.00	0.00051952	0.00002608	0.00002607	0.00000001	0.00048484	0.00002828	0.00002827	0.00000001
612870.00	2370940.00	0.00023933	0.00002646	0.00002645	0.00000002	0.00039854	0.00002974	0.00002972	0.00000001
613370.00	2370940.00	0.00049145	0.00002451	0.0000245	0.00000001	0.00054516	0.00002636	0.00002635	0.00000001
613870.00	2370940.00	0.00023658	0.00002546	0.00002544	0.00000002	0.00038849	0.00002838	0.00002836	0.00000001
614370.00	2370940.00	0.00043044	0.00002152	0.00002151	0.00000001	0.00030379	0.00002241	0.0000224	0.00000001
614870.00	2370940.00	0.00038922	0.00002071	0.0000207	0.00000001	0.00028252	0.00002155	0.00002154	0.00000001
615370.00	2370940.00	0.00038083	0.00002019	0.00002018	0.00000001	0.00027852	0.00002095	0.00002094	0.00000001
615870.00	2370940.00	0.00045772	0.00002029	0.00002028	0.00000001	0.00031235	0.00002095	0.00002094	0.00000001
616370.00	2370940.00	0.00052547	0.0000203	0.00002029	0.00000001	0.00034917	0.00002092	0.00002091	0.00000001
616870.00	2370940.00	0.00028502	0.00001841	0.0000184	0.00000001	0.00024485	0.0000192	0.00001919	0.00000001
617370.00	2370940.00	0.00022774	0.00001761	0.0000176	0.00000001	0.0002293	0.00001845	0.00001844	0.00000001
617870.00	2370940.00	0.00017787	0.00001647	0.00001646	0.00000001	0.00020897	0.00001731	0.0000173	0.00000001
618370.00	2370940.00	0.00047131	0.00001895	0.00001893	0.00000002	0.00032059	0.00001939	0.00001937	0.00000001
618870.00	2370940.00	0.00062689	0.00001968	0.00001966	0.00000002	0.00043031	0.00002006	0.00002005	0.00000001
619370.00	2370940.00	0.0004308	0.00001987	0.00001985	0.00000002	0.00065915	0.00002087	0.00002085	0.00000001
619870.00	2370940.00	0.00039748	0.00001965	0.00001962	0.00000003	0.00065944	0.00002067	0.00002066	0.00000002
590370.00	2371440.00	0.00044185	0.0001706	0.00017054	0.00000005	0.00073757	0.00019626	0.00019621	0.00000005
590870.00	2371440.00	0.00043226	0.00015688	0.00015683	0.00000004	0.00079488	0.0001776	0.00017755	0.00000004
591370.00	2371440.00	0.00043687	0.00014757	0.00014754	0.00000003	0.00101718	0.00016443	0.0001644	0.00000004
591870.00	2371440.00	0.00091791	0.00014177	0.00014174	0.00000003	0.00214473	0.00015479	0.00015477	0.00000003
592370.00	2371440.00	0.00159692	0.00013665	0.00013663	0.00000002	0.00069619	0.00014581	0.00014579	0.00000002
592870.00	2371440.00	0.0002532	0.00011946	0.00011945	0.00000002	0.0003044	0.00012909	0.00012908	0.00000001
593370.00	2371440.00	0.00023422	0.00011658	0.00011656	0.00000001	0.00027948	0.00012585	0.00012583	0.00000001
593870.00	2371440.00	0.00021965	0.00011398	0.00011397	0.00000001	0.00025199	0.00012173	0.00012172	0.00000001
594370.00	2371440.00	0.00024882	0.00011781	0.00011779	0.00000001	0.00028363	0.00012552	0.00012551	0.00000001
594870.00	2371440.00	0.00041673	0.00013213	0.00013211	0.00000001	0.00035703	0.00013669	0.00013668	0.00000001
595370.00	2371440.00	0.0007902	0.00014854	0.00014853	0.00000001	0.00046972	0.00014809	0.00014808	0.00000001
595870.00	2371440.00	0.00124556	0.00016182	0.0001618	0.00000001	0.00065293	0.00016211	0.0001621	0.00000001
596370.00	2371440.00	0.00156081	0.00017289	0.00017288	0.00000001	0.0008658	0.00017545	0.00017544	0.00000001
596870.00	2371440.00	0.00160579	0.00018063	0.00018061	0.00000001	0.00113929	0.0001884	0.00018839	0.00000001
597370.00	2371440.00	0.00148136	0.00018398	0.00018397	0.00000001	0.00121738	0.00019714	0.00019713	0.00000001
597870.00	2371440.00	0.00134046	0.00018193	0.00018191	0.00000001	0.00122568	0.00019954	0.00019952	0.00000001
598370.00	2371440.00	0.00106098	0.00017517	0.00017516	0.00000001	0.00134124	0.00019874	0.00019872	0.00000001
598870.00	2371440.00	0.00070504	0.00016447	0.00016446	0.00000001	0.00142788	0.00018902	0.00018901	0.00000001
599370.00	2371440.00	0.0005399	0.00015347	0.00015345	0.00000001	0.00128217	0.00017625	0.00017624	0.00000001
599870.00	2371440.00	0.000583	0.00014341	0.00014339	0.00000001	0.00120854	0.00016222	0.00016221	0.00000001
600370.00	2371440.00	0.00038515	0.0001338	0.00013378	0.00000002	0.00089642	0.00015246	0.00015245	0.00000001
600870.00	2371440.00	0.00040701	0.00012589	0.00012588	0.00000001	0.00084469	0.00014177	0.00014175	0.00000001
601370.00	2371440.00	0.00042026	0.00011904	0.00011902	0.00000001	0.00082471	0.00013362	0.0001336	0.00000001
601870.00	2371440.00	0.00040068	0.00011269	0.00011268	0.00000001	0.00078933	0.00012694	0.00012692	0.00000001
602370.00	2371440.00	0.00039058	0.00010683	0.00010682	0.00000001	0.00080804	0.00012077	0.00012075	0.00000001
602870.00	2371440.00	0.00039948	0.00010129	0.00010128	0.00000001	0.00078892	0.00011452	0.00011451	0.00000001
603370.00	2371440.00	0.00044494	0.00009597	0.00009596	0.00000001	0.00073977	0.000108	0.00010799	0.00000001
603870.00	2371440.00	0.00038618	0.00009033	0.00009031	0.00000001	0.0007679	0.00010247	0.00010246	0.00000001
604370.00	2371440.00	0.0003811	0.00008486	0.00008484	0.00000001	0.00076401	0.00009638	0.00009637	0.00000001
604870.00	2371440.00	0.00036842	0.00007936	0.00007934	0.00000001	0.00076046	0.00009036	0.00009034	0.00000001
605370.00	2371440.00	0.00030505	0.00007393	0.00007392	0.00000001	0.00057899	0.00008493	0.00008492	0.00000001
605870.00	2371440.00	0.00040253	0.00006843	0.00006841	0.00000001	0.00075112	0.00007796	0.00007795	0.00000001
606370.00	2371440.00	0.00031187	0.00006323	0.00006321	0.00000001	0.00063899	0.00007284	0.00007283	0.00000001
606870.00	2371440.00	0.00033339	0.0000581	0.00005808	0.00000001	0.00071946	0.00006701	0.00006699	0.00000001
607370.00	2371440.00	0.00034582	0.0000533	0.00005329	0.00000001	0.00073862	0.00006159	0.00006157	0.00000001
607870.00	2371440.00	0.0003472	0.0000489	0.00004889	0.00000001	0.0007363	0.00005662	0.00005661	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2371440.00	0.00030884	0.00004507	0.00004506	0.00000001	0.0006737	0.00005241	0.00005239	0.00000001
608870.00	2371440.00	0.00047431	0.00004102	0.00004101	0.00000001	0.00057939	0.00004701	0.00004699	0.00000001
609370.00	2371440.00	0.00041065	0.00003812	0.0000381	0.00000001	0.00066663	0.00004381	0.0000438	0.00000001
609870.00	2371440.00	0.0004613	0.0000353	0.00003529	0.00000001	0.00057452	0.00004019	0.00004018	0.00000001
610370.00	2371440.00	0.00024666	0.00003443	0.00003442	0.00000001	0.00040466	0.00003979	0.00003977	0.00000001
610870.00	2371440.00	0.00050683	0.00003091	0.0000309	0.00000001	0.00046923	0.00003454	0.00003453	0.00000001
611370.00	2371440.00	0.0004353	0.00002952	0.00002951	0.00000001	0.00059747	0.00003308	0.00003307	0.00000001
611870.00	2371440.00	0.0004896	0.00002798	0.00002797	0.00000001	0.00049824	0.00003086	0.00003084	0.00000001
612370.00	2371440.00	0.00023657	0.00002804	0.00002802	0.00000001	0.00039388	0.0000318	0.00003179	0.00000001
612870.00	2371440.00	0.00049607	0.00002578	0.00002577	0.00000001	0.00048577	0.00002798	0.00002797	0.00000001
613370.00	2371440.00	0.00048692	0.00002494	0.00002493	0.00000001	0.00051194	0.00002694	0.00002692	0.00000001
613870.00	2371440.00	0.00023311	0.00002631	0.0000263	0.00000002	0.00037923	0.00002947	0.00002945	0.00000001
614370.00	2371440.00	0.0004961	0.00002226	0.00002225	0.00000001	0.00032734	0.00002335	0.00002334	0.00000001
614870.00	2371440.00	0.00047992	0.00002162	0.00002161	0.00000001	0.00032057	0.00002259	0.00002258	0.00000001
615370.00	2371440.00	0.0003023	0.00001986	0.00001985	0.00000001	0.00024707	0.00002085	0.00002084	0.00000001
615870.00	2371440.00	0.00027974	0.00001925	0.00001924	0.00000001	0.0002409	0.00002022	0.00002021	0.00000001
616370.00	2371440.00	0.00021949	0.00001829	0.00001828	0.00000001	0.00022205	0.00001929	0.00001928	0.00000001
616870.00	2371440.00	0.00021684	0.00001794	0.00001793	0.00000001	0.00022116	0.00001889	0.00001888	0.00000001
617370.00	2371440.00	0.00017984	0.00001696	0.00001695	0.00000001	0.00020816	0.00001788	0.00001787	0.00000001
617870.00	2371440.00	0.0001785	0.00001669	0.00001668	0.00000001	0.00020713	0.00001757	0.00001756	0.00000001
618370.00	2371440.00	0.00064061	0.00002004	0.00002002	0.00000002	0.00044047	0.00002048	0.00002047	0.00000001
618870.00	2371440.00	0.00025516	0.00002018	0.00002016	0.00000002	0.00053651	0.00002177	0.00002176	0.00000001
619370.00	2371440.00	0.00021684	0.00002033	0.00002031	0.00000003	0.0003659	0.000022	0.00002199	0.00000002
619870.00	2371440.00	0.00021485	0.0000201	0.00002007	0.00000003	0.00035986	0.00002172	0.0000217	0.00000002
590370.00	2371940.00	0.0004276	0.00016289	0.00016284	0.00000005	0.00072157	0.00018617	0.00018612	0.00000005
590870.00	2371940.00	0.00041915	0.00015074	0.0001507	0.00000004	0.00078256	0.00016967	0.00016963	0.00000004
591370.00	2371940.00	0.0004492	0.00014208	0.00014205	0.00000003	0.0011752	0.00015741	0.00015738	0.00000003
591870.00	2371940.00	0.00132502	0.00013708	0.00013705	0.00000003	0.00180464	0.00014821	0.00014818	0.00000003
592370.00	2371940.00	0.00186024	0.00013318	0.00013316	0.00000002	0.00086445	0.00014208	0.00014206	0.00000002
592870.00	2371940.00	0.00031666	0.00012168	0.00012167	0.00000002	0.00034115	0.00013065	0.00013064	0.00000001
593370.00	2371940.00	0.00020574	0.000106	0.00010598	0.00000001	0.00023993	0.00011412	0.00011411	0.00000001
593870.00	2371940.00	0.00022345	0.00011212	0.00011211	0.00000001	0.00026224	0.00012023	0.00012022	0.00000001
594370.00	2371940.00	0.00028212	0.00011879	0.00011878	0.00000001	0.00030484	0.00012653	0.00012652	0.00000001
594870.00	2371940.00	0.00048452	0.00013004	0.00013002	0.00000001	0.00036456	0.0001335	0.00013349	0.00000001
595370.00	2371940.00	0.00075267	0.000142	0.00014199	0.00000001	0.00044742	0.000142	0.00014199	0.00000001
595870.00	2371940.00	0.00132632	0.00015475	0.00015474	0.00000001	0.00068541	0.00015562	0.00015561	0.00000001
596370.00	2371940.00	0.00151488	0.00016477	0.00016476	0.00000001	0.00083038	0.00016684	0.00016682	0.00000001
596870.00	2371940.00	0.00156371	0.00017329	0.00017328	0.00000001	0.00094053	0.00017836	0.00017834	0.00000001
597370.00	2371940.00	0.00147435	0.00017773	0.00017771	0.00000001	0.00116143	0.00018858	0.00018857	0.00000001
597870.00	2371940.00	0.00136457	0.00017772	0.00017771	0.00000001	0.00116435	0.00019291	0.00019289	0.00000001
598370.00	2371940.00	0.00114822	0.00017234	0.00017233	0.00000001	0.00124279	0.00019118	0.00019117	0.00000001
598870.00	2371940.00	0.00077937	0.00016379	0.00016378	0.00000001	0.00139756	0.00018721	0.0001872	0.00000001
599370.00	2371940.00	0.00055656	0.00015344	0.00015343	0.00000001	0.00129741	0.00017612	0.0001761	0.00000001
599870.00	2371940.00	0.00060854	0.00014367	0.00014365	0.00000001	0.00120456	0.00016242	0.00016241	0.00000001
600370.00	2371940.00	0.00039094	0.0001341	0.00013409	0.00000001	0.0009195	0.00015263	0.00015262	0.00000001
600870.00	2371940.00	0.00043542	0.00012619	0.00012618	0.00000001	0.00085655	0.00014125	0.00014124	0.00000001
601370.00	2371940.00	0.00039476	0.00011909	0.00011908	0.00000001	0.00081145	0.00013358	0.00013357	0.00000001
601870.00	2371940.00	0.00038499	0.00011287	0.00011286	0.00000001	0.00077563	0.00012675	0.00012673	0.00000001
602370.00	2371940.00	0.00037576	0.00010718	0.00010716	0.00000001	0.00079031	0.00012073	0.00012072	0.00000001
602870.00	2371940.00	0.00034168	0.0001017	0.00010169	0.00000001	0.00073009	0.00011531	0.0001153	0.00000001
603370.00	2371940.00	0.0005444	0.00009746	0.00009744	0.00000001	0.00055846	0.00010742	0.0001074	0.00000001
603870.00	2371940.00	0.00038644	0.00009158	0.00009157	0.00000001	0.00074527	0.00010335	0.00010333	0.00000001
604370.00	2371940.00	0.00036663	0.00008642	0.00008641	0.00000001	0.00073984	0.00009782	0.00009781	0.00000001
604870.00	2371940.00	0.00038675	0.00008132	0.00008131	0.00000001	0.00073666	0.00009187	0.00009185	0.00000001
605370.00	2371940.00	0.00037586	0.00007615	0.00007613	0.00000001	0.00073891	0.00008621	0.00008619	0.00000001
605870.00	2371940.00	0.00031044	0.00007101	0.00007099	0.00000001	0.00063673	0.0000811	0.00008109	0.00000001
606370.00	2371940.00	0.00035725	0.00006588	0.00006587	0.00000001	0.00073391	0.00007502	0.00007501	0.00000001
606870.00	2371940.00	0.00045333	0.00006083	0.00006081	0.00000001	0.00063635	0.00006892	0.00006891	0.00000001
607370.00	2371940.00	0.00032255	0.00005622	0.0000562	0.00000001	0.00069327	0.00006458	0.00006456	0.00000001
607870.00	2371940.00	0.00026296	0.00005306	0.00005305	0.00000001	0.00039446	0.00006113	0.00006111	0.00000001
608370.00	2371940.00	0.00049094	0.00004718	0.00004716	0.00000001	0.00053737	0.00005378	0.00005377	0.00000001
608870.00	2371940.00	0.0002909	0.00004404	0.00004403	0.00000001	0.00062028	0.00005102	0.00005101	0.00000001
609370.00	2371940.00	0.0004183	0.00004027	0.00004026	0.00000001	0.00062925	0.00004615	0.00004614	0.00000001
609870.00	2371940.00	0.00048064	0.00003711	0.00003709	0.00000001	0.00051148	0.00004217	0.00004215	0.00000001
610370.00	2371940.00	0.00049953	0.00003444	0.00003443	0.00000001	0.0004529	0.00003889	0.00003888	0.00000001
610870.00	2371940.00	0.0005012	0.00003223	0.00003222	0.00000001	0.00043716	0.00003617	0.00003616	0.00000001
611370.00	2371940.00	0.00028383	0.00003109	0.00003107	0.00000001	0.00063032	0.00003562	0.00003561	0.00000001
611870.00	2371940.00	0.00023706	0.00003201	0.000032	0.00000002	0.00037368	0.00003659	0.00003657	0.00000001
612370.00	2371940.00	0.00023333	0.00003016	0.00003015	0.00000001	0.00036926	0.00003432	0.00003431	0.00000001
612870.00	2371940.00	0.0002901	0.00002685	0.00002683	0.00000001	0.0006491	0.0000302	0.00003019	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2371940.00	0.00022768	0.00002686	0.00002685	0.00000001	0.00037181	0.00003026	0.00003024	0.00000001
613870.00	2371940.00	0.00026114	0.00002503	0.00002502	0.00000001	0.00057349	0.00002796	0.00002795	0.00000001
614370.00	2371940.00	0.00042007	0.00002229	0.00002228	0.00000001	0.00028969	0.00002352	0.00002351	0.00000001
614870.00	2371940.00	0.00047425	0.00002198	0.00002197	0.00000001	0.0003137	0.00002306	0.00002305	0.00000001
615370.00	2371940.00	0.0004351	0.00002123	0.00002122	0.00000001	0.00029684	0.00002216	0.00002215	0.00000001
615870.00	2371940.00	0.00026466	0.00001942	0.00001941	0.00000001	0.00023292	0.00002048	0.00002047	0.00000001
616370.00	2371940.00	0.00020295	0.00001834	0.00001833	0.00000001	0.00021383	0.00001944	0.00001943	0.00000001
616870.00	2371940.00	0.0002131	0.0000181	0.00001809	0.00000001	0.00021594	0.00001909	0.00001908	0.00000001
617370.00	2371940.00	0.00051374	0.00001993	0.00001992	0.00000001	0.00033698	0.00002058	0.00002057	0.00000001
617870.00	2371940.00	0.00058478	0.00002073	0.00002072	0.00000001	0.00056514	0.00002156	0.00002155	0.00000001
618370.00	2371940.00	0.00046297	0.00001909	0.00001907	0.00000001	0.00031164	0.0000196	0.00001959	0.00000001
618870.00	2371940.00	0.00061331	0.00002006	0.00002004	0.00000001	0.00049595	0.00002065	0.00002064	0.00000001
619370.00	2371940.00	0.00025801	0.00001994	0.00001992	0.00000002	0.00055461	0.00002145	0.00002144	0.00000001
619870.00	2371940.00	0.00021057	0.00002058	0.00002056	0.00000003	0.00034408	0.00002228	0.00002226	0.00000002
590370.00	2372440.00	0.00041435	0.00015612	0.00015607	0.00000005	0.00070292	0.00017737	0.00017733	0.00000005
590870.00	2372440.00	0.00040767	0.00014499	0.00014495	0.00000004	0.00078018	0.00016231	0.00016227	0.00000004
591370.00	2372440.00	0.00043637	0.00013734	0.00013731	0.00000003	0.0011426	0.00015156	0.00015153	0.00000003
591870.00	2372440.00	0.00089719	0.00013276	0.00013273	0.00000002	0.00199733	0.00014402	0.000144	0.00000002
592370.00	2372440.00	0.0015981	0.00012842	0.0001284	0.00000002	0.00070506	0.00013659	0.00013657	0.00000002
592870.00	2372440.00	0.00040515	0.00012054	0.00012052	0.00000002	0.00035754	0.00012801	0.000128	0.00000001
593370.00	2372440.00	0.00023468	0.00011088	0.00011086	0.00000001	0.00027749	0.00011905	0.00011904	0.00000001
593870.00	2372440.00	0.00022794	0.00010967	0.00010966	0.00000001	0.00026672	0.00011745	0.00011744	0.00000001
594370.00	2372440.00	0.00028158	0.00011616	0.00011615	0.00000001	0.00029959	0.00012309	0.00012308	0.00000001
594870.00	2372440.00	0.00038059	0.00012264	0.00012263	0.00000001	0.00033142	0.00012711	0.0001271	0.00000001
595370.00	2372440.00	0.0006563	0.00013511	0.00013509	0.00000001	0.00041198	0.00013551	0.0001355	0.00000001
595870.00	2372440.00	0.00128247	0.00014778	0.00014777	0.00000001	0.00065589	0.0001488	0.00014879	0.00000001
596370.00	2372440.00	0.00148787	0.00015724	0.00015722	0.00000001	0.00081316	0.0001591	0.00015908	0.00000001
596870.00	2372440.00	0.00152755	0.00016578	0.00016576	0.00000001	0.00091645	0.00016983	0.00016982	0.00000001
597370.00	2372440.00	0.00147845	0.00017144	0.00017142	0.00000001	0.00107672	0.00017998	0.00017996	0.00000001
597870.00	2372440.00	0.00136582	0.00017297	0.00017295	0.00000001	0.00112472	0.00018602	0.00018601	0.00000001
598370.00	2372440.00	0.00122196	0.00016975	0.00016974	0.00000001	0.00114175	0.0001863	0.00018629	0.00000001
598870.00	2372440.00	0.0009668	0.00016303	0.00016302	0.00000001	0.0012457	0.00018426	0.00018424	0.00000001
599370.00	2372440.00	0.00085213	0.00015381	0.0001538	0.00000001	0.00117849	0.00017382	0.00017381	0.00000001
599870.00	2372440.00	0.00070248	0.00014398	0.00014397	0.00000001	0.0011569	0.00016214	0.00016213	0.00000001
600370.00	2372440.00	0.00041779	0.00013444	0.00013442	0.00000001	0.00100497	0.00015257	0.00015256	0.00000001
600870.00	2372440.00	0.00047489	0.0001265	0.00012648	0.00000001	0.00084504	0.00014078	0.00014077	0.00000001
601370.00	2372440.00	0.00039674	0.00011924	0.00011923	0.00000001	0.00080339	0.00013328	0.00013326	0.00000001
601870.00	2372440.00	0.0003909	0.00011307	0.00011305	0.00000001	0.00077793	0.00012629	0.00012628	0.00000001
602370.00	2372440.00	0.00039466	0.00010753	0.00010752	0.00000001	0.00074886	0.00012012	0.0001201	0.00000001
602870.00	2372440.00	0.00036102	0.0001022	0.00010219	0.00000001	0.00075619	0.00011494	0.00011493	0.00000001
603370.00	2372440.00	0.00030542	0.00009708	0.00009706	0.00000001	0.00061827	0.00011032	0.00011031	0.00000001
603870.00	2372440.00	0.00036302	0.00009245	0.00009243	0.00000001	0.00072783	0.00010415	0.00010413	0.00000001
604370.00	2372440.00	0.00035731	0.00008764	0.00008763	0.00000001	0.0007188	0.00009885	0.00009883	0.00000001
604870.00	2372440.00	0.00033897	0.00008281	0.0000828	0.00000001	0.00070344	0.00009364	0.00009363	0.00000001
605370.00	2372440.00	0.00032984	0.00007799	0.00007798	0.00000001	0.00069121	0.0000883	0.00008829	0.00000001
605870.00	2372440.00	0.00040493	0.00007318	0.00007316	0.00000001	0.00068571	0.00008223	0.00008221	0.00000001
606370.00	2372440.00	0.00029578	0.00006835	0.00006833	0.00000001	0.0005917	0.00007783	0.00007781	0.00000001
606870.00	2372440.00	0.00037009	0.0000635	0.00006349	0.00000001	0.00070917	0.0000719	0.00007189	0.00000001
607370.00	2372440.00	0.00047179	0.00005869	0.00005868	0.00000001	0.00055935	0.00006613	0.00006612	0.00000001
607870.00	2372440.00	0.00027978	0.00005461	0.0000546	0.00000001	0.00054354	0.00006264	0.00006262	0.00000001
608370.00	2372440.00	0.00028131	0.00005042	0.00005041	0.00000001	0.0005675	0.00005797	0.00005795	0.00000001
608870.00	2372440.00	0.00025367	0.0000471	0.00004709	0.00000001	0.00041226	0.00005422	0.00005421	0.00000001
609370.00	2372440.00	0.0005029	0.00004217	0.00004216	0.00000001	0.00044271	0.00004785	0.00004783	0.00000001
609870.00	2372440.00	0.00035832	0.00003955	0.00003954	0.00000001	0.00067079	0.00004536	0.00004535	0.00000001
610370.00	2372440.00	0.00026397	0.00003718	0.00003717	0.00000001	0.00054298	0.00004294	0.00004292	0.00000001
610870.00	2372440.00	0.00023502	0.00003585	0.00003584	0.00000001	0.00036767	0.0000412	0.00004119	0.00000001
611370.00	2372440.00	0.00035104	0.00003223	0.00003222	0.00000001	0.00065298	0.00003667	0.00003666	0.00000001
611870.00	2372440.00	0.00044617	0.00003017	0.00003015	0.00000001	0.00051074	0.00003374	0.00003373	0.00000001
612370.00	2372440.00	0.0004149	0.00002872	0.00002871	0.00000001	0.00055598	0.00003205	0.00003203	0.00000001
612870.00	2372440.00	0.0003811	0.00002747	0.00002746	0.00000001	0.00060424	0.0000306	0.00003059	0.00000001
613370.00	2372440.00	0.00022324	0.00002767	0.00002765	0.00000001	0.00035971	0.00003126	0.00003125	0.00000001
613870.00	2372440.00	0.00040294	0.00002532	0.0000253	0.00000001	0.00056971	0.00002776	0.00002775	0.00000001
614370.00	2372440.00	0.00034233	0.0000223	0.00002229	0.00000001	0.0002577	0.0000237	0.00002369	0.00000001
614870.00	2372440.00	0.00027418	0.00002095	0.00002094	0.00000001	0.00023247	0.00002232	0.00002231	0.00000001
615370.00	2372440.00	0.00026827	0.00002032	0.00002031	0.00000001	0.00023024	0.00002156	0.00002155	0.00000001
615870.00	2372440.00	0.00023051	0.00001938	0.00001937	0.00000001	0.0002197	0.00002061	0.0000206	0.00000001
616370.00	2372440.00	0.00019321	0.00001843	0.00001842	0.00000001	0.00020648	0.00001961	0.0000196	0.00000001
616870.00	2372440.00	0.00038667	0.00001984	0.00001983	0.00000001	0.00027419	0.00002056	0.00002055	0.00000001
617370.00	2372440.00	0.00030646	0.00002131	0.0000213	0.00000001	0.00068914	0.00002299	0.00002298	0.00000001
617870.00	2372440.00	0.00021953	0.00002119	0.00002117	0.00000002	0.00040076	0.0000231	0.00002309	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2372440.00	0.00021959	0.00002081	0.0000208	0.00000002	0.00040374	0.00002263	0.00002261	0.00000001
618870.00	2372440.00	0.00022052	0.00002045	0.00002044	0.00000002	0.00041011	0.00002218	0.00002217	0.00000001
619370.00	2372440.00	0.00021127	0.00002035	0.00002033	0.00000002	0.00036562	0.00002205	0.00002204	0.00000001
619870.00	2372440.00	0.00020772	0.00002075	0.00002073	0.00000002	0.0003407	0.00002249	0.00002248	0.00000002
590370.00	2372940.00	0.00040226	0.00014944	0.0001494	0.00000004	0.00069777	0.00016879	0.00016875	0.00000005
590870.00	2372940.00	0.00040187	0.00013937	0.00013933	0.00000004	0.00082251	0.00015514	0.0001551	0.00000004
591370.00	2372940.00	0.00047242	0.00013264	0.00013261	0.00000003	0.00137919	0.00014559	0.00014556	0.00000003
591870.00	2372940.00	0.00117239	0.00012863	0.0001286	0.00000002	0.00175447	0.00013853	0.0001385	0.00000002
592370.00	2372940.00	0.00178894	0.00012531	0.00012529	0.00000002	0.00086588	0.00013324	0.00013322	0.00000002
592870.00	2372940.00	0.00085148	0.00012104	0.00012102	0.00000002	0.00043767	0.00012759	0.00012758	0.00000001
593370.00	2372940.00	0.00030488	0.00011375	0.00011374	0.00000001	0.00031417	0.00012133	0.00012131	0.00000001
593870.00	2372940.00	0.0002022	0.00010402	0.00010401	0.00000001	0.00023243	0.00011077	0.00011076	0.00000001
594370.00	2372940.00	0.00022378	0.00010686	0.00010685	0.00000001	0.00025741	0.00011364	0.00011363	0.00000001
594870.00	2372940.00	0.00030048	0.0001157	0.00011569	0.00000001	0.00030157	0.00012115	0.00012114	0.00000001
595370.00	2372940.00	0.00067837	0.00013051	0.0001305	0.00000001	0.00040891	0.00013121	0.0001312	0.00000001
595870.00	2372940.00	0.00095133	0.00014006	0.00014005	0.00000001	0.00051712	0.00013967	0.00013966	0.00000001
596370.00	2372940.00	0.00129813	0.00014996	0.00014994	0.00000001	0.00068668	0.00015085	0.00015084	0.00000001
596870.00	2372940.00	0.00148303	0.00015862	0.0001586	0.00000001	0.00086783	0.00016178	0.00016177	0.00000001
597370.00	2372940.00	0.00144886	0.00016493	0.00016491	0.00000001	0.00104471	0.00017195	0.00017193	0.00000001
597870.00	2372940.00	0.00137461	0.00016797	0.00016795	0.00000001	0.00106195	0.00017883	0.00017882	0.00000001
598370.00	2372940.00	0.00118951	0.0001662	0.00016619	0.00000001	0.00117489	0.00018141	0.0001814	0.00000001
598870.00	2372940.00	0.00081523	0.00016084	0.00016083	0.00000001	0.00137743	0.00018221	0.0001822	0.00000001
599370.00	2372940.00	0.00090575	0.00015334	0.00015333	0.00000001	0.0011371	0.00017269	0.00017267	0.00000001
599870.00	2372940.00	0.00059867	0.00014369	0.00014367	0.00000001	0.00092002	0.00016182	0.00016181	0.00000001
600370.00	2372940.00	0.0003956	0.00013458	0.00013457	0.00000001	0.00092534	0.00015328	0.00015326	0.00000001
600870.00	2372940.00	0.00050995	0.00012675	0.00012674	0.00000001	0.00081954	0.00014052	0.00014051	0.00000001
601370.00	2372940.00	0.00041124	0.00011943	0.00011941	0.00000001	0.00085071	0.000133	0.00013299	0.00000001
601870.00	2372940.00	0.00040025	0.00011321	0.0001132	0.00000001	0.00077309	0.00012581	0.0001258	0.00000001
602370.00	2372940.00	0.00038392	0.00010763	0.00010762	0.00000001	0.00074239	0.00011984	0.00011983	0.00000001
602870.00	2372940.00	0.00037753	0.00010256	0.00010255	0.00000001	0.00075419	0.00011448	0.00011447	0.00000001
603370.00	2372940.00	0.00045598	0.00009821	0.00009819	0.00000001	0.00066269	0.00010856	0.00010855	0.00000001
603870.00	2372940.00	0.00038049	0.0000932	0.00009319	0.00000001	0.00071039	0.00010425	0.00010423	0.00000001
604370.00	2372940.00	0.0004056	0.00008873	0.00008872	0.00000001	0.00067414	0.00009898	0.00009896	0.00000001
604870.00	2372940.00	0.00036531	0.00008408	0.00008407	0.00000001	0.0006929	0.00009432	0.0000943	0.00000001
605370.00	2372940.00	0.0002938	0.00007949	0.00007947	0.00000001	0.00058826	0.00009007	0.00009006	0.00000001
605870.00	2372940.00	0.00030198	0.00007495	0.00007494	0.00000001	0.00062325	0.00008479	0.00008478	0.00000001
606370.00	2372940.00	0.00034034	0.00007037	0.00007036	0.00000001	0.00069002	0.00007928	0.00007927	0.00000001
606870.00	2372940.00	0.0003163	0.00006582	0.00006581	0.00000001	0.00066673	0.00007444	0.00007443	0.00000001
607370.00	2372940.00	0.00040298	0.00006127	0.00006125	0.00000001	0.00064419	0.00006889	0.00006888	0.00000001
607870.00	2372940.00	0.00037922	0.00005688	0.00005687	0.00000001	0.0006684	0.00006426	0.00006425	0.00000001
608370.00	2372940.00	0.00044267	0.00005255	0.00005254	0.00000001	0.00056659	0.00005929	0.00005928	0.00000001
608870.00	2372940.00	0.00026459	0.00004909	0.00004908	0.00000001	0.00050186	0.00005625	0.00005623	0.00000001
609370.00	2372940.00	0.00025377	0.00004561	0.00004559	0.00000001	0.00045396	0.00005236	0.00005235	0.00000001
609870.00	2372940.00	0.00024201	0.00004438	0.00004437	0.00000001	0.000365	0.00005086	0.00005084	0.00000001
610370.00	2372940.00	0.00041626	0.00003854	0.00003853	0.00000001	0.00056011	0.00004379	0.00004378	0.00000001
610870.00	2372940.00	0.00023507	0.00003703	0.00003702	0.00000001	0.0003907	0.00004256	0.00004254	0.00000001
611370.00	2372940.00	0.00022905	0.00003568	0.00003567	0.00000001	0.00035233	0.00004084	0.00004083	0.00000001
611870.00	2372940.00	0.00022591	0.00003347	0.00003346	0.00000001	0.000351	0.00003825	0.00003824	0.00000001
612370.00	2372940.00	0.00022769	0.0000308	0.00003079	0.00000001	0.00039239	0.0000352	0.00003519	0.00000001
612870.00	2372940.00	0.00043862	0.00002824	0.00002822	0.00000001	0.00048302	0.00003131	0.0000313	0.00000001
613370.00	2372940.00	0.00047224	0.00002679	0.00002678	0.00000001	0.00040518	0.00002935	0.00002934	0.00000001
613870.00	2372940.00	0.00046178	0.00002577	0.00002576	0.00000001	0.00042885	0.0000281	0.00002809	0.00000001
614370.00	2372940.00	0.00022395	0.0000216	0.00002158	0.00000001	0.00021613	0.00002346	0.00002345	0.00000001
614870.00	2372940.00	0.00022715	0.00002095	0.00002094	0.00000001	0.00021641	0.00002257	0.00002256	0.00000001
615370.00	2372940.00	0.00018778	0.00001963	0.00001962	0.00000001	0.00020165	0.00002117	0.00002116	0.00000001
615870.00	2372940.00	0.00018074	0.00001891	0.0000189	0.00000001	0.00019817	0.0000203	0.00002029	0.00000001
616370.00	2372940.00	0.00016918	0.00001812	0.00001811	0.00000001	0.0001919	0.00001938	0.00001937	0.00000001
616870.00	2372940.00	0.00028905	0.00001939	0.00001938	0.00000001	0.00023259	0.00002032	0.00002031	0.00000001
617370.00	2372940.00	0.00046433	0.00002145	0.00002144	0.00000001	0.00064261	0.00002276	0.00002275	0.00000001
617870.00	2372940.00	0.00024768	0.00002112	0.00002111	0.00000001	0.00054136	0.00002296	0.00002295	0.00000001
618370.00	2372940.00	0.0002082	0.00002123	0.00002121	0.00000001	0.0003551	0.00002314	0.00002312	0.00000001
618870.00	2372940.00	0.00020619	0.00002127	0.00002125	0.00000002	0.00034221	0.00002315	0.00002314	0.00000001
619370.00	2372940.00	0.00020525	0.00002102	0.000021	0.00000002	0.00033951	0.00002284	0.00002282	0.00000001
619870.00	2372940.00	0.00020736	0.00002145	0.00002143	0.00000002	0.00034212	0.00002335	0.00002333	0.00000002
590370.00	2373440.00	0.00039094	0.00014361	0.00014357	0.00000004	0.00068747	0.00016134	0.0001613	0.00000004
590870.00	2373440.00	0.00039442	0.00013448	0.00013444	0.00000004	0.00083519	0.00014898	0.00014895	0.00000004
591370.00	2373440.00	0.00046437	0.00012848	0.00012845	0.00000003	0.00136167	0.00014053	0.0001405	0.00000003
591870.00	2373440.00	0.00140708	0.00012467	0.00012465	0.00000002	0.00148023	0.00013342	0.00013339	0.00000002
592370.00	2373440.00	0.00126532	0.00012016	0.00012014	0.00000002	0.00055153	0.00012724	0.00012722	0.00000002
592870.00	2373440.00	0.00037965	0.00011371	0.00011369	0.00000001	0.00033816	0.00012037	0.00012036	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2373440.00	0.00020159	0.0001019	0.00010189	0.00000001	0.00023562	0.00010888	0.00010887	0.00000001
593870.00	2373440.00	0.00020431	0.00010165	0.00010164	0.00000001	0.00024279	0.00010912	0.00010911	0.00000001
594370.00	2373440.00	0.00020844	0.00010239	0.00010238	0.00000001	0.00024586	0.00010956	0.00010955	0.00000001
594870.00	2373440.00	0.00024959	0.00010907	0.00010906	0.00000001	0.00027611	0.00011533	0.00011532	0.00000001
595370.00	2373440.00	0.00035478	0.00011778	0.00011777	0.00000001	0.00031902	0.00012136	0.00012135	0.00000001
595870.00	2373440.00	0.00088623	0.00013412	0.00013411	0.00000001	0.00048789	0.00013397	0.00013396	0.00000001
596370.00	2373440.00	0.00132227	0.00014357	0.00014355	0.00000001	0.00069256	0.00014465	0.00014463	0.00000001
596870.00	2373440.00	0.00145124	0.00015183	0.00015182	0.00000001	0.00086844	0.00015447	0.00015446	0.00000001
597370.00	2373440.00	0.00143255	0.00015863	0.00015861	0.00000001	0.00097556	0.00016403	0.00016402	0.00000001
597870.00	2373440.00	0.00131725	0.0001624	0.00016238	0.00000001	0.00109477	0.00017207	0.00017206	0.00000001
598370.00	2373440.00	0.00112344	0.00016217	0.00016216	0.00000001	0.00121998	0.00017621	0.0001762	0.00000001
598870.00	2373440.00	0.00105942	0.00015858	0.00015857	0.00000001	0.00114258	0.00017453	0.00017451	0.00000001
599370.00	2373440.00	0.00094688	0.00015186	0.00015185	0.00000001	0.00109623	0.00016839	0.00016838	0.00000001
599870.00	2373440.00	0.00063685	0.0001436	0.00014358	0.00000001	0.00088946	0.00016129	0.00016127	0.00000001
600370.00	2373440.00	0.00045419	0.00013467	0.00013466	0.00000001	0.00091528	0.00015205	0.00015204	0.00000001
600870.00	2373440.00	0.00048024	0.00012679	0.00012677	0.00000001	0.00083592	0.00014111	0.00014109	0.00000001
601370.00	2373440.00	0.00041628	0.00011955	0.00011954	0.00000001	0.00085037	0.00013292	0.0001329	0.00000001
601870.00	2373440.00	0.0003934	0.00011326	0.00011325	0.00000001	0.0008073	0.00012568	0.00012567	0.00000001
602370.00	2373440.00	0.00038878	0.00010775	0.00010773	0.00000001	0.00077375	0.00011946	0.00011944	0.00000001
602870.00	2373440.00	0.00037235	0.0001027	0.00010268	0.00000001	0.00074874	0.00011418	0.00011417	0.00000001
603370.00	2373440.00	0.000278	0.00009773	0.00009772	0.00000001	0.00052143	0.00011068	0.00011067	0.00000001
603870.00	2373440.00	0.00033371	0.00009349	0.00009348	0.00000001	0.00069294	0.00010481	0.00010479	0.00000001
604370.00	2373440.00	0.00044763	0.00008963	0.00008962	0.00000001	0.00059868	0.00009893	0.00009892	0.00000001
604870.00	2373440.00	0.00034178	0.00008498	0.00008496	0.00000001	0.00067746	0.00009523	0.00009522	0.00000001
605370.00	2373440.00	0.00035157	0.00008073	0.00008072	0.00000001	0.00067358	0.00009035	0.00009034	0.00000001
605870.00	2373440.00	0.00034273	0.00007644	0.00007642	0.00000001	0.00067255	0.00008564	0.00008562	0.00000001
606370.00	2373440.00	0.0002553	0.00007264	0.00007262	0.00000001	0.00038591	0.00008256	0.00008254	0.00000001
606870.00	2373440.00	0.00025343	0.00006846	0.00006845	0.00000001	0.00037807	0.00007778	0.00007777	0.00000001
607370.00	2373440.00	0.000486	0.00006334	0.00006333	0.00000001	0.00045899	0.00007024	0.00007022	0.00000001
607870.00	2373440.00	0.00032889	0.00005924	0.00005923	0.00000001	0.00066774	0.00006678	0.00006676	0.00000001
608370.00	2373440.00	0.00029229	0.00005518	0.00005517	0.00000001	0.00061697	0.00006255	0.00006254	0.00000001
608870.00	2373440.00	0.00035636	0.00005112	0.00005111	0.00000001	0.0006516	0.00005781	0.00005779	0.00000001
609370.00	2373440.00	0.00026035	0.00004772	0.00004771	0.00000001	0.00050418	0.00005448	0.00005446	0.00000001
609870.00	2373440.00	0.00028351	0.00004413	0.00004411	0.00000001	0.00060542	0.00005042	0.0000504	0.00000001
610370.00	2373440.00	0.00026128	0.00004112	0.0000411	0.00000001	0.00053579	0.00004711	0.00004709	0.00000001
610870.00	2373440.00	0.00028693	0.00003812	0.0000381	0.00000001	0.00061602	0.00004362	0.00004361	0.00000001
611370.00	2373440.00	0.00032829	0.00003545	0.00003543	0.00000001	0.00062893	0.00004037	0.00004036	0.00000001
611870.00	2373440.00	0.00045349	0.00003278	0.00003277	0.00000001	0.00043485	0.00003678	0.00003677	0.00000001
612370.00	2373440.00	0.00029768	0.00003136	0.00003135	0.00000001	0.00062019	0.00003565	0.00003564	0.00000001
612870.00	2373440.00	0.0002184	0.00003152	0.0000315	0.00000001	0.00033929	0.00003583	0.00003582	0.00000001
613370.00	2373440.00	0.0003938	0.00002797	0.00002796	0.00000001	0.00052436	0.00003114	0.00003113	0.00000001
613870.00	2373440.00	0.00045348	0.00002651	0.0000265	0.00000001	0.00041037	0.00002906	0.00002905	0.00000001
614370.00	2373440.00	0.00038732	0.00002393	0.00002392	0.00000001	0.00026767	0.00002574	0.00002573	0.00000001
614870.00	2373440.00	0.00030731	0.00002244	0.00002243	0.00000001	0.00023927	0.00002404	0.00002403	0.00000001
615370.00	2373440.00	0.00022813	0.00002082	0.00002081	0.00000001	0.00021286	0.00002241	0.0000224	0.00000001
615870.00	2373440.00	0.00016686	0.00001892	0.00001891	0.00000001	0.00018813	0.00002044	0.00002043	0.00000001
616370.00	2373440.00	0.00016191	0.00001806	0.00001805	0.00000001	0.00018331	0.00001941	0.0000194	0.00000001
616870.00	2373440.00	0.00017494	0.00001824	0.00001823	0.00000001	0.00019237	0.00001951	0.0000195	0.00000001
617370.00	2373440.00	0.00042513	0.00002022	0.00002021	0.00000001	0.00028283	0.00002107	0.00002106	0.00000001
617870.00	2373440.00	0.0006188	0.00002093	0.00002092	0.00000001	0.00040793	0.00002169	0.00002168	0.00000001
618370.00	2373440.00	0.00025274	0.00002088	0.00002086	0.00000001	0.00056407	0.00002263	0.00002262	0.00000001
618870.00	2373440.00	0.00020266	0.00002148	0.00002147	0.00000002	0.00033543	0.00002343	0.00002341	0.00000001
619370.00	2373440.00	0.0002037	0.00002163	0.00002161	0.00000002	0.00033632	0.00002359	0.00002357	0.00000001
619870.00	2373440.00	0.00020504	0.00002173	0.00002172	0.00000002	0.00033999	0.00002369	0.00002367	0.00000002
590370.00	2373940.00	0.00038193	0.00013795	0.00013791	0.00000004	0.00069719	0.00015416	0.00015412	0.00000004
590870.00	2373940.00	0.00044767	0.00012927	0.00012924	0.00000003	0.00120707	0.0001422	0.00014217	0.00000003
591370.00	2373940.00	0.00048889	0.00012449	0.00012447	0.00000003	0.00146884	0.00013559	0.00013556	0.00000003
591870.00	2373940.00	0.00155171	0.0001209	0.00012088	0.00000002	0.00125747	0.00012876	0.00012874	0.00000002
592370.00	2373940.00	0.00077163	0.00011539	0.00011538	0.00000002	0.00041777	0.00012134	0.00012132	0.00000002
592870.00	2373940.00	0.00020645	0.0001009	0.00010088	0.00000001	0.00024666	0.0001078	0.00010779	0.00000001
593370.00	2373940.00	0.00020485	0.00010087	0.00010086	0.00000001	0.00024399	0.00010799	0.00010798	0.00000001
593870.00	2373940.00	0.00024611	0.00010524	0.00010523	0.00000001	0.00027442	0.00011229	0.00011228	0.00000001
594370.00	2373940.00	0.00022125	0.00010166	0.00010165	0.00000001	0.00025328	0.00010772	0.00010771	0.00000001
594870.00	2373940.00	0.00022157	0.00010259	0.00010258	0.00000001	0.00026194	0.00010925	0.00010925	0.00000001
595370.00	2373940.00	0.00035614	0.0001145	0.00011449	0.00000001	0.00031352	0.00011775	0.00011774	0.00000001
595870.00	2373940.00	0.00075029	0.00012801	0.000128	0.00000001	0.00042815	0.00012786	0.00012785	0.00000001
596370.00	2373940.00	0.00135807	0.00013774	0.00013773	0.00000001	0.00072146	0.00013915	0.00013914	0.00000001
596870.00	2373940.00	0.00141242	0.00014545	0.00014544	0.00000001	0.00083714	0.00014761	0.0001476	0.00000001
597370.00	2373940.00	0.00138742	0.0001523	0.00015229	0.00000001	0.00097863	0.00015696	0.00015695	0.00000001
597870.00	2373940.00	0.00134904	0.0001572	0.00015719	0.00000001	0.00098029	0.00016468	0.00016467	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2373940.00	0.0012339	0.00015849	0.00015848	0.00000001	0.00105298	0.00016984	0.00016983	0.00000001
598870.00	2373940.00	0.00112595	0.00015618	0.00015616	0.00000001	0.00105117	0.00017022	0.00017021	0.00000001
599370.00	2373940.00	0.0009562	0.0001505	0.00015048	0.00000001	0.00109076	0.00016623	0.00016622	0.00000001
599870.00	2373940.00	0.00067882	0.0001428	0.00014279	0.00000001	0.00084437	0.00015814	0.00015812	0.00000001
600370.00	2373940.00	0.00048695	0.00013472	0.00013471	0.00000001	0.00090295	0.00015176	0.00015175	0.00000001
600870.00	2373940.00	0.00040076	0.00012678	0.00012676	0.00000001	0.00084255	0.00014253	0.00014251	0.00000001
601370.00	2373940.00	0.00038578	0.00011961	0.0001196	0.00000001	0.00083802	0.00013346	0.00013345	0.00000001
601870.00	2373940.00	0.00037502	0.00011327	0.00011326	0.00000001	0.00080032	0.00012577	0.00012575	0.00000001
602370.00	2373940.00	0.00037777	0.00010774	0.00010773	0.00000001	0.00076782	0.00011922	0.00011921	0.00000001
602870.00	2373940.00	0.00038071	0.00010281	0.0001028	0.00000001	0.00070303	0.00011363	0.00011361	0.00000001
603370.00	2373940.00	0.000347	0.00009812	0.00009811	0.00000001	0.00071337	0.00010915	0.00010913	0.00000001
603870.00	2373940.00	0.00033322	0.0000938	0.00009379	0.00000001	0.0006877	0.00010469	0.00010467	0.00000001
604370.00	2373940.00	0.00035238	0.00008977	0.00008975	0.00000001	0.00067643	0.00009998	0.00009997	0.00000001
604870.00	2373940.00	0.00038396	0.00008582	0.00008581	0.00000001	0.00064066	0.00009522	0.00009521	0.00000001
605370.00	2373940.00	0.00038672	0.00008177	0.00008175	0.00000001	0.00062546	0.00009072	0.00009071	0.00000001
605870.00	2373940.00	0.00038189	0.00007769	0.00007768	0.00000001	0.0006239	0.00008627	0.00008625	0.00000001
606370.00	2373940.00	0.00025457	0.00007369	0.00007368	0.00000001	0.00042463	0.00008339	0.00008337	0.00000001
606870.00	2373940.00	0.00033053	0.00006948	0.00006946	0.00000001	0.00065255	0.00007766	0.00007764	0.00000001
607370.00	2373940.00	0.00031689	0.00006538	0.00006537	0.00000001	0.00064755	0.00007325	0.00007324	0.00000001
607870.00	2373940.00	0.00025037	0.00006155	0.00006154	0.00000001	0.00041832	0.00006958	0.00006957	0.00000001
608370.00	2373940.00	0.00025687	0.00005748	0.00005746	0.00000001	0.00047084	0.00006499	0.00006498	0.00000001
608870.00	2373940.00	0.00041252	0.00005329	0.00005328	0.00000001	0.00055331	0.0000596	0.00005959	0.00000001
609370.00	2373940.00	0.00025466	0.00004993	0.00004992	0.00000001	0.00048251	0.00005668	0.00005667	0.00000001
609870.00	2373940.00	0.00027968	0.00004629	0.00004628	0.00000001	0.00059268	0.00005259	0.00005258	0.00000001
610370.00	2373940.00	0.00024131	0.00004336	0.00004335	0.00000001	0.00043442	0.00004945	0.00004943	0.00000001
610870.00	2373940.00	0.00046109	0.0000394	0.00003939	0.00000001	0.00041221	0.00004429	0.00004428	0.00000001
611370.00	2373940.00	0.00022352	0.00003906	0.00003904	0.00000001	0.00033818	0.00004448	0.00004446	0.00000001
611870.00	2373940.00	0.00043502	0.00003442	0.00003441	0.00000001	0.00044704	0.00003867	0.00003866	0.00000001
612370.00	2373940.00	0.00021849	0.00003485	0.00003484	0.00000001	0.00033445	0.00003966	0.00003964	0.00000001
612870.00	2373940.00	0.00026628	0.00003098	0.00003097	0.00000001	0.00057549	0.00003522	0.00003521	0.00000001
613370.00	2373940.00	0.00041767	0.00002889	0.00002888	0.00000001	0.00045955	0.00003213	0.00003212	0.00000001
613870.00	2373940.00	0.00041298	0.00002751	0.0000275	0.00000001	0.00046477	0.00003045	0.00003044	0.00000001
614370.00	2373940.00	0.00023499	0.00002319	0.00002318	0.00000001	0.00021292	0.00002542	0.00002541	0.00000001
614870.00	2373940.00	0.00020814	0.00002188	0.00002187	0.00000001	0.00020443	0.00002392	0.00002391	0.00000001
615370.00	2373940.00	0.00018016	0.00002051	0.0000205	0.00000001	0.00019323	0.00002238	0.00002237	0.00000001
615870.00	2373940.00	0.00016147	0.00001908	0.00001906	0.00000001	0.00018139	0.00002072	0.00002071	0.00000001
616370.00	2373940.00	0.00015483	0.00001771	0.0000177	0.00000001	0.00017453	0.00001918	0.00001917	0.00000001
616870.00	2373940.00	0.00022778	0.00001953	0.00001951	0.00000001	0.0002081	0.0000208	0.00002079	0.00000001
617370.00	2373940.00	0.00026393	0.000022	0.00002199	0.00000001	0.00059709	0.00002404	0.00002402	0.00000001
617870.00	2373940.00	0.00020741	0.00002178	0.00002177	0.00000001	0.00037328	0.00002391	0.0000239	0.00000001
618370.00	2373940.00	0.00020049	0.00002161	0.0000216	0.00000001	0.00033824	0.00002365	0.00002364	0.00000001
618870.00	2373940.00	0.00020001	0.00002194	0.00002192	0.00000001	0.00032901	0.00002399	0.00002398	0.00000001
619370.00	2373940.00	0.00020227	0.00002217	0.00002215	0.00000002	0.00033504	0.00002425	0.00002423	0.00000001
619870.00	2373940.00	0.00020101	0.00002183	0.00002182	0.00000002	0.00033346	0.0000239	0.00002388	0.00000001
590370.00	2374440.00	0.00047697	0.00013132	0.00013129	0.00000004	0.0012703	0.00014531	0.00014528	0.00000004
590870.00	2374440.00	0.00152837	0.00012332	0.00012329	0.00000003	0.00080822	0.00013206	0.00013203	0.00000003
591370.00	2374440.00	0.00159664	0.00011976	0.00011974	0.00000002	0.00094385	0.00012738	0.00012735	0.00000002
591870.00	2374440.00	0.00164347	0.00011716	0.00011713	0.00000002	0.00096965	0.00012419	0.00012417	0.00000002
592370.00	2374440.00	0.00079588	0.00011239	0.00011237	0.00000002	0.00042058	0.00011806	0.00011805	0.00000002
592870.00	2374440.00	0.000197	0.00009746	0.00009745	0.00000001	0.00023396	0.00010423	0.00010422	0.00000001
593370.00	2374440.00	0.00020609	0.00009876	0.00009875	0.00000001	0.0002447	0.00010552	0.0001055	0.00000001
593870.00	2374440.00	0.00026468	0.00010366	0.00010365	0.00000001	0.00027855	0.00010999	0.00010998	0.00000001
594370.00	2374440.00	0.00035539	0.00010689	0.00010688	0.00000001	0.00030092	0.00011159	0.00011158	0.00000001
594870.00	2374440.00	0.00048484	0.00011158	0.00011157	0.00000001	0.00033389	0.00011432	0.00011431	0.00000001
595370.00	2374440.00	0.00032771	0.00011008	0.00011007	0.00000001	0.00029866	0.00011355	0.00011354	0.00000001
595870.00	2374440.00	0.00074823	0.00012335	0.00012334	0.00000001	0.00042404	0.00012351	0.0001235	0.00000001
596370.00	2374440.00	0.00126741	0.00013204	0.00013203	0.00000001	0.00065623	0.00013321	0.0001332	0.00000001
596870.00	2374440.00	0.00136158	0.00013944	0.00013942	0.00000001	0.00076756	0.00014115	0.00014114	0.00000001
597370.00	2374440.00	0.00137093	0.00014641	0.0001464	0.00000001	0.00085495	0.00014967	0.00014966	0.00000001
597870.00	2374440.00	0.0013321	0.00015174	0.00015173	0.00000001	0.00093735	0.0001578	0.00015779	0.00000001
598370.00	2374440.00	0.00124735	0.0001542	0.00015419	0.00000001	0.00099174	0.00016375	0.00016374	0.00000001
598870.00	2374440.00	0.00115797	0.00015329	0.00015327	0.00000001	0.00099559	0.00016564	0.00016563	0.00000001
599370.00	2374440.00	0.0007738	0.00014859	0.00014858	0.00000001	0.00085673	0.00016303	0.00016302	0.00000001
599870.00	2374440.00	0.00061557	0.00014234	0.00014233	0.00000001	0.00091955	0.00016001	0.00016	0.00000001
600370.00	2374440.00	0.00045477	0.00013453	0.00013451	0.00000001	0.00093286	0.00015215	0.00015214	0.00000001
600870.00	2374440.00	0.00052295	0.00012707	0.00012706	0.00000001	0.00080913	0.0001412	0.00014119	0.00000001
601370.00	2374440.00	0.00050313	0.00011999	0.00011997	0.00000001	0.0007821	0.00013214	0.00013213	0.00000001
601870.00	2374440.00	0.0003799	0.00011336	0.00011335	0.00000001	0.0007981	0.00012564	0.00012562	0.00000001
602370.00	2374440.00	0.00035292	0.00010769	0.00010767	0.00000001	0.00075472	0.00011928	0.00011927	0.00000001
602870.00	2374440.00	0.00036509	0.00010276	0.00010275	0.00000001	0.0007074	0.00011342	0.00011341	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2374440.00	0.00040128	0.00009847	0.00009846	0.00000001	0.00067135	0.00010817	0.00010816	0.00000001
603870.00	2374440.00	0.00034335	0.00009403	0.00009402	0.00000001	0.00068693	0.00010432	0.00010431	0.00000001
604370.00	2374440.00	0.00024916	0.00009023	0.00009021	0.00000001	0.00039624	0.00010234	0.00010233	0.00000001
604870.00	2374440.00	0.00035971	0.00008627	0.00008625	0.00000001	0.000645	0.00009566	0.00009565	0.00000001
605370.00	2374440.00	0.00037041	0.00008247	0.00008245	0.00000001	0.00062209	0.00009134	0.00009132	0.00000001
605870.00	2374440.00	0.00038754	0.00007866	0.00007865	0.00000001	0.00059279	0.00008694	0.00008693	0.00000001
606370.00	2374440.00	0.00038487	0.0000748	0.00007478	0.00000001	0.00058991	0.00008272	0.0000827	0.00000001
606870.00	2374440.00	0.00039576	0.00007092	0.00007091	0.00000001	0.00057114	0.00007837	0.00007836	0.00000001
607370.00	2374440.00	0.00031731	0.000067	0.00006699	0.00000001	0.00063313	0.00007473	0.00007471	0.00000001
607870.00	2374440.00	0.00040013	0.00006311	0.00006309	0.00000001	0.00055838	0.00006989	0.00006988	0.00000001
608370.00	2374440.00	0.00041586	0.00005921	0.00005919	0.00000001	0.00052694	0.0000656	0.00006559	0.00000001
608870.00	2374440.00	0.00045769	0.00005527	0.00005526	0.00000001	0.00043784	0.00006121	0.0000612	0.00000001
609370.00	2374440.00	0.00033569	0.00005179	0.00005178	0.00000001	0.00062249	0.00005807	0.00005806	0.00000001
609870.00	2374440.00	0.00024942	0.00004853	0.00004852	0.00000001	0.00047672	0.00005491	0.0000549	0.00000001
610370.00	2374440.00	0.00022902	0.00004569	0.00004568	0.00000001	0.0003628	0.00005179	0.00005177	0.00000001
610870.00	2374440.00	0.00035228	0.0000418	0.00004179	0.00000001	0.00058374	0.00004714	0.00004713	0.00000001
611370.00	2374440.00	0.00036699	0.00003891	0.0000389	0.00000001	0.00055345	0.00004388	0.00004387	0.00000001
611870.00	2374440.00	0.00022285	0.00003718	0.00003717	0.00000001	0.00037848	0.00004235	0.00004233	0.00000001
612370.00	2374440.00	0.00025966	0.00003438	0.00003437	0.00000001	0.00055476	0.00003913	0.00003912	0.00000001
612870.00	2374440.00	0.00039053	0.00003191	0.0000319	0.00000001	0.00048861	0.00003579	0.00003578	0.00000001
613370.00	2374440.00	0.00043556	0.00002989	0.00002988	0.00000001	0.00039002	0.00003322	0.00003321	0.00000001
613870.00	2374440.00	0.0002997	0.00002881	0.0000288	0.00000001	0.00058353	0.00003241	0.00003239	0.00000001
614370.00	2374440.00	0.00025181	0.00002434	0.00002433	0.00000001	0.00021699	0.00002672	0.00002671	0.00000001
614870.00	2374440.00	0.00016725	0.00002151	0.0000215	0.00000001	0.00018454	0.00002379	0.00002378	0.00000001
615370.00	2374440.00	0.00016015	0.00002028	0.00002027	0.00000001	0.0001788	0.00002229	0.00002228	0.00000001
615870.00	2374440.00	0.00019529	0.00002071	0.0000207	0.00000001	0.00019615	0.00002252	0.00002251	0.00000001
616370.00	2374440.00	0.00016819	0.00001941	0.0000194	0.00000001	0.00018433	0.00002108	0.00002107	0.00000001
616870.00	2374440.00	0.00034394	0.00002104	0.00002102	0.00000001	0.00024537	0.00002224	0.00002223	0.00000001
617370.00	2374440.00	0.00024476	0.00002235	0.00002234	0.00000001	0.00054128	0.00002456	0.00002455	0.00000001
617870.00	2374440.00	0.00020267	0.0000221	0.00002209	0.00000001	0.00035831	0.00002433	0.00002431	0.00000001
618370.00	2374440.00	0.00019609	0.00002219	0.00002218	0.00000001	0.00032171	0.00002436	0.00002435	0.00000001
618870.00	2374440.00	0.00019526	0.00002173	0.00002172	0.00000001	0.00032163	0.00002378	0.00002377	0.00000001
619370.00	2374440.00	0.00019917	0.00002242	0.0000224	0.00000002	0.00032954	0.00002458	0.00002457	0.00000001
619870.00	2374440.00	0.00019806	0.000022	0.00002198	0.00000002	0.00032904	0.00002411	0.00002409	0.00000001
590370.00	2374940.00	0.00066291	0.00012657	0.00012653	0.00000004	0.00149709	0.00013867	0.00013864	0.00000004
590870.00	2374940.00	0.00089206	0.00011703	0.000117	0.00000003	0.00045868	0.00012409	0.00012406	0.00000003
591370.00	2374940.00	0.00126038	0.00011477	0.00011474	0.00000002	0.00056864	0.00012145	0.00012142	0.00000002
591870.00	2374940.00	0.00127137	0.00011243	0.00011241	0.00000002	0.00056226	0.00011862	0.0001186	0.00000002
592370.00	2374940.00	0.00021136	0.00009932	0.00009931	0.00000002	0.0002545	0.00010584	0.00010583	0.00000001
592870.00	2374940.00	0.00020483	0.0000975	0.00009748	0.00000001	0.00024359	0.00010395	0.00010393	0.00000001
593370.00	2374940.00	0.00021425	0.00009712	0.00009711	0.00000001	0.00024787	0.00010343	0.00010342	0.00000001
593870.00	2374940.00	0.00046777	0.00010551	0.0001055	0.00000001	0.00032445	0.00011012	0.00011011	0.00000001
594370.00	2374940.00	0.00060752	0.00010773	0.00010771	0.00000001	0.00035059	0.00011149	0.00011149	0.00000001
594870.00	2374940.00	0.00078807	0.00011113	0.00011111	0.00000001	0.00040783	0.00011405	0.00011404	0.00000001
595370.00	2374940.00	0.00071736	0.00011417	0.00011416	0.00000001	0.00039404	0.00011576	0.00011576	0.00000001
595870.00	2374940.00	0.00059748	0.00011752	0.00011751	0.00000001	0.00037075	0.00011778	0.00011778	0.00000001
596370.00	2374940.00	0.00112995	0.00012667	0.00012666	0.00000001	0.00057914	0.00012758	0.00012757	0.00000001
596870.00	2374940.00	0.00131156	0.00013381	0.00013379	0.00000001	0.00072327	0.00013517	0.00013516	0.00000001
597370.00	2374940.00	0.00133862	0.00014064	0.00014062	0.00000001	0.00082962	0.00014328	0.00014327	0.00000001
597870.00	2374940.00	0.00131295	0.00014634	0.00014633	0.00000001	0.0008908	0.00015115	0.00015114	0.00000001
598370.00	2374940.00	0.0012603	0.00014977	0.00014976	0.00000001	0.00092071	0.00015752	0.00015751	0.00000001
598870.00	2374940.00	0.00085726	0.00014957	0.00014956	0.00000001	0.00081953	0.00016063	0.00016061	0.00000001
599370.00	2374940.00	0.0006843	0.00014682	0.00014681	0.00000001	0.00098081	0.00016372	0.00016371	0.00000001
599870.00	2374940.00	0.00062388	0.00014135	0.00014134	0.00000001	0.0009308	0.00015851	0.0001585	0.00000001
600370.00	2374940.00	0.00062581	0.00013414	0.00013413	0.00000001	0.00080812	0.00014798	0.00014797	0.00000001
600870.00	2374940.00	0.00058003	0.0001269	0.00012689	0.00000001	0.00075514	0.00013942	0.00013941	0.00000001
601370.00	2374940.00	0.00038295	0.00011985	0.00011984	0.00000001	0.00083262	0.00013393	0.00013392	0.00000001
601870.00	2374940.00	0.00041504	0.00011352	0.0001135	0.00000001	0.00079586	0.00012522	0.00012521	0.00000001
602370.00	2374940.00	0.0003557	0.00010773	0.00010772	0.00000001	0.00075633	0.00011906	0.00011905	0.00000001
602870.00	2374940.00	0.00039131	0.00010287	0.00010285	0.00000001	0.00071849	0.0001128	0.00011279	0.00000001
603370.00	2374940.00	0.00034547	0.00009822	0.00009821	0.00000001	0.00069826	0.00010838	0.00010836	0.00000001
603870.00	2374940.00	0.00031611	0.000094	0.00009399	0.00000001	0.00066087	0.00010429	0.00010428	0.00000001
604370.00	2374940.00	0.00037253	0.00009041	0.00009039	0.00000001	0.00063911	0.00009954	0.00009953	0.00000001
604870.00	2374940.00	0.00024339	0.00008654	0.00008653	0.00000001	0.00039925	0.00009784	0.00009783	0.00000001
605370.00	2374940.00	0.00025949	0.00008274	0.00008273	0.00000001	0.00049958	0.00009299	0.00009298	0.00000001
605870.00	2374940.00	0.00023826	0.00007977	0.00007976	0.00000001	0.00036218	0.00009033	0.00009031	0.00000001
606370.00	2374940.00	0.00023809	0.00007597	0.00007596	0.00000001	0.00036966	0.00008583	0.00008582	0.00000001
606870.00	2374940.00	0.0002393	0.00007222	0.00007221	0.00000001	0.00038504	0.0000814	0.00008138	0.00000001
607370.00	2374940.00	0.00039149	0.00006839	0.00006838	0.00000001	0.00054731	0.00007536	0.00007535	0.00000001
607870.00	2374940.00	0.00024561	0.00006479	0.00006478	0.00000001	0.000435	0.00007272	0.00007271	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2374940.00	0.00023297	0.00006151	0.00006149	0.00000001	0.00035319	0.0000692	0.00006919	0.00000001
608870.00	2374940.00	0.00023236	0.00005779	0.00005777	0.00000001	0.00036126	0.00006499	0.00006498	0.00000001
609370.00	2374940.00	0.00043912	0.00005358	0.00005356	0.00000001	0.00043945	0.00005923	0.00005921	0.00000001
609870.00	2374940.00	0.00042209	0.00005011	0.0000501	0.00000001	0.00047262	0.00005564	0.00005563	0.00000001
610370.00	2374940.00	0.00023851	0.00004726	0.00004725	0.00000001	0.00043795	0.00005333	0.00005332	0.00000001
610870.00	2374940.00	0.00034176	0.00004377	0.00004376	0.00000001	0.00057917	0.00004914	0.00004912	0.00000001
611370.00	2374940.00	0.00033307	0.00004086	0.00004084	0.00000001	0.0005801	0.00004598	0.00004597	0.00000001
611870.00	2374940.00	0.00043657	0.00003775	0.00003774	0.00000001	0.00039468	0.0000422	0.00004219	0.00000001
612370.00	2374940.00	0.00039035	0.00003553	0.00003551	0.00000001	0.0004784	0.00003985	0.00003984	0.00000001
612870.00	2374940.00	0.00020956	0.00003474	0.00003473	0.00000001	0.00032703	0.00003938	0.00003937	0.00000001
613370.00	2374940.00	0.00021644	0.0000322	0.00003219	0.00000001	0.00038964	0.00003658	0.00003657	0.00000001
613870.00	2374940.00	0.00029325	0.00002994	0.00002993	0.00000001	0.00057071	0.00003372	0.00003371	0.00000001
614370.00	2374940.00	0.00017859	0.00002394	0.00002393	0.00000001	0.00018996	0.00002674	0.00002673	0.00000001
614870.00	2374940.00	0.00016511	0.00002227	0.00002225	0.00000001	0.00018172	0.00002476	0.00002475	0.00000001
615370.00	2374940.00	0.00033988	0.00002391	0.0000239	0.00000001	0.00024043	0.00002591	0.0000259	0.00000001
615870.00	2374940.00	0.00047676	0.00002488	0.00002487	0.00000001	0.00053547	0.00002711	0.0000271	0.00000001
616370.00	2374940.00	0.00058351	0.00002371	0.00002369	0.00000001	0.00036853	0.00002531	0.0000253	0.00000001
616870.00	2374940.00	0.00058248	0.00002297	0.00002296	0.00000001	0.00037164	0.00002439	0.00002438	0.00000001
617370.00	2374940.00	0.00041742	0.00002261	0.0000226	0.00000001	0.00058698	0.00002438	0.00002437	0.00000001
617870.00	2374940.00	0.00027541	0.00002208	0.00002207	0.00000001	0.00060699	0.0000241	0.00002409	0.00000001
618370.00	2374940.00	0.00019283	0.0000226	0.00002259	0.00000001	0.00031331	0.00002488	0.00002487	0.00000001
618870.00	2374940.00	0.00019281	0.00002234	0.00002233	0.00000001	0.00031395	0.00002453	0.00002452	0.00000001
619370.00	2374940.00	0.00019348	0.00002219	0.00002218	0.00000001	0.00031677	0.00002433	0.00002432	0.00000001
619870.00	2374940.00	0.00019424	0.00002215	0.00002214	0.00000001	0.00032062	0.00002432	0.00002431	0.00000001
590370.00	2375440.00	0.00139715	0.00012098	0.00012095	0.00000003	0.00076859	0.00013011	0.00013008	0.00000003
590870.00	2375440.00	0.00101044	0.0001141	0.00011408	0.00000003	0.00048521	0.00012116	0.00012113	0.00000003
591370.00	2375440.00	0.00038798	0.00010753	0.0001075	0.00000002	0.0003464	0.00011312	0.0001131	0.00000002
591870.00	2375440.00	0.00031002	0.00010419	0.00010417	0.00000002	0.00031939	0.00010992	0.0001099	0.00000002
592370.00	2375440.00	0.00022792	0.00009807	0.00009806	0.00000002	0.00027216	0.00010414	0.00010412	0.00000001
592870.00	2375440.00	0.00021629	0.00009612	0.00009611	0.00000001	0.00025761	0.00010221	0.0001022	0.00000001
593370.00	2375440.00	0.0003297	0.00010112	0.00010111	0.00000001	0.00029577	0.00010643	0.00010642	0.00000001
593870.00	2375440.00	0.00063034	0.0001042	0.00010419	0.00000001	0.00035195	0.00010863	0.00010862	0.00000001
594370.00	2375440.00	0.00078783	0.0001059	0.00010589	0.00000001	0.00039735	0.00010981	0.0001098	0.00000001
594870.00	2375440.00	0.00089066	0.00010836	0.00010835	0.00000001	0.00043486	0.00011174	0.00011173	0.00000001
595370.00	2375440.00	0.00108821	0.00011223	0.00011222	0.00000001	0.0005191	0.00011492	0.00011491	0.00000001
595870.00	2375440.00	0.00117259	0.0001168	0.00011679	0.00000001	0.00058408	0.00011872	0.00011871	0.00000001
596370.00	2375440.00	0.0012776	0.00012242	0.00012241	0.00000001	0.00067841	0.00012392	0.00012391	0.00000001
596870.00	2375440.00	0.00130467	0.00012865	0.00012863	0.00000001	0.00075732	0.00013006	0.00013005	0.00000001
597370.00	2375440.00	0.00129374	0.00013513	0.00013512	0.00000001	0.0007641	0.00013702	0.00013701	0.00000001
597870.00	2375440.00	0.00128905	0.00014103	0.00014102	0.00000001	0.00084389	0.00014483	0.00014481	0.00000001
598370.00	2375440.00	0.00123788	0.00014504	0.00014503	0.00000001	0.00090405	0.00015164	0.00015163	0.00000001
598870.00	2375440.00	0.000747	0.00014624	0.00014622	0.00000001	0.00097881	0.00015962	0.0001596	0.00000001
599370.00	2375440.00	0.00074545	0.00014391	0.00014389	0.00000001	0.00088601	0.00015671	0.0001567	0.00000001
599870.00	2375440.00	0.00073942	0.00013991	0.00013989	0.00000001	0.00077122	0.00015284	0.00015283	0.00000001
600370.00	2375440.00	0.0006779	0.00013377	0.00013376	0.00000001	0.00074001	0.0001466	0.00014659	0.00000001
600870.00	2375440.00	0.00061346	0.00012685	0.00012684	0.00000001	0.00071993	0.00013891	0.0001389	0.00000001
601370.00	2375440.00	0.00039816	0.00011993	0.00011992	0.00000001	0.00084538	0.00013391	0.0001339	0.00000001
601870.00	2375440.00	0.0003144	0.00011352	0.0001135	0.00000001	0.00066484	0.00012712	0.00012711	0.00000001
602370.00	2375440.00	0.00038033	0.00010783	0.00010781	0.00000001	0.00076028	0.00011864	0.00011863	0.00000001
602870.00	2375440.00	0.00034376	0.00010269	0.00010268	0.00000001	0.00072264	0.00011311	0.0001131	0.00000001
603370.00	2375440.00	0.00038185	0.00009835	0.00009834	0.00000001	0.00068988	0.00010759	0.00010758	0.00000001
603870.00	2375440.00	0.00034163	0.00009413	0.00009412	0.00000001	0.0006749	0.0001036	0.00010359	0.00000001
604370.00	2375440.00	0.00031509	0.00009025	0.00009024	0.00000001	0.00064104	0.00009985	0.00009984	0.00000001
604870.00	2375440.00	0.00033108	0.00008674	0.00008673	0.00000001	0.00063629	0.00009583	0.00009582	0.00000001
605370.00	2375440.00	0.0003615	0.00008338	0.00008337	0.00000001	0.00060099	0.00009177	0.00009176	0.00000001
605870.00	2375440.00	0.0003962	0.00008003	0.00008002	0.00000001	0.00054073	0.00008767	0.00008765	0.00000001
606370.00	2375440.00	0.00040879	0.00007658	0.00007656	0.00000001	0.00050367	0.00008375	0.00008374	0.00000001
606870.00	2375440.00	0.00024618	0.00007295	0.00007293	0.00000001	0.00045259	0.00008177	0.00008176	0.00000001
607370.00	2375440.00	0.0002749	0.00006949	0.00006948	0.00000001	0.00056475	0.00007738	0.00007737	0.00000001
607870.00	2375440.00	0.00029816	0.00006601	0.000066	0.00000001	0.00059737	0.00007325	0.00007324	0.00000001
608370.00	2375440.00	0.00031746	0.00006252	0.00006251	0.00000001	0.00059923	0.00006923	0.00006922	0.00000001
608870.00	2375440.00	0.00025673	0.00005909	0.00005908	0.00000001	0.00051546	0.00006594	0.00006592	0.00000001
609370.00	2375440.00	0.00023666	0.00005573	0.00005572	0.00000001	0.00042084	0.00006241	0.0000624	0.00000001
609870.00	2375440.00	0.00022266	0.00005317	0.00005315	0.00000001	0.00032823	0.00005973	0.00005971	0.00000001
610370.00	2375440.00	0.00022033	0.00004985	0.00004984	0.00000001	0.00032692	0.00005602	0.00005601	0.00000001
610870.00	2375440.00	0.00023084	0.00004603	0.00004602	0.00000001	0.00041618	0.00005181	0.00005179	0.00000001
611370.00	2375440.00	0.00032258	0.00004272	0.00004271	0.00000001	0.00057451	0.00004787	0.00004786	0.00000001
611870.00	2375440.00	0.00021443	0.00004208	0.00004206	0.00000001	0.00032065	0.00004747	0.00004746	0.00000001
612370.00	2375440.00	0.00031996	0.00003738	0.00003737	0.00000001	0.00056159	0.00004203	0.00004202	0.00000001
612870.00	2375440.00	0.00037904	0.00003486	0.00003485	0.00000001	0.00047071	0.00003902	0.00003901	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2375440.00	0.00037117	0.00003278	0.00003277	0.00000001	0.00047371	0.00003668	0.00003666	0.00000001
613870.00	2375440.00	0.000202	0.00003269	0.00003268	0.00000001	0.00030949	0.00003691	0.0000369	0.00000001
614370.00	2375440.00	0.00017134	0.00002469	0.00002468	0.00000001	0.00018448	0.0000277	0.00002769	0.00000001
614870.00	2375440.00	0.00015292	0.00002219	0.00002218	0.00000001	0.0001702	0.00002486	0.00002485	0.00000001
615370.00	2375440.00	0.00037141	0.00002495	0.00002494	0.00000001	0.00024788	0.00002719	0.00002718	0.00000001
615870.00	2375440.00	0.00044907	0.00002559	0.00002558	0.00000001	0.00054219	0.00002807	0.00002806	0.00000001
616370.00	2375440.00	0.00022372	0.00002491	0.0000249	0.00000001	0.00046359	0.00002783	0.00002782	0.00000001
616870.00	2375440.00	0.00019647	0.00002438	0.00002437	0.00000001	0.00033456	0.00002719	0.00002718	0.00000001
617370.00	2375440.00	0.00020067	0.00002344	0.00002343	0.00000001	0.00036127	0.00002604	0.00002603	0.00000001
617870.00	2375440.00	0.00021326	0.0000226	0.00002259	0.00000001	0.00042617	0.00002496	0.00002495	0.00000001
618370.00	2375440.00	0.0002256	0.00002193	0.00002192	0.00000001	0.00048055	0.00002408	0.00002407	0.00000001
618870.00	2375440.00	0.00021151	0.00002144	0.00002143	0.00000001	0.00042338	0.0000235	0.00002349	0.00000001
619370.00	2375440.00	0.0001878	0.0000216	0.00002159	0.00000001	0.00030848	0.00002367	0.00002366	0.00000001
619870.00	2375440.00	0.00019081	0.00002236	0.00002235	0.00000001	0.0003131	0.00002459	0.00002458	0.00000001
590370.00	2375940.00	0.00022576	0.00010316	0.00010313	0.00000003	0.00026399	0.00011107	0.00011104	0.00000003
590870.00	2375940.00	0.00021232	0.00009844	0.00009841	0.00000002	0.00024853	0.00010495	0.00010493	0.00000002
591370.00	2375940.00	0.00020909	0.000096	0.00009598	0.00000002	0.00024867	0.00010179	0.00010177	0.00000002
591870.00	2375940.00	0.00033952	0.00010232	0.0001023	0.00000002	0.00032159	0.00010739	0.00010737	0.00000002
592370.00	2375940.00	0.00044011	0.00010215	0.00010214	0.00000002	0.00033367	0.00010693	0.00010692	0.00000001
592870.00	2375940.00	0.00047021	0.00010134	0.00010133	0.00000001	0.00032961	0.00010611	0.00010609	0.00000001
593370.00	2375940.00	0.00050796	0.00010092	0.0001009	0.00000001	0.00032843	0.00010551	0.0001055	0.00000001
593870.00	2375940.00	0.00068401	0.00010189	0.00010188	0.00000001	0.00036057	0.00010621	0.0001062	0.00000001
594370.00	2375940.00	0.00102136	0.00010385	0.00010384	0.00000001	0.00046186	0.00010813	0.00010812	0.00000001
594870.00	2375940.00	0.00105472	0.00010583	0.00010582	0.00000001	0.00048839	0.0001094	0.0001094	0.00000001
595370.00	2375940.00	0.00111489	0.00010894	0.00010893	0.00000001	0.00053456	0.00011173	0.00011172	0.00000001
595870.00	2375940.00	0.0011959	0.00011301	0.000113	0.00000001	0.00059524	0.0001151	0.00011509	0.00000001
596370.00	2375940.00	0.00127953	0.00011815	0.00011814	0.00000001	0.00070497	0.00011981	0.0001198	0.00000001
596870.00	2375940.00	0.00126584	0.00012377	0.00012375	0.00000001	0.00070615	0.00012504	0.00012503	0.00000001
597370.00	2375940.00	0.00127118	0.00012997	0.00012995	0.00000001	0.0007606	0.00013162	0.00013161	0.00000001
597870.00	2375940.00	0.0012576	0.00013582	0.00013581	0.00000001	0.00084313	0.00013904	0.00013903	0.00000001
598370.00	2375940.00	0.00084019	0.00013971	0.0001397	0.00000001	0.0008511	0.00014621	0.00014619	0.00000001
598870.00	2375940.00	0.00084492	0.00014213	0.00014212	0.00000001	0.00077272	0.00015054	0.00015053	0.00000001
599370.00	2375940.00	0.00080388	0.00014158	0.00014157	0.00000001	0.00076677	0.00015221	0.0001522	0.00000001
599870.00	2375940.00	0.00074871	0.0001383	0.00013829	0.00000001	0.00075458	0.00015033	0.00015032	0.00000001
600370.00	2375940.00	0.00069717	0.00013304	0.00013303	0.00000001	0.00072141	0.00014525	0.00014524	0.00000001
600870.00	2375940.00	0.00065661	0.00012674	0.00012673	0.00000001	0.00065954	0.000138	0.00013799	0.00000001
601370.00	2375940.00	0.00042325	0.00011996	0.00011994	0.00000001	0.00085168	0.00013371	0.0001337	0.00000001
601870.00	2375940.00	0.00032113	0.00011362	0.00011361	0.00000001	0.00068588	0.00012712	0.00012711	0.00000001
602370.00	2375940.00	0.00037798	0.00010786	0.00010785	0.00000001	0.00075872	0.00011867	0.00011866	0.00000001
602870.00	2375940.00	0.00038701	0.0001028	0.00010279	0.00000001	0.00071726	0.00011236	0.00011235	0.00000001
603370.00	2375940.00	0.00033106	0.00009813	0.00009812	0.00000001	0.00069118	0.00010783	0.00010782	0.00000001
603870.00	2375940.00	0.00033109	0.00009407	0.00009405	0.00000001	0.0006699	0.00010333	0.00010332	0.00000001
604370.00	2375940.00	0.00031998	0.0000903	0.00009029	0.00000001	0.00064698	0.00009945	0.00009943	0.00000001
604870.00	2375940.00	0.0003214	0.00008682	0.00008681	0.00000001	0.00062893	0.0000957	0.00009568	0.00000001
605370.00	2375940.00	0.00031833	0.00008347	0.00008345	0.00000001	0.00061414	0.00009213	0.00009211	0.00000001
605870.00	2375940.00	0.00030356	0.00008015	0.00008014	0.00000001	0.00059924	0.00008872	0.0000887	0.00000001
606370.00	2375940.00	0.00024039	0.00007685	0.00007684	0.00000001	0.00044013	0.00008611	0.0000861	0.00000001
606870.00	2375940.00	0.00026633	0.00007364	0.00007363	0.00000001	0.00054368	0.00008195	0.00008194	0.00000001
607370.00	2375940.00	0.00039523	0.0000705	0.00007048	0.00000001	0.00049122	0.00007702	0.00007701	0.00000001
607870.00	2375940.00	0.00032758	0.00006713	0.00006712	0.00000001	0.00057534	0.00007398	0.00007397	0.00000001
608370.00	2375940.00	0.00022523	0.00006408	0.00006407	0.00000001	0.00035513	0.00007175	0.00007174	0.00000001
608870.00	2375940.00	0.00024798	0.00006054	0.00006052	0.00000001	0.00048726	0.00006739	0.00006737	0.00000001
609370.00	2375940.00	0.00037916	0.00005711	0.0000571	0.00000001	0.00050388	0.00006274	0.00006273	0.00000001
609870.00	2375940.00	0.0002432	0.00005398	0.00005396	0.00000001	0.00047521	0.00006019	0.00006017	0.00000001
610370.00	2375940.00	0.00031036	0.00005065	0.00005064	0.00000001	0.0005779	0.00005622	0.0000562	0.00000001
610870.00	2375940.00	0.00042375	0.00004726	0.00004725	0.00000001	0.00040141	0.00005215	0.00005214	0.00000001
611370.00	2375940.00	0.00021273	0.00004535	0.00004534	0.00000001	0.00032272	0.00005088	0.00005087	0.00000001
611870.00	2375940.00	0.00026746	0.00004181	0.0000418	0.00000001	0.00055494	0.00004689	0.00004688	0.00000001
612370.00	2375940.00	0.00039994	0.00003879	0.00003878	0.00000001	0.0004268	0.00004316	0.00004315	0.00000001
612870.00	2375940.00	0.00029068	0.00003668	0.00003667	0.00000001	0.0005581	0.0000412	0.00004119	0.00000001
613370.00	2375940.00	0.00038014	0.00003417	0.00003416	0.00000001	0.00044307	0.00003812	0.00003811	0.00000001
613870.00	2375940.00	0.00020936	0.00003297	0.00003296	0.00000001	0.00037336	0.00003727	0.00003726	0.00000001
614370.00	2375940.00	0.00018494	0.00002633	0.00002632	0.00000001	0.0001889	0.00002954	0.00002953	0.00000001
614870.00	2375940.00	0.0001496	0.00002293	0.00002292	0.00000001	0.00016626	0.00002581	0.0000258	0.00000001
615370.00	2375940.00	0.00017383	0.00002346	0.00002345	0.00000001	0.00018257	0.00002612	0.00002611	0.00000001
615870.00	2375940.00	0.0004583	0.00002519	0.00002518	0.00000001	0.00027105	0.00002738	0.00002737	0.00000001
616370.00	2375940.00	0.00055749	0.00002488	0.00002487	0.00000001	0.00034024	0.00002685	0.00002684	0.00000001
616870.00	2375940.00	0.00020063	0.0000248	0.00002479	0.00000001	0.00036442	0.00002772	0.00002771	0.00000001
617370.00	2375940.00	0.00018833	0.00002447	0.00002446	0.00000001	0.00030228	0.00002724	0.00002723	0.00000001
617870.00	2375940.00	0.00018756	0.00002416	0.00002415	0.00000001	0.00029806	0.00002682	0.00002681	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2375940.00	0.00018699	0.00002356	0.00002355	0.00000001	0.00029863	0.00002607	0.00002606	0.00000001
618870.00	2375940.00	0.00020302	0.0000218	0.00002179	0.00000001	0.00039047	0.00002399	0.00002398	0.00000001
619370.00	2375940.00	0.00018525	0.00002173	0.00002172	0.00000001	0.00030526	0.00002387	0.00002386	0.00000001
619870.00	2375940.00	0.00018661	0.00002229	0.00002227	0.00000001	0.0003035	0.00002447	0.00002446	0.00000001
590370.00	2376440.00	0.00022282	0.00010044	0.00010041	0.00000003	0.00026216	0.00010779	0.00010777	0.00000003
590870.00	2376440.00	0.00022239	0.00009921	0.00009919	0.00000002	0.00026504	0.00010556	0.00010553	0.00000002
591370.00	2376440.00	0.00025236	0.00009968	0.00009966	0.00000002	0.00029221	0.00010527	0.00010525	0.00000002
591870.00	2376440.00	0.00034141	0.00009984	0.00009982	0.00000002	0.00031589	0.00010462	0.00010461	0.00000002
592370.00	2376440.00	0.00063818	0.00010088	0.00010086	0.00000001	0.00036672	0.00010542	0.00010541	0.00000001
592870.00	2376440.00	0.00080841	0.00010055	0.00010054	0.00000001	0.00040387	0.00010528	0.00010526	0.00000001
593370.00	2376440.00	0.00087554	0.00010015	0.00010013	0.00000001	0.00041729	0.00010491	0.0001049	0.00000001
593870.00	2376440.00	0.00088732	0.00010015	0.00010014	0.00000001	0.00041877	0.00010476	0.00010475	0.00000001
594370.00	2376440.00	0.00114727	0.00010165	0.00010164	0.00000001	0.00053086	0.00010592	0.00010591	0.00000001
594870.00	2376440.00	0.00121543	0.00010348	0.00010347	0.00000001	0.00057695	0.00010716	0.00010715	0.00000001
595370.00	2376440.00	0.00126354	0.00010626	0.00010624	0.00000001	0.00064735	0.00010931	0.0001093	0.00000001
595870.00	2376440.00	0.00121685	0.00010954	0.00010953	0.00000001	0.00062081	0.00011175	0.00011174	0.00000001
596370.00	2376440.00	0.00124288	0.00011405	0.00011404	0.00000001	0.00067591	0.00011569	0.00011568	0.00000001
596870.00	2376440.00	0.00124916	0.00011942	0.00011941	0.00000001	0.00082407	0.00012097	0.00012096	0.00000001
597370.00	2376440.00	0.00124434	0.0001251	0.00012509	0.00000001	0.0007529	0.00012658	0.00012657	0.00000001
597870.00	2376440.00	0.00121592	0.00013083	0.00013082	0.00000001	0.00085441	0.00013365	0.00013364	0.00000001
598370.00	2376440.00	0.00085886	0.00013523	0.00013522	0.00000001	0.00073005	0.00014003	0.00014002	0.00000001
598870.00	2376440.00	0.00084048	0.00013822	0.00013821	0.00000001	0.00073587	0.00014528	0.00014527	0.00000001
599370.00	2376440.00	0.00080706	0.00013865	0.00013864	0.00000001	0.00073903	0.00014799	0.00014798	0.00000001
599870.00	2376440.00	0.00076837	0.00013654	0.00013653	0.00000001	0.00070684	0.00014721	0.0001472	0.00000001
600370.00	2376440.00	0.00071147	0.00013206	0.00013205	0.00000001	0.00069692	0.00014353	0.00014352	0.00000001
600870.00	2376440.00	0.00066834	0.00012635	0.00012634	0.00000001	0.00064455	0.00013724	0.00013723	0.00000001
601370.00	2376440.00	0.00040737	0.00011985	0.00011984	0.00000001	0.00083435	0.00013393	0.00013391	0.00000001
601870.00	2376440.00	0.00037699	0.00011365	0.00011364	0.00000001	0.00079651	0.00012622	0.0001262	0.00000001
602370.00	2376440.00	0.00037642	0.0001079	0.00010789	0.00000001	0.00075705	0.00011877	0.00011876	0.00000001
602870.00	2376440.00	0.00035154	0.00010272	0.0001027	0.00000001	0.00072032	0.0001127	0.00011268	0.00000001
603370.00	2376440.00	0.00024936	0.00009819	0.00009818	0.00000001	0.0004426	0.00010977	0.00010976	0.00000001
603870.00	2376440.00	0.00024475	0.00009393	0.00009391	0.00000001	0.00044452	0.00010483	0.00010482	0.00000001
604370.00	2376440.00	0.00033996	0.00009036	0.00009035	0.00000001	0.0006434	0.00009884	0.00009883	0.00000001
604870.00	2376440.00	0.00029475	0.00008676	0.00008675	0.00000001	0.00061195	0.00009569	0.00009567	0.00000001
605370.00	2376440.00	0.00033485	0.00008367	0.00008366	0.00000001	0.00059699	0.00009177	0.00009176	0.00000001
605870.00	2376440.00	0.00039656	0.00008077	0.00008076	0.00000001	0.00051074	0.0000878	0.00008779	0.00000001
606370.00	2376440.00	0.00034827	0.00007745	0.00007743	0.00000001	0.00055698	0.00008488	0.00008487	0.00000001
606870.00	2376440.00	0.00037404	0.00007439	0.00007438	0.00000001	0.00051249	0.00008123	0.00008122	0.00000001
607370.00	2376440.00	0.00037756	0.00007125	0.00007124	0.00000001	0.00049779	0.00007777	0.00007775	0.00000001
607870.00	2376440.00	0.00038611	0.00006809	0.00006807	0.00000001	0.00047866	0.00007424	0.00007423	0.00000001
608370.00	2376440.00	0.00040805	0.00006489	0.00006488	0.00000001	0.0004347	0.00007059	0.00007058	0.00000001
608870.00	2376440.00	0.0002497	0.00006177	0.00006176	0.00000001	0.00050169	0.00006851	0.0000685	0.00000001
609370.00	2376440.00	0.0003504	0.00005854	0.00005853	0.00000001	0.00052432	0.00006421	0.0000642	0.00000001
609870.00	2376440.00	0.00030875	0.0000554	0.00005539	0.00000001	0.00056571	0.00006109	0.00006108	0.00000001
610370.00	2376440.00	0.00040201	0.00005213	0.00005212	0.00000001	0.00043126	0.00005713	0.00005712	0.00000001
610870.00	2376440.00	0.00034101	0.00004917	0.00004916	0.00000001	0.00052647	0.00005429	0.00005428	0.00000001
611370.00	2376440.00	0.00021031	0.00004766	0.00004764	0.00000001	0.00031003	0.00005335	0.00005334	0.00000001
611870.00	2376440.00	0.00021168	0.00004389	0.00004388	0.00000001	0.00034656	0.00004915	0.00004913	0.00000001
612370.00	2376440.00	0.00021394	0.00004114	0.00004113	0.00000001	0.00037147	0.00004617	0.00004615	0.00000001
612870.00	2376440.00	0.00036099	0.00003806	0.00003805	0.00000001	0.00046784	0.00004234	0.00004233	0.00000001
613370.00	2376440.00	0.00028602	0.00003594	0.00003593	0.00000001	0.00054348	0.00004027	0.00004025	0.00000001
613870.00	2376440.00	0.00039032	0.00003346	0.00003345	0.00000001	0.00039685	0.00003719	0.00003718	0.00000001
614370.00	2376440.00	0.00015263	0.000026	0.00002599	0.00000001	0.00016909	0.00002937	0.00002936	0.00000001
614870.00	2376440.00	0.00014618	0.00002372	0.00002371	0.00000001	0.00016287	0.00002682	0.00002681	0.00000001
615370.00	2376440.00	0.00034752	0.00002674	0.00002673	0.00000001	0.00023533	0.00002941	0.0000294	0.00000001
615870.00	2376440.00	0.00029254	0.00002743	0.00002742	0.00000001	0.00059662	0.00003058	0.00003057	0.00000001
616370.00	2376440.00	0.00022356	0.00002636	0.00002635	0.00000001	0.00046895	0.00002952	0.00002951	0.00000001
616870.00	2376440.00	0.00020603	0.00002539	0.00002538	0.00000001	0.00039743	0.0000284	0.00002839	0.00000001
617370.00	2376440.00	0.00018592	0.00002498	0.00002497	0.00000001	0.00029883	0.00002786	0.00002785	0.00000001
617870.00	2376440.00	0.00018496	0.00002479	0.00002478	0.00000001	0.00029159	0.00002757	0.00002756	0.00000001
618370.00	2376440.00	0.00018403	0.00002402	0.00002401	0.00000001	0.00029177	0.00002663	0.00002662	0.00000001
618870.00	2376440.00	0.00018704	0.00002417	0.00002416	0.00000001	0.00030054	0.00002676	0.00002674	0.00000001
619370.00	2376440.00	0.00018617	0.00002354	0.00002352	0.00000001	0.00030166	0.00002605	0.00002603	0.00000001
619870.00	2376440.00	0.0001852	0.00002295	0.00002293	0.00000001	0.00030143	0.00002532	0.00002531	0.00000001
590370.00	2376940.00	0.00020701	0.00009641	0.00009638	0.00000003	0.0002396	0.00010316	0.00010313	0.00000003
590870.00	2376940.00	0.00022765	0.0000974	0.00009738	0.00000002	0.00027136	0.00010337	0.00010335	0.00000002
591370.00	2376940.00	0.00031307	0.00009842	0.0000984	0.00000002	0.00031037	0.00010345	0.00010343	0.00000002
591870.00	2376940.00	0.00040603	0.00009825	0.00009823	0.00000002	0.00032486	0.00010264	0.00010262	0.00000002
592370.00	2376940.00	0.00057282	0.00009818	0.00009817	0.00000001	0.00034579	0.00010249	0.00010248	0.00000001
592870.00	2376940.00	0.00076633	0.00009805	0.00009804	0.00000001	0.00038669	0.00010254	0.00010252	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2376940.00	0.00086	0.00009776	0.00009775	0.00000001	0.00040978	0.00010244	0.00010243	0.00000001
593870.00	2376940.00	0.0009908	0.00009795	0.00009794	0.00000001	0.00044318	0.00010244	0.00010243	0.00000001
594370.00	2376940.00	0.0010653	0.00009886	0.00009885	0.00000001	0.00048642	0.00010294	0.00010293	0.00000001
594870.00	2376940.00	0.00109224	0.00010039	0.00010038	0.00000001	0.00051399	0.00010389	0.00010388	0.00000001
595370.00	2376940.00	0.00115768	0.00010286	0.00010285	0.00000001	0.00055924	0.00010574	0.00010573	0.00000001
595870.00	2376940.00	0.00119382	0.00010615	0.00010614	0.00000001	0.00061003	0.00010838	0.00010837	0.00000001
596370.00	2376940.00	0.00118679	0.00011014	0.00011013	0.00000001	0.00062292	0.00011168	0.00011167	0.00000001
596870.00	2376940.00	0.00120735	0.00011503	0.00011502	0.00000001	0.00067024	0.00011621	0.0001162	0.00000001
597370.00	2376940.00	0.00121106	0.00012049	0.00012048	0.00000001	0.00071637	0.00012168	0.00012167	0.00000001
597870.00	2376940.00	0.00084827	0.00012565	0.00012564	0.00000001	0.00067304	0.00012805	0.00012804	0.00000001
598370.00	2376940.00	0.00084654	0.00013067	0.00013066	0.00000001	0.0006961	0.00013451	0.0001345	0.00000001
598870.00	2376940.00	0.00083272	0.00013429	0.00013428	0.00000001	0.00067047	0.0001399	0.00013989	0.00000001
599370.00	2376940.00	0.00080887	0.00013562	0.00013561	0.00000001	0.000681	0.00014341	0.0001434	0.00000001
599870.00	2376940.00	0.00077254	0.00013444	0.00013443	0.00000001	0.00066948	0.00014391	0.0001439	0.00000001
600370.00	2376940.00	0.00072498	0.00013088	0.00013087	0.00000001	0.00066378	0.00014138	0.00014137	0.00000001
600870.00	2376940.00	0.00067782	0.00012578	0.00012577	0.00000001	0.00063031	0.00013622	0.00013621	0.00000001
601370.00	2376940.00	0.00043552	0.00011969	0.00011968	0.00000001	0.00090424	0.00013351	0.0001335	0.00000001
601870.00	2376940.00	0.00032649	0.0001137	0.00011369	0.00000001	0.00071708	0.00012734	0.00012733	0.00000001
602370.00	2376940.00	0.00034133	0.00010794	0.00010792	0.00000001	0.00073675	0.00011942	0.00011941	0.00000001
602870.00	2376940.00	0.00045426	0.00010292	0.00010291	0.00000001	0.00064531	0.00011146	0.00011145	0.00000001
603370.00	2376940.00	0.00041523	0.00009827	0.00009826	0.00000001	0.00064391	0.00010638	0.00010637	0.00000001
603870.00	2376940.00	0.00037089	0.00009408	0.00009406	0.00000001	0.00064957	0.00010217	0.00010215	0.00000001
604370.00	2376940.00	0.00023377	0.0000902	0.00009019	0.00000001	0.00040862	0.00010066	0.00010065	0.00000001
604870.00	2376940.00	0.00030646	0.00008679	0.00008677	0.00000001	0.00061882	0.00009518	0.00009517	0.00000001
605370.00	2376940.00	0.00024875	0.00008345	0.00008344	0.00000001	0.00050129	0.00009262	0.0000926	0.00000001
605870.00	2376940.00	0.00030014	0.00008055	0.00008054	0.00000001	0.00058696	0.00008861	0.00008859	0.00000001
606370.00	2376940.00	0.00034929	0.00007775	0.00007774	0.00000001	0.00054468	0.00008493	0.00008491	0.00000001
606870.00	2376940.00	0.00039725	0.00007493	0.00007492	0.00000001	0.00046205	0.00008124	0.00008123	0.00000001
607370.00	2376940.00	0.00021782	0.00007186	0.00007185	0.00000001	0.00035054	0.00008046	0.00008045	0.00000001
607870.00	2376940.00	0.00025769	0.00006874	0.00006873	0.00000001	0.00052439	0.00007608	0.00007607	0.00000001
608370.00	2376940.00	0.00025912	0.00006578	0.00006577	0.00000001	0.00052807	0.00007272	0.00007271	0.00000001
608870.00	2376940.00	0.00037345	0.00006279	0.00006277	0.00000001	0.00046953	0.00006839	0.00006838	0.00000001
609370.00	2376940.00	0.00021629	0.00005998	0.00005996	0.00000001	0.00035178	0.00006675	0.00006674	0.00000001
609870.00	2376940.00	0.00041084	0.00005662	0.00005661	0.00000001	0.00038907	0.00006154	0.00006153	0.00000001
610370.00	2376940.00	0.00040016	0.00005361	0.0000536	0.00000001	0.00041139	0.00005846	0.00005845	0.00000001
610870.00	2376940.00	0.00033164	0.00005073	0.00005072	0.00000001	0.0005204	0.00005578	0.00005577	0.00000001
611370.00	2376940.00	0.00023031	0.000048	0.00004799	0.00000001	0.00044873	0.00005335	0.00005334	0.00000001
611870.00	2376940.00	0.00021804	0.00004529	0.00004528	0.00000001	0.00039368	0.00005048	0.00005047	0.00000001
612370.00	2376940.00	0.00028526	0.00004237	0.00004236	0.00000001	0.000544	0.00004708	0.00004707	0.00000001
612870.00	2376940.00	0.00025066	0.00003991	0.0000399	0.00000001	0.0005193	0.00004456	0.00004455	0.00000001
613370.00	2376940.00	0.00040544	0.00003697	0.00003696	0.00000001	0.00034805	0.00004088	0.00004087	0.00000001
613870.00	2376940.00	0.0003616	0.00003499	0.00003498	0.00000001	0.00043473	0.00003886	0.00003884	0.00000001
614370.00	2376940.00	0.00015209	0.00002754	0.00002753	0.00000001	0.00016859	0.00003108	0.00003107	0.00000001
614870.00	2376940.00	0.00014898	0.0000256	0.00002559	0.00000001	0.00016518	0.00002887	0.00002886	0.00000001
615370.00	2376940.00	0.00028269	0.00002735	0.00002734	0.00000001	0.00021461	0.00003017	0.00003016	0.00000001
615870.00	2376940.00	0.00051081	0.00002803	0.00002802	0.00000001	0.00041398	0.00003075	0.00003074	0.00000001
616370.00	2376940.00	0.00020563	0.00002732	0.0000273	0.00000001	0.000396	0.00003064	0.00003063	0.00000001
616870.00	2376940.00	0.00018838	0.00002642	0.00002641	0.00000001	0.00031615	0.00002959	0.00002958	0.00000001
617370.00	2376940.00	0.00018415	0.00002554	0.00002553	0.00000001	0.00029831	0.00002853	0.00002852	0.00000001
617870.00	2376940.00	0.00018143	0.00002494	0.00002493	0.00000001	0.0002864	0.00002776	0.00002775	0.00000001
618370.00	2376940.00	0.000182	0.00002473	0.00002472	0.00000001	0.00028663	0.00002747	0.00002746	0.00000001
618870.00	2376940.00	0.00018388	0.00002463	0.00002462	0.00000001	0.00029396	0.00002738	0.00002737	0.00000001
619370.00	2376940.00	0.0001826	0.0000239	0.00002388	0.00000001	0.0002927	0.0000265	0.00002648	0.00000001
619870.00	2376940.00	0.00018176	0.00002326	0.00002324	0.00000001	0.00029285	0.00002572	0.0000257	0.00000001
590370.00	2377440.00	0.00020817	0.00009431	0.00009428	0.00000003	0.00024371	0.00010063	0.00010061	0.00000003
590870.00	2377440.00	0.00021582	0.00009441	0.00009439	0.00000002	0.0002584	0.00010001	0.00009999	0.00000002
591370.00	2377440.00	0.00029009	0.00009583	0.00009582	0.00000002	0.00029968	0.00010061	0.0001006	0.00000002
591870.00	2377440.00	0.0004315	0.0000962	0.00009618	0.00000002	0.0003234	0.00010028	0.00010026	0.00000002
592370.00	2377440.00	0.00067573	0.00009635	0.00009633	0.00000001	0.00036398	0.00010051	0.00010049	0.00000001
592870.00	2377440.00	0.00072676	0.00009567	0.00009566	0.00000001	0.00037077	0.00009994	0.00009993	0.00000001
593370.00	2377440.00	0.00097983	0.00009573	0.00009572	0.00000001	0.00043705	0.00010027	0.00010026	0.00000001
593870.00	2377440.00	0.00099275	0.00009568	0.00009567	0.00000001	0.00045016	0.00010001	0.0001	0.00000001
594370.00	2377440.00	0.00102975	0.00009635	0.00009634	0.00000001	0.00047095	0.00010028	0.00010027	0.00000001
594870.00	2377440.00	0.00108955	0.00009781	0.0000978	0.00000001	0.00051111	0.00010124	0.00010123	0.00000001
595370.00	2377440.00	0.00111921	0.00009993	0.00009992	0.00000001	0.000537	0.00010276	0.00010275	0.00000001
595870.00	2377440.00	0.00114947	0.0001029	0.00010289	0.00000001	0.00057816	0.00010509	0.00010509	0.00000001
596370.00	2377440.00	0.00115399	0.00010657	0.00010656	0.00000001	0.00060077	0.00010812	0.00010811	0.00000001
596870.00	2377440.00	0.00117224	0.00011107	0.00011106	0.00000001	0.00064095	0.00011221	0.0001122	0.00000001
597370.00	2377440.00	0.00118077	0.00011618	0.00011617	0.00000001	0.00069153	0.00011721	0.0001172	0.00000001
597870.00	2377440.00	0.00082796	0.00012114	0.00012113	0.00000001	0.00064736	0.00012314	0.00012313	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2377440.00	0.00082596	0.00012619	0.00012618	0.00000001	0.00065113	0.00012927	0.00012926	0.00000001
598870.00	2377440.00	0.00081775	0.00013013	0.00013012	0.00000001	0.00066605	0.00013497	0.00013496	0.00000001
599370.00	2377440.00	0.00079809	0.00013216	0.00013215	0.00000001	0.00068066	0.00013909	0.00013908	0.00000001
599870.00	2377440.00	0.00076671	0.00013187	0.00013186	0.00000001	0.00067408	0.00014059	0.00014058	0.00000001
600370.00	2377440.00	0.0007263	0.0001293	0.00012929	0.00000001	0.0006545	0.00013912	0.00013911	0.00000001
600870.00	2377440.00	0.00068164	0.00012495	0.00012493	0.00000001	0.0006259	0.00013501	0.000135	0.00000001
601370.00	2377440.00	0.00044679	0.00011936	0.00011935	0.00000001	0.00091416	0.00013305	0.00013303	0.00000001
601870.00	2377440.00	0.0003943	0.0001136	0.00011359	0.00000001	0.00085077	0.00012621	0.0001262	0.00000001
602370.00	2377440.00	0.00028592	0.00010807	0.00010806	0.00000001	0.00056324	0.00012103	0.00012102	0.00000001
602870.00	2377440.00	0.00036518	0.00010277	0.00010276	0.00000001	0.00071701	0.00011252	0.00011251	0.00000001
603370.00	2377440.00	0.00033848	0.00009806	0.00009805	0.00000001	0.00068454	0.00010711	0.0001071	0.00000001
603870.00	2377440.00	0.00037537	0.000094	0.00009399	0.00000001	0.00063959	0.00010183	0.00010181	0.00000001
604370.00	2377440.00	0.00019285	0.00007988	0.00007986	0.00000001	0.00029655	0.00008981	0.0000898	0.00000001
604870.00	2377440.00	0.00041068	0.00008716	0.00008715	0.00000001	0.00053835	0.00009374	0.00009372	0.00000001
605370.00	2377440.00	0.00032315	0.00008367	0.00008365	0.00000001	0.00059647	0.00009129	0.00009128	0.00000001
605870.00	2377440.00	0.00018188	0.00007114	0.00007112	0.00000001	0.00027466	0.0000799	0.00007989	0.00000001
606370.00	2377440.00	0.00021561	0.00007782	0.0000778	0.00000001	0.00035188	0.00008709	0.00008708	0.00000001
606870.00	2377440.00	0.00026176	0.00007486	0.00007485	0.00000001	0.00053506	0.00008268	0.00008267	0.00000001
607370.00	2377440.00	0.00017737	0.0000634	0.00006339	0.00000001	0.00026326	0.00007121	0.00007119	0.00000001
607870.00	2377440.00	0.00040243	0.00006952	0.00006951	0.00000001	0.00040692	0.00007507	0.00007506	0.00000001
608370.00	2377440.00	0.0002681	0.0000665	0.00006649	0.00000001	0.00053632	0.00007324	0.00007323	0.00000001
608870.00	2377440.00	0.00017514	0.00005595	0.00005594	0.00000001	0.00025694	0.00006275	0.00006273	0.00000001
609370.00	2377440.00	0.00026874	0.00006081	0.0000608	0.00000001	0.00053756	0.00006687	0.00006686	0.00000001
609870.00	2377440.00	0.00038655	0.00005785	0.00005784	0.00000001	0.00041545	0.00006279	0.00006278	0.00000001
610370.00	2377440.00	0.00017239	0.00004846	0.00004845	0.00000001	0.00025163	0.0000543	0.00005429	0.00000001
610870.00	2377440.00	0.00039197	0.00005203	0.00005202	0.00000001	0.00039591	0.00005663	0.00005662	0.00000001
611370.00	2377440.00	0.0002372	0.00004942	0.00004941	0.00000001	0.00048103	0.00005466	0.00005464	0.00000001
611870.00	2377440.00	0.00016931	0.00004151	0.0000415	0.00000001	0.00024718	0.00004657	0.00004656	0.00000001
612370.00	2377440.00	0.0003787	0.00004371	0.0000437	0.00000001	0.00041143	0.00004799	0.00004798	0.00000001
612870.00	2377440.00	0.00022794	0.0000415	0.00004149	0.00000001	0.0004584	0.00004619	0.00004618	0.00000001
613370.00	2377440.00	0.00016414	0.00003511	0.00003509	0.00000001	0.00024158	0.0000395	0.00003949	0.00000001
613870.00	2377440.00	0.00021165	0.00003694	0.00003693	0.00000001	0.00040029	0.00004132	0.00004131	0.00000001
614370.00	2377440.00	0.00014455	0.00002819	0.00002818	0.00000001	0.0001607	0.00003191	0.0000319	0.00000001
614870.00	2377440.00	0.00015284	0.00002742	0.00002741	0.00000001	0.00016841	0.00003086	0.00003085	0.00000001
615370.00	2377440.00	0.00048377	0.00002989	0.00002988	0.00000001	0.00027807	0.0000328	0.00003279	0.00000001
615870.00	2377440.00	0.00046402	0.00002914	0.00002913	0.00000001	0.00046137	0.0000321	0.00003209	0.00000001
616370.00	2377440.00	0.00050231	0.00002763	0.00002762	0.00000001	0.0004017	0.00003026	0.00003025	0.00000001
616870.00	2377440.00	0.00019331	0.00002706	0.00002705	0.00000001	0.00034672	0.00003031	0.0000303	0.00000001
617370.00	2377440.00	0.00018042	0.00002647	0.00002645	0.00000001	0.00028431	0.00002955	0.00002954	0.00000001
617870.00	2377440.00	0.00017889	0.00002562	0.00002561	0.00000001	0.00028023	0.00002855	0.00002854	0.00000001
618370.00	2377440.00	0.00018081	0.00002563	0.00002562	0.00000001	0.00028384	0.00002851	0.0000285	0.00000001
618870.00	2377440.00	0.00018115	0.00002513	0.00002512	0.00000001	0.0002877	0.00002797	0.00002796	0.00000001
619370.00	2377440.00	0.00017986	0.00002434	0.00002432	0.00000001	0.00028646	0.00002702	0.00002701	0.00000001
619870.00	2377440.00	0.000179	0.00002364	0.00002363	0.00000001	0.00028656	0.00002618	0.00002617	0.00000001
590370.00	2377940.00	0.00021521	0.00009498	0.00009496	0.00000003	0.00025542	0.00010104	0.00010102	0.00000002
590870.00	2377940.00	0.0002429	0.00009452	0.0000945	0.00000002	0.00027924	0.00009965	0.00009962	0.00000002
591370.00	2377940.00	0.00032951	0.00009433	0.00009431	0.00000002	0.0003044	0.00009854	0.00009853	0.00000002
591870.00	2377940.00	0.00052076	0.00009452	0.0000945	0.00000002	0.00033417	0.0000984	0.00009838	0.00000002
592370.00	2377940.00	0.00066287	0.00009411	0.0000941	0.00000001	0.00035695	0.00009808	0.00009806	0.00000001
592870.00	2377940.00	0.00088433	0.00009392	0.00009391	0.00000001	0.00041072	0.00009828	0.00009827	0.00000001
593370.00	2377940.00	0.00095681	0.00009351	0.0000935	0.00000001	0.00042793	0.00009784	0.00009783	0.00000001
593870.00	2377940.00	0.00102774	0.00009362	0.00009361	0.00000001	0.00046251	0.00009779	0.00009778	0.00000001
594370.00	2377940.00	0.00105747	0.00009418	0.00009417	0.00000001	0.00048403	0.000098	0.00009799	0.00000001
594870.00	2377940.00	0.00107541	0.00009534	0.00009533	0.00000001	0.00050478	0.00009868	0.00009867	0.00000001
595370.00	2377940.00	0.0011322	0.00009736	0.00009735	0.00000001	0.00055207	0.00010018	0.00010017	0.00000001
595870.00	2377940.00	0.00112265	0.00009991	0.0000999	0.00000001	0.00056266	0.0001021	0.00010209	0.00000001
596370.00	2377940.00	0.00114724	0.00010335	0.00010334	0.00000001	0.00060808	0.00010498	0.00010497	0.00000001
596870.00	2377940.00	0.00115685	0.00010745	0.00010744	0.00000001	0.00066141	0.00010862	0.00010861	0.00000001
597370.00	2377940.00	0.00116091	0.00011221	0.0001122	0.00000001	0.00070562	0.00011326	0.00011325	0.00000001
597870.00	2377940.00	0.00115394	0.00011729	0.00011728	0.00000001	0.00073555	0.00011864	0.00011863	0.00000001
598370.00	2377940.00	0.00080888	0.00012185	0.00012184	0.00000001	0.00065493	0.00012448	0.00012447	0.00000001
598870.00	2377940.00	0.00080808	0.00012606	0.00012605	0.00000001	0.00063867	0.00013004	0.00013003	0.00000001
599370.00	2377940.00	0.00079452	0.00012874	0.00012873	0.00000001	0.00063359	0.00013446	0.00013445	0.00000001
599870.00	2377940.00	0.00076913	0.00012926	0.00012925	0.00000001	0.00063603	0.00013684	0.00013683	0.00000001
600370.00	2377940.00	0.00073131	0.00012763	0.00012762	0.00000001	0.00060753	0.00013633	0.00013632	0.00000001
600870.00	2377940.00	0.00068819	0.00012413	0.00012412	0.00000001	0.00055752	0.00013307	0.00013306	0.00000001
601370.00	2377940.00	0.00044572	0.00011886	0.00011885	0.00000001	0.00093716	0.00013247	0.00013246	0.00000001
601870.00	2377940.00	0.00040396	0.00011345	0.00011343	0.00000001	0.00086214	0.00012601	0.00012599	0.00000001
602370.00	2377940.00	0.00036767	0.00010795	0.00010794	0.00000001	0.00073529	0.00011923	0.00011922	0.00000001
602870.00	2377940.00	0.0003448	0.00010278	0.00010277	0.00000001	0.00071521	0.00011288	0.00011287	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2377940.00	0.0002807	0.00009808	0.00009807	0.00000001	0.00059217	0.00010807	0.00010806	0.00000001
603870.00	2377940.00	0.00034019	0.00009385	0.00009384	0.00000001	0.00065804	0.000102	0.00010199	0.00000001
604370.00	2377940.00	0.00022657	0.00009086	0.00009085	0.00000001	0.00035986	0.00010158	0.00010157	0.00000001
604870.00	2377940.00	0.00032358	0.0000867	0.00008668	0.00000001	0.00061309	0.00009422	0.0000942	0.00000001
605370.00	2377940.00	0.00030536	0.00008354	0.00008353	0.00000001	0.0005953	0.00009109	0.00009108	0.00000001
605870.00	2377940.00	0.00027523	0.00008054	0.00008052	0.00000001	0.00056611	0.00008836	0.00008835	0.00000001
606370.00	2377940.00	0.00032608	0.00007794	0.00007793	0.00000001	0.00055	0.00008488	0.00008487	0.00000001
606870.00	2377940.00	0.00021921	0.00007501	0.00007499	0.00000001	0.00039599	0.00008345	0.00008344	0.00000001
607370.00	2377940.00	0.000253	0.00007237	0.00007236	0.00000001	0.00051533	0.00007983	0.00007981	0.00000001
607870.00	2377940.00	0.00020656	0.00007012	0.00007011	0.00000001	0.00031848	0.00007834	0.00007833	0.00000001
608370.00	2377940.00	0.00021467	0.00006716	0.00006714	0.00000001	0.00037124	0.00007464	0.00007463	0.00000001
608870.00	2377940.00	0.00023899	0.00006447	0.00006446	0.00000001	0.000487	0.00007116	0.00007115	0.00000001
609370.00	2377940.00	0.0004464	0.00006187	0.00006186	0.00000001	0.00053135	0.00006699	0.00006698	0.00000001
609870.00	2377940.00	0.00021016	0.0000591	0.00005908	0.00000001	0.00035061	0.00006547	0.00006546	0.00000001
610370.00	2377940.00	0.00022613	0.00005629	0.00005628	0.00000001	0.00043641	0.0000621	0.00006209	0.00000001
610870.00	2377940.00	0.00024066	0.00005353	0.00005352	0.00000001	0.00050278	0.00005894	0.00005893	0.00000001
611370.00	2377940.00	0.00039058	0.0000508	0.00005079	0.00000001	0.00058528	0.00005539	0.00005538	0.00000001
611870.00	2377940.00	0.00028207	0.00004811	0.0000481	0.00000001	0.00060031	0.00005289	0.00005288	0.00000001
612370.00	2377940.00	0.00022719	0.00004553	0.00004551	0.00000001	0.00045639	0.00005036	0.00005034	0.00000001
612870.00	2377940.00	0.00019763	0.00004329	0.00004328	0.00000001	0.0003109	0.00004807	0.00004806	0.00000001
613370.00	2377940.00	0.00024808	0.00004054	0.00004053	0.00000001	0.00053502	0.00004494	0.00004493	0.00000001
613870.00	2377940.00	0.00012783	0.00002607	0.00002606	0.00000001	0.00020119	0.00002931	0.0000293	0.00000001
614370.00	2377940.00	0.00032337	0.0000344	0.00003439	0.00000001	0.00023499	0.00003805	0.00003804	0.00000001
614870.00	2377940.00	0.00025705	0.00003176	0.00003174	0.00000001	0.00021446	0.00003524	0.00003523	0.00000001
615370.00	2377940.00	0.00036121	0.00003089	0.00003088	0.00000001	0.00024999	0.00003406	0.00003406	0.00000001
615870.00	2377940.00	0.00030201	0.00003026	0.00003025	0.00000001	0.00046664	0.00003359	0.00003358	0.00000001
616370.00	2377940.00	0.00024612	0.00002891	0.0000289	0.00000001	0.00049022	0.00003223	0.00003222	0.00000001
616870.00	2377940.00	0.00020536	0.00002773	0.00002772	0.00000001	0.00041096	0.00003101	0.000031	0.00000001
617370.00	2377940.00	0.00019299	0.00002661	0.0000266	0.00000001	0.00036147	0.00002975	0.00002974	0.00000001
617870.00	2377940.00	0.00017778	0.00002685	0.00002684	0.00000001	0.00027489	0.00002993	0.00002991	0.00000001
618370.00	2377940.00	0.00017754	0.00002488	0.00002487	0.00000001	0.00029066	0.00002771	0.0000277	0.00000001
618870.00	2377940.00	0.00018968	0.00002363	0.00002362	0.00000001	0.00035799	0.00002624	0.00002623	0.00000001
619370.00	2377940.00	0.0001772	0.00002313	0.00002312	0.00000001	0.00029596	0.00002562	0.00002561	0.00000001
619870.00	2377940.00	0.00017554	0.00002246	0.00002245	0.00000001	0.00029119	0.00002481	0.0000248	0.00000001
590370.00	2378440.00	0.0002113	0.00009257	0.00009254	0.00000002	0.00025125	0.00009826	0.00009823	0.00000002
590870.00	2378440.00	0.00031623	0.00009382	0.0000938	0.00000002	0.00030148	0.00009819	0.00009817	0.00000002
591370.00	2378440.00	0.00047255	0.00009344	0.00009342	0.00000002	0.0003263	0.00009725	0.00009723	0.00000002
591870.00	2378440.00	0.00063772	0.00009294	0.00009293	0.00000002	0.0003519	0.00009669	0.00009668	0.00000001
592370.00	2378440.00	0.00094412	0.00009276	0.00009275	0.00000001	0.00042758	0.00009691	0.0000969	0.00000001
592870.00	2378440.00	0.00100968	0.00009215	0.00009213	0.00000001	0.00045293	0.00009636	0.00009635	0.00000001
593370.00	2378440.00	0.00103599	0.00009171	0.0000917	0.00000001	0.00046905	0.00009588	0.00009587	0.00000001
593870.00	2378440.00	0.00101057	0.00009149	0.00009148	0.00000001	0.00045954	0.00009549	0.00009548	0.00000001
594370.00	2378440.00	0.00111453	0.00009215	0.00009214	0.00000001	0.00051568	0.00009589	0.00009588	0.00000001
594870.00	2378440.00	0.00108621	0.00009305	0.00009304	0.00000001	0.00050896	0.00009633	0.00009633	0.00000001
595370.00	2378440.00	0.00112137	0.00009485	0.00009484	0.00000001	0.00055121	0.00009762	0.00009761	0.00000001
595870.00	2378440.00	0.00115514	0.00009737	0.00009736	0.00000001	0.00063857	0.00009965	0.00009964	0.00000001
596370.00	2378440.00	0.00113161	0.0001003	0.00010029	0.00000001	0.00060725	0.00010197	0.00010196	0.00000001
596870.00	2378440.00	0.00113164	0.00010402	0.00010401	0.00000001	0.00064631	0.00010519	0.00010518	0.00000001
597370.00	2378440.00	0.00110236	0.00010856	0.00010855	0.00000001	0.00081113	0.0001098	0.0001098	0.00000001
597870.00	2378440.00	0.00112868	0.00011323	0.00011322	0.00000001	0.0006974	0.00011431	0.0001143	0.00000001
598370.00	2378440.00	0.00078958	0.00011768	0.00011767	0.00000001	0.00062802	0.00011982	0.00011982	0.00000001
598870.00	2378440.00	0.00078077	0.00012203	0.00012202	0.00000001	0.00059281	0.00012509	0.00012509	0.00000001
599370.00	2378440.00	0.00076188	0.00012522	0.00012521	0.00000001	0.00057008	0.00012965	0.00012964	0.00000001
599870.00	2378440.00	0.00074958	0.00012651	0.0001265	0.00000001	0.00057829	0.00013276	0.00013275	0.00000001
600370.00	2378440.00	0.00072624	0.00012565	0.00012563	0.00000001	0.00057604	0.00013337	0.00013336	0.00000001
600870.00	2378440.00	0.00067164	0.00012295	0.00012294	0.00000001	0.0005261	0.00013099	0.00013098	0.00000001
601370.00	2378440.00	0.00045414	0.0001182	0.00011819	0.00000001	0.00094598	0.00013152	0.00013151	0.00000001
601870.00	2378440.00	0.00036673	0.00011317	0.00011316	0.00000001	0.00084748	0.00012624	0.00012623	0.00000001
602370.00	2378440.00	0.00037986	0.0001079	0.00010789	0.00000001	0.00076262	0.00011914	0.00011913	0.00000001
602870.00	2378440.00	0.00033948	0.00010279	0.00010278	0.00000001	0.00071252	0.00011306	0.00011305	0.00000001
603370.00	2378440.00	0.00034629	0.00009806	0.00009805	0.00000001	0.00068603	0.00010696	0.00010695	0.00000001
603870.00	2378440.00	0.00025837	0.00009379	0.00009378	0.00000001	0.00052429	0.00010329	0.00010328	0.00000001
604370.00	2378440.00	0.00033878	0.00009002	0.00009001	0.00000001	0.0006285	0.00009746	0.00009745	0.00000001
604870.00	2378440.00	0.00029558	0.00008652	0.0000865	0.00000001	0.00060618	0.00009417	0.00009416	0.00000001
605370.00	2378440.00	0.0003612	0.00008365	0.00008364	0.00000001	0.00055837	0.00009017	0.00009016	0.00000001
605870.00	2378440.00	0.00033834	0.00008071	0.0000807	0.00000001	0.00055549	0.00008737	0.00008736	0.00000001
606370.00	2378440.00	0.00041162	0.00007842	0.0000784	0.00000001	0.00042986	0.00008382	0.00008381	0.00000001
606870.00	2378440.00	0.00037786	0.00007556	0.00007555	0.00000001	0.00046116	0.00008137	0.00008136	0.00000001
607370.00	2378440.00	0.0002057	0.00007378	0.00007377	0.00000001	0.00031079	0.0000826	0.00008258	0.00000001
607870.00	2378440.00	0.00021572	0.00007007	0.00007006	0.00000001	0.00039122	0.00007775	0.00007774	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2378440.00	0.00039107	0.0000678	0.00006779	0.00000001	0.00057315	0.00007357	0.00007356	0.00000001
608870.00	2378440.00	0.0002018	0.00006527	0.00006526	0.00000001	0.00031365	0.00007262	0.0000726	0.00000001
609370.00	2378440.00	0.00032944	0.00006254	0.00006253	0.00000001	0.0006041	0.00006817	0.00006816	0.00000001
609870.00	2378440.00	0.00020093	0.00006008	0.00006007	0.00000001	0.00031227	0.00006662	0.00006661	0.00000001
610370.00	2378440.00	0.00019881	0.0000576	0.00005759	0.00000001	0.00029984	0.00006384	0.00006383	0.00000001
610870.00	2378440.00	0.00019855	0.00005551	0.00005549	0.00000001	0.00029167	0.00006162	0.00006161	0.00000001
611370.00	2378440.00	0.00028096	0.00005201	0.000052	0.00000001	0.0005926	0.0000569	0.00005689	0.00000001
611870.00	2378440.00	0.0003223	0.0000494	0.00004939	0.00000001	0.00060679	0.00005395	0.00005394	0.00000001
612370.00	2378440.00	0.00019391	0.00004752	0.00004751	0.00000001	0.00028578	0.00005264	0.00005263	0.00000001
612870.00	2378440.00	0.00019242	0.00004487	0.00004486	0.00000001	0.000288	0.00004969	0.00004968	0.00000001
613370.00	2378440.00	0.00021447	0.00004198	0.00004197	0.00000001	0.00041342	0.00004646	0.00004644	0.00000001
613870.00	2378440.00	0.00013574	0.00002954	0.00002953	0.00000001	0.00020786	0.00003318	0.00003317	0.00000001
614370.00	2378440.00	0.00016205	0.0000346	0.00003459	0.00000001	0.00023706	0.00003882	0.0000388	0.00000001
614870.00	2378440.00	0.000199	0.00003551	0.0000355	0.00000001	0.00036189	0.00003955	0.00003954	0.00000001
615370.00	2378440.00	0.00028657	0.00003321	0.0000332	0.00000001	0.00047992	0.0000368	0.00003679	0.00000001
615870.00	2378440.00	0.00019316	0.00003189	0.00003188	0.00000001	0.0003474	0.00003562	0.00003561	0.00000001
616370.00	2378440.00	0.0002816	0.00002983	0.00002981	0.00000001	0.00047022	0.00003308	0.00003307	0.00000001
616870.00	2378440.00	0.000203	0.00002868	0.00002867	0.00000001	0.00040342	0.00003202	0.00003201	0.00000001
617370.00	2378440.00	0.00017899	0.00002928	0.00002927	0.00000001	0.00027502	0.00003266	0.00003264	0.00000001
617870.00	2378440.00	0.00024961	0.00002593	0.00002592	0.00000001	0.00047664	0.00002874	0.00002873	0.00000001
618370.00	2378440.00	0.00022322	0.00002496	0.00002494	0.00000001	0.00045966	0.00002768	0.00002767	0.00000001
618870.00	2378440.00	0.00024788	0.0000239	0.00002389	0.00000001	0.00043383	0.00002633	0.00002632	0.00000001
619370.00	2378440.00	0.00025301	0.00002304	0.00002303	0.00000001	0.00043144	0.00002527	0.00002526	0.00000001
619870.00	2378440.00	0.00025266	0.00002228	0.00002227	0.00000001	0.00043067	0.00002435	0.00002434	0.00000001
590370.00	2378940.00	0.00022892	0.00009217	0.00009214	0.00000002	0.00026734	0.00009737	0.00009734	0.00000002
590870.00	2378940.00	0.000256	0.00009051	0.00009049	0.00000002	0.00028098	0.00009499	0.00009497	0.00000002
591370.00	2378940.00	0.00027882	0.0000893	0.00008929	0.00000002	0.00028283	0.00009338	0.00009336	0.00000002
591870.00	2378940.00	0.00043253	0.00008988	0.00008987	0.00000002	0.00030909	0.00009341	0.00009339	0.00000001
592370.00	2378940.00	0.00047227	0.00008915	0.00008914	0.00000001	0.0003117	0.00009268	0.00009267	0.00000001
592870.00	2378940.00	0.00071587	0.00008941	0.0000894	0.00000001	0.00036216	0.00009315	0.00009314	0.00000001
593370.00	2378940.00	0.00099952	0.00008962	0.00008961	0.00000001	0.00044889	0.00009362	0.00009361	0.00000001
593870.00	2378940.00	0.00103066	0.00008957	0.00008956	0.00000001	0.00046847	0.00009341	0.00009341	0.00000001
594370.00	2378940.00	0.00105598	0.00008993	0.00008992	0.00000001	0.00048886	0.00009351	0.0000935	0.00000001
594870.00	2378940.00	0.00111288	0.00009098	0.00009097	0.00000001	0.00053347	0.0000942	0.00009419	0.00000001
595370.00	2378940.00	0.00116649	0.00009282	0.00009281	0.00000001	0.00066692	0.00009567	0.00009566	0.00000001
595870.00	2378940.00	0.00113704	0.000095	0.00009499	0.00000001	0.00074675	0.0000974	0.00009739	0.00000001
596370.00	2378940.00	0.00101361	0.00009786	0.00009784	0.00000001	0.00093085	0.00009993	0.00009992	0.00000001
596870.00	2378940.00	0.001	0.00010118	0.00010117	0.00000001	0.00092501	0.0001028	0.00010279	0.00000001
597370.00	2378940.00	0.00110477	0.00010485	0.00010484	0.00000001	0.00064538	0.0001057	0.0001057	0.00000001
597870.00	2378940.00	0.00109045	0.00010931	0.0001093	0.00000001	0.0006288	0.00011005	0.00011004	0.00000001
598370.00	2378940.00	0.00076641	0.00011364	0.00011363	0.00000001	0.00057328	0.00011522	0.00011521	0.00000001
598870.00	2378940.00	0.00075245	0.00011806	0.00011805	0.00000001	0.00054526	0.00012037	0.00012036	0.00000001
599370.00	2378940.00	0.00073446	0.00012158	0.00012157	0.00000001	0.00053613	0.00012508	0.00012507	0.00000001
599870.00	2378940.00	0.0007165	0.00012354	0.00012353	0.00000001	0.00053221	0.00012855	0.00012854	0.00000001
600370.00	2378940.00	0.00069252	0.0001235	0.00012349	0.00000001	0.00052453	0.00012991	0.0001299	0.00000001
600870.00	2378940.00	0.00068356	0.0001214	0.00012139	0.00000001	0.00052978	0.00012902	0.00012901	0.00000001
601370.00	2378940.00	0.00030679	0.00011764	0.00011763	0.00000001	0.00052084	0.00013302	0.00013301	0.00000001
601870.00	2378940.00	0.0005722	0.00011265	0.00011264	0.00000001	0.0006366	0.00012195	0.00012194	0.00000001
602370.00	2378940.00	0.00039895	0.00010777	0.00010776	0.00000001	0.00076222	0.00011886	0.00011884	0.00000001
602870.00	2378940.00	0.00035175	0.00010277	0.00010276	0.00000001	0.00071999	0.00011296	0.00011295	0.00000001
603370.00	2378940.00	0.00035917	0.00009807	0.00009806	0.00000001	0.00068415	0.00010685	0.00010684	0.00000001
603870.00	2378940.00	0.00034215	0.00009377	0.00009376	0.00000001	0.00065438	0.00010175	0.00010174	0.00000001
604370.00	2378940.00	0.00043509	0.00009012	0.00009011	0.00000001	0.00052169	0.00009605	0.00009604	0.00000001
604870.00	2378940.00	0.00028478	0.0000864	0.00008639	0.00000001	0.00059592	0.00009399	0.00009398	0.00000001
605370.00	2378940.00	0.00039741	0.00008366	0.00008364	0.00000001	0.00050862	0.0000894	0.00008939	0.00000001
605870.00	2378940.00	0.00031941	0.00008055	0.00008053	0.00000001	0.0005645	0.00008716	0.00008715	0.00000001
606370.00	2378940.00	0.00029624	0.00007781	0.0000778	0.00000001	0.00055508	0.0000846	0.00008459	0.00000001
606870.00	2378940.00	0.00025457	0.00007514	0.00007513	0.00000001	0.00052219	0.00008236	0.00008235	0.00000001
607370.00	2378940.00	0.00023817	0.00007266	0.00007265	0.00000001	0.00048514	0.00007993	0.00007992	0.00000001
607870.00	2378940.00	0.00021301	0.00007027	0.00007026	0.00000001	0.00039073	0.00007782	0.00007781	0.00000001
608370.00	2378940.00	0.00019922	0.00006808	0.00006806	0.00000001	0.00031607	0.00007572	0.00007571	0.00000001
608870.00	2378940.00	0.00023749	0.00006549	0.00006547	0.00000001	0.00049327	0.00007202	0.00007201	0.00000001
609370.00	2378940.00	0.00023816	0.00006305	0.00006304	0.00000001	0.00049615	0.00006926	0.00006925	0.00000001
609870.00	2378940.00	0.0001991	0.00006071	0.00006069	0.00000001	0.0003195	0.00006719	0.00006718	0.00000001
610370.00	2378940.00	0.00019716	0.00005827	0.00005826	0.00000001	0.00030932	0.00006444	0.00006443	0.00000001
610870.00	2378940.00	0.0001944	0.00005592	0.00005591	0.00000001	0.000293	0.00006185	0.00006183	0.00000001
611370.00	2378940.00	0.00019331	0.00005367	0.00005366	0.00000001	0.00028463	0.00005939	0.00005938	0.00000001
611870.00	2378940.00	0.00022998	0.00005056	0.00005054	0.00000001	0.0004765	0.00005544	0.00005543	0.00000001
612370.00	2378940.00	0.0002057	0.00004811	0.0000481	0.00000001	0.00036831	0.00005296	0.00005295	0.00000001
612870.00	2378940.00	0.00037813	0.00004558	0.00004557	0.00000001	0.00055339	0.00004961	0.0000496	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2378940.00	0.00018875	0.00004365	0.00004364	0.00000001	0.00028636	0.00004824	0.00004822	0.00000001
613870.00	2378940.00	0.00012502	0.0000276	0.00002759	0.00000001	0.00019533	0.00003088	0.00003086	0.00000001
614370.00	2378940.00	0.00025316	0.0000386	0.00003859	0.00000001	0.00049372	0.00004257	0.00004256	0.00000001
614870.00	2378940.00	0.00018383	0.00003791	0.00003789	0.00000001	0.00027313	0.00004209	0.00004207	0.00000001
615370.00	2378940.00	0.00026188	0.0000345	0.00003449	0.00000001	0.00048578	0.00003816	0.00003815	0.00000001
615870.00	2378940.00	0.00022308	0.00003279	0.00003278	0.00000001	0.00045702	0.00003642	0.00003641	0.00000001
616370.00	2378940.00	0.00027075	0.00003093	0.00003092	0.00000001	0.00046608	0.00003426	0.00003425	0.00000001
616870.00	2378940.00	0.00017767	0.00003013	0.00003012	0.00000001	0.00028431	0.00003358	0.00003357	0.00000001
617370.00	2378940.00	0.00031988	0.0000278	0.00002779	0.00000001	0.00039968	0.00003063	0.00003062	0.00000001
617870.00	2378940.00	0.00023188	0.0000268	0.00002679	0.00000001	0.00046392	0.00002975	0.00002974	0.00000001
618370.00	2378940.00	0.00023933	0.00002563	0.00002561	0.00000001	0.00046536	0.00002837	0.00002836	0.00000001
618870.00	2378940.00	0.00023914	0.00002457	0.00002456	0.00000001	0.0004295	0.00002712	0.00002711	0.00000001
619370.00	2378940.00	0.00024897	0.00002361	0.0000236	0.00000001	0.00042319	0.00002596	0.00002595	0.00000001
619870.00	2378940.00	0.00024845	0.00002279	0.00002278	0.00000001	0.000422	0.00002497	0.00002496	0.00000001
590370.00	2379440.00	0.00019206	0.0000852	0.00008517	0.00000002	0.00022695	0.00009008	0.00009006	0.00000002
590870.00	2379440.00	0.0001947	0.00008536	0.00008534	0.00000002	0.00023334	0.00008983	0.00008982	0.00000002
591370.00	2379440.00	0.00020713	0.00008441	0.0000844	0.00000002	0.00024698	0.00008859	0.00008857	0.00000002
591870.00	2379440.00	0.00018871	0.00008247	0.00008246	0.00000001	0.00022701	0.00008662	0.00008661	0.00000001
592370.00	2379440.00	0.00033168	0.00008623	0.00008621	0.00000001	0.00027858	0.0000897	0.00008969	0.00000001
592870.00	2379440.00	0.00066583	0.00008737	0.00008736	0.00000001	0.00034475	0.00009094	0.00009093	0.00000001
593370.00	2379440.00	0.00094409	0.00008757	0.00008755	0.00000001	0.00042692	0.00009137	0.00009136	0.00000001
593870.00	2379440.00	0.00121076	0.00008823	0.00008822	0.00000001	0.00060121	0.00009203	0.00009202	0.00000001
594370.00	2379440.00	0.00109061	0.00008806	0.00008805	0.00000001	0.00050884	0.00009152	0.00009152	0.00000001
594870.00	2379440.00	0.00111485	0.00008893	0.00008892	0.00000001	0.00054484	0.00009206	0.00009205	0.00000001
595370.00	2379440.00	0.00112957	0.0000907	0.00009069	0.00000001	0.00075482	0.00009358	0.00009357	0.00000001
595870.00	2379440.00	0.00107431	0.00009209	0.00009208	0.00000001	0.00054515	0.00009422	0.00009421	0.00000001
596370.00	2379440.00	0.00106243	0.00009457	0.00009456	0.00000001	0.00055026	0.00009618	0.00009617	0.00000001
596870.00	2379440.00	0.00104097	0.00009761	0.0000976	0.00000001	0.00054232	0.00009868	0.00009867	0.00000001
597370.00	2379440.00	0.00107578	0.00010149	0.00010148	0.00000001	0.0006176	0.00010228	0.00010228	0.00000001
597870.00	2379440.00	0.00105209	0.00010564	0.00010563	0.00000001	0.00057759	0.00010623	0.00010622	0.00000001
598370.00	2379440.00	0.00072148	0.00010969	0.00010968	0.00000001	0.00050389	0.00011074	0.00011073	0.00000001
598870.00	2379440.00	0.00070342	0.00011411	0.0001141	0.00000001	0.00049297	0.00011566	0.00011565	0.00000001
599370.00	2379440.00	0.00069937	0.0001179	0.00011789	0.00000001	0.00049972	0.00012058	0.00012057	0.00000001
599870.00	2379440.00	0.00069385	0.00012037	0.00012036	0.00000001	0.0005075	0.00012452	0.00012451	0.00000001
600370.00	2379440.00	0.00068235	0.00012101	0.000121	0.00000001	0.00051111	0.00012668	0.00012667	0.00000001
600870.00	2379440.00	0.00064318	0.00011976	0.00011975	0.00000001	0.00048668	0.00012633	0.00012632	0.00000001
601370.00	2379440.00	0.00046215	0.00011632	0.00011631	0.00000001	0.00096478	0.00012886	0.00012885	0.00000001
601870.00	2379440.00	0.00044092	0.00011225	0.00011224	0.00000001	0.00088882	0.00012426	0.00012425	0.00000001
602370.00	2379440.00	0.00027869	0.00010781	0.0001078	0.00000001	0.00048746	0.00012128	0.00012127	0.00000001
602870.00	2379440.00	0.00030562	0.00010277	0.00010276	0.00000001	0.000643	0.00011374	0.00011373	0.00000001
603370.00	2379440.00	0.0002688	0.00009814	0.00009813	0.00000001	0.00053294	0.00010854	0.00010853	0.00000001
603870.00	2379440.00	0.00029957	0.00009374	0.00009373	0.00000001	0.00063478	0.0001023	0.00010229	0.00000001
604370.00	2379440.00	0.00026514	0.00008985	0.00008984	0.00000001	0.0005603	0.00009815	0.00009814	0.00000001
604870.00	2379440.00	0.00026394	0.00008631	0.0000863	0.00000001	0.00056093	0.00009405	0.00009403	0.00000001
605370.00	2379440.00	0.00023118	0.00008314	0.00008313	0.00000001	0.00046012	0.00009117	0.00009116	0.00000001
605870.00	2379440.00	0.00027041	0.00008029	0.00008028	0.00000001	0.00055793	0.00008732	0.00008731	0.00000001
606370.00	2379440.00	0.00036156	0.00007798	0.00007797	0.00000001	0.0004969	0.00008364	0.00008363	0.00000001
606870.00	2379440.00	0.00022436	0.00007509	0.00007507	0.00000001	0.00044707	0.00008256	0.00008254	0.00000001
607370.00	2379440.00	0.00021092	0.00007268	0.00007267	0.00000001	0.00039277	0.00008028	0.00008027	0.00000001
607870.00	2379440.00	0.00028576	0.00007047	0.00007046	0.00000001	0.00051168	0.00007668	0.00007667	0.00000001
608370.00	2379440.00	0.00038547	0.00006842	0.00006841	0.00000001	0.00055208	0.00007393	0.00007392	0.00000001
608870.00	2379440.00	0.00021355	0.00006581	0.00006579	0.00000001	0.00040475	0.00007257	0.00007255	0.00000001
609370.00	2379440.00	0.00041213	0.0000637	0.00006369	0.00000001	0.00051165	0.00006866	0.00006865	0.00000001
609870.00	2379440.00	0.00026393	0.00006118	0.00006117	0.00000001	0.0005537	0.0000668	0.00006679	0.00000001
610370.00	2379440.00	0.00029852	0.00005883	0.00005882	0.00000001	0.0005784	0.00006396	0.00006395	0.00000001
610870.00	2379440.00	0.00036373	0.00005645	0.00005644	0.00000001	0.00055322	0.00006105	0.00006104	0.00000001
611370.00	2379440.00	0.0002491	0.00005399	0.00005398	0.00000001	0.00053232	0.00005893	0.00005892	0.00000001
611870.00	2379440.00	0.00023074	0.00005158	0.00005157	0.00000001	0.00048307	0.00005641	0.0000564	0.00000001
612370.00	2379440.00	0.00018829	0.00004953	0.00004952	0.00000001	0.00028319	0.00005459	0.00005457	0.00000001
612870.00	2379440.00	0.00024319	0.00004679	0.00004678	0.00000001	0.00052185	0.00005117	0.00005116	0.00000001
613370.00	2379440.00	0.00018844	0.00004469	0.00004467	0.00000001	0.00029684	0.00004922	0.00004921	0.00000001
613870.00	2379440.00	0.00012332	0.00002825	0.00002824	0.00000001	0.00019234	0.00003154	0.00003153	0.00000001
614370.00	2379440.00	0.00014903	0.00003468	0.00003467	0.00000001	0.00021966	0.00003867	0.00003866	0.00000001
614870.00	2379440.00	0.00020078	0.00003793	0.00003791	0.00000001	0.00037972	0.0000419	0.00004189	0.00000001
615370.00	2379440.00	0.00018488	0.00003613	0.00003612	0.00000001	0.00030702	0.00004002	0.00004001	0.00000001
615870.00	2379440.00	0.00036442	0.00003343	0.00003342	0.00000001	0.00031569	0.0000366	0.00003659	0.00000001
616370.00	2379440.00	0.00017582	0.00003336	0.00003334	0.00000001	0.0002637	0.00003702	0.00003701	0.00000001
616870.00	2379440.00	0.0002048	0.00003065	0.00003063	0.00000001	0.00041171	0.00003405	0.00003404	0.00000001
617370.00	2379440.00	0.00019403	0.00002923	0.00002922	0.00000001	0.00037536	0.00003252	0.00003251	0.00000001
617870.00	2379440.00	0.0002207	0.00002771	0.0000277	0.00000001	0.00044822	0.00003075	0.00003074	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2379440.00	0.00016926	0.00002742	0.00002741	0.00000001	0.00026179	0.00003047	0.00003046	0.00000001
618870.00	2379440.00	0.00021886	0.00002535	0.00002534	0.00000001	0.00042691	0.00002806	0.00002805	0.00000001
619370.00	2379440.00	0.00024528	0.00002425	0.00002424	0.00000001	0.00041579	0.00002669	0.00002668	0.00000001
619870.00	2379440.00	0.00024459	0.00002335	0.00002334	0.00000001	0.00041418	0.00002563	0.00002562	0.00000001
590370.00	2379940.00	0.00019616	0.00008569	0.00008567	0.00000002	0.00023371	0.00009042	0.0000904	0.00000002
590870.00	2379940.00	0.00019341	0.00008363	0.00008361	0.00000002	0.00023238	0.00008789	0.00008787	0.00000002
591370.00	2379940.00	0.00018706	0.00008184	0.00008183	0.00000002	0.00022551	0.00008588	0.00008586	0.00000002
591870.00	2379940.00	0.00017988	0.00008031	0.0000803	0.00000001	0.00021684	0.00008431	0.0000843	0.00000001
592370.00	2379940.00	0.00036149	0.00008477	0.00008476	0.00000001	0.00028119	0.00008802	0.00008801	0.00000001
592870.00	2379940.00	0.00074866	0.00008575	0.00008574	0.00000001	0.00036435	0.00008922	0.00008921	0.00000001
593370.00	2379940.00	0.00094267	0.00008573	0.00008572	0.00000001	0.00042553	0.00008939	0.00008938	0.00000001
593870.00	2379940.00	0.00111943	0.00008607	0.00008606	0.00000001	0.00052428	0.00008964	0.00008963	0.00000001
594370.00	2379940.00	0.00109108	0.00008619	0.00008618	0.00000001	0.0005151	0.00008954	0.00008953	0.00000001
594870.00	2379940.00	0.00055262	0.00008794	0.00008793	0.00000001	0.00127023	0.00009193	0.00009192	0.00000001
595370.00	2379940.00	0.00106604	0.00008801	0.000088	0.00000001	0.00052756	0.0000906	0.0000906	0.00000001
595870.00	2379940.00	0.00104674	0.0000897	0.00008969	0.00000001	0.00052706	0.0000918	0.0000918	0.00000001
596370.00	2379940.00	0.00101497	0.00009189	0.00009188	0.00000001	0.00051277	0.00009346	0.00009345	0.00000001
596870.00	2379940.00	0.00099238	0.00009469	0.00009468	0.00000001	0.00050591	0.00009574	0.00009573	0.00000001
597370.00	2379940.00	0.00102884	0.00009827	0.00009826	0.00000001	0.00055162	0.00009897	0.00009896	0.00000001
597870.00	2379940.00	0.00102774	0.00010224	0.00010223	0.00000001	0.00056077	0.00010274	0.00010274	0.00000001
598370.00	2379940.00	0.00071167	0.00010609	0.00010608	0.00000001	0.00049793	0.00010701	0.000107	0.00000001
598870.00	2379940.00	0.00071634	0.00011046	0.00011045	0.00000001	0.0005096	0.00011193	0.00011192	0.00000001
599370.00	2379940.00	0.0007386	0.00011434	0.00011433	0.00000001	0.000542	0.00011705	0.00011704	0.00000001
599870.00	2379940.00	0.00068414	0.00011712	0.00011711	0.00000001	0.00049624	0.00012066	0.00012065	0.00000001
600370.00	2379940.00	0.0006744	0.00011836	0.00011835	0.00000001	0.00049876	0.00012334	0.00012333	0.00000001
600870.00	2379940.00	0.00063808	0.00011781	0.0001178	0.00000001	0.0004799	0.0001238	0.00012379	0.00000001
601370.00	2379940.00	0.00046828	0.0001151	0.00011509	0.00000001	0.00095917	0.00012708	0.00012707	0.00000001
601870.00	2379940.00	0.00044597	0.00011156	0.00011155	0.00000001	0.00090759	0.00012333	0.00012333	0.00000001
602370.00	2379940.00	0.00039273	0.00010719	0.00010718	0.00000001	0.00076212	0.00011836	0.00011835	0.00000001
602870.00	2379940.00	0.00038014	0.00010259	0.00010258	0.00000001	0.00072265	0.00011261	0.0001126	0.00000001
603370.00	2379940.00	0.00034102	0.00009803	0.00009801	0.00000001	0.00068655	0.0001072	0.00010719	0.00000001
603870.00	2379940.00	0.00044509	0.0000937	0.00009369	0.00000001	0.00055203	0.00010017	0.00010016	0.00000001
604370.00	2379940.00	0.00034736	0.00008982	0.00008981	0.00000001	0.00061827	0.00009687	0.00009686	0.00000001
604870.00	2379940.00	0.00023496	0.00008628	0.00008627	0.00000001	0.00046268	0.00009453	0.00009452	0.00000001
605370.00	2379940.00	0.00022601	0.00008306	0.00008305	0.00000001	0.00044029	0.00009102	0.00009101	0.00000001
605870.00	2379940.00	0.00025927	0.00008015	0.00008014	0.00000001	0.00054348	0.0000871	0.00008709	0.00000001
606370.00	2379940.00	0.00020457	0.00007756	0.00007754	0.00000001	0.00036017	0.0000856	0.00008559	0.00000001
606870.00	2379940.00	0.00019777	0.00007524	0.00007523	0.00000001	0.00032588	0.00008335	0.00008334	0.00000001
607370.00	2379940.00	0.00023591	0.00007267	0.00007266	0.00000001	0.0004843	0.00007952	0.00007951	0.00000001
607870.00	2379940.00	0.00030725	0.0000706	0.00007059	0.00000001	0.00049079	0.00007635	0.00007634	0.00000001
608370.00	2379940.00	0.00037235	0.0000686	0.00006858	0.00000001	0.00038251	0.00007333	0.00007332	0.00000001
608870.00	2379940.00	0.00024998	0.00006608	0.00006607	0.00000001	0.00052787	0.00007226	0.00007225	0.00000001
609370.00	2379940.00	0.00030373	0.00006395	0.00006394	0.00000001	0.00056726	0.00006946	0.00006945	0.00000001
609870.00	2379940.00	0.00021649	0.00006163	0.00006162	0.00000001	0.00042677	0.00006763	0.00006761	0.00000001
610370.00	2379940.00	0.00018857	0.00006008	0.00006007	0.00000001	0.00027981	0.00006654	0.00006653	0.00000001
610870.00	2379940.00	0.00018742	0.00005758	0.00005757	0.00000001	0.00027922	0.00006363	0.00006361	0.00000001
611370.00	2379940.00	0.00047126	0.00005482	0.00005481	0.00000001	0.00041047	0.00005868	0.00005867	0.00000001
611870.00	2379940.00	0.00020146	0.00005251	0.0000525	0.00000001	0.00036303	0.00005755	0.00005754	0.00000001
612370.00	2379940.00	0.00023771	0.00005017	0.00005016	0.00000001	0.00050649	0.00005469	0.00005468	0.00000001
612870.00	2379940.00	0.00028388	0.00004787	0.00004786	0.00000001	0.00056639	0.00005201	0.000052	0.00000001
613370.00	2379940.00	0.00034094	0.00004558	0.00004556	0.00000001	0.00055123	0.00004941	0.0000494	0.00000001
613870.00	2379940.00	0.00013059	0.00003194	0.00003193	0.00000001	0.00019881	0.00003562	0.00003561	0.00000001
614370.00	2379940.00	0.00014938	0.00003614	0.00003612	0.00000001	0.00021898	0.00004019	0.00004017	0.00000001
614870.00	2379940.00	0.00018816	0.0000392	0.00003919	0.00000001	0.00032364	0.00004319	0.00004318	0.00000001
615370.00	2379940.00	0.00030601	0.00003681	0.0000368	0.00000001	0.00042296	0.00004027	0.00004026	0.00000001
615870.00	2379940.00	0.00018879	0.00003528	0.00003527	0.00000001	0.0003384	0.000039	0.00003899	0.00000001
616370.00	2379940.00	0.00029853	0.00003307	0.00003306	0.00000001	0.00042133	0.00003633	0.00003632	0.00000001
616870.00	2379940.00	0.00018154	0.0000319	0.00003189	0.00000001	0.00031495	0.00003538	0.00003537	0.00000001
617370.00	2379940.00	0.00021586	0.00003007	0.00003006	0.00000001	0.00043862	0.0000333	0.00003329	0.00000001
617870.00	2379940.00	0.00017059	0.00002924	0.00002923	0.00000001	0.00027045	0.00003246	0.00003245	0.00000001
618370.00	2379940.00	0.00017043	0.00002785	0.00002784	0.00000001	0.00027684	0.00003094	0.00003093	0.00000001
618870.00	2379940.00	0.00018769	0.00002629	0.00002628	0.00000001	0.00036317	0.00002919	0.00002918	0.00000001
619370.00	2379940.00	0.00017183	0.00002543	0.00002542	0.00000001	0.00029494	0.00002824	0.00002823	0.00000001
619870.00	2379940.00	0.00023653	0.00002398	0.00002397	0.00000001	0.00040812	0.00002637	0.00002636	0.00000001
590370.00	2380440.00	0.0002422	0.00008623	0.00008621	0.00000002	0.00026763	0.00009052	0.0000905	0.00000002
590870.00	2380440.00	0.00027421	0.00008493	0.00008491	0.00000002	0.00027267	0.00008866	0.00008864	0.00000002
591370.00	2380440.00	0.00049338	0.00008561	0.0000856	0.00000002	0.00031313	0.00008873	0.00008871	0.00000002
591870.00	2380440.00	0.00022486	0.00008185	0.00008184	0.00000001	0.00024992	0.00008546	0.00008544	0.00000001
592370.00	2380440.00	0.00021753	0.00008086	0.00008084	0.00000001	0.00024124	0.00008455	0.00008454	0.00000001
592870.00	2380440.00	0.00026016	0.00008117	0.00008116	0.00000001	0.00024764	0.00008455	0.00008454	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2380440.00	0.00030502	0.00008127	0.00008126	0.00000001	0.0002533	0.00008449	0.00008448	0.00000001
593870.00	2380440.00	0.00048163	0.00008233	0.00008232	0.00000001	0.00028701	0.00008535	0.00008534	0.00000001
594370.00	2380440.00	0.00112225	0.00008454	0.00008453	0.00000001	0.00055652	0.00008782	0.00008781	0.00000001
594870.00	2380440.00	0.00112564	0.00008537	0.00008536	0.00000001	0.00068222	0.00008842	0.00008841	0.00000001
595370.00	2380440.00	0.00104151	0.00008593	0.00008592	0.00000001	0.00051311	0.00008845	0.00008845	0.00000001
595870.00	2380440.00	0.00104009	0.00008755	0.00008754	0.00000001	0.00053158	0.00008963	0.00008963	0.00000001
596370.00	2380440.00	0.00099458	0.00008947	0.00008946	0.00000001	0.00050132	0.00009104	0.00009103	0.00000001
596870.00	2380440.00	0.00101122	0.00009219	0.00009218	0.00000001	0.00053121	0.00009331	0.0000933	0.00000001
597370.00	2380440.00	0.00102323	0.00009542	0.00009541	0.00000001	0.00056089	0.00009618	0.00009617	0.00000001
597870.00	2380440.00	0.00103508	0.00009922	0.00009921	0.00000001	0.00063597	0.00009985	0.00009984	0.00000001
598370.00	2380440.00	0.00072696	0.00010284	0.00010283	0.00000001	0.00054034	0.0001038	0.00010379	0.00000001
598870.00	2380440.00	0.00073361	0.00010703	0.00010702	0.00000001	0.00055641	0.00010852	0.00010851	0.00000001
599370.00	2380440.00	0.0007016	0.00011079	0.00011078	0.00000001	0.00050067	0.0001128	0.00011279	0.00000001
599870.00	2380440.00	0.00067348	0.00011385	0.00011384	0.00000001	0.00048463	0.00011684	0.00011683	0.00000001
600370.00	2380440.00	0.00070735	0.00011557	0.00011556	0.00000001	0.00052223	0.00012027	0.00012026	0.00000001
600870.00	2380440.00	0.0007077	0.00011554	0.00011553	0.00000001	0.00054479	0.00012171	0.0001217	0.00000001
601370.00	2380440.00	0.00042144	0.00011364	0.00011363	0.00000001	0.00095224	0.00012543	0.00012542	0.00000001
601870.00	2380440.00	0.00045329	0.0001107	0.00011069	0.00000001	0.00090334	0.00012211	0.0001221	0.00000001
602370.00	2380440.00	0.00041334	0.00010676	0.00010675	0.00000001	0.00076315	0.00011763	0.00011762	0.00000001
602870.00	2380440.00	0.00036081	0.00010239	0.00010238	0.00000001	0.00072599	0.00011268	0.00011267	0.00000001
603370.00	2380440.00	0.00035817	0.00009796	0.00009795	0.00000001	0.00068824	0.00010701	0.000107	0.00000001
603870.00	2380440.00	0.00033489	0.0000937	0.00009369	0.00000001	0.00065536	0.00010186	0.00010185	0.00000001
604370.00	2380440.00	0.00025137	0.00008985	0.00008983	0.00000001	0.00050708	0.00009836	0.00009835	0.00000001
604870.00	2380440.00	0.00026498	0.00008619	0.00008618	0.00000001	0.00056105	0.00009365	0.00009364	0.00000001
605370.00	2380440.00	0.00027844	0.00008296	0.00008295	0.00000001	0.00057384	0.00008971	0.0000897	0.00000001
605870.00	2380440.00	0.00039668	0.00008037	0.00008036	0.00000001	0.00046342	0.00008526	0.00008525	0.00000001
606370.00	2380440.00	0.00029732	0.00007748	0.00007747	0.00000001	0.00054485	0.00008349	0.00008348	0.00000001
606870.00	2380440.00	0.00024985	0.00007493	0.00007492	0.00000001	0.00051503	0.00008145	0.00008144	0.00000001
607370.00	2380440.00	0.00021612	0.00007261	0.0000726	0.00000001	0.00042885	0.00007955	0.00007954	0.00000001
607870.00	2380440.00	0.00019061	0.00007066	0.00007065	0.00000001	0.00030777	0.00007825	0.00007824	0.00000001
608370.00	2380440.00	0.00018831	0.00006865	0.00006864	0.00000001	0.00029514	0.0000761	0.00007609	0.00000001
608870.00	2380440.00	0.00025058	0.00006625	0.00006623	0.00000001	0.00052744	0.00007229	0.00007227	0.00000001
609370.00	2380440.00	0.00018715	0.00006494	0.00006493	0.00000001	0.00028148	0.00007205	0.00007204	0.00000001
609870.00	2380440.00	0.00042689	0.00006221	0.0000622	0.00000001	0.00046057	0.00006667	0.00006666	0.00000001
610370.00	2380440.00	0.00024997	0.00005985	0.00005984	0.00000001	0.0005234	0.00006518	0.00006517	0.00000001
610870.00	2380440.00	0.00022925	0.00005767	0.00005766	0.00000001	0.00047858	0.00006291	0.0000629	0.00000001
611370.00	2380440.00	0.00018357	0.00005591	0.0000559	0.00000001	0.00027455	0.00006162	0.00006161	0.00000001
611870.00	2380440.00	0.00018315	0.0000536	0.00005359	0.00000001	0.00027627	0.00005897	0.00005896	0.00000001
612370.00	2380440.00	0.00018478	0.00005121	0.0000512	0.00000001	0.00029061	0.00005621	0.0000562	0.00000001
612870.00	2380440.00	0.00023674	0.00004883	0.00004882	0.00000001	0.00050424	0.00005311	0.0000531	0.00000001
613370.00	2380440.00	0.00030074	0.00004662	0.00004661	0.00000001	0.00055659	0.0000505	0.00005049	0.00000001
613870.00	2380440.00	0.0001203	0.00002955	0.00002954	0.00000001	0.00018714	0.00003288	0.00003287	0.00000001
614370.00	2380440.00	0.0001794	0.00004337	0.00004336	0.00000001	0.00026438	0.00004778	0.00004777	0.00000001
614870.00	2380440.00	0.00017996	0.00004186	0.00004185	0.00000001	0.000268	0.00004626	0.00004625	0.00000001
615370.00	2380440.00	0.00031212	0.00003796	0.00003795	0.00000001	0.00040099	0.00004134	0.00004133	0.00000001
615870.00	2380440.00	0.00029739	0.00003604	0.00003603	0.00000001	0.00041852	0.00003937	0.00003936	0.00000001
616370.00	2380440.00	0.00029635	0.00003419	0.00003418	0.00000001	0.00041424	0.00003743	0.00003742	0.00000001
616870.00	2380440.00	0.00017081	0.00003336	0.00003335	0.00000001	0.00026061	0.00003686	0.00003685	0.00000001
617370.00	2380440.00	0.00021939	0.00003105	0.00003104	0.00000001	0.00044088	0.00003427	0.00003426	0.00000001
617870.00	2380440.00	0.0002986	0.0000293	0.00002929	0.00000001	0.00039309	0.00003218	0.00003217	0.00000001
618370.00	2380440.00	0.00032726	0.00002779	0.00002778	0.00000001	0.00034139	0.00003042	0.00003041	0.00000001
618870.00	2380440.00	0.00016537	0.00002836	0.00002835	0.00000001	0.00025135	0.00003142	0.00003141	0.00000001
619370.00	2380440.00	0.00016685	0.00002627	0.00002626	0.00000001	0.00027451	0.00002913	0.00002912	0.00000001
619870.00	2380440.00	0.00021727	0.00002472	0.00002471	0.00000001	0.00043151	0.00002726	0.00002725	0.00000001
590370.00	2380940.00	0.00031331	0.00008552	0.0000855	0.00000002	0.00028066	0.00008922	0.0000892	0.00000002
590870.00	2380940.00	0.00033731	0.00008408	0.00008407	0.00000002	0.00028357	0.00008732	0.0000873	0.00000002
591370.00	2380940.00	0.00090418	0.00008516	0.00008514	0.00000002	0.00041455	0.00008849	0.00008848	0.00000002
591870.00	2380940.00	0.00049528	0.00008289	0.00008288	0.00000001	0.00030409	0.00008583	0.00008581	0.00000001
592370.00	2380940.00	0.00072017	0.00008286	0.00008285	0.00000001	0.00035326	0.00008598	0.00008596	0.00000001
592870.00	2380940.00	0.00063863	0.00008202	0.00008201	0.00000001	0.00032901	0.00008515	0.00008514	0.00000001
593370.00	2380940.00	0.00070673	0.00008172	0.00008171	0.00000001	0.00034633	0.0000849	0.00008489	0.00000001
593870.00	2380940.00	0.00092158	0.00008205	0.00008204	0.00000001	0.00042203	0.0000853	0.00008529	0.00000001
594370.00	2380940.00	0.00031706	0.00008395	0.00008394	0.00000001	0.00100503	0.00008824	0.00008823	0.00000001
594870.00	2380940.00	0.00107651	0.00008322	0.00008321	0.00000001	0.00054397	0.00008609	0.00008608	0.00000001
595370.00	2380940.00	0.00104671	0.0000841	0.00008409	0.00000001	0.00053157	0.0000866	0.00008659	0.00000001
595870.00	2380940.00	0.00102798	0.00008548	0.00008547	0.00000001	0.00053114	0.00008756	0.00008755	0.00000001
596370.00	2380940.00	0.0010389	0.00008755	0.00008754	0.00000001	0.00060866	0.00008923	0.00008922	0.00000001
596870.00	2380940.00	0.00098859	0.00009012	0.00009011	0.00000001	0.00075108	0.00009149	0.00009149	0.00000001
597370.00	2380940.00	0.00100428	0.00009269	0.00009268	0.00000001	0.00056621	0.00009345	0.00009344	0.00000001
597870.00	2380940.00	0.00069002	0.00009568	0.00009567	0.00000001	0.00048418	0.00009649	0.00009648	0.00000001

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2380940.00	0.00068221	0.00009942	0.00009941	0.00000001	0.00047465	0.00010011	0.0001001	0.00000001
598870.00	2380940.00	0.00067702	0.00010343	0.00010342	0.00000001	0.00047136	0.00010433	0.00010433	0.00000001
599370.00	2380940.00	0.00065524	0.00010728	0.00010727	0.00000001	0.00045804	0.00010867	0.00010866	0.00000001
599870.00	2380940.00	0.00063505	0.00011056	0.00011055	0.00000001	0.000452	0.00011284	0.00011283	0.00000001
600370.00	2380940.00	0.0006475	0.00011275	0.00011274	0.00000001	0.00046891	0.0001164	0.00011639	0.00000001
600870.00	2380940.00	0.0005907	0.00011336	0.00011335	0.00000001	0.00044079	0.00011794	0.00011793	0.00000001
601370.00	2380940.00	0.00030087	0.00011226	0.00011225	0.00000001	0.00050884	0.00012492	0.00012491	0.00000001
601870.00	2380940.00	0.00037967	0.0001096	0.00010959	0.00000001	0.00086753	0.00012126	0.00012125	0.00000001
602370.00	2380940.00	0.00039928	0.00010619	0.00010618	0.00000001	0.00086436	0.00011717	0.00011716	0.00000001
602870.00	2380940.00	0.00032609	0.00010212	0.00010211	0.00000001	0.00068573	0.00011282	0.00011281	0.00000001
603370.00	2380940.00	0.00050432	0.00009775	0.00009774	0.00000001	0.00052142	0.00010452	0.00010451	0.00000001
603870.00	2380940.00	0.00040067	0.00009369	0.00009367	0.00000001	0.00061455	0.00010119	0.00010118	0.00000001
604370.00	2380940.00	0.00024912	0.00008984	0.00008982	0.00000001	0.00049429	0.00009841	0.0000984	0.00000001
604870.00	2380940.00	0.00022838	0.00008625	0.00008624	0.00000001	0.00043006	0.00009454	0.00009453	0.00000001
605370.00	2380940.00	0.00030128	0.00008289	0.00008287	0.00000001	0.00057983	0.0000892	0.00008919	0.00000001
605870.00	2380940.00	0.0003225	0.00008002	0.00008	0.00000001	0.00054836	0.00008572	0.00008571	0.00000001
606370.00	2380940.00	0.00034807	0.00007747	0.00007746	0.00000001	0.00050032	0.00008263	0.00008262	0.00000001
606870.00	2380940.00	0.00034915	0.0000751	0.00007509	0.00000001	0.00047509	0.0000801	0.00008009	0.00000001
607370.00	2380940.00	0.00019124	0.0000727	0.00007269	0.00000001	0.00031954	0.00008021	0.0000802	0.00000001
607870.00	2380940.00	0.0003024	0.00007054	0.00007053	0.00000001	0.00048535	0.00007593	0.00007592	0.00000001
608370.00	2380940.00	0.00025343	0.00006831	0.0000683	0.00000001	0.00049025	0.00007419	0.00007418	0.00000001
608870.00	2380940.00	0.00026015	0.00006636	0.00006635	0.00000001	0.00053808	0.00007216	0.00007215	0.00000001
609370.00	2380940.00	0.00021753	0.00006427	0.00006426	0.00000001	0.00044283	0.00007031	0.0000703	0.00000001
609870.00	2380940.00	0.00021209	0.00006225	0.00006224	0.00000001	0.00042244	0.00006812	0.00006811	0.00000001
610370.00	2380940.00	0.000186	0.00006029	0.00006027	0.00000001	0.00030538	0.00006638	0.00006637	0.00000001
610870.00	2380940.00	0.0002656	0.00005817	0.00005816	0.00000001	0.00053434	0.00006308	0.00006307	0.00000001
611370.00	2380940.00	0.00044408	0.00005613	0.00005612	0.00000001	0.00041094	0.00005992	0.00005991	0.00000001
611870.00	2380940.00	0.00022985	0.00005394	0.00005393	0.00000001	0.0004832	0.00005864	0.00005863	0.00000001
612370.00	2380940.00	0.00017958	0.00005213	0.00005212	0.00000001	0.00027148	0.00005723	0.00005722	0.00000001
612870.00	2380940.00	0.00017846	0.0000501	0.00005008	0.00000001	0.00026607	0.00005498	0.00005497	0.00000001
613370.00	2380940.00	0.00029987	0.00004756	0.00004755	0.00000001	0.00054522	0.00005137	0.00005136	0.00000001
613870.00	2380940.00	0.00011848	0.00003004	0.00003003	0.00000001	0.00018443	0.00003339	0.00003338	0.00000001
614370.00	2380940.00	0.00014244	0.00003708	0.00003707	0.00000001	0.00020963	0.00004106	0.00004105	0.00000001
614870.00	2380940.00	0.00024235	0.0000412	0.00004119	0.00000001	0.00046207	0.00004482	0.00004481	0.00000001
615370.00	2380940.00	0.00017807	0.00003948	0.00003947	0.00000001	0.00029112	0.0000433	0.00004329	0.00000001
615870.00	2380940.00	0.0002731	0.0000372	0.00003719	0.00000001	0.00043513	0.00004054	0.00004053	0.00000001
616370.00	2380940.00	0.00023197	0.00003544	0.00003543	0.00000001	0.00045155	0.00003881	0.0000388	0.00000001
616870.00	2380940.00	0.000341	0.00003333	0.00003332	0.00000001	0.00031613	0.00003628	0.00003627	0.00000001
617370.00	2380940.00	0.00021563	0.00003207	0.00003206	0.00000001	0.00043323	0.00003529	0.00003528	0.00000001
617870.00	2380940.00	0.00019415	0.00003062	0.00003061	0.00000001	0.00038387	0.00003379	0.00003378	0.00000001
618370.00	2380940.00	0.00029648	0.00002883	0.00002882	0.00000001	0.00038089	0.0000316	0.00003159	0.00000001
618870.00	2380940.00	0.00031721	0.0000274	0.00002739	0.00000001	0.00034241	0.00002997	0.00002996	0.00000001
619370.00	2380940.00	0.00016393	0.00002832	0.0000283	0.00000001	0.00025006	0.00003134	0.00003132	0.00000001
619870.00	2380940.00	0.00017234	0.00002571	0.0000257	0.00000001	0.00030907	0.00002847	0.00002846	0.00000001
588472.38	2364388.75	0.0007908	0.00062584	0.00062563	0.00000021	0.00115322	0.00067295	0.00067282	0.00000013
588972.38	2364388.75	0.00085039	0.00065879	0.00065852	0.00000026	0.00120794	0.00071626	0.00071607	0.00000019
589472.38	2364388.75	0.00089442	0.00065282	0.00065255	0.00000027	0.00125604	0.00073789	0.00073766	0.00000023
589972.38	2364388.75	0.00190988	0.00058399	0.00058376	0.00000023	0.00221088	0.00070631	0.00070608	0.00000022
590472.38	2364388.75	0.00267246	0.00047085	0.00047069	0.00000016	0.00162171	0.00059621	0.00059603	0.00000018
590972.38	2364388.75	0.00276719	0.00036863	0.00036852	0.00000011	0.00147415	0.00046636	0.00046623	0.00000013
588472.38	2364888.75	0.00076742	0.00060064	0.00060041	0.00000023	0.00110906	0.00064797	0.00064781	0.00000015
588972.38	2364888.75	0.00081582	0.00061841	0.00061816	0.00000026	0.00115692	0.00067981	0.00067962	0.0000002
589472.38	2364888.75	0.00084425	0.00059504	0.00059479	0.00000025	0.00119017	0.00068393	0.00068371	0.00000022
589972.38	2364888.75	0.00083048	0.0005163	0.0005161	0.0000002	0.00119922	0.00063218	0.00063198	0.0000002
590472.38	2364888.75	0.00247525	0.00041429	0.00041415	0.00000014	0.00142022	0.00052048	0.00052032	0.00000015
590972.38	2364888.75	0.00156585	0.00032265	0.00032256	0.0000001	0.00090842	0.00039844	0.00039833	0.00000011
588472.38	2365388.75	0.00074364	0.0005744	0.00057417	0.00000023	0.00106896	0.00062321	0.00062305	0.00000016
588972.38	2365388.75	0.00077642	0.0005766	0.00057635	0.00000025	0.00109361	0.00063971	0.00063951	0.0000002
589472.38	2365388.75	0.00079191	0.00053981	0.00053958	0.00000023	0.00111377	0.00062842	0.00062821	0.00000021
589972.38	2365388.75	0.0007927	0.0004701	0.00046992	0.00000018	0.00115186	0.00057863	0.00057844	0.00000019
590472.38	2365388.75	0.00077785	0.00037169	0.00037156	0.00000013	0.00148479	0.00047368	0.00047354	0.00000014
590972.38	2365388.75	0.00273761	0.00030302	0.00030293	0.00000009	0.00155687	0.00037086	0.00037076	0.0000001
588472.38	2365888.75	0.00071782	0.00054643	0.00054619	0.00000023	0.00102516	0.000596	0.00059583	0.00000017
588972.38	2365888.75	0.00073268	0.00053537	0.00053513	0.00000024	0.00102756	0.00059952	0.00059933	0.0000002
589472.38	2365888.75	0.00074622	0.00049043	0.00049022	0.00000021	0.00105291	0.00057765	0.00057746	0.00000019
589972.38	2365888.75	0.00073116	0.00041549	0.00041533	0.00000016	0.0010757	0.00051385	0.00051369	0.00000016
590472.38	2365888.75	0.00071065	0.00034493	0.00034481	0.00000012	0.00110045	0.00043495	0.00043482	0.00000013
590972.38	2365888.75	0.00070807	0.00028078	0.0002807	0.00000009	0.00146345	0.00034939	0.0003493	0.00000009
588472.38	2366388.75	0.00069161	0.00051799	0.00051777	0.00000023	0.00098352	0.00056896	0.00056879	0.00000018
588972.38	2366388.75	0.00070575	0.00049767	0.00049745	0.00000022	0.00099172	0.00056438	0.00056419	0.00000019

Hg (0) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
589472.38	2366388.75	0.00074639	0.00044015	0.00043997	0.00000018	0.00150123	0.00052446	0.00052429	0.00000018
589972.38	2366388.75	0.00069051	0.00037208	0.00037194	0.00000014	0.00110712	0.00046019	0.00046004	0.00000015
590472.38	2366388.75	0.00066714	0.0003106	0.0003105	0.0000001	0.00106854	0.00038834	0.00038822	0.00000011
590972.38	2366388.75	0.00066548	0.00026028	0.0002602	0.00000008	0.00134621	0.00031955	0.00031946	0.00000008
588472.38	2366888.75	0.00066249	0.00048865	0.00048843	0.00000022	0.00093709	0.00054046	0.00054028	0.00000018
588972.38	2366888.75	0.00067221	0.0004606	0.0004604	0.0000002	0.0009466	0.00052774	0.00052756	0.00000018
589472.38	2366888.75	0.00079156	0.00040102	0.00040086	0.00000016	0.00179378	0.00048053	0.00048037	0.00000016
589972.38	2366888.75	0.00188922	0.00033488	0.00033476	0.00000012	0.00106789	0.0004043	0.00040417	0.00000013
590472.38	2366888.75	0.00069457	0.00028114	0.00028104	0.00000009	0.00156401	0.00034733	0.00034724	0.0000001
590972.38	2366888.75	0.0006866	0.00024168	0.00024161	0.00000007	0.0016958	0.0002925	0.00029242	0.00000008
591758.19	2356560.25	0.01124535	0.01118836	0.01118777	0.00000059	0.02888529	0.02466717	0.02466689	0.00000028
592258.19	2356560.25	0.00249737	0.00159783	0.00159618	0.00000165	0.02860804	0.02634581	0.02634514	0.00000067
592758.19	2356560.25	0.01311346	0.00125771	0.00124945	0.00000826	0.01316677	0.00444086	0.00443969	0.00000117
593258.19	2356560.25	0.01042468	0.00106892	0.00105898	0.00000994	0.03216004	0.00331159	0.00330132	0.00001027
593758.19	2356560.25	0.00771018	0.00072387	0.00071693	0.00000694	0.02069556	0.00185277	0.00184697	0.0000058
594258.19	2356560.25	0.00595376	0.00049232	0.0004874	0.00000492	0.0137314	0.00102722	0.00102349	0.00000373
591758.19	2357060.25	0.01482353	0.01875752	0.01875658	0.00000094	0.02402616	0.02587427	0.02587399	0.00000028
592258.19	2357060.25	0.00980916	0.00735962	0.00735899	0.00000063	0.03380544	0.04053101	0.04052961	0.0000014
592758.19	2357060.25	0.01020758	0.00571097	0.00571078	0.0000002	0.02494084	0.01643993	0.01643959	0.00000034
593258.19	2357060.25	0.00827277	0.00143751	0.00143713	0.00000039	0.02077692	0.00652315	0.00652292	0.00000023
593758.19	2357060.25	0.00626485	0.00068054	0.0006786	0.00000194	0.01417009	0.00173975	0.00173861	0.00000114
594258.19	2357060.25	0.00446143	0.00044376	0.00044045	0.00000331	0.00939688	0.00089159	0.00088908	0.00000251
591758.19	2357560.25	0.01060096	0.01194469	0.01194323	0.00000146	0.01369638	0.01557413	0.0155738	0.00000033
592258.19	2357560.25	0.00659718	0.00479435	0.00479398	0.00000037	0.01909065	0.01841967	0.01841841	0.00000126
592758.19	2357560.25	0.00723912	0.00475815	0.00475802	0.00000013	0.01272708	0.00764207	0.00764182	0.00000025
593258.19	2357560.25	0.00553818	0.00232476	0.00232464	0.00000012	0.0120586	0.00663336	0.00663322	0.00000014
593758.19	2357560.25	0.00480208	0.0008984	0.00089826	0.00000014	0.00981014	0.00248786	0.00248773	0.00000013
594258.19	2357560.25	0.00393504	0.00046454	0.0004641	0.00000043	0.00733444	0.00098676	0.00098647	0.0000003
591758.19	2358060.25	0.00679139	0.00662306	0.00662209	0.00000097	0.00946012	0.00924732	0.00924669	0.00000063
592258.19	2358060.25	0.00436158	0.00301121	0.00301095	0.00000027	0.01082483	0.00824979	0.00824908	0.00000071
592758.19	2358060.25	0.00508622	0.00293915	0.00293904	0.0000001	0.00768595	0.00415576	0.00415557	0.0000002
593258.19	2358060.25	0.00402585	0.00232778	0.00232769	0.00000009	0.00921071	0.00430227	0.00430216	0.00000011
593758.19	2358060.25	0.00358413	0.00117651	0.00117642	0.00000009	0.00653911	0.00258099	0.00258089	0.0000001
594258.19	2358060.25	0.00315162	0.00057473	0.00057464	0.00000009	0.00573949	0.00124547	0.00124537	0.0000001
591758.19	2358560.25	0.0045205	0.0037745	0.00377389	0.00000061	0.00721799	0.00616084	0.00616014	0.00000071
592258.19	2358560.25	0.00313163	0.00202009	0.00201989	0.0000002	0.00708018	0.00434631	0.00434586	0.00000045
592758.19	2358560.25	0.00359477	0.00187906	0.00187897	0.00000009	0.00532949	0.00254167	0.00254152	0.00000016
593258.19	2358560.25	0.00324878	0.00187989	0.00187982	0.00000007	0.00697188	0.00266588	0.00266579	0.00000009
593758.19	2358560.25	0.00269329	0.00124112	0.00124105	0.00000007	0.00503762	0.00219686	0.00219678	0.00000008
594258.19	2358560.25	0.0025628	0.00070585	0.00070578	0.00000007	0.0043517	0.00132875	0.00132866	0.00000008
591758.19	2359060.25	0.00322794	0.00235736	0.00235694	0.00000041	0.00550352	0.00410109	0.0041005	0.0000006
592258.19	2359060.25	0.00239484	0.00144099	0.00144082	0.00000016	0.00514648	0.00263207	0.00263176	0.00000031
592758.19	2359060.25	0.00260317	0.0013033	0.00130322	0.00000008	0.00408483	0.00172817	0.00172804	0.00000013
593258.19	2359060.25	0.00282026	0.00142788	0.00142782	0.00000006	0.00513305	0.00177771	0.00177763	0.00000008
593758.19	2359060.25	0.00216151	0.00113615	0.00113609	0.00000006	0.00454342	0.00173033	0.00173026	0.00000007
594258.19	2359060.25	0.00202504	0.00075818	0.00075812	0.00000006	0.00338762	0.00123511	0.00123504	0.00000007

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
600239.00	2356326.00	0.0011983	0.00034463	0.00031361	0.00003101	0.00168624	0.00042625	0.00039128	0.00003498
601239.00	2356326.00	0.00103456	0.00029478	0.00026929	0.00002548	0.00143734	0.00035832	0.00032987	0.00002845
602239.00	2356326.00	0.00090972	0.00025805	0.00023639	0.00002167	0.00125224	0.00030942	0.0002854	0.00002402
596178.25	2355631.50	0.00318553	0.00144465	0.0013571	0.00008755	0.00506333	0.00226024	0.00215333	0.00010691
596670.63	2355544.50	0.00270834	0.00119429	0.00111885	0.00007543	0.00415897	0.00178123	0.00169105	0.00009018
597163.06	2355457.75	0.00234291	0.00101028	0.00094414	0.00006613	0.00350534	0.00145238	0.00137474	0.00007764
598147.88	2355284.00	0.00182915	0.00076418	0.00071128	0.0000529	0.00264006	0.00104203	0.00098175	0.00006028
599132.63	2355110.50	0.00149221	0.00061145	0.00056745	0.000044	0.00210605	0.00080416	0.00075506	0.0000491
600117.44	2354936.75	0.00125752	0.00050969	0.00047206	0.00003763	0.00174944	0.00065248	0.00061108	0.0000414
601102.25	2354763.25	0.00108639	0.00043771	0.00040486	0.00003285	0.00149676	0.00054875	0.00051297	0.00003577
602087.06	2354589.50	0.00095646	0.00038425	0.00035512	0.00002913	0.00130874	0.00047386	0.00044236	0.00003149
594823.13	2355385.50	0.00602575	0.00481415	0.00467877	0.00013539	0.01087092	0.00794966	0.00783105	0.00011861
595058.06	2355300.00	0.00533355	0.00419573	0.00407212	0.00012361	0.00936401	0.00669885	0.00658819	0.00011066
595527.94	2355129.00	0.00428787	0.00328077	0.00317568	0.00010509	0.0071772	0.0049454	0.00484845	0.00009695
595997.75	2354958.00	0.00354895	0.00265153	0.00256026	0.00009128	0.00571432	0.00381513	0.00372926	0.00008587
596467.63	2354787.00	0.00300623	0.00220099	0.00212042	0.00008057	0.00468947	0.00304969	0.0029729	0.00007679
596937.44	2354616.00	0.00259451	0.00186727	0.00179521	0.00007206	0.00394392	0.00250863	0.00243927	0.00006936
597877.19	2354274.00	0.00202041	0.00141691	0.00135751	0.0000594	0.00295212	0.00181367	0.00175576	0.0000579
598816.88	2353931.75	0.00164702	0.00113415	0.00108368	0.00005047	0.00233738	0.00140036	0.00135077	0.00004959
599756.56	2353589.75	0.00138762	0.00094387	0.00090005	0.00004382	0.00192689	0.00113456	0.00109124	0.00004332
600696.25	2353247.75	0.00119808	0.00080843	0.00076973	0.0000387	0.0016364	0.00095192	0.0009135	0.00003842
601635.94	2352905.75	0.00105391	0.00070762	0.00067297	0.00003464	0.00142122	0.0008199	0.00078539	0.00003451
593971.06	2355326.00	0.00850594	0.00769677	0.00760956	0.00008721	0.01609438	0.01363403	0.01350997	0.00012405
594187.56	2355201.00	0.00737652	0.00645132	0.00637464	0.00007668	0.01339087	0.01077882	0.01067567	0.00010315
594404.06	2355076.00	0.00647178	0.00548292	0.00541453	0.00006839	0.01134286	0.00871515	0.00862744	0.00008771
594620.56	2354951.00	0.00573845	0.00472037	0.00465876	0.00006161	0.00976821	0.00719835	0.00712223	0.00007612
594837.06	2354826.00	0.00513371	0.00411051	0.00405466	0.00005584	0.0085329	0.00605798	0.00599078	0.0000672
595270.06	2354576.00	0.00420396	0.00321326	0.00316639	0.00004687	0.0067396	0.00449495	0.00444077	0.00005418
595703.13	2354326.00	0.00352962	0.00259843	0.00255818	0.00004025	0.00552439	0.00350317	0.00345791	0.00004526
596136.13	2354076.00	0.00302234	0.00215944	0.00212428	0.00003516	0.00465539	0.00283466	0.00279581	0.00003885
596569.13	2353826.00	0.00262936	0.00183415	0.00180303	0.00003113	0.00400694	0.00236077	0.00232674	0.00003403
597435.13	2353326.00	0.00207197	0.00139691	0.00137172	0.00002519	0.00311365	0.00174531	0.00171816	0.00002715
598301.19	2352826.00	0.00170044	0.00112243	0.00110137	0.00002105	0.00253509	0.00137237	0.00134983	0.00002254
599167.19	2352326.00	0.00143898	0.00093771	0.0009197	0.00001801	0.00213129	0.00112652	0.00110728	0.00001923
600033.25	2351826.00	0.00124715	0.00080662	0.00079093	0.00001569	0.00183521	0.0009546	0.00093786	0.00001674
600899.25	2351326.00	0.00110109	0.00070924	0.00069536	0.00001387	0.00160914	0.00082826	0.00081346	0.0000148
593579.56	2355201.00	0.00928615	0.00919813	0.0090799	0.00011823	0.01502556	0.01234038	0.01217778	0.0001626
593771.06	2355040.50	0.00794855	0.00768662	0.00758412	0.0001025	0.01360072	0.01098286	0.01083875	0.00014411
593962.63	2354879.75	0.00688361	0.00649933	0.00640902	0.00009031	0.01205812	0.00954306	0.00941529	0.00012776
594154.13	2354719.00	0.00602637	0.00555869	0.00547802	0.00008067	0.01062668	0.00822614	0.00811258	0.00011356
594345.63	2354558.25	0.00533022	0.00480775	0.00473496	0.0000728	0.00937278	0.0070914	0.00698986	0.00010154
594537.13	2354397.75	0.004758	0.004201	0.00413482	0.00006618	0.00830274	0.00614186	0.00605045	0.00009142
594920.19	2354076.25	0.00387945	0.00329392	0.00323807	0.00005585	0.00662751	0.0046952	0.00462003	0.00007517
595303.19	2353754.75	0.00324628	0.0026628	0.00261459	0.00004821	0.00542231	0.00369311	0.00362991	0.0000632
595686.19	2353433.50	0.00277507	0.00220774	0.00216543	0.00004231	0.00453768	0.00298509	0.00293088	0.00005422
596069.25	2353112.00	0.00241262	0.001869	0.00183144	0.00003756	0.00387133	0.00247078	0.00242351	0.00004726
596835.25	2352469.25	0.00189917	0.00140885	0.00137836	0.00003049	0.00296109	0.00179442	0.00175718	0.00003725
597601.31	2351826.50	0.00155822	0.00111928	0.00109377	0.00002552	0.00238221	0.00138574	0.00135523	0.00003051
598367.38	2351183.75	0.00131894	0.00092528	0.00090341	0.00002186	0.00198639	0.00112026	0.00109454	0.00002572
599133.38	2350541.00	0.00114371	0.00078831	0.00076924	0.00001907	0.00170049	0.00093733	0.00091517	0.00002216
593138.88	2355253.50	0.00855714	0.00872942	0.00855457	0.00017485	0.00712122	0.00464323	0.00455795	0.00008528
593203.19	2355177.00	0.00814168	0.00821207	0.00804911	0.00016296	0.00740794	0.00466229	0.00457728	0.00008501
593363.88	2354985.50	0.0071691	0.00702585	0.00688693	0.00013892	0.0077697	0.00458817	0.00450424	0.00008393
593524.56	2354794.00	0.00635003	0.0060382	0.00591729	0.00012091	0.00776087	0.00438999	0.00430813	0.00008186
593685.25	2354602.50	0.00567013	0.00523038	0.00512343	0.00010695	0.00752875	0.00412411	0.0040456	0.00007852
593846.00	2354411.00	0.0051023	0.00456883	0.00447291	0.00009592	0.00718764	0.00383456	0.00375995	0.00007461
594006.69	2354219.50	0.00462297	0.00402476	0.00393801	0.00008675	0.00679606	0.00354532	0.00347473	0.00007059
594167.38	2354027.75	0.00421561	0.00357239	0.00349329	0.0000791	0.00639131	0.00326731	0.00320058	0.00006673
594488.75	2353644.75	0.00357007	0.00287748	0.00281034	0.00006714	0.00562509	0.00277667	0.00271739	0.00005928
594810.13	2353261.75	0.00308036	0.00237602	0.00231779	0.00005824	0.00495154	0.00237317	0.0023202	0.00005297
595131.56	2352878.75	0.00269834	0.00200302	0.0019517	0.00005132	0.00437748	0.00204675	0.00199904	0.00004771
595452.94	2352495.75	0.00239487	0.00171833	0.00167254	0.00004579	0.00389206	0.00178221	0.00173893	0.00004328
596095.75	2351729.75	0.00194895	0.0013196	0.00128204	0.00003755	0.00314017	0.00139034	0.00135405	0.00003629
596738.50	2350963.75	0.0016367	0.0010593	0.00102757	0.00003173	0.00259789	0.00112162	0.00109047	0.00003114
597381.31	2350197.75	0.00140468	0.00087822	0.00085079	0.00002744	0.00219545	0.00093046	0.00090323	0.00002723
592839.00	2355286.75	0.00456026	0.0040707	0.00395004	0.00012066	0.00327517	0.0024792	0.0024116	0.0000676
592889.00	2355200.25	0.00435965	0.00384454	0.00373322	0.00011132	0.00324446	0.00233007	0.00226747	0.00006259
592939.00	2355113.50	0.00417035	0.00361971	0.00351644	0.00010327	0.00326695	0.00220584	0.00214727	0.00005857
592989.00	2355027.00	0.00399478	0.00340399	0.00330798	0.00009601	0.00332712	0.00210203	0.00204716	0.00005487
593114.00	2354810.50	0.00360226	0.00292167	0.0028403	0.00008136	0.00353045	0.00190154	0.00185375	0.00004779

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593239.00	2354594.00	0.00329324	0.00252918	0.00245874	0.00007045	0.00369221	0.00174686	0.00170395	0.00004291
593364.00	2354377.50	0.00304207	0.00220768	0.00214562	0.00006205	0.00376358	0.00161389	0.00157482	0.00003907
593489.00	2354161.00	0.00283333	0.00194485	0.00188942	0.00005544	0.003752	0.00149447	0.00145853	0.00003594
593614.00	2353944.50	0.00265273	0.00172859	0.00167867	0.00004992	0.00368784	0.00138712	0.00135372	0.0000334
593739.00	2353728.00	0.00249269	0.00154862	0.00150328	0.00004534	0.00359079	0.00129033	0.00125906	0.00003126
593989.00	2353295.00	0.00221932	0.0012707	0.00123248	0.00003822	0.0033483	0.00112392	0.00109638	0.00002754
594239.00	2352862.00	0.00199166	0.00106779	0.0010348	0.00003299	0.00308641	0.00098746	0.00096281	0.00002465
594489.00	2352429.00	0.00180075	0.00091541	0.00088645	0.00002897	0.0028343	0.00087525	0.0008529	0.00002234
594739.00	2351995.75	0.00163844	0.00079748	0.00077177	0.00002571	0.00259753	0.00078159	0.00076118	0.00002042
595239.00	2351129.75	0.00138154	0.00063038	0.00060947	0.00002091	0.00219207	0.00063728	0.00061992	0.00001736
595739.00	2350263.75	0.00118787	0.0005192	0.00050164	0.00001756	0.00187637	0.00053358	0.0005185	0.00001508
592615.25	2355292.25	0.00247252	0.00203379	0.00196644	0.00006735	0.00271334	0.00220853	0.00214032	0.0000682
592649.44	2355198.25	0.00232636	0.00189496	0.0018335	0.00006146	0.00245106	0.00196541	0.00190297	0.00006244
592683.63	2355104.50	0.00218823	0.00176083	0.00170435	0.00005649	0.00224293	0.00176315	0.00170552	0.00005763
592717.81	2355010.50	0.00206179	0.00163558	0.00158332	0.00005226	0.00207955	0.00159219	0.00153887	0.00005332
592752.00	2354916.50	0.00194848	0.00151916	0.00147066	0.0000485	0.00195477	0.00144757	0.00139802	0.00004955
592837.56	2354681.50	0.00171985	0.00127382	0.00123289	0.00004093	0.00177447	0.00117341	0.00113138	0.00004203
592923.06	2354446.50	0.00155606	0.00108489	0.00104963	0.00003526	0.00171852	0.00098619	0.00094965	0.00003654
593008.56	2354211.75	0.00143805	0.00093837	0.00090748	0.00003089	0.00172001	0.00085488	0.00082281	0.00003208
593094.06	2353976.75	0.00134733	0.00082206	0.00079453	0.00002753	0.0017383	0.00075814	0.00072962	0.00002852
593179.56	2353741.75	0.00127246	0.00072823	0.00070354	0.00002469	0.00175676	0.00068439	0.00065872	0.00002567
593265.06	2353507.00	0.00120872	0.00065205	0.00062974	0.00002231	0.00177028	0.00062673	0.00060346	0.00002327
593436.06	2353037.00	0.00110245	0.00053678	0.00051815	0.00001863	0.00177018	0.00054156	0.00052218	0.00001937
593607.06	2352567.25	0.00101591	0.00045522	0.00043926	0.00001596	0.00173787	0.00048044	0.00046389	0.00001655
593778.06	2352097.50	0.00094326	0.00039527	0.00038135	0.00001392	0.00168209	0.00043301	0.00041857	0.00001444
593949.13	2351627.50	0.00087978	0.00034934	0.00033706	0.00001229	0.00161041	0.00039384	0.00038107	0.00001277
594291.13	2350687.75	0.00077396	0.0002849	0.00027502	0.00000989	0.00145115	0.00033213	0.00032184	0.0000103
592412.63	2355341.25	0.00173814	0.00146764	0.00140201	0.00006562	0.00354422	0.00279875	0.00272793	0.00007081
592430.00	2355242.75	0.00163178	0.00136698	0.00130754	0.00005944	0.0030187	0.00235389	0.0022895	0.00006439
592447.38	2355144.25	0.00152314	0.00126561	0.00121144	0.00005417	0.00262765	0.00201863	0.00195951	0.00005912
592464.75	2355045.75	0.00141828	0.00116837	0.00111872	0.00004965	0.00232489	0.0017571	0.0017025	0.0000546
592482.13	2354947.25	0.00131933	0.00107716	0.0010314	0.00004576	0.00208373	0.00154735	0.00149675	0.0000506
592499.50	2354848.75	0.00122811	0.00099334	0.00095095	0.00004239	0.00188814	0.0013758	0.00132869	0.00004711
592542.88	2354602.50	0.00103561	0.00081636	0.00078068	0.00003567	0.00152986	0.00105863	0.00101853	0.00004011
592586.31	2354356.50	0.00088805	0.00067988	0.00064923	0.00003066	0.00129752	0.00084506	0.00081021	0.00003485
592629.69	2354110.25	0.00077554	0.00057442	0.00054764	0.00002677	0.00114267	0.00069427	0.0006637	0.00003058
592673.13	2353864.00	0.00068907	0.00049229	0.00046854	0.00002375	0.00104011	0.00058488	0.00055774	0.00002714
592716.50	2353617.75	0.0006215	0.00042723	0.00040597	0.00002126	0.00097089	0.00050299	0.00047858	0.00002441
592759.94	2353371.50	0.00056797	0.00037521	0.00035604	0.00001918	0.00092485	0.00044033	0.00041832	0.00002201
592846.75	2352879.25	0.00049083	0.00029883	0.00028286	0.00001597	0.00087093	0.00035287	0.00033465	0.00001823
592933.56	2352386.75	0.00043847	0.00024685	0.00023321	0.00001363	0.0008411	0.00029604	0.00028056	0.00001548
593020.44	2351894.25	0.00040104	0.00021025	0.00019841	0.00001184	0.00081859	0.00025661	0.00024317	0.00001344
593107.25	2351402.00	0.0003741	0.00018372	0.00017329	0.00001043	0.00079707	0.00022739	0.00021558	0.00001181
593280.88	2350417.25	0.00033562	0.00014851	0.00014013	0.00000837	0.00075264	0.00018658	0.00017715	0.00000944
592239.00	2355426.00	0.00158222	0.00137846	0.00130521	0.00007326	0.00691446	0.00526444	0.00517036	0.00009408
592239.00	2355326.00	0.0014995	0.00129783	0.00123274	0.00006509	0.00560489	0.00419814	0.00412018	0.00007796
592239.00	2355226.00	0.0014089	0.00121119	0.00115222	0.00005897	0.0046707	0.00342004	0.00335239	0.00006765
592239.00	2355126.00	0.00131465	0.00112236	0.00106862	0.00005374	0.0039964	0.00284189	0.00278156	0.00006033
592239.00	2355026.00	0.00122221	0.00103627	0.000987	0.00004926	0.00350275	0.00240446	0.00234982	0.00005464
592239.00	2354926.00	0.00113442	0.00095521	0.0009098	0.0000454	0.00313599	0.002068	0.00201789	0.00005011
592239.00	2354826.00	0.00105292	0.00088037	0.00083833	0.00004205	0.00285628	0.00180402	0.00175765	0.00004637
592239.00	2354576.00	0.00087882	0.00072155	0.00068619	0.00003537	0.00237683	0.00134751	0.00130826	0.00003925
592239.00	2354326.00	0.00074256	0.00059819	0.00056782	0.00003037	0.00205781	0.00105992	0.0010259	0.00003401
592239.00	2354076.00	0.00063678	0.00050276	0.00047625	0.00002652	0.00182113	0.00086352	0.00083365	0.00002987
592239.00	2353826.00	0.00055429	0.00042848	0.00040497	0.00002351	0.00163544	0.00072202	0.00069543	0.00002658
592239.00	2353576.00	0.00048924	0.0003699	0.00034886	0.00002103	0.00148635	0.00061606	0.00059213	0.00002393
592239.00	2353326.00	0.00043756	0.00032321	0.00030424	0.00001897	0.00136337	0.00053401	0.00051248	0.00002153
592239.00	2352826.00	0.00036204	0.00025495	0.00023915	0.0000158	0.00116419	0.0004164	0.00039854	0.00001785
592239.00	2352326.00	0.00031167	0.00020893	0.00019544	0.00001349	0.00101535	0.00033768	0.0003225	0.00001519
592239.00	2351826.00	0.00027713	0.00017683	0.00016511	0.00001172	0.00089807	0.00028212	0.00026893	0.0000132
592239.00	2351326.00	0.00025269	0.00015377	0.00014344	0.00001033	0.00080461	0.00024124	0.00022963	0.00001161
592239.00	2350326.00	0.00021769	0.00012248	0.00011419	0.00000829	0.00066688	0.00018601	0.00017672	0.00000929
592100.06	2355538.25	0.00180828	0.00157594	0.00149167	0.00008426	0.01509303	0.0114235	0.01116515	0.00025835
592082.75	2355439.75	0.00176396	0.00152735	0.00145377	0.00007358	0.01227773	0.00903816	0.00884564	0.00019252
592065.38	2355341.25	0.0016846	0.00144943	0.00138408	0.00006535	0.01020762	0.0072845	0.00713616	0.00014834
592048.00	2355242.75	0.00159167	0.00136073	0.00130155	0.00005919	0.00866885	0.00597166	0.00585384	0.00011782
592030.63	2355144.25	0.00149348	0.00126797	0.00121404	0.00005393	0.00751237	0.00497214	0.00487555	0.00009659
592013.25	2355045.75	0.00139526	0.00117608	0.00112665	0.00004943	0.00663457	0.00419945	0.00411799	0.00008147
591995.88	2354947.25	0.00130142	0.00108873	0.00104318	0.00004555	0.00596058	0.00359363	0.00352323	0.00007041
591978.50	2354848.75	0.00121404	0.00100751	0.00096533	0.00004218	0.00542768	0.00311139	0.00304931	0.00006208

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591935.13	2354602.50	0.00102782	0.00083372	0.00079824	0.00003547	0.00451295	0.0022715	0.0022231	0.0000484
591891.69	2354356.50	0.00088353	0.00069762	0.00066715	0.00003047	0.0039192	0.00174733	0.00170729	0.00004003
591848.31	2354110.25	0.0007736	0.00059189	0.0005653	0.0000266	0.00350409	0.00139988	0.00136554	0.00003434
591804.88	2353864.00	0.00069049	0.00050969	0.00048611	0.00002359	0.00319346	0.00115779	0.00112783	0.00002996
591761.50	2353617.75	0.00062742	0.00044502	0.00042392	0.0000211	0.00294905	0.00098122	0.00095482	0.0000264
591718.06	2353371.50	0.00057941	0.00039364	0.0003746	0.00001903	0.00274944	0.000848	0.00082455	0.00002345
591631.25	2352879.25	0.00051381	0.0003187	0.00030284	0.00001585	0.00242507	0.00066115	0.00064207	0.00001909
591544.44	2352386.75	0.00047132	0.00026764	0.0002541	0.00001354	0.00217506	0.00053864	0.00052261	0.00001604
591457.56	2351894.25	0.00044049	0.00023138	0.00021961	0.00001178	0.00196555	0.0004526	0.00043879	0.00001381
591370.75	2351402.00	0.00041574	0.00020434	0.00019395	0.00001039	0.00178732	0.00038925	0.00037719	0.00001206
591197.13	2350417.25	0.0003758	0.00016614	0.00015778	0.00000836	0.00150324	0.00030348	0.00029392	0.00000956
591999.56	2355668.25	0.00273489	0.00233961	0.00221223	0.00012738	0.03287867	0.02577628	0.02529549	0.00048081
591965.38	2355574.25	0.0028623	0.00242223	0.00231522	0.00010701	0.02667444	0.02019734	0.01977552	0.00042182
591931.19	2355480.25	0.00287049	0.00240738	0.00231521	0.00009217	0.02234944	0.01622739	0.01586345	0.00036394
591897.00	2355386.25	0.00280084	0.00232996	0.00224893	0.00008103	0.01923278	0.01329831	0.01298694	0.00031137
591862.75	2355292.25	0.00269552	0.0022245	0.00215174	0.00007276	0.01694175	0.01108432	0.01081831	0.00026601
591828.56	2355198.25	0.00256681	0.00210186	0.00203594	0.00006592	0.01520393	0.00937138	0.00914357	0.00022782
591794.38	2355104.50	0.00242953	0.00197424	0.00191401	0.00006023	0.01385992	0.00802413	0.00782775	0.00019639
591760.19	2355010.50	0.0022908	0.00184717	0.00179177	0.0000554	0.01276407	0.00694045	0.00677002	0.00017044
591726.00	2354916.50	0.00215744	0.00172591	0.00167465	0.00005126	0.01186003	0.0060634	0.00591429	0.0001491
591640.44	2354681.50	0.00185742	0.0014543	0.00141132	0.00004299	0.0101624	0.00448633	0.00437566	0.00011068
591554.94	2354446.50	0.00161171	0.00123027	0.00119342	0.00003684	0.00895968	0.00346634	0.0033805	0.00008585
591469.44	2354211.75	0.00142065	0.00105119	0.00101903	0.00003215	0.00806179	0.00277595	0.0027067	0.00006925
591383.94	2353976.75	0.00127486	0.00090818	0.00087967	0.00002851	0.0073488	0.00228528	0.00222781	0.00005748
591298.44	2353741.75	0.00116596	0.00079381	0.00076829	0.00002552	0.0067773	0.00192622	0.00187744	0.00004877
591212.94	2353507.00	0.00108533	0.00070186	0.00067881	0.00002305	0.00630348	0.00165526	0.00161318	0.00004208
591041.94	2353037.00	0.00097704	0.00056534	0.00054606	0.00001928	0.00553844	0.00127694	0.00124423	0.00003271
590870.94	2352567.25	0.00090784	0.00047171	0.00045511	0.0000166	0.0049522	0.00103116	0.00100461	0.00002654
590699.94	2352097.50	0.00085882	0.00040509	0.00039053	0.00001457	0.00446374	0.00085995	0.00083773	0.00002222
590528.88	2351627.50	0.00081869	0.00035545	0.00034243	0.00001301	0.00403988	0.00073445	0.00071546	0.00001899
590186.88	2350687.75	0.0007496	0.00028635	0.0002757	0.00001065	0.00335494	0.0005643	0.0005498	0.0000145
591889.00	2355719.75	0.00513365	0.00446413	0.00411599	0.00034814	0.0595844	0.04837514	0.04789569	0.00047947
591839.00	2355633.25	0.00559729	0.00478496	0.00448503	0.00029993	0.04864065	0.03812022	0.03769349	0.00042674
591789.00	2355546.50	0.00579149	0.00488765	0.00462502	0.00026264	0.04095727	0.03072104	0.03032711	0.00039394
591739.00	2355460.00	0.0057968	0.00483997	0.0046063	0.00023367	0.03556738	0.02529997	0.02493256	0.00036741
591689.00	2355373.25	0.00568702	0.00469973	0.00448902	0.00021071	0.03171428	0.02120412	0.02086027	0.00034384
591639.00	2355286.75	0.00550597	0.00450564	0.00431374	0.0001919	0.02894675	0.01806976	0.01774762	0.00032214
591589.00	2355200.25	0.00528169	0.00428061	0.00410444	0.00017618	0.02688884	0.01560845	0.01530652	0.00030193
591539.00	2355113.50	0.00503754	0.00404318	0.00388037	0.0001628	0.02529512	0.01363402	0.013351	0.00028303
591489.00	2355027.00	0.00479456	0.00380916	0.00365785	0.0001513	0.02406148	0.01203975	0.01177425	0.00026551
591364.00	2354810.50	0.0042303	0.00326384	0.00313569	0.00012816	0.02184482	0.0091467	0.00891951	0.00022718
591239.00	2354594.00	0.00376725	0.00279857	0.00268787	0.0001107	0.02023635	0.00724494	0.00704918	0.00019576
591114.00	2354377.50	0.00341761	0.00241795	0.00232069	0.00009726	0.01887745	0.00592153	0.00575139	0.00017013
590989.00	2354161.00	0.00316806	0.00211033	0.00202366	0.00008667	0.01766225	0.00495917	0.00480986	0.00014932
590864.00	2353944.50	0.00299447	0.00186157	0.00178354	0.00007803	0.01656483	0.00423828	0.00410621	0.00013207
590739.00	2353728.00	0.00286437	0.00165789	0.00158702	0.00007087	0.01557609	0.00368079	0.00356297	0.00011783
590489.00	2353295.00	0.00268389	0.00135103	0.00129128	0.00005976	0.01388682	0.00288746	0.00279139	0.00009607
590239.00	2352862.00	0.00255829	0.00113562	0.00108406	0.00005157	0.01248792	0.00235941	0.00227898	0.00008043
589989.00	2352429.00	0.00245905	0.00097851	0.00093336	0.00004515	0.01130588	0.00198583	0.00191703	0.00006881
589739.00	2351995.75	0.0023709	0.00086053	0.00082048	0.00004006	0.01028636	0.00170958	0.00164979	0.00005979
589239.00	2351129.75	0.00220734	0.00069707	0.00066443	0.00003263	0.00864574	0.00133133	0.00128477	0.00004656
588739.00	2350263.75	0.00205707	0.00058961	0.00056215	0.00002745	0.00737763	0.00108473	0.00104705	0.00003767
591853.31	2355866.25	0.00894318	0.00792204	0.0072369	0.00068514	0.12907684	0.1146161	0.11181881	0.00279725
591789.06	2355789.75	0.01096538	0.00954106	0.00894705	0.00059401	0.1072296	0.09224035	0.09066236	0.00157803
591724.75	2355713.25	0.01228209	0.01057464	0.0100494	0.00052525	0.09019711	0.07507668	0.07409912	0.00097763
591660.50	2355636.50	0.01293587	0.01104548	0.01057496	0.00047052	0.07706944	0.06182182	0.06115001	0.0006718
591596.19	2355560.00	0.01310918	0.01111282	0.01068644	0.00042638	0.06720023	0.05164523	0.05113584	0.0005094
591531.94	2355483.25	0.01296254	0.0109066	0.01051622	0.00039039	0.05974439	0.04365956	0.04324472	0.00041484
591467.63	2355406.75	0.01262094	0.01054037	0.01018032	0.00036005	0.05423413	0.03740056	0.03704419	0.00035638
591403.38	2355330.25	0.01215045	0.01007088	0.00973664	0.00033424	0.05008614	0.03239863	0.03208162	0.00031699
591339.13	2355253.50	0.01161023	0.00954576	0.00923365	0.00031211	0.04694004	0.0283387	0.02805012	0.00028859
591274.81	2355177.00	0.01105968	0.00901206	0.00871938	0.00029268	0.04459718	0.02504319	0.02477595	0.00026724
591114.13	2354985.50	0.00976789	0.00773374	0.00748121	0.00025253	0.04074887	0.01903211	0.01880223	0.00022986
590953.44	2354794.00	0.00871432	0.00662692	0.00640522	0.0002217	0.0383931	0.01507655	0.01487184	0.00020471
590792.75	2354602.50	0.00792216	0.00571708	0.00551955	0.00019753	0.03666508	0.01233387	0.012149	0.00018487
590632.00	2354411.00	0.00735174	0.0049813	0.00480317	0.00017813	0.03517622	0.01035217	0.0101835	0.00016867
590471.31	2354219.50	0.00693994	0.00438495	0.0042228	0.00016215	0.03379976	0.00886841	0.00871323	0.00015518
590310.63	2354027.75	0.00663468	0.00389742	0.00374864	0.00014878	0.03246965	0.00771978	0.00757594	0.00014385
589989.25	2353644.75	0.00624276	0.00316547	0.00303768	0.00012779	0.0299308	0.00608128	0.00595563	0.00012564
589667.88	2353261.75	0.00600668	0.00264991	0.00253781	0.0001121	0.02756708	0.00497609	0.00486466	0.00011143

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
589346.44	2352878.75	0.00583499	0.00227505	0.00217523	0.00009982	0.02539787	0.00418795	0.00408778	0.00010016
589025.06	2352495.75	0.00568977	0.00199409	0.00190403	0.00009007	0.02341894	0.00360026	0.00350936	0.0000909
588382.25	2351729.75	0.00539895	0.00160119	0.00152577	0.00007541	0.02002464	0.00278671	0.00271012	0.00007659
591779.38	2355940.25	0.02342159	0.02191035	0.02016963	0.00174073	0.18871931	0.178875	0.16929742	0.00957776
591702.75	2355876.00	0.02921404	0.026706	0.02541808	0.00128792	0.16680304	0.1543924	0.1467821	0.00761036
591626.19	2355811.75	0.03289693	0.02972254	0.02871655	0.001006	0.14780211	0.1329464	0.12693197	0.00601461
591549.56	2355747.50	0.03470349	0.03109796	0.03027709	0.00082086	0.1319722	0.11473293	0.10996626	0.00476674
591472.94	2355683.25	0.03510083	0.03123953	0.03054759	0.00069195	0.11908826	0.09947948	0.095673	0.0038064
591396.38	2355619.00	0.03460846	0.03058933	0.02998944	0.00059989	0.10875231	0.08675941	0.08368916	0.00307024
591319.75	2355554.75	0.03353458	0.02944459	0.02891275	0.00053183	0.10054502	0.07616129	0.07365456	0.00250679
591243.13	2355490.50	0.0321171	0.02801651	0.02754137	0.00047513	0.09402293	0.06730196	0.06522916	0.00207286
591166.56	2355426.00	0.03049877	0.02643005	0.02600087	0.00042919	0.08879089	0.05981561	0.05808366	0.00173197
591089.94	2355361.75	0.0288548	0.02483937	0.02444779	0.00039157	0.08462543	0.05353308	0.052064	0.00146906
590898.44	2355201.00	0.02492351	0.02105825	0.02073754	0.00032071	0.07721161	0.04156443	0.0405418	0.00102263
590706.94	2355040.50	0.02160251	0.01783336	0.01756197	0.0002714	0.07242989	0.03330096	0.03255442	0.00074656
590515.38	2354879.75	0.01894892	0.0151852	0.01495026	0.00023495	0.06891868	0.02737006	0.02679799	0.00057206
590323.88	2354719.00	0.01690988	0.01305016	0.01284309	0.00020706	0.06608819	0.0229985	0.02254188	0.00045663
590132.38	2354558.25	0.01537414	0.01133189	0.01114689	0.00018499	0.06361629	0.01968147	0.01930498	0.00037649
589940.88	2354397.75	0.01421963	0.00994658	0.00977935	0.00016723	0.06138328	0.0171128	0.01679358	0.00031924
589557.81	2354076.25	0.01267029	0.00787613	0.00773584	0.0001403	0.05729193	0.01342038	0.01317831	0.00024207
589174.81	2353754.75	0.01174274	0.00644596	0.00632524	0.00012071	0.05353014	0.01093892	0.01074477	0.00019416
588791.81	2353433.50	0.01115668	0.00542517	0.00531901	0.00010616	0.05005013	0.00917756	0.00901578	0.00016178
588408.75	2353112.00	0.01074284	0.00466911	0.00457464	0.00009447	0.04684152	0.00786932	0.00773259	0.00013673
591719.38	2356026.00	0.05344624	0.0628176	0.04924508	0.01357258	0.21605586	0.20787556	0.19857339	0.00930215
591632.75	2355976.00	0.06678629	0.07378433	0.06213131	0.01165305	0.19920151	0.18918492	0.18060371	0.00858138
591546.19	2355926.00	0.07528082	0.08043674	0.07030379	0.01013279	0.18326631	0.17106802	0.16317772	0.00789034
591459.56	2355876.00	0.0793914	0.08308154	0.07417356	0.008908	0.16904677	0.15434242	0.14709879	0.00724368
591373.00	2355826.00	0.08023865	0.08276431	0.07486137	0.00790295	0.1568438	0.13931432	0.13266466	0.00664961
591286.38	2355776.00	0.07901244	0.08061968	0.07349385	0.00712585	0.14657484	0.12597876	0.11987138	0.00610743
591199.75	2355726.00	0.07643153	0.07725808	0.07083169	0.00642645	0.13803026	0.11424024	0.10862418	0.00561603
591113.19	2355676.00	0.07309868	0.073259	0.06746476	0.00579423	0.13095839	0.10393687	0.0987645	0.00517228
591026.56	2355626.00	0.06939671	0.06901271	0.06376352	0.00524923	0.12510017	0.09488681	0.09011525	0.00477156
590939.94	2355576.00	0.06557992	0.06473906	0.0599636	0.00477552	0.12018787	0.08692596	0.08251609	0.00440994
590723.44	2355451.00	0.05653413	0.05476554	0.05093499	0.00383056	0.11088338	0.07085471	0.06721407	0.00364069
590506.94	2355326.00	0.04889441	0.04632988	0.04319833	0.00313154	0.1043567	0.05890392	0.05587974	0.00302419
590290.44	2355201.00	0.04279184	0.03945524	0.03685521	0.00260005	0.09941056	0.04983623	0.04730215	0.00253405
590073.94	2355076.00	0.03804538	0.03391195	0.03172496	0.00218698	0.09534141	0.04281863	0.04067795	0.00214074
589857.44	2354951.00	0.03438751	0.02943794	0.02757771	0.00186024	0.09180164	0.03728452	0.03546228	0.00182227
589640.94	2354826.00	0.03155279	0.02580492	0.0242068	0.00159811	0.08856568	0.03284594	0.03128327	0.0015627
589207.94	2354576.00	0.02759092	0.02037423	0.01916414	0.00121009	0.08266571	0.02625267	0.0250786	0.00117408
588774.88	2354326.00	0.02501534	0.01660886	0.01566469	0.00094419	0.07728288	0.0216503	0.02074568	0.00090463
588341.88	2354076.00	0.02322643	0.01390049	0.01314848	0.000752	0.0723082	0.01829448	0.01758188	0.00071261
591675.19	2356120.75	0.06412733	0.07270526	0.06055833	0.01214702	0.18738373	0.17883498	0.17418994	0.00464503
591581.25	2356086.50	0.07977391	0.08617902	0.07614357	0.01003548	0.17407806	0.16442534	0.16014594	0.0042794
591487.25	2356052.50	0.08958535	0.09442815	0.08594624	0.00848191	0.16119286	0.15019704	0.1462533	0.0039438
591393.25	2356018.25	0.09420112	0.09785802	0.09053047	0.00732764	0.14951871	0.13697502	0.13332565	0.00364945
591299.31	2355984.00	0.09496402	0.0976852	0.09125335	0.00643187	0.13923451	0.12493754	0.12155177	0.00338574
591205.31	2355949.75	0.0932354	0.09518757	0.08944389	0.00574375	0.13028009	0.11410062	0.11095267	0.00314796
591111.38	2355915.50	0.08995457	0.09126243	0.08609916	0.00516322	0.12255829	0.10443842	0.10150426	0.00293413
591017.38	2355881.25	0.08583149	0.08658986	0.08192848	0.0046614	0.11590479	0.09584203	0.09310178	0.00274034
590923.44	2355847.25	0.08128889	0.08158959	0.07736012	0.0042295	0.1101117	0.0881847	0.08562231	0.00256236
590829.44	2355813.00	0.07666149	0.07657401	0.07271176	0.00386223	0.10505801	0.0813879	0.07898549	0.00240245
590594.56	2355727.50	0.06575321	0.06486724	0.06173015	0.00313701	0.09480221	0.06743586	0.0653762	0.0020597
590359.63	2355642.00	0.05653522	0.05497122	0.05236742	0.00260383	0.08699107	0.05681947	0.05503767	0.00178182
590124.69	2355556.50	0.0491238	0.04690974	0.04471184	0.00219792	0.08077448	0.04859803	0.04704417	0.00155392
589889.75	2355471.00	0.04326723	0.0404021	0.03852166	0.00188044	0.07562852	0.04212096	0.04075499	0.00136595
589654.88	2355385.50	0.03863888	0.0351358	0.03350919	0.0016266	0.07120851	0.03693256	0.03572361	0.00120897
589419.94	2355300.00	0.03494864	0.03084406	0.02942406	0.00141998	0.06726022	0.03270887	0.03163223	0.00107665
588950.06	2355129.00	0.02956676	0.02439986	0.0232931	0.00110674	0.06044637	0.02631888	0.02545256	0.00086633
588480.25	2354958.00	0.02586824	0.01989925	0.01901554	0.00088372	0.05473373	0.02177908	0.02106898	0.00071009
591648.13	2356221.75	0.03743161	0.03647478	0.03447057	0.00200418	0.12623869	0.11844547	0.1168222	0.00162325
591549.63	2356204.50	0.04561607	0.04432672	0.04266734	0.00165938	0.11401839	0.10581354	0.10438573	0.00142782
591451.13	2356187.00	0.05035036	0.04889937	0.04748185	0.00141752	0.10321281	0.09443975	0.09316251	0.00127724
591352.69	2356169.75	0.05204119	0.0504916	0.04925864	0.00123295	0.09373901	0.08429351	0.08313895	0.00115451
591254.19	2356152.25	0.05175647	0.05015169	0.04906044	0.00109123	0.0857099	0.07548508	0.07442892	0.00105608
591155.69	2356135.00	0.05018843	0.04853411	0.04754912	0.00098496	0.07878803	0.06775786	0.06678487	0.00097296
591057.25	2356117.50	0.04795648	0.04627067	0.04536851	0.00090217	0.07293201	0.061109	0.06020415	0.00090483
590958.75	2356100.25	0.04532306	0.04360433	0.0427825	0.00082182	0.06784863	0.0552824	0.05443637	0.00084602
590860.25	2356083.00	0.0425669	0.04082772	0.04007359	0.00075412	0.06345739	0.05021589	0.04941984	0.00079607
590761.81	2356065.50	0.03987994	0.03812152	0.03742455	0.00069697	0.05966098	0.04582913	0.04507486	0.00075428

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
590515.56	2356022.00	0.03370597	0.03188069	0.03129654	0.00058416	0.05193068	0.03700116	0.03634291	0.00065828
590269.38	2355978.75	0.02864262	0.02670189	0.02620064	0.00050126	0.04605875	0.03046786	0.02990042	0.00056742
590023.19	2355935.25	0.02468098	0.02257199	0.0221333	0.00043869	0.0414593	0.02555968	0.02506374	0.00049593
589777.00	2355892.00	0.0215816	0.01927093	0.01888156	0.00038937	0.03770784	0.02176611	0.02132816	0.00043795
589530.75	2355848.50	0.01915194	0.01663366	0.01628348	0.00035017	0.03460978	0.01879553	0.01840528	0.00039027
589284.56	2355805.00	0.01721327	0.01450395	0.01418557	0.00031838	0.03196238	0.01642189	0.01607121	0.00035068
588792.19	2355718.25	0.01435517	0.01133314	0.01106294	0.0002702	0.02761922	0.01289925	0.01261018	0.00028908
588299.75	2355631.50	0.01237878	0.00914898	0.00891291	0.00023607	0.02420885	0.01046303	0.0102193	0.00024373
591539.00	2356326.00	0.01936525	0.01789147	0.01695963	0.00093184	0.06220362	0.0562886	0.05561286	0.00067576
591439.00	2356326.00	0.02060196	0.01901917	0.01821161	0.00080756	0.0540132	0.04818354	0.04757664	0.0006069
591339.00	2356326.00	0.0207426	0.01913295	0.01842087	0.00071209	0.04731311	0.04150309	0.04095084	0.00055223
591239.00	2356326.00	0.02019552	0.0186063	0.01796953	0.00063678	0.041844	0.03599429	0.03548657	0.00050773
591139.00	2356326.00	0.01928807	0.01773688	0.01715954	0.00057735	0.03735187	0.03142923	0.03095855	0.00047068
591039.00	2356326.00	0.01819602	0.01669552	0.01616641	0.00052911	0.03361874	0.02762601	0.02718658	0.00043944
590939.00	2356326.00	0.0170322	0.0155894	0.01510107	0.00048834	0.0304914	0.02443962	0.02402697	0.00041265
590839.00	2356326.00	0.01587068	0.01448759	0.01403506	0.00045253	0.02785214	0.02175133	0.02136184	0.0003895
590739.00	2356326.00	0.01475544	0.01343083	0.01300944	0.0004214	0.02558761	0.01947155	0.01910212	0.00036944
590489.00	2356326.00	0.0122837	0.01108907	0.01072972	0.00035935	0.02117982	0.01510268	0.01477341	0.00032927
590239.00	2356326.00	0.01030251	0.00920663	0.00889378	0.00031285	0.01801305	0.01204539	0.01175304	0.00029234
589989.00	2356326.00	0.00875641	0.00772417	0.00744727	0.0002769	0.01564055	0.00983745	0.00957559	0.00026185
589739.00	2356326.00	0.00755354	0.0065573	0.00630895	0.00024835	0.01379785	0.00819872	0.00796195	0.00023677
589489.00	2356326.00	0.00660681	0.00563002	0.00540499	0.00022503	0.01233007	0.00695181	0.00673617	0.00021564
589239.00	2356326.00	0.00585197	0.00488601	0.00468032	0.00020569	0.01112848	0.0059816	0.00578387	0.00019774
588739.00	2356326.00	0.00474347	0.00378908	0.00361363	0.00017545	0.00928053	0.00459688	0.00442774	0.00016915
588239.00	2356326.00	0.0039799	0.00303922	0.00288618	0.00015304	0.00792632	0.00367655	0.0035291	0.00014745
591549.63	2356447.50	0.01244485	0.01172441	0.01064068	0.00108374	0.03479297	0.03069537	0.03003467	0.0006607
591451.13	2356465.00	0.0128514	0.01198996	0.01104219	0.00094777	0.02953211	0.02579424	0.02518217	0.00061206
591352.69	2356482.25	0.01269495	0.01177086	0.01092873	0.00084214	0.02541216	0.02195975	0.02138937	0.00057038
591254.19	2356499.75	0.01219909	0.01125995	0.01050274	0.00075721	0.02211163	0.01888605	0.01835174	0.00053431
591155.69	2356517.00	0.01154557	0.01061569	0.00992653	0.00068916	0.01946723	0.0164161	0.01591366	0.00050244
591057.25	2356534.50	0.01082452	0.00991972	0.00928636	0.00063337	0.01729813	0.01439083	0.01391646	0.00047438
590958.75	2356551.75	0.01009404	0.00922358	0.00863717	0.00058641	0.01551794	0.01272496	0.01227569	0.00044928
590860.25	2356569.00	0.00938413	0.00855128	0.00800664	0.00054464	0.01403791	0.01133496	0.01090813	0.00042683
590761.81	2356586.50	0.00871191	0.00791848	0.00741009	0.00050838	0.01279089	0.01016131	0.00975468	0.00040662
590515.56	2356630.00	0.00724502	0.00654636	0.00611151	0.00043485	0.01043362	0.00793718	0.00757374	0.00036344
590269.38	2356673.25	0.00607286	0.00545883	0.00507936	0.00037947	0.00880694	0.006396	0.00606877	0.00032723
590023.19	2356716.75	0.00515013	0.00460555	0.00426917	0.00033639	0.00763318	0.00528396	0.00498712	0.00029683
589777.00	2356760.00	0.00442498	0.00393539	0.00363332	0.00030207	0.00675507	0.00445925	0.00418769	0.00027156
589530.75	2356803.50	0.00384844	0.00340224	0.00312837	0.00027387	0.00607234	0.00382815	0.00357841	0.00024974
589284.56	2356847.00	0.00338611	0.00297411	0.00272366	0.00025045	0.00553027	0.00333526	0.00310442	0.00023084
588792.19	2356933.75	0.00270412	0.00234077	0.0021268	0.00021398	0.0047203	0.00262624	0.00242605	0.00020019
588299.75	2357020.50	0.00223915	0.00190615	0.00171913	0.00018702	0.00413362	0.00214885	0.00197232	0.00017653
591487.25	2356599.50	0.01269666	0.01238233	0.01151795	0.00086437	0.02138302	0.01861053	0.0179179	0.00069263
591393.25	2356633.75	0.01242809	0.01201216	0.01124781	0.00076436	0.01872329	0.01618766	0.01554746	0.0006402
591299.31	2356668.00	0.01186935	0.01138852	0.0107039	0.00068463	0.01657655	0.01421525	0.01362117	0.00059408
591205.31	2356702.25	0.01118182	0.01065841	0.01003748	0.00062093	0.01482287	0.01258681	0.01203376	0.00055306
591111.38	2356736.50	0.01045279	0.00990457	0.00933568	0.0005689	0.01337661	0.01122758	0.01071066	0.00051692
591017.38	2356770.75	0.00972718	0.00916691	0.00864138	0.00052553	0.01217252	0.01008065	0.0095957	0.00048496
590923.44	2356804.75	0.00903429	0.00846986	0.00798093	0.00048893	0.0111684	0.0091073	0.00865067	0.00045662
590829.44	2356839.00	0.00838498	0.00782173	0.00736576	0.00045596	0.01031965	0.00827174	0.00784041	0.00043133
590594.56	2356924.50	0.00698225	0.00643551	0.00604697	0.00038854	0.00870223	0.00664164	0.00626351	0.00037813
590359.63	2357010.00	0.00587335	0.00535279	0.0050146	0.0003382	0.00755182	0.00547019	0.00513446	0.00033573
590124.69	2357095.50	0.00500476	0.0045116	0.00421236	0.00029924	0.00669252	0.0046019	0.00430063	0.00030127
589889.75	2357181.00	0.0043221	0.00385409	0.00358578	0.00026831	0.00602511	0.00394167	0.00366833	0.00027335
589654.88	2357266.50	0.00377935	0.00333319	0.00309039	0.0002428	0.00548744	0.00342703	0.00317771	0.00024932
589419.94	2357352.00	0.0033427	0.00291534	0.0026936	0.00022173	0.00504331	0.00301794	0.00278913	0.00022881
588950.06	2357523.00	0.00269634	0.00229891	0.0021098	0.00018911	0.0043501	0.00241659	0.00222061	0.00019598
588480.25	2357694.00	0.00225186	0.00187611	0.00171101	0.0001651	0.00382684	0.00200283	0.0018318	0.00017103
591286.38	2356876.00	0.01260139	0.01343833	0.01274637	0.00069196	0.01481101	0.01286356	0.01233422	0.00052934
591199.75	2356926.00	0.01171445	0.01241445	0.01177929	0.00063516	0.01352256	0.01166231	0.01116962	0.00049269
591113.19	2356976.00	0.01085251	0.01143469	0.01084762	0.00058707	0.01240891	0.01061951	0.01015791	0.00046161
591026.56	2357026.00	0.01004168	0.01052093	0.00997531	0.00054562	0.01144198	0.00970828	0.00927352	0.00043478
590939.94	2357076.00	0.00929176	0.00968272	0.00917356	0.00050917	0.01060018	0.00890927	0.00849779	0.00041149
590723.44	2357201.00	0.00769893	0.00792054	0.00748458	0.00043596	0.00891023	0.00729783	0.00693354	0.00036429
590506.94	2357326.00	0.00645807	0.00656212	0.00618144	0.00038068	0.00763912	0.00609551	0.00576795	0.00032756
590290.44	2357451.00	0.00549502	0.00551442	0.00517679	0.00033763	0.00665659	0.00517657	0.00487972	0.00029684
590073.94	2357576.00	0.00474112	0.00469935	0.00439611	0.00030324	0.00588066	0.00446126	0.00418962	0.00027165
589857.44	2357701.00	0.00414076	0.00405455	0.00377949	0.00027506	0.00525601	0.0038941	0.00364414	0.00024996
589640.94	2357826.00	0.00365765	0.00353875	0.00328714	0.00025162	0.00474412	0.00343746	0.00320601	0.00023145
589207.94	2358076.00	0.00294115	0.00277898	0.00256394	0.00021504	0.00396317	0.00275589	0.00255494	0.00020095

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
588774.88	2358326.00	0.00244486	0.00225834	0.00207049	0.00018785	0.00340015	0.0022803	0.00210299	0.00017731
588341.88	2358576.00	0.00208774	0.00188707	0.00172047	0.0001666	0.00297754	0.0019351	0.00177683	0.00015827
591089.94	2357290.25	0.00950244	0.01134807	0.01086771	0.00048035	0.01148382	0.01079402	0.01033507	0.00045895
590898.44	2357451.00	0.00777777	0.00918934	0.00877735	0.00041198	0.00946485	0.00879019	0.00837965	0.00041054
590706.94	2357611.50	0.00646562	0.00755079	0.00719072	0.00036007	0.007963	0.0072706	0.00690135	0.00036925
590515.38	2357772.25	0.00546106	0.00629954	0.00597979	0.00031975	0.00682228	0.0061058	0.00577146	0.00033435
590323.88	2357933.00	0.00468044	0.00533317	0.00504559	0.00028759	0.00593972	0.00520089	0.00489626	0.00030464
590132.38	2358093.75	0.00406364	0.00457291	0.00431186	0.00026105	0.00524253	0.00448729	0.00420839	0.0002789
589940.88	2358254.25	0.00357069	0.00396828	0.00372927	0.000239	0.00468079	0.0039169	0.00366025	0.00025665
589557.81	2358575.75	0.00284089	0.00308165	0.00287733	0.00020431	0.003839	0.00307537	0.00285476	0.00022061
589174.81	2358897.25	0.00233631	0.00247792	0.00230004	0.00017789	0.00324341	0.00249721	0.00230445	0.00019276
588791.81	2359218.50	0.00197473	0.00205082	0.00189333	0.00015749	0.00280278	0.00208429	0.00191362	0.00017067
588408.75	2359540.00	0.00170744	0.00173801	0.0015971	0.00014091	0.00246581	0.00177926	0.00162655	0.00015271
590953.44	2357858.00	0.00572704	0.00709107	0.00678563	0.00030545	0.00812535	0.0081015	0.00775805	0.00034347
590792.75	2358049.50	0.00478778	0.00585531	0.00558984	0.00026547	0.00687564	0.00667289	0.00637298	0.00029991
590632.00	2358241.00	0.00407163	0.00491099	0.00467669	0.0002343	0.00592143	0.00558724	0.00532189	0.00026535
590471.31	2358432.50	0.00351251	0.00417713	0.00396807	0.00020906	0.00517559	0.00474843	0.0045109	0.00023753
590310.63	2358624.25	0.00307019	0.00359757	0.00340916	0.00018842	0.0045806	0.0040888	0.00387455	0.00021426
589989.25	2359007.25	0.00242341	0.00275881	0.00260222	0.00015659	0.00370118	0.00313785	0.00295938	0.00017848
589667.88	2359390.25	0.00198222	0.00219546	0.00206213	0.00013333	0.00308854	0.00250087	0.00234853	0.00015234
589346.44	2359773.25	0.00166898	0.00180151	0.00168575	0.00011576	0.00264195	0.00205511	0.00192287	0.00013223
589025.06	2360156.25	0.00143849	0.00151627	0.00141419	0.00010208	0.00230508	0.00173173	0.00161558	0.00011616
588382.25	2360922.25	0.00112731	0.00114072	0.00105852	0.0000822	0.00183389	0.00130385	0.00121099	0.00009286
590489.00	2359357.00	0.0023567	0.00265654	0.00236644	0.0002901	0.0034478	0.00281078	0.00264029	0.00017049
590239.00	2359790.00	0.00194155	0.00211021	0.00187636	0.00023385	0.00288223	0.00222769	0.00208053	0.00014715
589989.00	2360223.00	0.00164376	0.00172828	0.00153628	0.000192	0.00246822	0.00182696	0.00169887	0.00012809
589739.00	2360656.25	0.00142303	0.00145184	0.00129156	0.00016027	0.00215759	0.00154007	0.00142756	0.00011251
589239.00	2361522.25	0.00112119	0.00108851	0.00097158	0.00011693	0.00172545	0.00116639	0.00107643	0.00008997
588739.00	2362388.25	0.00092727	0.00086627	0.00077749	0.00008877	0.00144097	0.00093812	0.00086451	0.00007361
588239.00	2363254.25	0.00079399	0.00071991	0.00065038	0.00006953	0.00124007	0.00078618	0.00072486	0.00006132
591373.00	2356826.00	0.01346529	0.01446036	0.01369941	0.00076096	0.01631089	0.01425251	0.01367953	0.00057298
591166.56	2357226.00	0.01033251	0.01239082	0.01187668	0.00051414	0.01248428	0.01176693	0.01128559	0.00048135
592239.00	2355526.00	0.00163737	0.00143633	0.00135249	0.00008385	0.00874911	0.00674385	0.00662187	0.00012198
598239.00	2356326.00	0.0017481	0.00052392	0.00047076	0.00005316	0.00257551	0.00068411	0.00062202	0.00006208
599239.00	2356326.00	0.00142234	0.00041564	0.00037618	0.00003946	0.00203766	0.0005262	0.00048103	0.00004516
595685.81	2355718.25	0.00382405	0.00179699	0.00169321	0.00010378	0.00637211	0.00299948	0.00286965	0.00012983
594118.38	2355642.00	0.00924961	0.00780165	0.00761386	0.00018778	0.01839571	0.01466097	0.01451344	0.00014753
594353.31	2355556.50	0.00793038	0.00655845	0.00639208	0.00016637	0.01522204	0.01173585	0.01159876	0.00013709
594588.25	2355471.00	0.00687613	0.00558534	0.00543597	0.00014937	0.0127778	0.00957657	0.00944912	0.00012745
593364.81	2355676.00	0.01364095	0.01360311	0.01346512	0.00013799	0.02800803	0.02726007	0.02701115	0.00024892
593451.44	2355626.00	0.01263116	0.01244024	0.01231203	0.0001282	0.02604088	0.02498466	0.02476297	0.0002217
593538.06	2355576.00	0.01177305	0.01143469	0.01131557	0.00011913	0.0241367	0.0227431	0.02254468	0.00019841
593754.56	2355451.00	0.00994265	0.00931898	0.00921812	0.00010086	0.01966213	0.01758677	0.01743257	0.0001542
592698.63	2355940.25	0.01474726	0.01504213	0.01468929	0.00035284	0.00543899	0.00456284	0.0043888	0.00017404
592775.25	2355876.00	0.01591055	0.01646234	0.01616105	0.00030129	0.0068593	0.00564559	0.0054915	0.00015409
592851.81	2355811.75	0.01627385	0.01700647	0.01674329	0.00026319	0.00859628	0.00701871	0.00687042	0.00014829
592928.44	2355747.50	0.01590517	0.0167009	0.01646697	0.00023393	0.01041265	0.0085063	0.00834681	0.00015948
593005.06	2355683.25	0.01509084	0.0158514	0.01564027	0.00021112	0.01208396	0.00990363	0.00972939	0.00017423
593081.63	2355619.00	0.01422859	0.01489792	0.01470638	0.00019155	0.01352651	0.01116175	0.01097672	0.00018503
593158.25	2355554.75	0.01336792	0.01391162	0.01373647	0.00017514	0.01466698	0.01217387	0.0119837	0.00019017
593234.88	2355490.50	0.01252611	0.01293465	0.01277326	0.00016139	0.01540426	0.01281961	0.01262935	0.00019026
593311.44	2355426.00	0.01171749	0.01199551	0.01184603	0.00014948	0.01575969	0.01311494	0.01292824	0.0001867
593388.06	2355361.75	0.01095643	0.01111137	0.01097213	0.00013924	0.01582436	0.01314077	0.01295968	0.00018109
592431.81	2356096.25	0.00286648	0.00311806	0.00228884	0.00082922	0.00981364	0.00826155	0.0075151	0.00074645
592496.13	2356019.50	0.00522735	0.00509442	0.0044746	0.00061982	0.00608003	0.00504037	0.00481259	0.00022778
592560.38	2355943.00	0.00742414	0.00725365	0.00675821	0.00049545	0.00488373	0.00416143	0.00398676	0.00017467
592624.69	2355866.25	0.00904688	0.0090379	0.00862659	0.00041132	0.00478926	0.00408797	0.00393928	0.00014869
592688.94	2355789.75	0.0102377	0.01047471	0.01012421	0.00035051	0.00502123	0.00421178	0.00408357	0.00012821
592753.25	2355713.25	0.01041117	0.010791	0.01048615	0.00030486	0.00508109	0.00419168	0.00407834	0.00011334
592817.50	2355636.50	0.01039199	0.01086508	0.01059568	0.00026939	0.00529376	0.00424882	0.00414631	0.00010251
592881.81	2355560.00	0.01015984	0.0106559	0.01041422	0.00024169	0.00559274	0.0043345	0.00423962	0.00009488
592946.06	2355483.25	0.00980393	0.01025689	0.01003657	0.00022032	0.00595706	0.00442874	0.00433887	0.00008988
593010.38	2355406.75	0.00940246	0.00977568	0.00957313	0.00020255	0.00636944	0.00452484	0.00443782	0.00008701
593074.63	2355330.25	0.00898556	0.00926338	0.00907568	0.0001877	0.00677112	0.00459844	0.00451277	0.00008567
592339.00	2356152.75	0.00052811	0.00112156	0.00037923	0.00074233	0.03736422	0.03184849	0.03017949	0.001669
592389.00	2356066.25	0.00178892	0.00185994	0.00137172	0.00048822	0.01439954	0.01197797	0.01115329	0.00082468
592439.00	2355979.50	0.00310673	0.00284388	0.00248075	0.00036313	0.00897441	0.00733216	0.00706804	0.00026411
592489.00	2355893.00	0.00414204	0.00369889	0.00340876	0.00029013	0.00614416	0.005123	0.00496585	0.00015715
592539.00	2355806.50	0.00481554	0.00429462	0.004053	0.00024161	0.00491182	0.00416239	0.00403079	0.0001316
592589.00	2355719.75	0.00517229	0.00464465	0.00443833	0.00020632	0.00437232	0.00371089	0.00359622	0.00011468

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592639.00	2355633.25	0.00525407	0.00474494	0.00456467	0.00018027	0.00403519	0.00339647	0.00329515	0.00010132
592689.00	2355546.50	0.00515915	0.00467203	0.00451167	0.00016036	0.00376233	0.00312203	0.00303178	0.00009025
592739.00	2355460.00	0.00498041	0.00450932	0.00436418	0.00014513	0.00353836	0.00287643	0.00279521	0.00008122
592789.00	2355373.25	0.0047717	0.00429795	0.00416618	0.00013176	0.00337143	0.00266049	0.00258676	0.00007373
592307.38	2356138.00	0.00032027	0.00066696	0.00022562	0.00044134	0.05158161	0.04449215	0.04262254	0.0018696
592341.63	2356044.00	0.00106997	0.00108992	0.0008081	0.00028182	0.02121028	0.01753213	0.0166452	0.00088694
592375.81	2355950.00	0.00180359	0.00161352	0.00140758	0.00020594	0.01300814	0.01056733	0.01018116	0.00038617
592410.00	2355856.25	0.00237157	0.00205185	0.00188941	0.00016243	0.00876456	0.0071192	0.00694632	0.00017288
592444.19	2355762.25	0.00272329	0.00232363	0.00219081	0.00013282	0.00626799	0.00516159	0.00503804	0.00012356
592478.44	2355668.25	0.00286369	0.00242413	0.00231289	0.00011124	0.00486937	0.00404453	0.00393927	0.00010526
592512.63	2355574.25	0.0028551	0.00240098	0.00230557	0.00009541	0.00402787	0.00335033	0.00325735	0.00009298
592546.81	2355480.25	0.00275932	0.00230475	0.00222128	0.00008346	0.0034617	0.00286919	0.00278599	0.0000832
592581.00	2355386.25	0.00261995	0.00217269	0.00209842	0.00007428	0.00304181	0.00250294	0.00242789	0.00007505
592273.75	2356129.00	0.00021842	0.00053746	0.00015043	0.00038704	0.07154606	0.06313664	0.06054364	0.002593
592291.06	2356030.50	0.00070813	0.00077945	0.00053142	0.00024804	0.03203652	0.02651437	0.0256222	0.00089217
592308.44	2355932.00	0.00120258	0.00112185	0.00093995	0.00018191	0.01927416	0.01569481	0.01512624	0.00056857
592325.81	2355833.50	0.00158835	0.00141606	0.00127219	0.00014387	0.01325714	0.01063746	0.01036421	0.00027324
592343.19	2355735.00	0.00182048	0.00159245	0.00147457	0.00011789	0.00947046	0.00756637	0.00741468	0.00015168
592360.56	2355636.75	0.00191242	0.00165458	0.00155584	0.00009874	0.00698561	0.00558745	0.00547848	0.00010897
592377.94	2355538.25	0.00190433	0.00163336	0.00154876	0.0000846	0.00535577	0.00428593	0.00419576	0.00009016
592395.25	2355439.75	0.00183631	0.00156269	0.00148881	0.00007387	0.00427997	0.00341058	0.00333163	0.00007895
592239.00	2356126.00	0.00018577	0.00050552	0.00012534	0.00038019	0.09824372	0.08961593	0.08511372	0.00450222
592239.00	2356026.00	0.00058346	0.00067778	0.00043434	0.00024344	0.04932579	0.04132638	0.04045471	0.00087165
592239.00	2355926.00	0.00101134	0.00097208	0.00079295	0.00017913	0.02975123	0.0243733	0.0236743	0.00069901
592239.00	2355826.00	0.00134643	0.00122799	0.00108594	0.00014205	0.02053658	0.01652343	0.0160566	0.00046683
592239.00	2355726.00	0.00155186	0.00138722	0.00127059	0.00011663	0.01504969	0.01189272	0.01161274	0.00027998
592239.00	2355626.00	0.00163889	0.00144919	0.00135141	0.00009779	0.01133896	0.00883884	0.00866374	0.0001751
592204.25	2356129.00	0.00018366	0.00052738	0.00012168	0.00040569	0.13043523	0.1238415	0.11539221	0.00844929
592186.94	2356030.50	0.0005872	0.00068394	0.00043356	0.00025038	0.07724435	0.06644431	0.06534633	0.00109801
592169.56	2355932.00	0.00104372	0.00099667	0.00081498	0.00018169	0.0481887	0.04000314	0.03930046	0.00070268
592152.19	2355833.50	0.00142017	0.00128491	0.00114157	0.00014334	0.03321109	0.02695778	0.02635534	0.00060244
592134.81	2355735.00	0.00166716	0.00147906	0.00136164	0.00011742	0.02456327	0.01952111	0.01904694	0.00047418
592117.44	2355636.75	0.00178741	0.00156951	0.00147114	0.00009837	0.01898246	0.01473973	0.0143875	0.00035222
592170.63	2356138.00	0.00020174	0.00074842	0.00013187	0.00061655	0.16648813	0.16428508	0.15000951	0.01427572
592136.38	2356044.00	0.00071428	0.00089407	0.00052545	0.00036862	0.11752638	0.10543272	0.10256664	0.00286605
592102.19	2355950.00	0.0013739	0.00132266	0.00106655	0.00025611	0.0801387	0.06843056	0.06760929	0.00082125
592068.00	2355856.25	0.00197888	0.00176913	0.00157416	0.00019496	0.05670023	0.04696585	0.04636752	0.00059832
592033.81	2355762.25	0.00244336	0.00212248	0.00196693	0.00015556	0.04215055	0.03400878	0.03347252	0.00053626
592189.00	2356239.50	0.00000732	0.00273221	0.00000325	0.00272896	0.19959276	0.20161635	0.18078246	0.02083394
592139.00	2356152.75	0.00023894	0.0014218	0.00015517	0.00126664	0.19992389	0.2020406	0.18278632	0.01925428
592089.00	2356066.25	0.00099213	0.0015723	0.00072965	0.00084266	0.16734938	0.15868835	0.15007964	0.00860886
592039.00	2355979.50	0.00211969	0.00226793	0.00164005	0.00062788	0.12877498	0.11537008	0.11262627	0.00274384
591989.00	2355893.00	0.00330801	0.0031154	0.00261573	0.00049967	0.09782556	0.08433707	0.08331714	0.00101992
591939.00	2355806.50	0.0043579	0.0038936	0.00348074	0.00041286	0.07537682	0.06306731	0.0624659	0.00060141
592174.75	2356249.50	0.00000782	0.00732383	0.00000355	0.0073203	0.20078357	0.2002643	0.18335745	0.01690682
592110.44	2356172.75	0.00031882	0.00256959	0.00020758	0.00236202	0.22565425	0.22866798	0.20877684	0.01989113
592046.19	2356096.25	0.00159226	0.00258294	0.00117188	0.00141107	0.21566771	0.21302412	0.19754605	0.01547812
591981.88	2356019.50	0.00381438	0.00399149	0.00295999	0.0010315	0.18713168	0.17828725	0.16872047	0.00956668
591917.63	2355943.00	0.00642196	0.0059399	0.00511768	0.00082222	0.15625697	0.14351285	0.13827634	0.00523654
592085.81	2356197.50	0.00052557	0.01087565	0.00035209	0.01052363	0.23451634	0.23492305	0.21882819	0.01609495
592009.19	2356133.25	0.00340016	0.00831274	0.00260356	0.00570919	0.24557321	0.24417993	0.22833046	0.01584954
591932.56	2356069.00	0.00918836	0.01112216	0.00750865	0.00361353	0.23388405	0.22970676	0.21556372	0.01414295
591856.00	2356004.50	0.01628967	0.01625418	0.01376274	0.00249144	0.21221437	0.20512566	0.19327899	0.01184677
592065.81	2356226.00	0.00088032	0.04021453	0.00061319	0.03960157	0.22338861	0.22022015	0.20946863	0.01075154
591979.19	2356176.00	0.00688884	0.03249735	0.00557268	0.02692466	0.24318375	0.23927266	0.22825371	0.01101901
592130.25	2356186.50	0.00016826	0.00244685	0.0001042	0.00234265	0.21984634	0.22397287	0.20329875	0.02067399
591806.00	2356076.00	0.03704108	0.04961913	0.03353538	0.01608372	0.23189734	0.22527965	0.21526511	0.0100146
592051.06	2356257.50	0.00106842	0.04160376	0.00075035	0.04085365	0.19556854	0.18970099	0.18348094	0.00622009
591957.06	2356223.50	0.00831437	0.03356202	0.00680138	0.02676062	0.20932088	0.2030704	0.19712248	0.0059479
591863.13	2356189.25	0.0244519	0.04129905	0.02174726	0.01955182	0.20866837	0.20173289	0.19624408	0.00548888
591769.13	2356155.00	0.04464444	0.05652382	0.04135227	0.01517152	0.19976636	0.19210063	0.18705153	0.00504908
592042.06	2356291.25	0.00092448	0.00951473	0.00063494	0.00887983	0.15873811	0.15150519	0.14818877	0.00331647
591943.56	2356274.00	0.0059004	0.00955898	0.00464402	0.00491496	0.15935271	0.15205403	0.14935052	0.00270356
591845.06	2356256.50	0.01543926	0.01657126	0.01322066	0.0033506	0.15122723	0.14380943	0.14158783	0.00222161
591746.63	2356239.25	0.02667129	0.02644574	0.02393367	0.00251208	0.13900763	0.13146687	0.12959167	0.00187514
592039.00	2356326.00	0.00075154	0.00408716	0.00050678	0.00358039	0.12173453	0.11424361	0.11235267	0.00189093
591939.00	2356326.00	0.00374625	0.00512937	0.00282889	0.00230049	0.11111189	0.10396734	0.10260416	0.00136316
591839.00	2356326.00	0.00817933	0.00827899	0.00658875	0.00169024	0.09744617	0.09069399	0.08962089	0.00107312
591739.00	2356326.00	0.01270887	0.01199113	0.01065733	0.00133381	0.08397677	0.07760132	0.07671112	0.00089019
591639.00	2356326.00	0.0166591	0.01543627	0.01433752	0.00109873	0.0721433	0.0660516	0.06528573	0.00076587

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591943.56	2356378.00	0.00311033	0.00492206	0.00238727	0.0025348	0.07498092	0.06859161	0.067551	0.00104062
591845.06	2356395.50	0.00619765	0.00690779	0.00501041	0.00189738	0.06118879	0.05549611	0.05460558	0.00089054
591746.63	2356412.75	0.00902207	0.00902025	0.00750183	0.00151842	0.05015191	0.04508511	0.04429284	0.00079227
591648.13	2356430.25	0.0111917	0.01073556	0.00947043	0.00126512	0.04147402	0.03694146	0.03622219	0.00071929
591863.13	2356462.75	0.0064496	0.00738142	0.00560406	0.00177736	0.0420111	0.03736055	0.03638877	0.00097178
591769.13	2356497.00	0.00932216	0.0097255	0.00831426	0.00141124	0.03449925	0.03050104	0.02960986	0.00089118
591675.19	2356531.25	0.01138986	0.01145715	0.0102892	0.00116796	0.02894379	0.02546103	0.02464261	0.00081842
591581.25	2356565.50	0.01245222	0.01229278	0.0112988	0.00099398	0.02470499	0.02162206	0.02087002	0.00075203
591719.38	2356626.00	0.01346501	0.01516059	0.01388711	0.00127347	0.02553989	0.02261455	0.02175692	0.00085762
591632.75	2356676.00	0.01453543	0.01607768	0.01498726	0.00109042	0.02259354	0.01997298	0.01920828	0.00076472
591546.19	2356726.00	0.0146604	0.01601756	0.01506488	0.00095269	0.02013888	0.01775496	0.01706721	0.00068774
591459.56	2356776.00	0.01421422	0.01538396	0.01453809	0.00084587	0.01806687	0.01586643	0.01524156	0.00062488
591549.56	2356904.50	0.01536626	0.01889094	0.01809322	0.00079773	0.01982122	0.01853172	0.01789288	0.00063885
591472.94	2356968.75	0.01436501	0.01755001	0.01683406	0.00071595	0.01799749	0.01690543	0.01630701	0.00059842
591396.38	2357033.00	0.01329314	0.01615352	0.01550276	0.00065077	0.01636348	0.01541844	0.0148547	0.00056375
591319.75	2357097.25	0.01224156	0.01480462	0.01420748	0.00059713	0.01490977	0.01406948	0.01353627	0.00053321
591243.13	2357161.50	0.01124831	0.01354409	0.01299179	0.00055231	0.01362105	0.01285439	0.01234845	0.00050594
591467.63	2357245.25	0.01140629	0.01455404	0.01400105	0.00055299	0.01612571	0.01689678	0.01631691	0.00057986
591403.38	2357321.75	0.01039763	0.01321656	0.01271189	0.00050467	0.01460229	0.01529383	0.01475507	0.00053876
591339.13	2357398.50	0.00947885	0.01200641	0.0115427	0.00046371	0.01326978	0.01386144	0.01335965	0.0005018
590438.50	2356953.50	0.00621243	0.00566226	0.00530423	0.00035802	0.00795217	0.00587437	0.00552217	0.0003522
591489.00	2357625.00	0.00833269	0.0107596	0.00980178	0.00095781	0.01181684	0.01311535	0.01270995	0.0004054
591364.00	2357841.50	0.00667287	0.00852877	0.00774416	0.00078461	0.00931069	0.00999024	0.00964607	0.00034417
591239.00	2358058.00	0.00546726	0.00689636	0.00624039	0.00065597	0.00760698	0.00782824	0.00752773	0.00030051
591114.00	2358274.50	0.00457829	0.00567959	0.005122	0.00055759	0.00639683	0.00629622	0.00602877	0.00026745
590989.00	2358491.00	0.00390353	0.00475318	0.00427277	0.00048041	0.00549778	0.00517947	0.0049387	0.00024076
590864.00	2358707.50	0.00337736	0.0040357	0.00361733	0.00041837	0.00480561	0.00434497	0.00412603	0.00021893
592204.81	2356232.00	0.00000674	0.00144493	0.00000304	0.0014419	0.19153726	0.19648398	0.17247142	0.02401257
592221.63	2356227.50	0.00000629	0.00095515	0.00000288	0.00095227	0.17903749	0.18613179	0.16010751	0.02602422
592162.38	2356261.75	0.00000869	0.02763266	0.00000409	0.02762863	0.19521024	0.19242981	0.17957816	0.01285169
592622.00	2356004.50	0.01241984	0.01244397	0.0120198	0.00042418	0.00442239	0.00378062	0.00357476	0.00020586
592239.00	2356226.00	0.00000618	0.00085086	0.00000287	0.00084799	0.1639841	0.17250151	0.14550179	0.02699982
592152.38	2356276.00	0.00000987	0.07311298	0.00000482	0.07310844	0.18192671	0.17863374	0.16940129	0.00923244
591806.00	2356576.00	0.01115987	0.01295684	0.01142896	0.00152787	0.02915702	0.02583382	0.02487022	0.0009636
592239.00	2356426.00	0.00002624	0.01124691	0.00001678	0.01123014	0.03511506	0.03076247	0.02886132	0.00190115
592273.19	2356420.00	0.00004374	0.00380485	0.00003621	0.00376865	0.03083517	0.02702219	0.0249427	0.00207949
592289.00	2356412.50	0.00005335	0.00352442	0.00004415	0.00348027	0.03001119	0.02632309	0.0241514	0.0021717
592303.25	2356402.50	0.00005598	0.00474507	0.00004063	0.00470445	0.03029445	0.02664883	0.02434055	0.00230827
592315.63	2356390.25	0.00005223	0.00816457	0.00002952	0.00813507	0.03209124	0.02849795	0.02587745	0.00262049
592325.63	2356376.00	0.0000448	0.01447431	0.00001899	0.01445535	0.0359412	0.03274623	0.02926412	0.00348207
592333.00	2356360.25	0.00003967	0.02241495	0.00001339	0.0224016	0.04205928	0.04048397	0.0347268	0.00575724
592337.50	2356343.25	0.00004053	0.02528866	0.0000123	0.02527643	0.05031829	0.05315964	0.0421818	0.01097783
592339.00	2356326.00	0.00004497	0.01991477	0.00001488	0.01989995	0.06027846	0.07108746	0.0513448	0.01974277
592439.00	2356326.00	0.00231544	0.01065753	0.00094378	0.00971382	0.0134827	0.06656248	0.00982226	0.05674024
592337.50	2356308.75	0.00004709	0.01142496	0.00002002	0.01140498	0.07086799	0.089697	0.06032674	0.02937024
592435.94	2356291.25	0.00257201	0.00600954	0.001375	0.00463458	0.01459905	0.03487405	0.0105099	0.02436416
592534.44	2356274.00	0.00789356	0.00705173	0.00434083	0.00271091	0.0010665	0.00242688	0.00063898	0.0017879
592333.00	2356291.75	0.00004377	0.0055331	0.00002344	0.00550967	0.08063225	0.1034865	0.0683083	0.03517837
592426.94	2356257.50	0.00255764	0.00402485	0.00176594	0.00225892	0.01544513	0.01828604	0.01118334	0.0071027
592520.94	2356223.50	0.00827807	0.00768943	0.00627878	0.00141065	0.00232209	0.00258101	0.00158401	0.000997
592614.88	2356189.25	0.01333691	0.01164626	0.01062121	0.00102505	0.00170226	0.00161354	0.00122821	0.00038533
592708.88	2356155.00	0.0174412	0.01532562	0.0145192	0.00080642	0.00428074	0.00355303	0.00320047	0.00035256
592802.81	2356120.75	0.01965222	0.01763068	0.01696814	0.00066255	0.01161722	0.00997983	0.00943296	0.00054688
592896.75	2356086.50	0.02040007	0.01863603	0.01807548	0.00056055	0.02428609	0.02339869	0.02277437	0.00062432
592990.75	2356052.50	0.02018821	0.0186475	0.01816266	0.00048483	0.0367576	0.03725742	0.03674371	0.00051372
593883.44	2355727.50	0.0109915	0.00945524	0.00923983	0.00021541	0.02274193	0.01881914	0.01865966	0.00015947
592325.63	2356276.00	0.00003622	0.00232923	0.00002133	0.0023079	0.08964836	0.11165612	0.07593243	0.0357238
592412.19	2356226.00	0.00199247	0.00254466	0.00157793	0.00096674	0.01751226	0.01612108	0.01311005	0.00301102
592498.81	2356176.00	0.00688357	0.00664534	0.00603427	0.00061107	0.00414624	0.00379638	0.00304241	0.00075396
592585.44	2356126.00	0.01166812	0.01123417	0.01078626	0.00044791	0.0028203	0.002454	0.00215535	0.00029864
592672.00	2356076.00	0.01564742	0.0153964	0.01504122	0.00035519	0.00414986	0.00349626	0.00324289	0.00025338
592758.63	2356026.00	0.01796648	0.01806779	0.01777295	0.00029483	0.00740965	0.00608336	0.00585176	0.0002316
592845.25	2355976.00	0.01873917	0.01913458	0.01888168	0.0002529	0.01229405	0.01040764	0.01013081	0.00027682
592931.81	2355926.00	0.01852437	0.01908396	0.01886256	0.0002214	0.0179758	0.01638266	0.01604254	0.00034012
593018.44	2355876.00	0.01776545	0.01835512	0.01815815	0.00019698	0.02363494	0.02277831	0.02241887	0.00035943
593105.00	2355826.00	0.01683085	0.01733012	0.01715216	0.00017796	0.02790346	0.02748571	0.02714097	0.00034474
593191.63	2355776.00	0.01575009	0.01608538	0.01592331	0.00016208	0.0295322	0.02919715	0.02888372	0.00031344
593278.25	2355726.00	0.01475435	0.01488455	0.01473549	0.00014907	0.02959201	0.02896052	0.02868058	0.00027993
592315.63	2356261.75	0.00002731	0.00228802	0.00001611	0.00227191	0.09827853	0.11734949	0.08384734	0.0335022
592392.19	2356197.50	0.00132036	0.00212447	0.00102907	0.0010954	0.02131626	0.01858081	0.01655346	0.00202736

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592468.81	2356133.25	0.0047794	0.00485504	0.00413842	0.00071662	0.00662377	0.00570653	0.00500054	0.00070599
592545.44	2356069.00	0.00884548	0.00872869	0.00819698	0.00053172	0.00421368	0.00356609	0.00331861	0.00024748
592303.25	2356249.50	0.00001906	0.00249579	0.00001063	0.00248516	0.10826847	0.12401759	0.09313452	0.0308832
592367.56	2356172.75	0.00084474	0.00186963	0.00062317	0.00124647	0.02781493	0.02373686	0.02201901	0.00171784
592289.00	2356239.50	0.00001239	0.0015504	0.00000643	0.00154398	0.1197328	0.13261729	0.10370016	0.02891729
592273.19	2356232.00	0.0000084	0.00097424	0.00000409	0.00097016	0.13317509	0.1440602	0.11624224	0.0278178
592256.38	2356227.50	0.0000067	0.00085454	0.00000314	0.0008514	0.14821326	0.15783406	0.13043791	0.02739655
592145.00	2356291.75	0.0000114	0.07716089	0.00000565	0.07715556	0.16554337	0.16021848	0.15383902	0.00637939
592140.50	2356308.75	0.00001348	0.02570602	0.00000653	0.02569955	0.14603085	0.13942522	0.13509027	0.00433516
592139.00	2356326.00	0.00001722	0.00837313	0.00000801	0.00836514	0.12546766	0.11822395	0.11518724	0.00303671
592140.50	2356343.25	0.00002267	0.00773904	0.00001026	0.00772881	0.10606657	0.09864091	0.09637551	0.00226545
592042.06	2356360.75	0.00071119	0.00430471	0.00048605	0.00381869	0.09074099	0.08362347	0.08226977	0.00135371
592145.00	2356360.25	0.0000284	0.00752626	0.00001282	0.00751346	0.08896935	0.08167313	0.07983109	0.00184208
592051.06	2356394.50	0.00077556	0.00421842	0.00056289	0.00365555	0.06834358	0.06187705	0.06064567	0.00123139
591957.06	2356428.50	0.00326077	0.00508257	0.00268617	0.0023964	0.05253166	0.04706797	0.04600404	0.00106393
592152.38	2356376.00	0.00003221	0.00746762	0.00001493	0.00745271	0.07478853	0.06780784	0.06616129	0.00164658
592065.81	2356426.00	0.00090896	0.00453136	0.00074635	0.00378503	0.05374479	0.04798853	0.04670796	0.00128058
591979.19	2356476.00	0.00390483	0.00622981	0.00369366	0.00253616	0.04103412	0.03640242	0.03522268	0.00117975
591892.56	2356526.00	0.00770379	0.00959747	0.00769054	0.00190694	0.03383255	0.02998081	0.02890461	0.00107621
592162.38	2356390.25	0.00003326	0.00746897	0.00001613	0.00745286	0.06337027	0.05681307	0.05523136	0.00158173
592085.81	2356454.50	0.00105109	0.00463125	0.00098946	0.00364181	0.04391397	0.0388569	0.03746368	0.0013932
592009.19	2356518.75	0.0048406	0.00777735	0.0053582	0.00241917	0.03619213	0.03207524	0.03079351	0.00128173
591932.56	2356583.00	0.00925022	0.01254631	0.01073264	0.00181365	0.03164643	0.02836162	0.02725226	0.00110937
591856.00	2356647.50	0.01312903	0.01700152	0.01555065	0.00145089	0.02879543	0.02604551	0.02509103	0.00095447
591779.38	2356711.75	0.01545411	0.01959763	0.01838647	0.00121115	0.02633462	0.02404909	0.02321112	0.00083797
591702.75	2356776.00	0.01628362	0.02037477	0.01933996	0.00103481	0.02400912	0.02212735	0.02137594	0.00075142
591626.19	2356840.25	0.01610556	0.01995366	0.01905252	0.00090116	0.02183072	0.0202824	0.01959452	0.00068788
592174.75	2356402.50	0.00003196	0.00982174	0.00001634	0.00980542	0.0547505	0.0486554	0.04706279	0.00159259
592110.44	2356479.25	0.00123862	0.00538443	0.00126426	0.00412018	0.03837856	0.03363592	0.03211816	0.00151775
591596.19	2357092.00	0.01365665	0.01758662	0.01690223	0.00068438	0.01984336	0.02062434	0.01995046	0.00067387
591531.94	2357168.75	0.01250037	0.01601794	0.01540684	0.00061111	0.01786732	0.01867754	0.01805248	0.00062504
592189.00	2356412.50	0.00002989	0.01862282	0.00001633	0.0186065	0.04795839	0.04233587	0.04069052	0.00164535
591639.00	2357365.25	0.01107969	0.0144775	0.01321287	0.00126463	0.0164215	0.01871669	0.01819848	0.00051823
591589.00	2357451.75	0.01006593	0.013097	0.01195116	0.00114583	0.0146482	0.01658685	0.0161132	0.00047366
591539.00	2357538.50	0.00912947	0.01183659	0.01079139	0.00104521	0.01309474	0.01470559	0.01426887	0.00043673
592204.81	2356420.00	0.00002837	0.02583084	0.00001664	0.02581421	0.04270026	0.03753176	0.03580989	0.00172188
591760.19	2357641.50	0.00987802	0.01323041	0.01139505	0.00183536	0.01267386	0.01429629	0.01370662	0.00058967
591726.00	2357735.50	0.00903547	0.01204863	0.01035717	0.00169146	0.01148212	0.0127211	0.01213746	0.00058364
592221.63	2356424.50	0.00002658	0.0203983	0.00001617	0.02038215	0.03854585	0.03380441	0.03199475	0.00180964
592435.94	2356360.75	0.00222796	0.01437158	0.00082017	0.01355146	0.01085005	0.03474007	0.00766867	0.02707151
592632.94	2356256.50	0.01239289	0.00887895	0.00703964	0.00183932	0.00073734	0.00101396	0.00045367	0.0005603
592256.38	2356424.50	0.00003207	0.00591901	0.00002366	0.00589535	0.03255653	0.02851691	0.02652475	0.00199216
592239.00	2356526.00	0.00137819	0.00648907	0.00134076	0.00514833	0.02776907	0.02562219	0.02367826	0.00194394
592239.00	2356626.00	0.0047132	0.00812013	0.00480254	0.0033176	0.03561325	0.03775343	0.03592367	0.00182976
592239.00	2356726.00	0.00793758	0.01052185	0.00806717	0.00245468	0.0427336	0.05044968	0.04886545	0.00158425
592239.00	2356826.00	0.00965477	0.01199878	0.0100267	0.00197207	0.04183315	0.05244878	0.05112683	0.00132199
592239.00	2356926.00	0.01039146	0.01240182	0.01077033	0.00163148	0.03816333	0.047951	0.04646437	0.00148662
592239.00	2357026.00	0.01028392	0.0119928	0.01061486	0.00137794	0.03428857	0.04282015	0.04097859	0.00184156
592239.00	2357126.00	0.00975244	0.01119659	0.01001728	0.00117931	0.03093883	0.03839775	0.03625819	0.00213952
592239.00	2357226.00	0.00906615	0.01029377	0.00926624	0.00102752	0.02793418	0.03432182	0.03205526	0.00226656
592239.00	2357326.00	0.00828996	0.00933765	0.00842933	0.00090833	0.02498424	0.03029789	0.0280611	0.00223678
592239.00	2357426.00	0.00762967	0.008515	0.0077001	0.00081491	0.02242551	0.02657	0.02446486	0.00210514
592273.75	2356523.00	0.00167159	0.00433785	0.00162464	0.00271323	0.02486811	0.02321906	0.02110717	0.00211186
592291.06	2356621.50	0.00500814	0.0067413	0.00498283	0.00175848	0.03352314	0.03748121	0.03537684	0.00210441
592308.44	2356720.00	0.00805116	0.00924902	0.00794371	0.00130532	0.04205199	0.05193718	0.05023751	0.00169967
592325.81	2356818.50	0.00957801	0.01068199	0.00962968	0.00105231	0.04249583	0.05424324	0.05216103	0.00208219
592343.19	2356917.00	0.0101285	0.01103444	0.01016317	0.00087127	0.04166884	0.05293225	0.0499468	0.00298547
592360.56	2357015.25	0.00996719	0.01070141	0.00996764	0.00073377	0.0393372	0.04960988	0.04620931	0.00340056
592377.94	2357113.75	0.00942774	0.01002009	0.00938897	0.00063112	0.0350447	0.04339327	0.04021817	0.00317509
592412.63	2357310.75	0.00802459	0.00840021	0.00790988	0.00049034	0.02500734	0.02911377	0.02695908	0.00215468
592430.00	2357409.25	0.00742354	0.00767174	0.00723041	0.00044133	0.02099649	0.02350434	0.02177299	0.00173134
592307.38	2356514.00	0.00238772	0.00415197	0.00234767	0.00180431	0.02129983	0.0200801	0.01774505	0.00233504
592341.63	2356608.00	0.00657948	0.00776384	0.00657182	0.00119202	0.0286862	0.03354363	0.03113414	0.00240949
592375.81	2356702.00	0.01030007	0.01106097	0.01016553	0.00089545	0.03846186	0.04869751	0.04645066	0.00224683
592410.00	2356795.75	0.01201499	0.01276908	0.01204812	0.00072095	0.04391815	0.05701004	0.05296507	0.00404496
592444.19	2356889.75	0.01245196	0.01305627	0.01245023	0.00060604	0.04501808	0.05771421	0.05304046	0.00467375
592478.44	2356983.75	0.01222531	0.01269899	0.01218115	0.00051784	0.0393379	0.04829763	0.04465718	0.00364046
592512.63	2357077.75	0.01146778	0.01183157	0.0113796	0.00045197	0.03121835	0.03651874	0.03400658	0.00251217
592546.81	2357171.75	0.01059715	0.01086871	0.01046815	0.00040055	0.02474227	0.02765076	0.02589274	0.00175803
592581.00	2357265.75	0.00970779	0.00989693	0.00953751	0.00035942	0.02002686	0.02148425	0.02019062	0.00129363

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592615.25	2357359.75	0.00889888	0.00900833	0.00868175	0.00032658	0.01672	0.01724496	0.01624812	0.00099683
592649.44	2357453.75	0.00818829	0.00818933	0.00789065	0.00029868	0.01434168	0.01419884	0.01340407	0.00079477
592339.00	2356499.25	0.00282118	0.00428244	0.00260428	0.00167817	0.01721342	0.01644277	0.01380967	0.00263311
592389.00	2356585.75	0.00722336	0.00792019	0.00681697	0.00110323	0.02148224	0.02617342	0.02337089	0.00280253
592439.00	2356672.50	0.01099653	0.01111247	0.01029078	0.00082167	0.03150455	0.04095111	0.03727855	0.00367255
592489.00	2356759.00	0.01276186	0.0126489	0.01199336	0.00065555	0.04261995	0.0559471	0.04953234	0.00641474
592539.00	2356845.50	0.01280013	0.01267619	0.0121328	0.00054339	0.03808166	0.0470503	0.04272633	0.00432396
592589.00	2356932.25	0.01236671	0.0121694	0.0117059	0.00046351	0.03032232	0.03434309	0.03196026	0.00238282
592639.00	2357018.75	0.01150771	0.01127625	0.01087237	0.00040388	0.02484612	0.02650922	0.02505849	0.00145074
592689.00	2357105.50	0.01051365	0.01026971	0.00991187	0.00035783	0.02175604	0.02222616	0.02123707	0.00098908
592739.00	2357192.00	0.00958239	0.00932191	0.00900047	0.00032144	0.02033618	0.01974932	0.01900819	0.00074115
592789.00	2357278.75	0.00868338	0.00842568	0.00813231	0.00029336	0.01921904	0.01783444	0.01724715	0.0005873
592839.00	2357365.25	0.00790358	0.00761652	0.00734786	0.00026867	0.01806425	0.0160739	0.01558742	0.00048647
592889.00	2357451.75	0.00716938	0.00688052	0.00663375	0.00024677	0.0167347	0.01442394	0.01400755	0.00041639
592939.00	2357538.50	0.00651692	0.00624194	0.00601327	0.00022866	0.01545201	0.01300843	0.01264056	0.00036789
592367.56	2356479.25	0.00285306	0.00437145	0.00218701	0.00218446	0.0130552	0.01301818	0.0099973	0.00302089
592431.81	2356555.75	0.00708814	0.00698078	0.00554864	0.00143214	0.01317323	0.01708026	0.01367529	0.00340498
592496.13	2356632.50	0.01042362	0.0093169	0.00825182	0.00106507	0.02058558	0.03103437	0.0242348	0.00679958
592560.38	2356709.00	0.01227457	0.01050503	0.00965593	0.00084911	0.02888482	0.03812521	0.03157857	0.00654665
592624.69	2356785.75	0.01239419	0.0105774	0.00987279	0.00070462	0.02624097	0.02918045	0.02653885	0.00264158
592688.94	2356862.25	0.01173205	0.00996444	0.00936191	0.00060252	0.02680153	0.02794973	0.02661753	0.00133221
592753.25	2356938.75	0.01100074	0.009299	0.00877004	0.00052896	0.02928652	0.02950818	0.02864317	0.000865
592817.50	2357015.50	0.01005409	0.00845548	0.00798626	0.00046923	0.02873239	0.02829749	0.02765162	0.00064589
592881.81	2357092.00	0.00914622	0.00763582	0.0072145	0.00042132	0.02618228	0.02523211	0.02471176	0.00052036
592946.06	2357168.75	0.00837483	0.00692594	0.00654303	0.00038291	0.02316356	0.02181366	0.02137275	0.00044092
593010.38	2357245.25	0.00770317	0.00627216	0.0059218	0.00035036	0.02014978	0.01858358	0.01819799	0.00038559
593074.63	2357321.75	0.00707292	0.00568891	0.00536659	0.00032233	0.01746845	0.01582689	0.01548207	0.00034483
592392.19	2356454.50	0.00273177	0.00495508	0.00155942	0.00339569	0.00954942	0.01052468	0.00707984	0.00344482
592468.81	2356518.75	0.00708781	0.00617131	0.00406806	0.00210326	0.00584298	0.00961314	0.00519651	0.00441665
592545.44	2356583.00	0.0102964	0.0075367	0.00601973	0.00151697	0.00849966	0.02210093	0.00950061	0.01260033
592622.00	2356647.50	0.01218204	0.00838224	0.00719936	0.00118289	0.01290866	0.01664884	0.01250573	0.00414309
592698.63	2356711.75	0.01261213	0.00843163	0.00746305	0.00096858	0.02541777	0.02623757	0.02474225	0.00149533
592775.25	2356776.00	0.01209176	0.00806118	0.00724232	0.00081886	0.03433846	0.03421029	0.0332933	0.00091701
592851.81	2356840.25	0.01124133	0.0074481	0.00673938	0.00070872	0.0334815	0.03252907	0.03180832	0.00072075
592928.44	2356904.50	0.01045426	0.00685158	0.00622677	0.0006248	0.03018779	0.02813326	0.02749499	0.00063827
593005.06	2356968.75	0.00971475	0.0062683	0.00571054	0.00055776	0.02681964	0.02355729	0.02297226	0.00058502
593081.63	2357033.00	0.00893873	0.0057056	0.00520192	0.00050367	0.02354881	0.01957684	0.0190402	0.00053665
592412.19	2356426.00	0.00254536	0.00730638	0.00110365	0.00620278	0.0076678	0.00903077	0.00541575	0.00361503
592498.81	2356476.00	0.00712296	0.00686182	0.00315084	0.003711	0.00169761	0.00695374	0.00113016	0.00582361
592585.44	2356526.00	0.01062474	0.00740514	0.00484408	0.00256107	0.00121296	0.02134824	0.00093101	0.02041724
592672.00	2356576.00	0.01253927	0.00775215	0.00583819	0.00191395	0.00777986	0.00993874	0.00755221	0.00238654
592758.63	2356626.00	0.0131086	0.00772531	0.00621911	0.0015062	0.02205345	0.02145913	0.01996633	0.00149282
592845.25	2356676.00	0.01292607	0.00742142	0.00619168	0.00122975	0.03115384	0.02538983	0.02405499	0.00133485
592931.81	2356726.00	0.0122856	0.0069559	0.00592349	0.00103241	0.0330625	0.02392523	0.022734	0.00119122
593018.44	2356776.00	0.01138419	0.00642144	0.00554008	0.00088136	0.0318052	0.02119784	0.02014358	0.00105428
592426.94	2356394.50	0.00234363	0.01225455	0.00089031	0.0113643	0.00810574	0.01047295	0.00561509	0.00485787
592520.94	2356428.50	0.00672595	0.01007351	0.0026598	0.00741376	0.00040712	0.00825737	0.00020964	0.00804775
592614.88	2356462.75	0.01042059	0.00961614	0.00424339	0.00537278	0.000017	0.0295568	0.00000726	0.02954955
592708.88	2356497.00	0.0125816	0.00935493	0.00521427	0.00414065	0.00246555	0.0066862	0.00143525	0.00525097
592802.81	2356531.25	0.01314476	0.00890167	0.00558277	0.00331891	0.0156475	0.01204137	0.00724754	0.00479386
592896.75	2356565.50	0.01286207	0.00829129	0.00555682	0.00273447	0.02937622	0.01728622	0.01321982	0.00406641
592990.75	2356599.50	0.01216125	0.00762812	0.00532471	0.00230341	0.03507742	0.01938025	0.01595013	0.00343014
593883.44	2356924.50	0.00581405	0.00322642	0.00247303	0.00075339	0.01349939	0.00658445	0.00556616	0.0010183
594118.38	2357010.00	0.00488202	0.00264169	0.00203511	0.00060659	0.01056275	0.00497177	0.00416675	0.00080502
594353.31	2357095.50	0.00416356	0.00220162	0.00170455	0.00049707	0.00863559	0.00391026	0.00325834	0.00065193
592534.44	2356378.00	0.00656307	0.01161946	0.00253201	0.00908753	0.00021285	0.11334714	0.00010903	0.11323843
592632.94	2356395.50	0.01011753	0.01076589	0.00404106	0.00672487	0.0000001	0.0099344	0.00000003	0.00993437
592731.38	2356412.75	0.01243044	0.01036235	0.00510075	0.0052616	0.00143411	0.01850497	0.0005237	0.01798135
592829.88	2356430.25	0.01337803	0.00988145	0.00561385	0.0042676	0.01361258	0.01726677	0.00529417	0.01197261
592928.38	2356447.50	0.01328464	0.00920617	0.00565817	0.003548	0.0282955	0.01999492	0.0115126	0.00848229
593026.88	2356465.00	0.01274661	0.00846333	0.00545629	0.00300706	0.03602605	0.02149836	0.01508211	0.00641629
592539.00	2356326.00	0.00686498	0.00907599	0.00289477	0.00618126	0.00039408	0.00510397	0.00020893	0.00489505
592639.00	2356326.00	0.01070968	0.00906134	0.00464985	0.00441151	0.00009492	0.00110254	0.00004639	0.00105615
592739.00	2356326.00	0.01340982	0.00934033	0.00598158	0.00335876	0.00377252	0.0041517	0.00277924	0.00137246
592839.00	2356326.00	0.01459317	0.00934008	0.00667526	0.00266482	0.02208346	0.019203	0.01748781	0.00171522
592939.00	2356326.00	0.01476015	0.00906195	0.00688564	0.00217631	0.03974569	0.02993026	0.02833113	0.00159914
593039.00	2356326.00	0.01436069	0.00857639	0.00676119	0.00181521	0.0470479	0.03221872	0.03072871	0.00149003
593139.00	2356326.00	0.01376025	0.00800976	0.00646944	0.00154031	0.04763291	0.03027529	0.02888268	0.00139263
596739.00	2356326.00	0.00256801	0.000831	0.0007352	0.0000958	0.00407489	0.00117054	0.00105356	0.00011698
592731.38	2356239.25	0.01577396	0.0105451	0.00918119	0.00136392	0.00463529	0.00420669	0.00326706	0.00093963

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592829.88	2356221.75	0.01727877	0.01144464	0.01038098	0.00106366	0.01948536	0.01779306	0.01687523	0.00091783
592928.38	2356204.50	0.01745329	0.01165664	0.01079317	0.00086348	0.03948412	0.03786148	0.03735425	0.00050723
593026.88	2356187.00	0.01694415	0.01136105	0.01064289	0.00071816	0.05099713	0.05014978	0.04967282	0.00047697
593125.31	2356169.75	0.01607647	0.01075645	0.01014532	0.00061113	0.05479311	0.05321259	0.05268905	0.00052353
593223.81	2356152.25	0.01508591	0.01001073	0.00948263	0.00052811	0.05314231	0.04967446	0.04914853	0.00052591
593322.31	2356135.00	0.0141595	0.00925233	0.00878798	0.00046436	0.04891944	0.04368671	0.04318335	0.00050336
593420.75	2356117.50	0.0132398	0.00849236	0.00807901	0.00041334	0.04368369	0.03721298	0.0367435	0.00046949
593519.25	2356100.25	0.01237858	0.00778756	0.00741548	0.00037208	0.03865883	0.03143288	0.030999	0.00043388
594208.63	2355978.75	0.00789334	0.00439108	0.00417856	0.00021252	0.01777984	0.01109202	0.0108317	0.00026033
594454.81	2355935.25	0.00685851	0.0036738	0.00349109	0.00018271	0.0142871	0.00832049	0.00809581	0.00022467
594701.00	2355892.00	0.00602425	0.00311333	0.00295347	0.00015985	0.01173846	0.0064416	0.00624535	0.00019625
594947.25	2355848.50	0.00531301	0.00267145	0.00252995	0.0001415	0.00987389	0.00516437	0.00498996	0.00017441
593084.75	2356018.25	0.01942748	0.01802471	0.01759701	0.0004277	0.04219555	0.04285078	0.04246236	0.00038843
593178.69	2355984.00	0.01841425	0.01702735	0.01664353	0.00038381	0.04227522	0.04214428	0.04183853	0.00030571
593272.69	2355949.75	0.01731601	0.01587957	0.01553201	0.00034756	0.03992539	0.03875222	0.03849956	0.00025267
593366.63	2355915.50	0.01619154	0.01469103	0.01437363	0.0003174	0.03682084	0.03473563	0.03451669	0.00021894
593460.63	2355881.25	0.01508767	0.01354867	0.01325644	0.00029224	0.03367526	0.0309091	0.03071125	0.00019786
593554.56	2355847.25	0.01405362	0.01249574	0.01222483	0.0002709	0.03082475	0.02754998	0.02736569	0.00018429
593648.56	2355813.00	0.01311213	0.01154342	0.01129103	0.0002524	0.02828476	0.02464461	0.02446972	0.00017489
592046.19	2356555.75	0.00543671	0.00898042	0.00642055	0.00255986	0.03416595	0.03077347	0.02944558	0.00132791
591981.88	2356632.50	0.01021521	0.0144204	0.01255249	0.00186791	0.03259232	0.03006844	0.0289636	0.00110483
591917.63	2356709.00	0.0140607	0.01905534	0.01755651	0.00149884	0.03123808	0.02963302	0.0286603	0.00097272
591853.31	2356785.75	0.01598625	0.02129558	0.02003613	0.00125945	0.02931573	0.02856049	0.02766451	0.00089598
591789.06	2356862.25	0.01628721	0.02144447	0.02038465	0.00105982	0.02689242	0.02681329	0.02597787	0.00083542
591724.75	2356938.75	0.01577022	0.02057304	0.01967363	0.00089942	0.02443197	0.02481785	0.02403774	0.00078012
591660.50	2357015.50	0.01479852	0.01916802	0.01838944	0.00077858	0.02204393	0.02270117	0.02197515	0.00072601
591114.13	2357666.50	0.00697899	0.00873129	0.00837326	0.00035803	0.00979789	0.0100101	0.00961211	0.00039799
592139.00	2356499.25	0.00152355	0.01070459	0.00164224	0.00906236	0.03483491	0.03069213	0.02906411	0.00162802
592089.00	2356585.75	0.00636284	0.01344634	0.00755524	0.0058911	0.03400199	0.03138428	0.03003132	0.00135295
592039.00	2356672.50	0.01145362	0.01824022	0.01388287	0.00435735	0.03519136	0.03416206	0.0329879	0.00117416
591989.00	2356759.00	0.01505983	0.02188124	0.01840355	0.00347771	0.0346131	0.03533628	0.03423833	0.00109794
591939.00	2356845.50	0.0166318	0.02322519	0.02032997	0.00289522	0.03262293	0.03471549	0.03369849	0.001017
591889.00	2356932.25	0.01685273	0.02296315	0.02054191	0.00242124	0.03002552	0.03287586	0.03195943	0.00091642
591839.00	2357018.75	0.01594121	0.02141322	0.01934646	0.00206676	0.0267653	0.02998865	0.02917551	0.00081315
591789.00	2357105.50	0.01476744	0.01963606	0.01784222	0.00179383	0.02374702	0.02693649	0.02621793	0.00071857
591739.00	2357192.00	0.01351965	0.01783964	0.01626301	0.00157664	0.02103324	0.02396227	0.02332388	0.00063839
591689.00	2357278.75	0.01222469	0.0160474	0.01464142	0.00140598	0.01852529	0.02117112	0.02059879	0.00057233
592170.63	2356514.00	0.00177354	0.0159802	0.00195625	0.01402397	0.03227532	0.02887283	0.02714991	0.00172292
592136.38	2356608.00	0.0073005	0.01816056	0.00858642	0.00957412	0.03488911	0.03343126	0.03200378	0.00142747
592102.19	2356702.00	0.01291642	0.02250629	0.01533029	0.00717601	0.03870318	0.039916	0.03857534	0.00134066
592068.00	2356795.75	0.0164089	0.02527955	0.01962168	0.00565788	0.03809031	0.04235375	0.04113524	0.00121851
592033.81	2356889.75	0.01787145	0.02596214	0.02134236	0.00461978	0.0354146	0.04117732	0.04014329	0.00103401
591999.56	2356983.75	0.01788246	0.02522416	0.02128925	0.00393492	0.0317148	0.03778785	0.0369169	0.00087093
591965.38	2357077.75	0.01695353	0.02352076	0.02010418	0.0034166	0.02761206	0.03325297	0.03249401	0.00075896
591931.19	2357171.75	0.01570028	0.02155598	0.01854514	0.00301085	0.02385799	0.02876212	0.02807404	0.00068808
591897.00	2357265.75	0.01433189	0.0195457	0.01686153	0.00268417	0.02061051	0.02470626	0.02406046	0.00064579
591862.75	2357359.75	0.01304014	0.0176912	0.01527658	0.00241461	0.0179569	0.02129474	0.02067371	0.00062105
591828.56	2357453.75	0.01186245	0.01602331	0.01383333	0.00218997	0.015821	0.01848464	0.0178782	0.00060643
591794.38	2357547.50	0.01080541	0.01453852	0.01253771	0.00200081	0.01407734	0.01617941	0.01558272	0.0005967
591640.44	2357970.50	0.00733994	0.00966221	0.00825865	0.00140356	0.00924533	0.00981416	0.00924786	0.0005663
591554.94	2358205.50	0.00609235	0.00789505	0.00670775	0.0011873	0.00769544	0.00785958	0.00731579	0.00054378
592204.25	2356523.00	0.00160753	0.01176938	0.00168285	0.01008655	0.03001383	0.0273789	0.02555878	0.00182013
592186.94	2356621.50	0.00619195	0.01345207	0.00686119	0.00659089	0.03569085	0.03588215	0.03428987	0.00159228
592169.56	2356720.00	0.0108235	0.01682907	0.01194551	0.00488357	0.0414447	0.0458433	0.04433878	0.00150454
592152.19	2356818.50	0.01343805	0.01906043	0.01516686	0.00389356	0.04075643	0.04886187	0.04763878	0.00122308
592134.81	2356917.00	0.01455612	0.0196714	0.01640024	0.00327116	0.03707516	0.04569295	0.04467275	0.0010202
592117.44	2357015.25	0.01444345	0.01896579	0.0162117	0.00275408	0.03228119	0.03997333	0.03899231	0.00098103
592100.06	2357113.75	0.01369198	0.0176586	0.01529661	0.00236199	0.02785658	0.03430814	0.03327532	0.00103281
592082.75	2357212.25	0.01268071	0.01615724	0.01409862	0.00205863	0.02425656	0.02958898	0.0284729	0.00111607
592065.38	2357310.75	0.0115708	0.0146192	0.01280103	0.00181817	0.02134635	0.02574952	0.02455503	0.00119448
592048.00	2357409.25	0.01059432	0.01328428	0.01165762	0.00162665	0.01913542	0.02276538	0.0215122	0.00125318
592030.63	2357507.75	0.00963061	0.01200504	0.01053701	0.00146802	0.01722557	0.0202242	0.01893757	0.00128663
592013.25	2357606.25	0.00881088	0.01091287	0.00957875	0.00133412	0.01569017	0.01814547	0.01685016	0.00129531
591995.88	2357704.75	0.00805015	0.00991058	0.00869052	0.00122006	0.01432319	0.01633762	0.01505439	0.00128322
591978.50	2357803.25	0.00737838	0.00902553	0.00790398	0.00112156	0.01313103	0.01477098	0.01351567	0.00125531
593158.25	2357097.25	0.00829145	0.00520261	0.00474346	0.00045916	0.02090154	0.01633992	0.01584645	0.00049347
594947.25	2356803.50	0.00356381	0.00169888	0.00125708	0.00044181	0.0071109	0.00269214	0.00213302	0.00055912
593617.75	2356083.00	0.01154882	0.00713477	0.00679715	0.00033762	0.03412356	0.02651923	0.02611912	0.0004001
592239.00	2357526.00	0.00692823	0.00770561	0.00696772	0.0007379	0.01981646	0.02309692	0.02117053	0.00192638
592239.00	2357626.00	0.00633153	0.00700438	0.00633064	0.00067373	0.01759603	0.02003756	0.01830201	0.00173555

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592395.25	2357212.25	0.00877115	0.00924719	0.00869473	0.00055246	0.03001012	0.03602376	0.03335602	0.00266774
592447.38	2357507.75	0.00678221	0.00697729	0.00657544	0.00040186	0.01765618	0.01915851	0.01774975	0.00140877
592464.75	2357606.25	0.00621853	0.00634093	0.00597178	0.00036915	0.01498221	0.01578619	0.01462175	0.00116444
592683.63	2357547.50	0.00746523	0.00743027	0.00715527	0.00027499	0.01261223	0.01209605	0.0114388	0.00065725
593138.88	2357398.50	0.00650964	0.00517111	0.00487293	0.00029818	0.01526895	0.01356083	0.01324669	0.00031415
593234.88	2357161.50	0.00766414	0.00474884	0.00432702	0.00042183	0.01853741	0.01373447	0.01327966	0.00045481
593311.44	2357226.00	0.00708785	0.00434354	0.00395359	0.00038995	0.01658226	0.01169902	0.01127723	0.00042178
593105.00	2356826.00	0.01053823	0.00588969	0.00512452	0.00076516	0.02944999	0.01834909	0.01741843	0.00093067
593191.63	2356876.00	0.00975893	0.00540075	0.00472528	0.00067547	0.02670088	0.01582086	0.01499227	0.00082857
593278.25	2356926.00	0.00905389	0.00495461	0.0043515	0.00060313	0.02396362	0.01361745	0.01287089	0.00074656
593364.81	2356976.00	0.00836803	0.00453918	0.00399552	0.00054366	0.02113649	0.01170083	0.01102302	0.00067781
593451.44	2357026.00	0.00770553	0.00415231	0.00365863	0.00049368	0.01866113	0.01011581	0.00949602	0.00061979
593754.56	2357201.00	0.0059042	0.0031324	0.00276097	0.00037143	0.01267478	0.00653049	0.00605569	0.00047481
593084.75	2356633.75	0.01135828	0.00698454	0.00501398	0.00197055	0.03525495	0.01903803	0.01613478	0.00290327
593178.69	2356668.00	0.01053111	0.00637631	0.00466492	0.00171138	0.03284607	0.01753041	0.0150433	0.00248711
593272.69	2356702.25	0.00968442	0.00578086	0.00427779	0.00150305	0.02924382	0.01548709	0.01334083	0.00214626
593366.63	2356736.50	0.00891804	0.00525556	0.00392583	0.00132975	0.02581776	0.01353054	0.01165046	0.00188008
593460.63	2356770.75	0.00823405	0.00479372	0.00360909	0.00118463	0.02279196	0.01179562	0.01013359	0.00166203
593648.56	2356839.00	0.00701076	0.00399649	0.00303888	0.00095761	0.01779253	0.00898761	0.00766855	0.00131907
593125.31	2356482.25	0.01199662	0.00773103	0.00513854	0.00259249	0.03726819	0.02080038	0.01573059	0.0050698
593223.81	2356499.75	0.01119341	0.00704389	0.00477701	0.00226689	0.03559938	0.01897206	0.01483496	0.00413706
593322.31	2356517.00	0.01040353	0.00639305	0.00439642	0.00199665	0.03241795	0.01669741	0.01324026	0.00345716
593420.75	2356534.50	0.009645	0.00580123	0.00403026	0.00177098	0.02900169	0.01452318	0.01157928	0.00294391
593962.44	2356630.00	0.00642845	0.00351307	0.00251562	0.00099744	0.01563516	0.00699554	0.00556105	0.00143451
594208.63	2356673.25	0.00543203	0.00286129	0.00206429	0.00079701	0.01228956	0.00527123	0.00417373	0.00109749
602087.06	2358062.50	0.00070791	0.00022613	0.00019793	0.0000282	0.00111834	0.00027033	0.00023982	0.00003051
593239.00	2356326.00	0.01301786	0.00738871	0.00605972	0.001329	0.04489305	0.02674177	0.02546414	0.00127763
593339.00	2356326.00	0.01228721	0.00676611	0.0056063	0.00115982	0.04109267	0.02287802	0.02171554	0.00116248
593439.00	2356326.00	0.01148834	0.00617189	0.00515079	0.00102111	0.03685134	0.01943065	0.01836827	0.00106236
593539.00	2356326.00	0.01079589	0.00563643	0.00473051	0.00090592	0.03310867	0.01655276	0.01558104	0.00097174
593639.00	2356326.00	0.01013261	0.00515041	0.00434136	0.00080905	0.02977488	0.01418283	0.013293	0.00088982
594239.00	2356326.00	0.00711995	0.00313142	0.00267727	0.00045415	0.01665645	0.00650933	0.00596861	0.00054073
594739.00	2356326.00	0.00550757	0.00220644	0.00190025	0.0003062	0.01123609	0.00398227	0.00360739	0.00037488
594989.00	2356326.00	0.00489299	0.00188894	0.00163242	0.00025652	0.0095019	0.00324363	0.00292613	0.00031749
597239.00	2356326.00	0.00222985	0.00069924	0.0006222	0.00007704	0.00342839	0.0009538	0.00086152	0.00009229
593716.19	2356065.50	0.01077878	0.00654136	0.00623298	0.00030838	0.03017062	0.02248022	0.02211077	0.00036945
593962.44	2356022.00	0.00916382	0.00531906	0.00506667	0.00025239	0.02274191	0.0154024	0.01509509	0.0003073
595193.44	2355805.00	0.00470692	0.00231273	0.00218622	0.00012651	0.00838172	0.00422128	0.00406487	0.00015641
590739.00	2358924.00	0.0029619	0.00347139	0.00310372	0.00036768	0.00425807	0.00370672	0.0035062	0.00020052
591469.44	2358440.25	0.00516542	0.00656895	0.00554934	0.00101962	0.00656861	0.0064775	0.00596082	0.00051668
591383.94	2358675.25	0.00443488	0.00554013	0.00465379	0.00088634	0.0056689	0.00545044	0.00496288	0.00048756
593538.06	2357076.00	0.00710623	0.00380651	0.0033551	0.00045141	0.01653375	0.00880528	0.00823528	0.00057
589160.81	2364783.25	0.00082096	0.00076762	0.00067166	0.00009597	0.00116374	0.00082426	0.00072988	0.00009437
592239.00	2357726.00	0.0057909	0.00636905	0.00575212	0.00061694	0.01564219	0.01738969	0.01583763	0.00155207
592482.13	2357704.75	0.00574226	0.00578954	0.00544903	0.00034051	0.01293731	0.01319963	0.01222027	0.00097936
592717.81	2357641.50	0.00687412	0.00677208	0.00651755	0.00025453	0.01133391	0.01047698	0.00992189	0.0005551
593203.19	2357475.00	0.0060065	0.00471506	0.00443767	0.00027738	0.01353173	0.01173813	0.0114473	0.00029083
593388.06	2357290.25	0.00654647	0.00397036	0.00360796	0.00036239	0.01483881	0.01002185	0.00962999	0.00039186
593971.06	2357326.00	0.00495336	0.00258876	0.00227564	0.00031312	0.00989062	0.0049281	0.00452709	0.00040102
593554.56	2356804.75	0.00760361	0.00437541	0.00331275	0.00106266	0.02014019	0.0102769	0.00880004	0.00147689
593519.25	2356551.75	0.00893427	0.00527183	0.0036928	0.00157903	0.02592604	0.01266037	0.01012125	0.00253912
593617.75	2356569.00	0.00826869	0.00479653	0.00338136	0.00141516	0.02305705	0.01100945	0.00880232	0.00220714
593716.19	2356586.50	0.00767207	0.00437395	0.00309959	0.00127436	0.02054115	0.00961439	0.00767886	0.00193556
594454.81	2356716.75	0.00465635	0.00236894	0.00172275	0.0006462	0.00998719	0.00410545	0.0032446	0.00086086
601102.25	2357888.75	0.00079635	0.00025752	0.00022359	0.00003393	0.0012761	0.00031148	0.00027477	0.0000367
593739.00	2356326.00	0.00951631	0.00471274	0.00398606	0.00072667	0.02680078	0.01223826	0.01142277	0.0008155
593989.00	2356326.00	0.00819838	0.00381323	0.00324583	0.0005674	0.02090879	0.00873988	0.00807909	0.00066081
594489.00	2356326.00	0.00623286	0.00261034	0.00224022	0.00037013	0.01354948	0.00502143	0.00457361	0.00044782
595239.00	2356326.00	0.00438438	0.00163575	0.00141857	0.00021718	0.0081516	0.00269272	0.0024211	0.00027162
596239.00	2356326.00	0.00301034	0.00101092	0.00088873	0.00012218	0.00495496	0.00147696	0.0013257	0.00015127
591298.44	2358910.25	0.00387773	0.00474878	0.00397101	0.00077777	0.00499418	0.00467257	0.0042149	0.00045767
591935.13	2358049.50	0.00602545	0.00724039	0.00631451	0.00092588	0.01071276	0.01164827	0.01050357	0.00114471
591891.69	2358295.50	0.00503904	0.0059297	0.00514871	0.00078098	0.00890695	0.00935526	0.00834068	0.00101457
591848.31	2358541.75	0.00428835	0.00493334	0.00426403	0.0006693	0.00750593	0.00763469	0.00674527	0.00088942
592989.00	2357625.00	0.00596972	0.00568466	0.00547189	0.00021277	0.01422883	0.01165047	0.01132143	0.00032904
592239.00	2357826.00	0.00531249	0.00580687	0.00523891	0.00056797	0.0139504	0.01513083	0.01374695	0.00138389
592499.50	2357803.25	0.00532614	0.00530067	0.00498556	0.00031511	0.01130846	0.01118581	0.01034889	0.00083693
594701.00	2356760.00	0.0040357	0.00198722	0.00145636	0.00053087	0.00830934	0.00327606	0.00258845	0.00068762
598147.88	2357368.00	0.00127296	0.00045427	0.00037517	0.0000791	0.00215007	0.00058169	0.00049449	0.0000872
600117.44	2357715.25	0.0009077	0.00029979	0.00025728	0.00004251	0.00147166	0.00036725	0.0003213	0.00004595

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
595739.00	2356326.00	0.00358749	0.00126121	0.00110118	0.00016002	0.00621395	0.00193786	0.00173675	0.00020111
591212.94	2359145.00	0.00342061	0.00411564	0.00342761	0.00068803	0.00442668	0.00406029	0.00363207	0.00042821
590699.94	2360554.50	0.00194184	0.00212411	0.00175536	0.00036874	0.00257907	0.00214815	0.0018645	0.00028365
591631.25	2359772.75	0.00233874	0.00241212	0.00205198	0.00036014	0.00385867	0.00339591	0.0029264	0.00046952
593579.56	2357451.00	0.00547517	0.00325033	0.00294166	0.00030867	0.01164291	0.00720749	0.00687309	0.00033441
594187.56	2357451.00	0.00422488	0.00218214	0.00191337	0.00026877	0.00802939	0.00388256	0.00353668	0.00034588
599132.63	2357541.50	0.00106009	0.00036104	0.00030486	0.00005618	0.00174919	0.0004508	0.00038967	0.00006113
591041.94	2359615.00	0.00275155	0.00319473	0.00264619	0.00054854	0.00359426	0.00317408	0.00280079	0.00037329
592752.00	2357735.50	0.00635686	0.00619012	0.0059534	0.00023672	0.01034679	0.0092223	0.00874367	0.00047863
591804.88	2358788.00	0.00371587	0.004171	0.00358965	0.00058136	0.00641837	0.00632605	0.00554817	0.00077788
592239.00	2358076.00	0.00435163	0.00467142	0.0042005	0.00047092	0.01070889	0.010903	0.0098578	0.0010452
601635.94	2359746.25	0.00065271	0.00022975	0.00019795	0.00003181	0.00108262	0.00027919	0.00024512	0.00003407
595193.44	2356847.00	0.00316432	0.00146368	0.00109267	0.00037101	0.00615721	0.00224247	0.00178263	0.00045985
595685.81	2356933.75	0.00254851	0.0011157	0.00084763	0.00026807	0.00477508	0.00162087	0.00129955	0.00032132
596670.63	2357107.50	0.00182103	0.00072378	0.00057068	0.0001531	0.00324096	0.00098268	0.00080726	0.00017542
597163.06	2357194.25	0.00158893	0.00060641	0.00048634	0.00012007	0.00277251	0.00080423	0.00066889	0.00013534
590870.94	2360084.75	0.00228789	0.00256864	0.0021225	0.00044614	0.00300718	0.00257117	0.00224641	0.00032477
594588.25	2357181.00	0.00360263	0.0018579	0.00144451	0.0004134	0.00720125	0.00313198	0.00259677	0.00053522
592239.00	2358326.00	0.00364617	0.00383379	0.00343468	0.00039911	0.00852413	0.00813211	0.00732331	0.00080881
592542.88	2358049.50	0.00448828	0.00430901	0.00404435	0.00026465	0.00850385	0.00779509	0.00719619	0.0005989
593114.00	2357841.50	0.00485468	0.00455069	0.00436912	0.00018157	0.01142021	0.00885165	0.00859133	0.00026033
593239.00	2358058.00	0.00404625	0.00372194	0.00356449	0.00015745	0.00929161	0.00685103	0.00663705	0.00021398
593363.88	2357666.50	0.00499819	0.00379807	0.00356217	0.0002359	0.01029691	0.00840322	0.00815808	0.00024514
594404.06	2357576.00	0.00365671	0.00186681	0.00163227	0.00023455	0.00670356	0.00314628	0.00284369	0.00030259
596178.25	2357020.50	0.00212515	0.00088437	0.00068455	0.00019981	0.00386983	0.00123612	0.00100259	0.00023353
592837.56	2357970.50	0.0053172	0.00501429	0.00481304	0.00020126	0.00862429	0.0070395	0.00668706	0.00035244
592923.06	2358205.50	0.00454957	0.00413155	0.00395665	0.00017491	0.00745949	0.00559279	0.00531728	0.00027551
593364.00	2358274.50	0.00342791	0.00308758	0.00294918	0.0001384	0.00763762	0.00539403	0.00521382	0.00018021
593524.56	2357858.00	0.00423192	0.00311769	0.0029128	0.00020489	0.00819877	0.00629556	0.00608327	0.00021229
593771.06	2357611.50	0.00462064	0.00269502	0.00242681	0.00026823	0.00932599	0.0054158	0.00512592	0.00028989
593962.63	2357772.25	0.00394232	0.00225862	0.00202192	0.00023669	0.00757554	0.00418454	0.00393114	0.0002534
600899.25	2361326.00	0.00063086	0.00025878	0.00021971	0.00003907	0.00104781	0.00031701	0.00027373	0.00004328
599756.56	2359062.25	0.00082172	0.00030015	0.00025481	0.00004534	0.00138842	0.00037406	0.00032484	0.00004922
600696.25	2359404.25	0.00072571	0.00025933	0.000222	0.00003734	0.0012129	0.00031851	0.00027836	0.00004015
591761.50	2359034.25	0.00324673	0.00357412	0.00306385	0.00051027	0.00554254	0.00531764	0.00463595	0.00068169
592239.00	2358576.00	0.0031154	0.00319868	0.00285461	0.00034407	0.00700941	0.00627052	0.00562682	0.00064369
592586.31	2358295.50	0.00384735	0.0035489	0.00332262	0.00022628	0.00674121	0.00572309	0.0052705	0.0004526
594823.13	2357266.50	0.00314356	0.00158222	0.00123447	0.00034775	0.00613473	0.00256188	0.00211649	0.00044539
592239.00	2359826.00	0.00169502	0.00155371	0.0013651	0.00018861	0.00352074	0.00241536	0.00213934	0.00027602
593685.25	2358049.50	0.00362835	0.00259243	0.00241219	0.00018024	0.00667006	0.0048559	0.00467035	0.00018555
591718.06	2359280.50	0.00288175	0.00310386	0.00265224	0.00045163	0.00486088	0.00452916	0.00392959	0.00059956
592239.00	2358826.00	0.00270167	0.00271166	0.00241096	0.0003007	0.00591424	0.00498166	0.00445599	0.00052568
593008.56	2358440.25	0.00389956	0.00343709	0.00328295	0.00015415	0.00653128	0.00454924	0.0043255	0.00022375
594620.56	2357701.00	0.00318401	0.00160387	0.00139775	0.00020613	0.00567835	0.0025842	0.00231813	0.00026607
594837.06	2357826.00	0.00282527	0.00140694	0.00122276	0.00018418	0.00494679	0.00218822	0.00195006	0.00023817
595058.06	2357352.00	0.002776	0.00136374	0.00106812	0.00029562	0.00531979	0.00213608	0.00176058	0.00037551
595527.94	2357523.00	0.00223852	0.00104928	0.00082937	0.00021991	0.00417994	0.00155874	0.00128652	0.00027223
595997.75	2357694.00	0.00187248	0.00084053	0.00067119	0.00016934	0.00343271	0.00120032	0.00099613	0.0002042
598816.88	2358720.25	0.00094899	0.00035711	0.00029994	0.00005717	0.00162326	0.00045336	0.00039054	0.00006281
590186.88	2361964.25	0.00132963	0.00135694	0.00113542	0.00022153	0.0018132	0.00140679	0.00121607	0.00019072
592629.69	2358541.75	0.00330867	0.00295988	0.00276318	0.00019671	0.00555047	0.00439872	0.00404208	0.00035664
593846.00	2358241.00	0.00317539	0.00220545	0.00204406	0.00016139	0.00563945	0.00390178	0.00373563	0.00016615
594154.13	2357933.00	0.00341385	0.00192749	0.0017157	0.00021179	0.0063278	0.00335779	0.00313254	0.00022525
594345.63	2358093.75	0.0029926	0.00166838	0.00147713	0.00019126	0.00539412	0.00276793	0.00256543	0.0002025
600033.25	2360826.00	0.00070405	0.00029224	0.00024791	0.00004434	0.00116656	0.00036035	0.00031088	0.00004946
596467.63	2357865.00	0.00160725	0.00069359	0.00055952	0.00013407	0.0029026	0.00096086	0.00080271	0.00015815
596937.44	2358036.00	0.00140587	0.00058555	0.00047689	0.00010866	0.00250521	0.0007914	0.00066582	0.00012557
597877.19	2358378.00	0.00113118	0.00044437	0.00036818	0.00007619	0.00196947	0.00057897	0.00049347	0.0000855
594537.13	2358254.25	0.00265393	0.00146278	0.00128853	0.00017425	0.00467846	0.00233229	0.00214842	0.00018387
593094.06	2358675.25	0.00342408	0.00292685	0.00278838	0.00013847	0.00587004	0.00382981	0.00363946	0.00019035
593489.00	2358491.00	0.00295755	0.00261266	0.00248894	0.00012372	0.00642025	0.00437063	0.00421472	0.00015592
594006.69	2358432.50	0.00279803	0.00189426	0.00174915	0.00014511	0.00482968	0.00319854	0.00304926	0.00014928
595703.13	2358326.00	0.00188261	0.00089331	0.00076853	0.00012477	0.0031679	0.00125942	0.00110362	0.0001558
596569.13	2358826.00	0.00139966	0.00063795	0.00054501	0.00009294	0.00232553	0.00085149	0.00074002	0.00011147
599167.19	2360326.00	0.00079903	0.00033679	0.00028562	0.00005117	0.00132144	0.00041928	0.00036164	0.00005764
596136.13	2358576.00	0.00160839	0.00074751	0.00064061	0.0001069	0.00268613	0.0010222	0.00089137	0.00013083
592239.00	2359076.00	0.00237974	0.00233225	0.0020665	0.00026576	0.00509265	0.0040532	0.00361503	0.00043817
592673.13	2358788.00	0.00291451	0.00253307	0.00235792	0.00017515	0.0047865	0.00355668	0.00326367	0.00029301
594920.19	2358575.75	0.00212712	0.001149	0.00100191	0.00014709	0.00362996	0.00172239	0.00156887	0.00015352
595270.06	2358076.00	0.00227008	0.0011029	0.00095334	0.00014956	0.00387446	0.00162231	0.00143007	0.00019224

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598301.19	2359826.00	0.00093018	0.00040005	0.00033945	0.00006061	0.00153972	0.00050565	0.0004363	0.00006935
597435.13	2359326.00	0.00111862	0.00049394	0.00042001	0.00007392	0.00185467	0.00063848	0.00055195	0.00008653
592239.00	2359326.00	0.00209976	0.00201167	0.00177667	0.00023501	0.00443325	0.00334824	0.00297861	0.00036963
592716.50	2359034.25	0.00254975	0.00216136	0.00200657	0.00015479	0.00412387	0.00288622	0.00264454	0.00024168
593614.00	2358707.50	0.00259527	0.00224891	0.00213715	0.00011176	0.00550117	0.00362675	0.00348919	0.00013756
594167.38	2358624.25	0.00249878	0.00165345	0.00152157	0.00013188	0.00422091	0.0026872	0.0025514	0.0001358
595686.19	2359218.50	0.00151243	0.00079326	0.00068129	0.00011197	0.00248889	0.00110362	0.00098839	0.00011523
591544.44	2360265.25	0.0019563	0.0019451	0.00165046	0.00029465	0.00317871	0.00265469	0.00227935	0.00037534
592846.75	2359772.75	0.00188558	0.0014955	0.00137985	0.00011565	0.0030828	0.00185016	0.00169295	0.00015721
593179.56	2358910.25	0.00306109	0.00253905	0.00241328	0.00012576	0.00535357	0.00329775	0.00313072	0.00016703
593739.00	2358924.00	0.00227658	0.00194076	0.00184054	0.00010022	0.0046957	0.00302342	0.00290265	0.00012077
594810.13	2359390.25	0.00170508	0.00105372	0.00095908	0.00009463	0.00271351	0.00154307	0.00144631	0.00009676
595303.19	2358897.25	0.00177119	0.00094144	0.00081416	0.00012728	0.00295797	0.00135211	0.00122034	0.00013178
596069.25	2359540.00	0.00131709	0.00068319	0.00058339	0.0000998	0.00214476	0.00092719	0.00082506	0.00010213
592759.94	2359280.50	0.00228834	0.00189316	0.00175361	0.00013955	0.00369687	0.00244845	0.00224193	0.00020652
596835.25	2360182.75	0.00104495	0.00053292	0.00045128	0.00008164	0.00167827	0.00069793	0.00061512	0.00008281
593265.06	2359145.00	0.00273564	0.00220936	0.00209541	0.00011396	0.00487264	0.00284725	0.00270073	0.00014652
594488.75	2359007.25	0.00203138	0.00129311	0.00118276	0.00011035	0.00330972	0.00197757	0.00186447	0.00011311
590528.88	2361024.50	0.00168446	0.00179733	0.00148888	0.00030845	0.00225695	0.00183395	0.00158591	0.00024804
599899.44	2362754.00	0.00057693	0.00028559	0.00023976	0.00004582	0.00090346	0.00035106	0.00030529	0.00004577
593436.06	2359615.00	0.00225902	0.00173666	0.00164091	0.00009575	0.00414654	0.00221565	0.0020978	0.00011785
593989.00	2359357.00	0.00183798	0.00151774	0.00143405	0.0000837	0.00363297	0.00224234	0.00214463	0.00009771
595131.56	2359773.25	0.00147345	0.0008912	0.00080805	0.00008314	0.00231007	0.00126425	0.00117912	0.00008513
597601.31	2360825.50	0.00086506	0.00043624	0.00036755	0.00006868	0.00137561	0.00055769	0.0004885	0.00006919
598367.38	2361468.25	0.00074	0.00037013	0.00031104	0.00005909	0.00116836	0.00046512	0.00040584	0.00005928
599133.38	2362111.00	0.00064741	0.00032199	0.00027031	0.00005168	0.00101706	0.00039961	0.00034791	0.0000517
593607.06	2360084.75	0.00193924	0.00142818	0.00134543	0.00008276	0.0036108	0.00180783	0.00170836	0.00009946
591457.56	2360757.75	0.0016659	0.00160406	0.00136034	0.00024372	0.00268098	0.00213596	0.00183176	0.00030421
589844.88	2362903.75	0.00109543	0.00108163	0.00091755	0.00016408	0.00151777	0.00113904	0.00098987	0.00014917
595452.94	2360156.25	0.00129301	0.00076977	0.00069592	0.00007385	0.00200423	0.00106455	0.00098898	0.00007557
592933.56	2360265.25	0.00160224	0.00122638	0.00112792	0.00009846	0.00267534	0.00147775	0.00135204	0.00012571
592239.00	2360326.00	0.00144181	0.00126778	0.00111048	0.0001573	0.00296677	0.00187325	0.00165438	0.00021888
596095.75	2360922.25	0.00102816	0.0006001	0.00054081	0.00005929	0.00156614	0.00079881	0.00073848	0.00006033
597381.31	2362454.25	0.0007361	0.00042552	0.00038329	0.00004223	0.00110284	0.00054116	0.0004982	0.00004295
594239.00	2359790.00	0.00154162	0.00123833	0.00116648	0.00007184	0.002954	0.00176114	0.00167896	0.00008218
596738.50	2361688.25	0.00085387	0.00049423	0.00044506	0.00004918	0.00129213	0.00064169	0.0005918	0.00004989
598024.06	2363220.50	0.00064353	0.0003727	0.00033623	0.00003647	0.00096086	0.0004668	0.00042976	0.00003704
598666.88	2363986.50	0.00057306	0.00033305	0.000301	0.00003205	0.0008525	0.00041183	0.00037926	0.00003257
588818.81	2365723.00	0.00072535	0.00066829	0.00059317	0.00007512	0.00102584	0.00071867	0.00064294	0.00007573
591370.75	2361250.00	0.00142652	0.00133259	0.00113175	0.00020084	0.0023328	0.00174665	0.00150121	0.00024544
592239.00	2360826.00	0.00122803	0.00103738	0.00090672	0.00013066	0.00254977	0.00147889	0.00130352	0.00017538
594489.00	2360223.00	0.00131148	0.00103204	0.00097023	0.00006182	0.00244621	0.00142076	0.00135166	0.00006911
593020.44	2360757.75	0.00136543	0.00101444	0.00093158	0.00008286	0.00241999	0.00118747	0.00108773	0.00009974
594739.00	2360656.25	0.00113701	0.00087381	0.00082057	0.00005323	0.00220305	0.00117542	0.00111766	0.00005776
590502.50	2366174.00	0.00066511	0.00052329	0.00046028	0.00006301	0.00104637	0.00061249	0.00054683	0.00006566
593778.06	2360554.50	0.0016898	0.00119916	0.00112717	0.000072	0.00321107	0.00151126	0.00142658	0.00008468
596239.00	2363254.25	0.00116204	0.00050307	0.00047311	0.00002997	0.00248129	0.00063599	0.00060483	0.00003116
597239.00	2364986.25	0.00055711	0.00038182	0.00035847	0.00002335	0.00118501	0.0004671	0.00044289	0.00002421
595239.00	2361522.25	0.00093158	0.00068586	0.00064298	0.00004287	0.0019315	0.00089739	0.00085173	0.00004566
593949.13	2361024.50	0.00150611	0.00103023	0.00096681	0.00006343	0.00303026	0.00129883	0.00122541	0.00007342
592239.00	2361326.00	0.00112719	0.00087221	0.00076251	0.0001097	0.00294846	0.00122675	0.00108333	0.00014342
596739.00	2364120.25	0.00064272	0.00042778	0.00040134	0.00002643	0.00152096	0.0005345	0.00050703	0.00002748
593107.25	2361250.00	0.0012078	0.00086833	0.00079667	0.00007166	0.00245678	0.0010064	0.00092412	0.00008228
591197.13	2362234.75	0.00114896	0.00101072	0.00086224	0.00014847	0.00192184	0.00127929	0.00110682	0.00017247
589502.81	2363843.50	0.00093913	0.00089798	0.00077371	0.00012427	0.00131937	0.00095571	0.00083791	0.00011781
590676.19	2365189.25	0.00255231	0.00064078	0.00056802	0.00007276	0.00168261	0.00070182	0.00062588	0.00007595
594975.19	2363843.50	0.00269459	0.00066762	0.00063099	0.00003664	0.00175018	0.00069487	0.00065384	0.00004103
594291.13	2361964.25	0.00211185	0.00084591	0.00079484	0.00005106	0.00532595	0.0011135	0.00105555	0.00005795
595739.00	2362388.25	0.00090505	0.00057046	0.00053505	0.00003541	0.00249482	0.00074851	0.00071134	0.00003717
593280.88	2362234.75	0.00225684	0.00072744	0.00067196	0.00005548	0.00589413	0.00088112	0.00082179	0.00005933
592239.00	2362326.00	0.00117901	0.00068641	0.00060259	0.00008382	0.00444952	0.00097342	0.00086855	0.00010487
594633.13	2362903.75	0.0031817	0.00076275	0.00072	0.00004275	0.00295818	0.00086993	0.00082187	0.00004806
595659.19	2365723.00	0.00202529	0.00052453	0.0004961	0.00002842	0.00129753	0.00053621	0.00050473	0.00003148
591023.44	2363219.75	0.00218339	0.00084685	0.00073459	0.00011226	0.00328465	0.00104571	0.00092098	0.00012473
593454.56	2363219.75	0.0034568	0.00065842	0.0006135	0.00004492	0.00153139	0.0005859	0.00053979	0.00004611
590849.81	2364204.50	0.00290299	0.0007427	0.00065367	0.00008902	0.00186715	0.0008254	0.00072988	0.00009552
595317.19	2364783.25	0.00237229	0.00058793	0.00055585	0.00003208	0.00153584	0.00060872	0.00057304	0.00003568
592239.00	2363326.00	0.00278895	0.00061181	0.00054706	0.00006474	0.00133146	0.000674	0.00059412	0.00007987
593628.19	2364204.50	0.00097762	0.0004539	0.00041623	0.00003768	0.00067013	0.00043421	0.0003967	0.00003751
592239.00	2364326.00	0.00104587	0.00046013	0.00040717	0.00005296	0.00076058	0.00052675	0.00046283	0.00006392

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593975.50	2366174.00	0.00038018	0.00030379	0.0002753	0.00002849	0.00043753	0.00031189	0.00028456	0.00002733
592239.00	2366326.00	0.00095366	0.00036184	0.00032342	0.00003842	0.00062725	0.00039712	0.00035276	0.00004437
593801.81	2365189.25	0.00104721	0.00041261	0.00037971	0.0000329	0.00062978	0.00038439	0.00035197	0.00003242
592239.00	2365326.00	0.00044054	0.00036132	0.00031707	0.00004425	0.00054497	0.0004281	0.00037549	0.00005261
596202.50	2360140.75	0.00118342	0.00062027	0.00054034	0.00007993	0.00186549	0.0008359	0.0007562	0.00007971
596702.50	2360140.75	0.00107484	0.00055072	0.00046812	0.0000826	0.00172341	0.00072512	0.00064169	0.00008343
597202.50	2360140.75	0.00098824	0.00049219	0.00041166	0.00008053	0.00160095	0.00063587	0.00055202	0.00008385
597702.50	2360140.75	0.00092857	0.00044254	0.0003683	0.00007423	0.00151699	0.00056442	0.0004846	0.00007982
598202.50	2360140.75	0.00088659	0.00040127	0.00033559	0.00006569	0.00145885	0.00050715	0.00043451	0.00007264
598702.50	2360140.75	0.00085276	0.00036694	0.00031012	0.00005682	0.00141002	0.00046015	0.00039604	0.00006412
599202.50	2360140.75	0.00081886	0.00033665	0.00028787	0.00004877	0.00135661	0.0004191	0.00036356	0.00005554
599702.50	2360140.75	0.00078341	0.00030956	0.00026726	0.00004229	0.00129911	0.00038305	0.00033495	0.0000481
600202.50	2360140.75	0.00074641	0.00028512	0.0002477	0.00003742	0.00123807	0.00035105	0.00030888	0.00004217
600702.50	2360140.75	0.00070918	0.00026337	0.00022948	0.00003389	0.00117545	0.00032279	0.00028513	0.00003766
596202.50	2360640.75	0.00108854	0.00059673	0.00053092	0.00006581	0.00166904	0.00079942	0.00073287	0.00006655
596702.50	2360640.75	0.0010215	0.00053102	0.00046158	0.00006944	0.00159199	0.00070024	0.00063115	0.00006909
597202.50	2360640.75	0.00094059	0.00047862	0.00040661	0.00007201	0.00149444	0.00061961	0.00054732	0.00007229
597702.50	2360640.75	0.00086906	0.00043222	0.00036107	0.00007115	0.00139689	0.00055044	0.00047746	0.00007298
598202.50	2360640.75	0.00081881	0.00039262	0.00032559	0.00006703	0.00132895	0.00049444	0.00042387	0.00007057
598702.50	2360640.75	0.00078538	0.00035961	0.00029883	0.00006078	0.00128685	0.00044966	0.00038404	0.00006562
599202.50	2360640.75	0.00076158	0.00033256	0.00027874	0.00005382	0.00125755	0.00041371	0.00035429	0.00005941
599702.50	2360640.75	0.00073675	0.00030768	0.00026089	0.00004679	0.00121982	0.00038063	0.00032826	0.00005237
600202.50	2360640.75	0.00071229	0.00028585	0.00024516	0.00004069	0.00118057	0.00035183	0.000306	0.00004583
600702.50	2360640.75	0.00068613	0.00026597	0.00023024	0.00003573	0.00113689	0.00032586	0.00028566	0.0000402
596202.50	2361140.75	0.00097184	0.00057443	0.00051878	0.00005565	0.00148042	0.00075897	0.00070249	0.00005648
596702.50	2361140.75	0.00095189	0.00051533	0.00045719	0.00005815	0.00144845	0.0006766	0.00061799	0.00005861
597202.50	2361140.75	0.0008978	0.00046423	0.00040317	0.00006106	0.00138675	0.0006019	0.00054129	0.0000606
597702.50	2361140.75	0.00082988	0.0004208	0.00035759	0.00006321	0.00130382	0.00053759	0.00047469	0.0000629
598202.50	2361140.75	0.00077378	0.00038481	0.00032152	0.0000633	0.00123202	0.00048461	0.00042045	0.00006416
598702.50	2361140.75	0.0007349	0.00035394	0.00029314	0.0000608	0.00118581	0.00044148	0.00037841	0.00006306
599202.50	2361140.75	0.00070714	0.000327	0.0002707	0.0000563	0.00115442	0.00040551	0.0003458	0.00005971
599702.50	2361140.75	0.000685	0.00030324	0.00025259	0.00005066	0.00112698	0.00037445	0.00031967	0.00005478
600202.50	2361140.75	0.00066713	0.000283	0.00023817	0.00004483	0.00110331	0.00034816	0.00029891	0.00004926
600702.50	2361140.75	0.00065123	0.00026573	0.00022617	0.00003956	0.00108091	0.00032591	0.00028189	0.00004402
596202.50	2361640.75	0.00086782	0.00055525	0.00050715	0.00004811	0.00134166	0.00071994	0.00067177	0.00004817
596702.50	2361640.75	0.00086193	0.00049861	0.00044897	0.00004964	0.00130644	0.00064845	0.00059812	0.00005034
597202.50	2361640.75	0.00084524	0.00045397	0.0004021	0.00005187	0.00127886	0.00058673	0.00053459	0.00005214
597702.50	2361640.75	0.00080048	0.00041255	0.00035832	0.00005424	0.00122742	0.0005279	0.00047421	0.00005369
598202.50	2361640.75	0.00074779	0.0003781	0.00032175	0.00005635	0.00116626	0.00047784	0.00042193	0.00005591
598702.50	2361640.75	0.00070095	0.00034824	0.00029141	0.00005684	0.00110855	0.00043477	0.00037758	0.0000572
599202.50	2361640.75	0.00066683	0.00032241	0.00026709	0.00005533	0.00106909	0.00039909	0.00034235	0.00005674
599702.50	2361640.75	0.00064261	0.00029977	0.00024769	0.00005209	0.00104344	0.00036918	0.00031472	0.00005446
600202.50	2361640.75	0.00062537	0.00028027	0.00023249	0.00004778	0.00102649	0.00034415	0.00029325	0.0000509
600702.50	2361640.75	0.00061102	0.00026308	0.00022007	0.00004301	0.0010099	0.00032225	0.00027569	0.00004656
596202.50	2362140.75	0.00081919	0.00053149	0.0004909	0.0000406	0.00176341	0.00069214	0.00065211	0.00004003
596702.50	2362140.75	0.00078022	0.00048247	0.00043918	0.0000433	0.0012551	0.00062244	0.00057905	0.00004339
597202.50	2362140.75	0.00077963	0.00044471	0.00039955	0.00004516	0.00117003	0.00056969	0.00052379	0.0000459
597702.50	2362140.75	0.00075877	0.00040543	0.00035891	0.00004652	0.00114215	0.00051743	0.00047086	0.00004658
598202.50	2362140.75	0.00072253	0.0003718	0.00032317	0.00004863	0.00110141	0.00047075	0.00042271	0.00004804
598702.50	2362140.75	0.00067844	0.00034266	0.00029214	0.00005052	0.00105131	0.0004297	0.00037977	0.00004993
599202.50	2362140.75	0.00064144	0.00031852	0.00026714	0.00005139	0.00100852	0.00039488	0.00034343	0.00005145
599702.50	2362140.75	0.00061316	0.00029709	0.00024649	0.0000506	0.00097894	0.00036558	0.00031408	0.0000515
600202.50	2362140.75	0.00059285	0.0002782	0.00022985	0.00004835	0.00096029	0.00034087	0.0002908	0.00005007
600702.50	2362140.75	0.00057741	0.00026141	0.00021636	0.00004505	0.00094618	0.00031955	0.00027212	0.00004743
596202.50	2362640.75	0.00114315	0.00052856	0.00049397	0.00003459	0.00261141	0.00067807	0.00064339	0.00003467
596702.50	2362640.75	0.00075232	0.00046952	0.00043186	0.00003766	0.00161854	0.0006076	0.00057041	0.00003719
597202.50	2362640.75	0.00071398	0.00043517	0.00039509	0.00004009	0.00107753	0.00055039	0.00050981	0.00004058
597702.50	2362640.75	0.00070788	0.00039977	0.00035881	0.00004096	0.00105787	0.00050629	0.00046473	0.00004156
598202.50	2362640.75	0.0006889	0.00036704	0.00032494	0.00004209	0.00103346	0.00046361	0.00042158	0.00004203
598702.50	2362640.75	0.00065902	0.00033907	0.00029507	0.00004399	0.00100011	0.00042543	0.000382	0.00004343
599202.50	2362640.75	0.00062343	0.00031472	0.00026894	0.00004579	0.00095938	0.00039113	0.00034591	0.00004522
599702.50	2362640.75	0.00059254	0.00029409	0.00024732	0.00004677	0.00092736	0.0003624	0.00031572	0.00004668
600202.50	2362640.75	0.00056711	0.00027541	0.00022899	0.00004642	0.00090068	0.00033719	0.00029023	0.00004695
600702.50	2362640.75	0.00055527	0.00026155	0.00021646	0.00004509	0.0009045	0.00032009	0.00027357	0.00004652
596202.50	2363140.75	0.001514	0.00052354	0.0004931	0.00003044	0.00223237	0.00063369	0.00060219	0.0000315
596702.50	2363140.75	0.00067437	0.00045674	0.00042366	0.00003308	0.00129885	0.00057188	0.00053899	0.00003289
597202.50	2363140.75	0.00065672	0.00042529	0.00038963	0.00003566	0.0010086	0.00052976	0.00049409	0.00003568
597702.50	2363140.75	0.00065491	0.00039312	0.00035638	0.00003673	0.00098263	0.00049245	0.00045519	0.00003727
598202.50	2363140.75	0.00064734	0.00036302	0.00032573	0.00003729	0.00096531	0.00045547	0.00041774	0.00003773
598702.50	2363140.75	0.00063166	0.00033612	0.00029768	0.00003844	0.00094464	0.00042059	0.00038225	0.00003834

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
599202.50	2363140.75	0.00060643	0.00031223	0.0002721	0.00004013	0.00091677	0.00038851	0.00034889	0.00003962
599702.50	2363140.75	0.00057651	0.00029109	0.00024935	0.00004174	0.00088455	0.00035975	0.00031855	0.0000412
600202.50	2363140.75	0.00055577	0.00027512	0.00023214	0.00004298	0.00087219	0.00033746	0.0002945	0.00004297
600702.50	2363140.75	0.00053499	0.00025958	0.00021657	0.00004301	0.00085521	0.00031722	0.00027365	0.00004357
596202.50	2363640.75	0.00083946	0.00048146	0.00045318	0.00002828	0.00232952	0.00062474	0.00059435	0.00003038
596702.50	2363640.75	0.00063516	0.00044288	0.00041364	0.00002924	0.00124757	0.00054749	0.00051774	0.00002975
597202.50	2363640.75	0.00060999	0.00041366	0.00038225	0.00003141	0.0009848	0.00050837	0.00047713	0.00003124
597702.50	2363640.75	0.00060887	0.00038705	0.00035381	0.00003324	0.00092092	0.00047805	0.00044457	0.00003348
598202.50	2363640.75	0.00060691	0.00036015	0.00032617	0.00003397	0.00090417	0.00044704	0.00041245	0.0000346
598702.50	2363640.75	0.00059775	0.00033359	0.00029929	0.0000343	0.00088821	0.00041484	0.00038016	0.00003468
599202.50	2363640.75	0.00058302	0.00031006	0.00027479	0.00003527	0.00086977	0.00038492	0.00034977	0.00003515
599702.50	2363640.75	0.00056109	0.00028911	0.00025236	0.00003674	0.00084567	0.00035736	0.00032111	0.00003626
600202.50	2363640.75	0.0005447	0.00027457	0.00023583	0.00003874	0.00084164	0.00033696	0.00029842	0.00003854
600702.50	2363640.75	0.0005214	0.00025826	0.00021863	0.00003963	0.00081974	0.00031576	0.00027609	0.00003967
596202.50	2364140.75	0.00100985	0.00047596	0.00044933	0.00002664	0.00250152	0.00061645	0.00058716	0.00002929
596702.50	2364140.75	0.00066463	0.00042989	0.00040363	0.00002626	0.00166077	0.00054057	0.00051315	0.00002742
597202.50	2364140.75	0.00057514	0.00040355	0.00037567	0.00002788	0.0009473	0.00048936	0.00046129	0.00002807
597702.50	2364140.75	0.00056678	0.00037752	0.0003479	0.00002962	0.00088748	0.00046064	0.00043113	0.00002951
598202.50	2364140.75	0.00056475	0.00035356	0.00032276	0.0000308	0.00085237	0.00043421	0.00040314	0.00003108
598702.50	2364140.75	0.00056117	0.00033002	0.00029886	0.00003117	0.00083713	0.00040716	0.00037549	0.00003167
599202.50	2364140.75	0.00055446	0.0003083	0.00027667	0.00003163	0.00082248	0.0003806	0.00034868	0.00003192
599702.50	2364140.75	0.00054237	0.00028851	0.00025586	0.00003265	0.00080696	0.00035526	0.00032269	0.00003257
600202.50	2364140.75	0.0005257	0.0002713	0.00023714	0.00003416	0.00079266	0.00033261	0.00029872	0.00003389
600702.50	2364140.75	0.00051018	0.00025729	0.00022155	0.00003573	0.00078704	0.00031413	0.00027856	0.00003557
596202.50	2364640.75	0.00183622	0.00050241	0.00047722	0.00002519	0.00126621	0.00054998	0.00052184	0.00002814
596702.50	2364640.75	0.00123011	0.00043845	0.00041439	0.00002406	0.00198147	0.00053369	0.00050806	0.00002563
597202.50	2364640.75	0.00055878	0.00039088	0.00036602	0.00002486	0.00107548	0.00047542	0.00044995	0.00002547
597702.50	2364640.75	0.00053641	0.00036832	0.00034197	0.00002635	0.00089563	0.00044485	0.00041857	0.00002628
598202.50	2364640.75	0.0005297	0.00034724	0.00031934	0.00002791	0.00081533	0.00042121	0.00039331	0.0000279
598702.50	2364640.75	0.00052848	0.000327	0.00029825	0.00002875	0.0007902	0.00039884	0.0003697	0.00002915
599202.50	2364640.75	0.00052482	0.00030654	0.00027755	0.000029	0.00077779	0.00037532	0.00034581	0.00002951
599702.50	2364640.75	0.00052154	0.00028899	0.00025927	0.00002972	0.00077301	0.00035387	0.00032375	0.00003013
600202.50	2364640.75	0.00050606	0.00026921	0.00023899	0.00003022	0.00075147	0.00032939	0.00029926	0.00003013
600702.50	2364640.75	0.00049137	0.00025384	0.00022227	0.00003157	0.00073849	0.00030944	0.00027813	0.0000313
590370.00	2357440.00	0.00577327	0.00588419	0.00553037	0.00035382	0.00693295	0.00550564	0.00519783	0.00030781
590870.00	2357440.00	0.00771054	0.0090139	0.00859567	0.00041823	0.00931807	0.00856167	0.00815755	0.00040412
591370.00	2357440.00	0.00913395	0.01158077	0.01107558	0.00050518	0.01317051	0.01400982	0.01352389	0.00048592
591870.00	2357440.00	0.01203464	0.01618076	0.01395944	0.00222132	0.01635193	0.01918571	0.01851436	0.00067134
592370.00	2357440.00	0.00697451	0.00732344	0.00680962	0.00051381	0.02141488	0.02439959	0.02249853	0.00190106
592870.00	2357440.00	0.00732191	0.00705912	0.00681025	0.00024887	0.01670077	0.01449893	0.01406467	0.00043425
593370.00	2357440.00	0.00591847	0.00393439	0.0036288	0.00030558	0.01271047	0.00961067	0.00929402	0.00031665
593870.00	2357440.00	0.00486796	0.00263285	0.00234052	0.00029233	0.00977723	0.00516796	0.00481587	0.0003521
594370.00	2357440.00	0.00391811	0.00199673	0.00172865	0.00026808	0.00741122	0.00343152	0.00308001	0.0003515
594870.00	2357440.00	0.00302283	0.00149348	0.00122854	0.00026494	0.00571473	0.00238893	0.00204596	0.00034297
595370.00	2357440.00	0.00239766	0.00114321	0.00089413	0.00024907	0.0045249	0.00172532	0.0014147	0.00031061
595870.00	2357440.00	0.00199928	0.00091577	0.00069978	0.000216	0.00374309	0.00131524	0.00105687	0.00025837
596370.00	2357440.00	0.0017359	0.00075802	0.00058033	0.00017769	0.00320491	0.00104897	0.00084286	0.00020611
596870.00	2357440.00	0.0015465	0.00064021	0.00049773	0.00014248	0.00279981	0.00086118	0.0006996	0.00016158
597370.00	2357440.00	0.00140672	0.00055118	0.00043768	0.0001135	0.00248815	0.00072517	0.0005985	0.00012668
597870.00	2357440.00	0.00130006	0.00048316	0.00039223	0.00009093	0.00224443	0.00062443	0.00052399	0.00010045
598370.00	2357440.00	0.00120796	0.00042849	0.00035497	0.00007352	0.00203686	0.00054538	0.00046467	0.00008071
598870.00	2357440.00	0.001126	0.00038406	0.00032389	0.00006017	0.00186214	0.00048327	0.00041733	0.00006593
599370.00	2357440.00	0.00105504	0.00034785	0.00029792	0.00004993	0.00170474	0.00043182	0.00037736	0.00005446
599870.00	2357440.00	0.00099351	0.00031872	0.00027653	0.00004219	0.00157762	0.00039186	0.00034582	0.00004604
600370.00	2357440.00	0.00093681	0.00029418	0.00025803	0.00003616	0.00146707	0.00035913	0.00031952	0.00003961
600870.00	2357440.00	0.00088682	0.00027335	0.00024191	0.00003145	0.00136731	0.00033118	0.00029668	0.0000345
601370.00	2357440.00	0.00084269	0.0002557	0.00022798	0.00002772	0.00128248	0.00030768	0.00027721	0.00003047
601870.00	2357440.00	0.00080126	0.00024022	0.00021549	0.00002474	0.00120423	0.00028725	0.00026	0.00002724
602370.00	2357440.00	0.00076425	0.00022683	0.00020451	0.00002232	0.00113668	0.00026972	0.0002451	0.00002462
602870.00	2357440.00	0.00073024	0.00021502	0.00019468	0.00002035	0.00107598	0.00025437	0.0002319	0.00002247
603370.00	2357440.00	0.00069891	0.00020451	0.00018581	0.0000187	0.00102138	0.00024081	0.00022013	0.00002067
603870.00	2357440.00	0.00066942	0.00019501	0.00017769	0.00001732	0.00097053	0.0002286	0.00020944	0.00001916
604370.00	2357440.00	0.0006426	0.0001865	0.00017036	0.00001614	0.00092548	0.00021776	0.0001999	0.00001786
604870.00	2357440.00	0.0006177	0.00017878	0.00016366	0.00001512	0.00088419	0.00020797	0.00019124	0.00001673
605370.00	2357440.00	0.00059453	0.00017173	0.0001575	0.00001424	0.00084629	0.00019908	0.00018332	0.00001575
605870.00	2357440.00	0.00057291	0.00016527	0.00015181	0.00001346	0.00081144	0.00019096	0.00017607	0.00001489
606370.00	2357440.00	0.00055272	0.00015931	0.00014654	0.00001277	0.0007793	0.00018351	0.00016939	0.00001412
606870.00	2357440.00	0.00053382	0.00015381	0.00014165	0.00001215	0.00074955	0.00017665	0.00016322	0.00001342
607370.00	2357440.00	0.0005161	0.0001487	0.0001371	0.0000116	0.00072195	0.0001703	0.0001575	0.0000128
607870.00	2357440.00	0.00049944	0.00014394	0.00013285	0.00001109	0.00069629	0.00016442	0.00015219	0.00001223

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2357440.00	0.00048378	0.0001395	0.00012887	0.00001063	0.0006724	0.00015894	0.00014723	0.00001171
608870.00	2357440.00	0.00046902	0.00013534	0.00012513	0.00001021	0.00065009	0.00015384	0.0001426	0.00001124
609370.00	2357440.00	0.00045509	0.00013144	0.00012161	0.00000982	0.00062923	0.00014906	0.00013826	0.0000108
609870.00	2357440.00	0.00044192	0.00012776	0.0001183	0.00000946	0.00060968	0.00014458	0.00013419	0.00001039
610370.00	2357440.00	0.00042946	0.0001243	0.00011517	0.00000913	0.00059133	0.00014036	0.00013035	0.00001001
610870.00	2357440.00	0.00041766	0.00012103	0.00011222	0.00000882	0.00057408	0.0001364	0.00012674	0.00000966
611370.00	2357440.00	0.00040646	0.00011794	0.00010941	0.00000853	0.00055784	0.00013266	0.00012333	0.00000933
611870.00	2357440.00	0.00039581	0.00011501	0.00010675	0.00000826	0.00054253	0.00012912	0.00012011	0.00000902
612370.00	2357440.00	0.00038566	0.00011222	0.00010422	0.000008	0.00052807	0.00012578	0.00011705	0.00000873
612870.00	2357440.00	0.00037602	0.00010957	0.00010181	0.00000776	0.0005144	0.0001226	0.00011415	0.00000846
613370.00	2357440.00	0.00036683	0.00010705	0.00009951	0.00000753	0.00050147	0.00011959	0.00011139	0.0000082
613870.00	2357440.00	0.00035806	0.00010464	0.00009732	0.00000732	0.00048921	0.00011672	0.00010876	0.00000796
614370.00	2357440.00	0.00034969	0.00010234	0.00009523	0.00000711	0.00047758	0.00011399	0.00010626	0.00000773
614870.00	2357440.00	0.00034167	0.00010014	0.00009323	0.00000692	0.00046654	0.00011138	0.00010388	0.00000751
615370.00	2357440.00	0.00033422	0.00009808	0.00009135	0.00000674	0.00045667	0.00010895	0.00010166	0.0000073
615870.00	2357440.00	0.00032688	0.00009607	0.00008951	0.00000656	0.00044667	0.00010658	0.00009947	0.0000071
616370.00	2357440.00	0.00031967	0.0000941	0.00008771	0.00000639	0.00043664	0.00010426	0.00009734	0.00000691
616870.00	2357440.00	0.00031289	0.00009224	0.000086	0.00000623	0.00042748	0.00010207	0.00009534	0.00000674
617370.00	2357440.00	0.00030643	0.00009046	0.00008438	0.00000608	0.00041883	0.00009999	0.00009342	0.00000656
617870.00	2357440.00	0.00030082	0.00008886	0.00008292	0.00000594	0.0004124	0.00009812	0.00009172	0.0000064
618370.00	2357440.00	0.00029518	0.00008722	0.00008142	0.0000058	0.00040476	0.00009612	0.00008989	0.00000623
618870.00	2357440.00	0.00028836	0.00008526	0.00007964	0.00000562	0.00039452	0.00009373	0.00008773	0.000006
619370.00	2357440.00	0.00027977	0.00008147	0.00007632	0.00000515	0.00041853	0.00009043	0.00008505	0.00000538
619870.00	2357440.00	0.00027389	0.00008024	0.00007516	0.00000508	0.000398	0.0000886	0.00008329	0.00000531
590370.00	2357940.00	0.00473991	0.00545694	0.00517298	0.00028397	0.00605083	0.0053508	0.00504249	0.00030831
590870.00	2357940.00	0.00528334	0.00650445	0.00622067	0.00028379	0.0075075	0.00737664	0.0070526	0.00032405
591370.00	2357940.00	0.00636216	0.00817689	0.007306	0.00087089	0.00860551	0.00907071	0.00873433	0.00033639
591870.00	2357940.00	0.00710201	0.00887853	0.00768519	0.00119334	0.01100706	0.01206906	0.011048	0.00102106
592370.00	2357940.00	0.00453056	0.00467948	0.00429603	0.00038345	0.01121731	0.01124815	0.01028422	0.00096392
592870.00	2357940.00	0.00533755	0.00507398	0.00487737	0.00019661	0.00914416	0.00735989	0.00702047	0.00033942
593370.00	2357940.00	0.00412361	0.00348991	0.0033095	0.00018042	0.0085891	0.00683736	0.0066357	0.00020166
593870.00	2357940.00	0.00374151	0.00230609	0.00210038	0.00020571	0.00696477	0.00430237	0.00408924	0.00021313
594370.00	2357940.00	0.00313742	0.0017039	0.00149871	0.00020518	0.00567684	0.00283775	0.00260903	0.00022872
594870.00	2357940.00	0.0026678	0.00133986	0.00116398	0.00017589	0.00461659	0.0020645	0.00184315	0.00022135
595370.00	2357940.00	0.00229548	0.00109135	0.00093908	0.00015226	0.00399226	0.00160469	0.00140404	0.00020065
595870.00	2357940.00	0.00194143	0.00088118	0.00074219	0.00013899	0.00343878	0.00125704	0.00108178	0.00017526
596370.00	2357940.00	0.00165168	0.00071821	0.00058935	0.00012885	0.00295883	0.00099891	0.00084446	0.00015445
596870.00	2357940.00	0.00143658	0.00060135	0.00048429	0.00011707	0.00257796	0.00081568	0.00068066	0.00013502
597370.00	2357940.00	0.00128375	0.00051878	0.00041512	0.00010365	0.00229052	0.00068778	0.0005713	0.00011648
597870.00	2357940.00	0.00116721	0.00045546	0.00036563	0.00008982	0.00205882	0.00059166	0.00049265	0.00009901
598370.00	2357940.00	0.00107902	0.00040681	0.00032978	0.00007703	0.00187751	0.00051976	0.0004359	0.00008386
598870.00	2357940.00	0.00100662	0.00036717	0.0003014	0.00006577	0.0017251	0.0004625	0.00039147	0.00007103
599370.00	2357940.00	0.00094491	0.00033427	0.00027807	0.0000562	0.00159364	0.00041591	0.0003555	0.00006042
599870.00	2357940.00	0.00089259	0.00030709	0.0002588	0.00004829	0.00148274	0.00037818	0.00032636	0.00005182
600370.00	2357940.00	0.00084672	0.00028414	0.00024235	0.00004179	0.00138612	0.00034685	0.00030199	0.00004486
600870.00	2357940.00	0.0008078	0.0002651	0.00022854	0.00003656	0.00130497	0.00032127	0.00028193	0.00003935
601370.00	2357940.00	0.00077068	0.00024811	0.00021592	0.00003219	0.0012306	0.00029908	0.00026427	0.00003481
601870.00	2357940.00	0.00073647	0.00023312	0.00020457	0.00002855	0.0011577	0.0002787	0.00024784	0.00003085
602370.00	2357940.00	0.00070374	0.00022017	0.00019455	0.00002563	0.00109437	0.00026225	0.00023437	0.00002788
602870.00	2357940.00	0.00067543	0.00020879	0.00018562	0.00002316	0.00103898	0.0002474	0.00022214	0.00002526
603370.00	2357940.00	0.00064885	0.0001986	0.0001775	0.0000211	0.0009879	0.0002342	0.00021113	0.00002307
603870.00	2357940.00	0.00062472	0.00018957	0.00017021	0.00001935	0.00094286	0.00022259	0.00020138	0.00002121
604370.00	2357940.00	0.00060219	0.00018141	0.00016355	0.00001786	0.00090153	0.00021217	0.00019256	0.00001961
604870.00	2357940.00	0.00058076	0.00017395	0.00015737	0.00001658	0.00086247	0.00020267	0.00018444	0.00001823
605370.00	2357940.00	0.00056045	0.00016711	0.00015164	0.00001547	0.00082592	0.000194	0.00017697	0.00001703
605870.00	2357940.00	0.00054177	0.0001609	0.0001464	0.0000145	0.00079319	0.00018618	0.0001702	0.00001598
606370.00	2357940.00	0.00052408	0.00015517	0.00014152	0.00001365	0.00076256	0.00017897	0.00016392	0.00001504
606870.00	2357940.00	0.00050748	0.00014987	0.00013698	0.00001289	0.00073426	0.00017235	0.00015814	0.00001421
607370.00	2357940.00	0.00049182	0.00014497	0.00013275	0.00001222	0.00070793	0.00016623	0.00015276	0.00001347
607870.00	2357940.00	0.00047703	0.0001404	0.00012879	0.00001161	0.00068338	0.00016056	0.00014776	0.0000128
608370.00	2357940.00	0.00046304	0.00013613	0.00012507	0.00001106	0.00066046	0.00015528	0.0001431	0.00001219
608870.00	2357940.00	0.0004498	0.00013214	0.00012157	0.00001056	0.00063901	0.00015036	0.00013873	0.00001164
609370.00	2357940.00	0.00043724	0.00012839	0.00011828	0.00001011	0.00061891	0.00014576	0.00013463	0.00001113
609870.00	2357940.00	0.00042532	0.00012486	0.00011516	0.0000097	0.00060004	0.00014144	0.00013078	0.00001066
610370.00	2357940.00	0.00041399	0.00012154	0.00011222	0.00000931	0.0005823	0.00013738	0.00012715	0.00001023
610870.00	2357940.00	0.00040349	0.00011845	0.00010949	0.00000896	0.00056632	0.00013363	0.00012379	0.00000984
611370.00	2357940.00	0.00039321	0.00011547	0.00010684	0.00000863	0.00055055	0.00013002	0.00012055	0.00000947
611870.00	2357940.00	0.00038342	0.00011265	0.00010432	0.00000833	0.00053566	0.00012661	0.00011748	0.00000912
612370.00	2357940.00	0.00037381	0.00010992	0.00010188	0.00000804	0.0005209	0.00012331	0.00011451	0.0000088
612870.00	2357940.00	0.00036489	0.00010737	0.00009959	0.00000778	0.0005076	0.00012025	0.00011174	0.0000085

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2357940.00	0.00035636	0.00010494	0.00009741	0.00000753	0.00049499	0.00011734	0.00010911	0.00000822
613870.00	2357940.00	0.0003482	0.00010263	0.00009533	0.0000073	0.00048303	0.00011457	0.00010661	0.00000796
614370.00	2357940.00	0.00034038	0.00010041	0.00009333	0.00000708	0.00047168	0.00011193	0.00010422	0.00000771
614870.00	2357940.00	0.00033287	0.00009829	0.00009142	0.00000687	0.0004609	0.00010941	0.00010193	0.00000748
615370.00	2357940.00	0.00032569	0.00009626	0.00008959	0.00000667	0.00045065	0.00010701	0.00009975	0.00000726
615870.00	2357940.00	0.00031881	0.00009432	0.00008783	0.00000649	0.00044087	0.00010471	0.00009766	0.00000705
616370.00	2357940.00	0.00031219	0.00009246	0.00008614	0.00000631	0.00043157	0.00010251	0.00009566	0.00000685
616870.00	2357940.00	0.00030618	0.00009073	0.00008458	0.00000615	0.00042371	0.00010049	0.00009382	0.00000666
617370.00	2357940.00	0.00030022	0.00008903	0.00008305	0.00000599	0.0004157	0.0000985	0.00009202	0.00000648
617870.00	2357940.00	0.00029413	0.00008734	0.00008151	0.00000584	0.00040686	0.00009651	0.0000902	0.00000631
618370.00	2357940.00	0.00028859	0.00008577	0.00008008	0.00000569	0.00039952	0.00009468	0.00008853	0.00000615
618870.00	2357940.00	0.00028113	0.00008345	0.00007802	0.00000543	0.0003877	0.00009171	0.00008592	0.00000579
619370.00	2357940.00	0.00027497	0.00008008	0.0000751	0.00000498	0.00042969	0.00008938	0.00008419	0.00000519
619870.00	2357940.00	0.00028855	0.00007861	0.00007388	0.00000474	0.00054075	0.00009054	0.00008564	0.0000049
590370.00	2358440.00	0.00346993	0.00410888	0.00390704	0.00020185	0.00504139	0.00454894	0.00430949	0.00023945
590870.00	2358440.00	0.00376939	0.00453295	0.00418099	0.00035196	0.00554424	0.00527159	0.0050402	0.00023139
591370.00	2358440.00	0.00498227	0.00635714	0.00539753	0.00095961	0.00628603	0.00609154	0.00567647	0.00041507
591870.00	2358440.00	0.00456836	0.00529097	0.00458329	0.00070768	0.00805983	0.00829591	0.00735477	0.00094112
592370.00	2358440.00	0.00322394	0.00320632	0.00291069	0.00029563	0.00716645	0.00629539	0.00570652	0.00058888
592870.00	2358440.00	0.00402182	0.00348676	0.00331612	0.00017065	0.0058977	0.00438218	0.00411991	0.00026227
593370.00	2358440.00	0.00318937	0.00288184	0.00275459	0.00012725	0.00718094	0.00479054	0.00461851	0.00017203
593870.00	2358440.00	0.00283367	0.00207625	0.00193519	0.00014106	0.00500088	0.00351893	0.00337335	0.00014559
594370.00	2358440.00	0.00263123	0.00153359	0.00137971	0.00015389	0.00454739	0.00249077	0.00233238	0.00015838
594870.00	2358440.00	0.00224386	0.00120655	0.00105018	0.00015637	0.00385634	0.00182673	0.00165981	0.00016692
595370.00	2358440.00	0.00195231	0.00098417	0.00084438	0.00013979	0.00327447	0.00141908	0.00125616	0.00016292
595870.00	2358440.00	0.00175834	0.0008294	0.0007121	0.0001173	0.00294596	0.0011541	0.00100925	0.00014485
596370.00	2358440.00	0.00158935	0.00071003	0.00060958	0.00010046	0.00269858	0.00096684	0.00084091	0.00012593
596870.00	2358440.00	0.001412	0.00060078	0.00051239	0.00008839	0.00242608	0.00080423	0.00069722	0.00010701
597370.00	2358440.00	0.00125527	0.00051196	0.00043155	0.00008041	0.00217435	0.00067588	0.00058246	0.00009341
597870.00	2358440.00	0.00113282	0.00044606	0.00037174	0.00007432	0.00196654	0.00058114	0.00049722	0.00008393
598370.00	2358440.00	0.00103984	0.00039782	0.0003294	0.00006842	0.00180357	0.00051161	0.00043581	0.00007579
598870.00	2358440.00	0.0009532	0.00035532	0.00029354	0.00006178	0.00164114	0.00045019	0.00038316	0.00006702
599370.00	2358440.00	0.00088874	0.00032386	0.00026821	0.00005565	0.00151756	0.00040511	0.00034539	0.00005972
599870.00	2358440.00	0.00083549	0.00029814	0.00024827	0.00004987	0.00141298	0.00036875	0.00031557	0.00005318
600370.00	2358440.00	0.0007928	0.00027731	0.00023265	0.00004466	0.00132845	0.00033987	0.00029236	0.00004751
600870.00	2358440.00	0.00075592	0.00025962	0.0002196	0.00004002	0.00125833	0.00031629	0.00027365	0.00004265
601370.00	2358440.00	0.00072094	0.00024349	0.00020761	0.00003587	0.00118595	0.0002944	0.00025613	0.00003826
601870.00	2358440.00	0.0006893	0.00022923	0.00019696	0.00003227	0.00112029	0.00027533	0.00024085	0.00003448
602370.00	2358440.00	0.00066055	0.00021662	0.00018748	0.00002914	0.00106117	0.00025858	0.00022736	0.00003122
602870.00	2358440.00	0.00063527	0.00020557	0.00017913	0.00002644	0.00101055	0.0002441	0.00021569	0.00002841
603370.00	2358440.00	0.00061366	0.00019583	0.00017173	0.0000241	0.0009662	0.00023101	0.00020509	0.00002592
603870.00	2358440.00	0.00059117	0.00018687	0.00016479	0.00002208	0.00092489	0.00021982	0.00019595	0.00002387
604370.00	2358440.00	0.0005693	0.00017859	0.00015827	0.00002032	0.00088141	0.00020924	0.00018722	0.00002202
604870.00	2358440.00	0.00055099	0.00017136	0.00015257	0.00001878	0.00084696	0.0002	0.00017959	0.00002041
605370.00	2358440.00	0.00053186	0.00016444	0.000147	0.00001744	0.00080989	0.00019123	0.00017224	0.00001899
605870.00	2358440.00	0.00051482	0.00015824	0.00014199	0.00001625	0.00077809	0.0001834	0.00016567	0.00001773
606370.00	2358440.00	0.00049895	0.00015256	0.00013736	0.0000152	0.000749	0.00017627	0.00015965	0.00001661
606870.00	2358440.00	0.00048388	0.00014731	0.00013304	0.00001427	0.00072163	0.00016968	0.00015406	0.00001562
607370.00	2358440.00	0.00046971	0.00014245	0.00012901	0.00001344	0.0006963	0.00016362	0.0001489	0.00001472
607870.00	2358440.00	0.0004563	0.00013794	0.00012524	0.00001269	0.00067262	0.00015801	0.00014409	0.00001391
608370.00	2358440.00	0.00044369	0.00013374	0.00012172	0.00001202	0.00065074	0.00015282	0.00013963	0.00001318
608870.00	2358440.00	0.00043153	0.00012979	0.00011838	0.00001141	0.00062968	0.00014793	0.00013541	0.00001252
609370.00	2358440.00	0.00042007	0.0001261	0.00011525	0.00001086	0.00061018	0.00014339	0.00013148	0.00001191
609870.00	2358440.00	0.00040946	0.00012269	0.00011234	0.00001036	0.00059263	0.00013921	0.00012785	0.00001136
610370.00	2358440.00	0.00039884	0.00011939	0.0001095	0.0000099	0.00057472	0.00013516	0.00012431	0.00001085
610870.00	2358440.00	0.00038915	0.00011635	0.00010688	0.00000947	0.00055902	0.00013146	0.00012108	0.00001038
611370.00	2358440.00	0.00037969	0.00011344	0.00010436	0.00000908	0.00054362	0.00012792	0.00011797	0.00000995
611870.00	2358440.00	0.0003704	0.00011064	0.00010191	0.00000872	0.00052836	0.00012451	0.00011496	0.00000955
612370.00	2358440.00	0.00036176	0.00010802	0.00009963	0.00000839	0.00051461	0.00012134	0.00011216	0.00000918
612870.00	2358440.00	0.0003535	0.00010553	0.00009745	0.00000808	0.00050158	0.00011834	0.00010951	0.00000884
613370.00	2358440.00	0.00034558	0.00010316	0.00009537	0.00000779	0.00048922	0.0001155	0.00010698	0.00000851
613870.00	2358440.00	0.00033799	0.0001009	0.00009338	0.00000752	0.0004775	0.00011279	0.00010457	0.00000821
614370.00	2358440.00	0.00033069	0.00009875	0.00009148	0.00000727	0.00046637	0.00011021	0.00010228	0.00000793
614870.00	2358440.00	0.00032373	0.0000967	0.00008966	0.00000704	0.00045595	0.00010776	0.0001001	0.00000767
615370.00	2358440.00	0.00031739	0.00009479	0.00008798	0.00000681	0.00044696	0.00010551	0.00009809	0.00000742
615870.00	2358440.00	0.0003107	0.00009285	0.00008625	0.00000661	0.00043661	0.0001032	0.00009601	0.00000719
616370.00	2358440.00	0.00030439	0.00009102	0.00008461	0.00000641	0.00042717	0.00010103	0.00009406	0.00000697
616870.00	2358440.00	0.00029852	0.0000893	0.00008307	0.00000622	0.00041872	0.000099	0.00009224	0.00000676
617370.00	2358440.00	0.00029279	0.00008763	0.00008158	0.00000605	0.00041036	0.00009703	0.00009047	0.00000656
617870.00	2358440.00	0.00028787	0.0000861	0.00008022	0.00000588	0.0004044	0.00009522	0.00008885	0.00000638

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2358440.00	0.00028264	0.00008455	0.00007883	0.00000572	0.00039616	0.00009329	0.00008711	0.00000618
618870.00	2358440.00	0.00027418	0.00008205	0.00007663	0.00000542	0.00038269	0.00009021	0.00008445	0.00000577
619370.00	2358440.00	0.00026786	0.00008017	0.00007497	0.0000052	0.0003759	0.00008806	0.00008256	0.00000551
619870.00	2358440.00	0.00026232	0.00007845	0.00007344	0.00000501	0.00037303	0.00008621	0.00008093	0.00000528
590370.00	2358940.00	0.00260013	0.00297435	0.00277393	0.00020043	0.00401286	0.00349267	0.00331362	0.00017906
590870.00	2358940.00	0.00315307	0.00376145	0.00328416	0.0004773	0.00432268	0.00377525	0.00354755	0.0002277
591370.00	2358940.00	0.00386293	0.00468031	0.00391272	0.00076759	0.00507765	0.004828	0.00430775	0.00052025
591870.00	2358940.00	0.00321164	0.00349092	0.0030174	0.00047353	0.0058987	0.00561258	0.00491541	0.00069717
592370.00	2358940.00	0.00242789	0.00232594	0.00209041	0.00023553	0.00517279	0.00403772	0.00363195	0.00040577
592870.00	2358940.00	0.00299219	0.00244778	0.0023006	0.00014718	0.00434627	0.00297461	0.00276395	0.00021066
593370.00	2358940.00	0.00272128	0.002336	0.00222533	0.00011068	0.00569146	0.00335972	0.00321069	0.00014903
593870.00	2358940.00	0.00219329	0.00180299	0.00170154	0.00010145	0.00419035	0.00279772	0.0026839	0.00011382
594370.00	2358940.00	0.00211492	0.00139222	0.00127932	0.0001129	0.00347827	0.00215394	0.00203821	0.00011572
594870.00	2358940.00	0.001973	0.00110209	0.00098113	0.00012095	0.00325938	0.00164881	0.0015259	0.00012291
595370.00	2358940.00	0.00172661	0.00091491	0.00078988	0.00012503	0.00287699	0.00130636	0.00117672	0.00012964
595870.00	2358940.00	0.00153182	0.00077431	0.00065747	0.00011683	0.00253352	0.00106778	0.00093898	0.0001288
596370.00	2358940.00	0.00140522	0.00066726	0.00056616	0.0001011	0.00232287	0.00089743	0.00077974	0.00011769
596870.00	2358940.00	0.00131401	0.00058959	0.00050347	0.00008612	0.00219673	0.00078113	0.00067648	0.00010465
597370.00	2358940.00	0.00120566	0.00051159	0.00043986	0.00007173	0.00202149	0.00066492	0.0005793	0.00008562
597870.00	2358940.00	0.001106	0.00044873	0.00038603	0.0000627	0.00186763	0.00057717	0.00050408	0.0000731
598370.00	2358940.00	0.00101376	0.00039587	0.000339	0.00005687	0.00171899	0.00050511	0.00044058	0.00006453
598870.00	2358940.00	0.00093492	0.00035392	0.00030114	0.00005278	0.00158699	0.00044796	0.00038937	0.00005858
599370.00	2358940.00	0.00086681	0.00032019	0.00027099	0.0000492	0.00146931	0.00040156	0.00034799	0.00005358
599870.00	2358940.00	0.00081104	0.00029378	0.00024785	0.00004593	0.00137089	0.0003651	0.0003157	0.0000494
600370.00	2358940.00	0.00076612	0.00027301	0.00023021	0.0000428	0.0012906	0.00033644	0.00029073	0.00004571
600870.00	2358940.00	0.00072687	0.00025514	0.00021547	0.00003967	0.00121751	0.0003118	0.00026964	0.00004216
601370.00	2358940.00	0.0006917	0.00023952	0.00020289	0.00003663	0.00115257	0.00029086	0.000252	0.00003887
601870.00	2358940.00	0.00065933	0.00022524	0.00019153	0.00003371	0.00108489	0.00027081	0.00023516	0.00003565
602370.00	2358940.00	0.00063416	0.00021407	0.00018294	0.00003112	0.00103698	0.00025594	0.00022297	0.00003297
602870.00	2358940.00	0.00060857	0.00020342	0.00017472	0.00002869	0.00098908	0.00024222	0.00021174	0.00003048
603370.00	2358940.00	0.00058608	0.00019385	0.00016737	0.00002648	0.00094491	0.00022961	0.00020143	0.00002818
603870.00	2358940.00	0.0005653	0.00018516	0.00016069	0.00002447	0.00090432	0.00021828	0.00019218	0.00002611
604370.00	2358940.00	0.00054581	0.00017721	0.00015455	0.00002266	0.00086617	0.00020804	0.0001838	0.00002424
604870.00	2358940.00	0.00052781	0.00016996	0.00014893	0.00002103	0.00083117	0.00019873	0.00017618	0.00002255
605370.00	2358940.00	0.00051137	0.00016334	0.00014378	0.00001956	0.00080011	0.00019025	0.00016922	0.00002103
605870.00	2358940.00	0.0004944	0.00015703	0.00013879	0.00001824	0.00076681	0.0001823	0.00016264	0.00001966
606370.00	2358940.00	0.00047911	0.00015129	0.00013424	0.00001705	0.00073772	0.00017506	0.00015664	0.00001842
606870.00	2358940.00	0.00046507	0.00014604	0.00013006	0.00001598	0.00071161	0.00016848	0.00015118	0.00001729
607370.00	2358940.00	0.00045181	0.00014117	0.00012616	0.00001501	0.00068716	0.00016239	0.00014612	0.00001627
607870.00	2358940.00	0.0004396	0.00013669	0.00012256	0.00001413	0.00066521	0.00015684	0.00014149	0.00001535
608370.00	2358940.00	0.00042735	0.0001324	0.00011906	0.00001334	0.00064275	0.00015151	0.000137	0.0000145
608870.00	2358940.00	0.00041605	0.00012844	0.00011583	0.00001261	0.00062253	0.00014662	0.00013289	0.00001373
609370.00	2358940.00	0.00040532	0.00012474	0.00011278	0.00001195	0.00060351	0.00014206	0.00012904	0.00001302
609870.00	2358940.00	0.0003951	0.00012126	0.00010991	0.00001135	0.00058558	0.00013779	0.00012542	0.00001237
610370.00	2358940.00	0.00038582	0.00011807	0.00010727	0.0000108	0.00056995	0.0001339	0.00012212	0.00001178
610870.00	2358940.00	0.00037608	0.00011491	0.00010461	0.0000103	0.00055269	0.00013002	0.00011879	0.00001123
611370.00	2358940.00	0.00036721	0.000112	0.00010217	0.00000983	0.00053759	0.00012648	0.00011576	0.00001072
611870.00	2358940.00	0.00035874	0.00010925	0.00009985	0.0000094	0.00052329	0.00012314	0.00011288	0.00001026
612370.00	2358940.00	0.00035063	0.00010664	0.00009764	0.000009	0.00050974	0.00011998	0.00011016	0.00000982
612870.00	2358940.00	0.00034301	0.00010419	0.00009555	0.00000864	0.00049729	0.00011702	0.00010761	0.00000942
613370.00	2358940.00	0.0003359	0.0001019	0.0000936	0.0000083	0.00048606	0.00011427	0.00010523	0.00000904
613870.00	2358940.00	0.00032828	0.00009957	0.00009159	0.00000798	0.00047313	0.00011146	0.00010277	0.0000087
614370.00	2358940.00	0.00032141	0.00009744	0.00008975	0.00000768	0.00046213	0.0001089	0.00010053	0.00000837
614870.00	2358940.00	0.00031545	0.00009552	0.00008811	0.00000741	0.00045363	0.00010661	0.00009855	0.00000806
615370.00	2358940.00	0.00030945	0.00009358	0.00008643	0.00000715	0.00044417	0.00010427	0.00009649	0.00000778
615870.00	2358940.00	0.00030294	0.00009168	0.00008477	0.00000691	0.00043376	0.00010205	0.00009454	0.00000751
616370.00	2358940.00	0.00029749	0.00008992	0.00008324	0.00000668	0.00042554	0.00009992	0.00009266	0.00000726
616870.00	2358940.00	0.00029112	0.00008812	0.00008165	0.00000647	0.00041495	0.00009782	0.0000908	0.00000702
617370.00	2358940.00	0.00028631	0.00008656	0.00008029	0.00000627	0.00040871	0.00009596	0.00008916	0.0000068
617870.00	2358940.00	0.00027987	0.00008459	0.00007857	0.00000601	0.00039722	0.00009344	0.00008697	0.00000647
618370.00	2358940.00	0.00027229	0.00008236	0.00007664	0.00000572	0.00038553	0.00009073	0.00008464	0.00000609
618870.00	2358940.00	0.00026657	0.00008065	0.00007514	0.00000551	0.00037808	0.00008875	0.0000829	0.00000584
619370.00	2358940.00	0.00026017	0.00007856	0.00007333	0.00000523	0.00037882	0.0000866	0.0000811	0.0000055
619870.00	2358940.00	0.00026667	0.00007643	0.00007157	0.00000485	0.00050036	0.00008764	0.00008261	0.00000503
590370.00	2359440.00	0.00220098	0.00244612	0.0021988	0.00024732	0.00329533	0.0026523	0.00249379	0.00015851
590870.00	2359440.00	0.00274403	0.00322943	0.00271277	0.00051666	0.00359274	0.00306075	0.00278535	0.0002754
591370.00	2359440.00	0.00300374	0.00340461	0.00284452	0.00056009	0.00421085	0.00393405	0.0034113	0.00052276
591870.00	2359440.00	0.00243338	0.00249594	0.00215229	0.00034365	0.00450133	0.00389273	0.00339392	0.00049882
592370.00	2359440.00	0.00189854	0.00174937	0.00155954	0.00018983	0.00397493	0.00280047	0.00250278	0.00029769
592870.00	2359440.00	0.00226429	0.00180217	0.00167583	0.00012634	0.00348251	0.00219484	0.00202107	0.00017377

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2359440.00	0.00241728	0.00189046	0.0017885	0.00010196	0.00438355	0.0024171	0.00228994	0.00012716
593870.00	2359440.00	0.00186148	0.00156242	0.00148111	0.00008132	0.00397154	0.00228946	0.00218814	0.00010132
594370.00	2359440.00	0.00170503	0.00126634	0.00117975	0.0000866	0.00288316	0.00184439	0.00175488	0.00008951
594870.00	2359440.00	0.00167123	0.00102322	0.00092993	0.00009328	0.0026538	0.0014912	0.00139571	0.00009549
595370.00	2359440.00	0.00157189	0.00085428	0.00075471	0.00009957	0.00252752	0.00121468	0.00111406	0.00010061
595870.00	2359440.00	0.00139803	0.00073069	0.00062736	0.00010333	0.00228087	0.00100371	0.00089841	0.00010529
596370.00	2359440.00	0.00125643	0.00063443	0.00053487	0.00009955	0.00205517	0.00084782	0.00074198	0.00010584
596870.00	2359440.00	0.0011676	0.0005589	0.00046941	0.00008948	0.00191963	0.00073329	0.00063368	0.00009961
597370.00	2359440.00	0.00109728	0.00049533	0.00041871	0.00007662	0.00181127	0.00064023	0.00055222	0.00008802
597870.00	2359440.00	0.00103962	0.00044478	0.00037984	0.00006494	0.00172596	0.00056826	0.0004924	0.00007586
598370.00	2359440.00	0.00097813	0.00039932	0.00034389	0.00005543	0.00163023	0.00050523	0.00044072	0.00006451
598870.00	2359440.00	0.00091592	0.00035931	0.0003106	0.00004871	0.00153097	0.0004514	0.00039558	0.00005582
599370.00	2359440.00	0.0008547	0.00032436	0.00028039	0.00004397	0.0014304	0.00040493	0.00035563	0.0000493
599870.00	2359440.00	0.00080022	0.00029564	0.00025484	0.0000408	0.00133916	0.00036693	0.00032202	0.0000449
600370.00	2359440.00	0.00075217	0.00027209	0.00023371	0.00003838	0.00125754	0.00033558	0.00029397	0.00004161
600870.00	2359440.00	0.00071132	0.00025316	0.00021678	0.00003637	0.00118732	0.00031021	0.00027118	0.00003904
601370.00	2359440.00	0.00067424	0.00023668	0.00020229	0.0000344	0.00112062	0.00028793	0.00025132	0.00003661
601870.00	2359440.00	0.00064333	0.00022353	0.00019094	0.00003259	0.00106834	0.0002707	0.00023608	0.00003462
602370.00	2359440.00	0.00061575	0.00021158	0.00018082	0.00003076	0.0010155	0.00025435	0.0002218	0.00003255
602870.00	2359440.00	0.00058961	0.00020107	0.0001721	0.00002897	0.00096715	0.00024042	0.00020978	0.00003063
603370.00	2359440.00	0.0005673	0.00019179	0.00016454	0.00002725	0.00092499	0.000228	0.00019919	0.00002881
603870.00	2359440.00	0.00054783	0.00018345	0.00015785	0.0000256	0.00088596	0.00021655	0.0001895	0.00002705
604370.00	2359440.00	0.00052809	0.00017552	0.00015152	0.000024	0.00084774	0.00020612	0.00018073	0.00002539
604870.00	2359440.00	0.00051162	0.00016882	0.00014627	0.00002255	0.00081681	0.00019748	0.00017357	0.00002391
605370.00	2359440.00	0.00049467	0.00016234	0.00014117	0.00002117	0.00078653	0.00018947	0.00016696	0.00002252
605870.00	2359440.00	0.00047907	0.00015628	0.0001364	0.00001988	0.00075659	0.00018176	0.00016057	0.00002119
606370.00	2359440.00	0.00046402	0.00015058	0.0001319	0.00001868	0.00072757	0.0001745	0.00015455	0.00001996
606870.00	2359440.00	0.00045062	0.00014541	0.00012784	0.00001757	0.00070257	0.00016798	0.00014917	0.00001881
607370.00	2359440.00	0.00043795	0.00014058	0.00012403	0.00001655	0.00067911	0.00016193	0.00014418	0.00001775
607870.00	2359440.00	0.00042629	0.00013612	0.00012051	0.00001561	0.00065802	0.00015638	0.00013961	0.00001677
608370.00	2359440.00	0.00041457	0.00013183	0.00011709	0.00001474	0.00063628	0.00015104	0.00013518	0.00001586
608870.00	2359440.00	0.00040377	0.00012786	0.00011392	0.00001393	0.0006167	0.00014614	0.00013111	0.00001502
609370.00	2359440.00	0.00039386	0.00012419	0.000111	0.0000132	0.00059924	0.00014164	0.00012739	0.00001425
609870.00	2359440.00	0.00038386	0.00012065	0.00010813	0.00001251	0.00058116	0.00013728	0.00012375	0.00001353
610370.00	2359440.00	0.00037467	0.00011737	0.00010548	0.00001189	0.00056504	0.00013327	0.00012041	0.00001286
610870.00	2359440.00	0.00036567	0.00011423	0.00010292	0.0000113	0.00054906	0.00012944	0.0001172	0.00001224
611370.00	2359440.00	0.00035727	0.0001113	0.00010054	0.00001077	0.00053451	0.00012589	0.00011422	0.00001167
611870.00	2359440.00	0.00034916	0.00010852	0.00009825	0.00001027	0.00052042	0.00012251	0.00011137	0.00001114
612370.00	2359440.00	0.00034139	0.00010588	0.00009607	0.00000981	0.00050704	0.00011931	0.00010867	0.00001064
612870.00	2359440.00	0.00033395	0.00010338	0.000094	0.00000938	0.00049434	0.00011629	0.00010611	0.00001018
613370.00	2359440.00	0.00032658	0.00010096	0.00009198	0.00000899	0.00048158	0.00011337	0.00010362	0.00000975
613870.00	2359440.00	0.00032043	0.00009883	0.00009022	0.00000862	0.00047219	0.00011081	0.00010146	0.00000935
614370.00	2359440.00	0.00031315	0.00009656	0.00008829	0.00000827	0.00045919	0.00010808	0.00009911	0.00000898
614870.00	2359440.00	0.00030689	0.00009452	0.00008657	0.00000795	0.00044891	0.00010564	0.00009702	0.00000863
615370.00	2359440.00	0.00030096	0.00009258	0.00008493	0.00000765	0.00043928	0.00010333	0.00009503	0.0000083
615870.00	2359440.00	0.00029586	0.00009081	0.00008345	0.00000737	0.00043198	0.00010121	0.00009322	0.00000799
616370.00	2359440.00	0.0002904	0.00008903	0.00008192	0.0000071	0.00042206	0.00009893	0.00009125	0.00000767
616870.00	2359440.00	0.00028364	0.00008692	0.00008013	0.0000068	0.00041054	0.00009638	0.00008908	0.00000731
617370.00	2359440.00	0.00027962	0.00008567	0.00007904	0.00000663	0.00040596	0.00009511	0.00008793	0.00000718
617870.00	2359440.00	0.00027186	0.00008328	0.00007701	0.00000628	0.00039145	0.00009203	0.00008532	0.00000671
618370.00	2359440.00	0.00026371	0.00008084	0.00007493	0.00000591	0.0003823	0.00008918	0.00008293	0.00000625
618870.00	2359440.00	0.00025813	0.00007891	0.00007328	0.00000563	0.00038473	0.00008725	0.00008134	0.00000592
619370.00	2359440.00	0.00025392	0.0000773	0.00007189	0.00000541	0.00039019	0.00008578	0.00008011	0.00000566
619870.00	2359440.00	0.0002501	0.00007589	0.00007067	0.00000522	0.0003919	0.00008438	0.00007892	0.00000546
590370.00	2359940.00	0.00199136	0.00219222	0.00189538	0.00029684	0.00279612	0.0021729	0.00200427	0.00016863
590870.00	2359940.00	0.00238077	0.00271164	0.00224344	0.0004682	0.00311804	0.00266772	0.00234923	0.00031848
591370.00	2359940.00	0.00238513	0.00253267	0.00212416	0.0004085	0.00351395	0.00315911	0.00270538	0.00045373
591870.00	2359940.00	0.00192939	0.00187539	0.00161425	0.00026115	0.00357955	0.00280564	0.00244363	0.00036201
592370.00	2359940.00	0.00158026	0.00139927	0.00124038	0.00015889	0.00328056	0.00211437	0.00188123	0.00023314
592870.00	2359940.00	0.00177429	0.00139166	0.00128201	0.00010965	0.0029304	0.00170979	0.00156375	0.00014604
593370.00	2359940.00	0.00212082	0.00154637	0.00145263	0.00009374	0.0034798	0.00183228	0.00172212	0.00011016
593870.00	2359940.00	0.00172862	0.00137847	0.00130426	0.00007421	0.00373024	0.00191486	0.00182101	0.00009385
594370.00	2359940.00	0.00143734	0.00113775	0.00106962	0.00006813	0.00266655	0.00159387	0.001518	0.00007587
594870.00	2359940.00	0.00140351	0.00095987	0.00088461	0.00007526	0.00224791	0.00134387	0.00126744	0.00007642
595370.00	2359940.00	0.00137822	0.00080496	0.00072561	0.00007935	0.00214632	0.00112595	0.00104485	0.0000811
595870.00	2359940.00	0.00129478	0.00068945	0.00060579	0.00008367	0.00204185	0.00094532	0.00086158	0.00008374
596370.00	2359940.00	0.00117261	0.00060615	0.00051868	0.00008747	0.00188285	0.00080992	0.00072185	0.00008807
596870.00	2359940.00	0.00106746	0.00053738	0.00045128	0.00008611	0.00173024	0.00070221	0.00061274	0.00008947
597370.00	2359940.00	0.00099253	0.00047837	0.00039884	0.00007953	0.00161838	0.00061537	0.00052983	0.00008554
597870.00	2359940.00	0.0009451	0.00043171	0.00036141	0.0000703	0.00155395	0.00054955	0.00047149	0.00007806

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2359940.00	0.00090577	0.00039253	0.00033199	0.00006053	0.00149732	0.0004952	0.00042649	0.00006871
598870.00	2359940.00	0.00086617	0.00035801	0.00030634	0.00005167	0.00143536	0.00044785	0.00038871	0.00005913
599370.00	2359940.00	0.00082529	0.00032747	0.00028279	0.00004468	0.00136947	0.00040691	0.00035591	0.00005099
599870.00	2359940.00	0.00078263	0.00029991	0.00026041	0.0000395	0.00129964	0.00037065	0.00032609	0.00004456
600370.00	2359940.00	0.00074129	0.00027595	0.00024001	0.00003594	0.00123115	0.00033952	0.00029955	0.00003997
600870.00	2359940.00	0.00070156	0.00025513	0.00022178	0.00003334	0.00116389	0.0003124	0.00027588	0.00003651
601370.00	2359940.00	0.00066514	0.00023746	0.00020602	0.00003143	0.00110135	0.00028928	0.00025531	0.00003397
601870.00	2359940.00	0.00063318	0.00022285	0.00019287	0.00002998	0.00104621	0.00027006	0.00023795	0.00003211
602370.00	2359940.00	0.00060347	0.00020993	0.0001813	0.00002863	0.00099315	0.00025288	0.00022245	0.00003042
602870.00	2359940.00	0.00057953	0.00019982	0.0001723	0.00002752	0.00095171	0.00023949	0.00021032	0.00002917
603370.00	2359940.00	0.00055625	0.00019027	0.00016393	0.00002634	0.00090996	0.00022684	0.00019901	0.00002783
603870.00	2359940.00	0.000535	0.00018182	0.00015665	0.00002517	0.00087289	0.00021587	0.00018928	0.00002659
604370.00	2359940.00	0.00051551	0.00017424	0.00015022	0.00002402	0.00083636	0.00020584	0.00018048	0.00002536
604870.00	2359940.00	0.00049856	0.0001674	0.00014452	0.00002289	0.0008052	0.0001968	0.00017264	0.00002416
605370.00	2359940.00	0.00048285	0.00016112	0.00013935	0.00002177	0.00077373	0.00018828	0.00016531	0.00002298
605870.00	2359940.00	0.00046728	0.00015531	0.00013462	0.00002069	0.00074655	0.00018107	0.00015918	0.00002189
606370.00	2359940.00	0.00045254	0.00014978	0.00013014	0.00001964	0.00071831	0.00017397	0.00015316	0.00002081
606870.00	2359940.00	0.00043921	0.00014471	0.00012607	0.00001864	0.00069335	0.00016748	0.0001477	0.00001978
607370.00	2359940.00	0.00042812	0.0001402	0.00012253	0.00001768	0.00067418	0.00016178	0.00014298	0.00001879
607870.00	2359940.00	0.00041607	0.00013571	0.00011894	0.00001677	0.00065164	0.00015616	0.00013831	0.00001786
608370.00	2359940.00	0.00040474	0.0001315	0.00011559	0.00001591	0.00063064	0.00015088	0.00013391	0.00001697
608870.00	2359940.00	0.00039426	0.00012757	0.00011247	0.0000151	0.00061163	0.00014601	0.00012987	0.00001613
609370.00	2359940.00	0.00038437	0.00012389	0.00010955	0.00001434	0.0005939	0.00014145	0.00012611	0.00001535
609870.00	2359940.00	0.00037475	0.00012037	0.00010674	0.00001363	0.00057656	0.00013712	0.00012252	0.0000146
610370.00	2359940.00	0.00036588	0.00011709	0.00010413	0.00001296	0.00056095	0.00013311	0.00011921	0.00001391
610870.00	2359940.00	0.00035724	0.00011396	0.00010163	0.00001233	0.00054566	0.00012929	0.00011604	0.00001325
611370.00	2359940.00	0.00034903	0.00011101	0.00009926	0.00001175	0.00053126	0.00012569	0.00011306	0.00001264
611870.00	2359940.00	0.00034145	0.00010825	0.00009705	0.0000112	0.00051835	0.00012236	0.0001103	0.00001206
612370.00	2359940.00	0.00033339	0.00010549	0.0000948	0.00001069	0.00050368	0.00011901	0.00010748	0.00001152
612870.00	2359940.00	0.0003265	0.00010302	0.0000928	0.00001022	0.00049218	0.00011604	0.00010502	0.00001102
613370.00	2359940.00	0.00031978	0.00010066	0.00009088	0.00000977	0.00048094	0.0001132	0.00010265	0.00001054
613870.00	2359940.00	0.00031312	0.00009837	0.00008901	0.00000936	0.00046959	0.00011045	0.00010035	0.0000101
614370.00	2359940.00	0.00030665	0.00009618	0.00008721	0.00000897	0.00045863	0.00010782	0.00009814	0.00000968
614870.00	2359940.00	0.00030017	0.00009404	0.00008543	0.0000086	0.00044711	0.00010524	0.00009595	0.00000929
615370.00	2359940.00	0.00029429	0.00009205	0.00008379	0.00000826	0.00043713	0.00010287	0.00009394	0.00000892
615870.00	2359940.00	0.00028904	0.00009023	0.00008229	0.00000794	0.00042878	0.00010071	0.00009213	0.00000858
616370.00	2359940.00	0.00028079	0.00008755	0.00008005	0.0000075	0.00041323	0.00009721	0.00008922	0.000008
616870.00	2359940.00	0.00027451	0.00008555	0.00007838	0.00000717	0.00040294	0.00009481	0.00008718	0.00000762
617370.00	2359940.00	0.00026985	0.00008398	0.00007706	0.00000692	0.00039544	0.00009298	0.00008562	0.00000736
617870.00	2359940.00	0.00026327	0.00008193	0.00007533	0.00000659	0.0003863	0.00009055	0.00008358	0.00000698
618370.00	2359940.00	0.00026374	0.00007891	0.00007289	0.00000603	0.0004884	0.00009014	0.00008387	0.00000627
618870.00	2359940.00	0.00026931	0.00007757	0.00007181	0.00000576	0.00055657	0.00009042	0.00008445	0.00000597
619370.00	2359940.00	0.0002504	0.00007632	0.00007063	0.00000569	0.00042159	0.00008572	0.00007979	0.00000593
619870.00	2359940.00	0.00024768	0.00007495	0.00006947	0.00000548	0.00042837	0.00008448	0.00007878	0.0000057
590370.00	2360440.00	0.00181995	0.00198863	0.00167391	0.00031472	0.00246222	0.00192014	0.00172705	0.00019309
590870.00	2360440.00	0.00205607	0.0022367	0.00184881	0.0003879	0.00275292	0.00235048	0.00202367	0.00032681
591370.00	2360440.00	0.00193783	0.00194875	0.00164209	0.00030666	0.00296171	0.00251975	0.00215203	0.00036773
591870.00	2360440.00	0.00160742	0.00149089	0.0012821	0.0002088	0.00299582	0.00214286	0.00186647	0.00027639
592370.00	2360440.00	0.00133862	0.00114226	0.00100848	0.00013378	0.00277714	0.00165536	0.00146804	0.00018732
592870.00	2360440.00	0.00144338	0.00111795	0.00102194	0.00009602	0.00254637	0.00138308	0.00125865	0.00012443
593370.00	2360440.00	0.00180168	0.00126727	0.00118278	0.00008449	0.0028852	0.00144341	0.00134811	0.00009531
593870.00	2360440.00	0.00164672	0.00121333	0.00114329	0.00007004	0.00332523	0.00158859	0.00150353	0.00008506
594370.00	2360440.00	0.00128294	0.00101327	0.00095635	0.00005692	0.00275094	0.00139478	0.00132752	0.00006727
594870.00	2360440.00	0.0011815	0.00087775	0.00081826	0.00005949	0.00201311	0.00118243	0.00112147	0.00006096
595370.00	2360440.00	0.00118921	0.0007657	0.00069983	0.00006587	0.00185193	0.00104162	0.0009749	0.00006671
595870.00	2360440.00	0.0011634	0.0006583	0.00059005	0.00006825	0.00178744	0.00089305	0.00082375	0.00006931
596370.00	2360440.00	0.00110365	0.00058091	0.00050866	0.00007225	0.00171811	0.00077626	0.00070416	0.0000721
596870.00	2360440.00	0.00101431	0.00052001	0.00044435	0.00007566	0.00161094	0.00068105	0.00060526	0.00007579
597370.00	2360440.00	0.00093113	0.00046701	0.00039158	0.00007542	0.00149752	0.00060034	0.00052312	0.00007722
597870.00	2360440.00	0.00087285	0.0004223	0.00035088	0.00007142	0.00141833	0.00053586	0.00046061	0.00007525
598370.00	2360440.00	0.00083174	0.00038411	0.0003194	0.00006471	0.00136272	0.00048314	0.0004131	0.00007004
598870.00	2360440.00	0.00080106	0.00035213	0.00029521	0.00005691	0.00132039	0.0004399	0.00037692	0.00006298
599370.00	2360440.00	0.00077402	0.00032481	0.00027551	0.0000493	0.00128016	0.00040323	0.00034787	0.00005536
599870.00	2360440.00	0.0007466	0.00030065	0.00025797	0.00004269	0.00123676	0.00037115	0.00032291	0.00004824
600370.00	2360440.00	0.00071782	0.00027892	0.00024144	0.00003748	0.00118967	0.00034273	0.00030042	0.00004231
600870.00	2360440.00	0.00068623	0.00025862	0.00022528	0.00003334	0.00113591	0.00031628	0.00027901	0.00003727
601370.00	2360440.00	0.00065535	0.0002408	0.0002104	0.0000304	0.00108334	0.0002933	0.0002597	0.0000336
601870.00	2360440.00	0.00062568	0.00022522	0.00019693	0.00002829	0.00103236	0.00027319	0.00024229	0.0000309
602370.00	2360440.00	0.00059818	0.00021187	0.0001851	0.00002678	0.000985	0.0002559	0.00022694	0.00002895
602870.00	2360440.00	0.00057259	0.00020036	0.00017475	0.00002561	0.00094281	0.00024128	0.00021373	0.00002755

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2360440.00	0.00054883	0.00019009	0.00016549	0.0000246	0.00090075	0.00022778	0.00020151	0.00002627
603870.00	2360440.00	0.00052667	0.00018082	0.00015715	0.00002368	0.00085844	0.00021513	0.00019007	0.00002506
604370.00	2360440.00	0.00050796	0.00017327	0.00015037	0.0000229	0.00082618	0.00020539	0.00018118	0.00002421
604870.00	2360440.00	0.00049012	0.00016625	0.00014415	0.0000221	0.00079301	0.00019593	0.00017263	0.0000233
605370.00	2360440.00	0.00047355	0.00015992	0.00013861	0.00002131	0.00076496	0.00018791	0.00016543	0.00002248
605870.00	2360440.00	0.00045788	0.00015411	0.00013359	0.00002052	0.00073584	0.00018033	0.0001587	0.00002163
606370.00	2360440.00	0.00044306	0.00014865	0.00012893	0.00001972	0.00070783	0.00017317	0.00015237	0.0000208
606870.00	2360440.00	0.00043018	0.00014375	0.00012482	0.00001892	0.0006844	0.00016683	0.00014686	0.00001997
607370.00	2360440.00	0.00041978	0.00013938	0.00012124	0.00001813	0.00066593	0.0001611	0.00014195	0.00001915
607870.00	2360440.00	0.00040746	0.00013501	0.00011765	0.00001736	0.00064393	0.00015568	0.00013732	0.00001836
608370.00	2360440.00	0.00039625	0.00013089	0.00011429	0.0000166	0.00062319	0.00015045	0.00013286	0.00001758
608870.00	2360440.00	0.00038611	0.00012708	0.00011122	0.00001587	0.00060499	0.00014567	0.00012884	0.00001683
609370.00	2360440.00	0.00037677	0.00012354	0.00010838	0.00001516	0.00058866	0.00014126	0.00012516	0.0000161
609870.00	2360440.00	0.00036739	0.00012009	0.00010561	0.00001448	0.00057179	0.00013697	0.00012157	0.0000154
610370.00	2360440.00	0.00035909	0.00011693	0.0001031	0.00001383	0.00055767	0.00013309	0.00011836	0.00001472
610870.00	2360440.00	0.00035052	0.00011381	0.00010061	0.00001321	0.00054236	0.00012927	0.00011518	0.00001408
611370.00	2360440.00	0.00034242	0.00011087	0.00009825	0.00001262	0.00052807	0.00012566	0.0001122	0.00001347
611870.00	2360440.00	0.00033498	0.00010812	0.00009606	0.00001206	0.00051539	0.00012233	0.00010944	0.00001289
612370.00	2360440.00	0.00032796	0.0001055	0.00009397	0.00001153	0.00050372	0.00011913	0.00010679	0.00001233
612870.00	2360440.00	0.00031853	0.00010229	0.00009134	0.00001094	0.00048477	0.00011496	0.00010331	0.00001165
613370.00	2360440.00	0.00031269	0.00010011	0.00008961	0.0000105	0.00047543	0.0001124	0.0001012	0.0000112
613870.00	2360440.00	0.00030783	0.00009825	0.00008815	0.00001011	0.00046846	0.00011031	0.00009948	0.00001083
614370.00	2360440.00	0.00030063	0.00009595	0.00008626	0.00000969	0.000456	0.00010766	0.00009726	0.0000104
614870.00	2360440.00	0.00029455	0.00009383	0.00008454	0.00000929	0.00044528	0.00010512	0.00009514	0.00000998
615370.00	2360440.00	0.00028962	0.00009189	0.00008298	0.00000891	0.00043699	0.00010262	0.00009308	0.00000954
615870.00	2360440.00	0.00028111	0.00008918	0.00008073	0.00000844	0.00042113	0.00009927	0.00009029	0.00000898
616370.00	2360440.00	0.0002741	0.0000869	0.00007886	0.00000805	0.00040922	0.00009652	0.000088	0.00000853
616870.00	2360440.00	0.00026711	0.00008462	0.00007697	0.00000765	0.00040025	0.00009385	0.00008578	0.00000807
617370.00	2360440.00	0.00026177	0.00008278	0.00007546	0.00000733	0.00039397	0.00009176	0.00008405	0.00000771
617870.00	2360440.00	0.00026017	0.00008015	0.00007331	0.00000684	0.00046349	0.00009089	0.00008377	0.00000712
618370.00	2360440.00	0.0002711	0.00007868	0.0000722	0.00000648	0.00058622	0.00009242	0.00008571	0.00000671
618870.00	2360440.00	0.00039057	0.00008051	0.00007444	0.00000607	0.00098445	0.00010134	0.0000951	0.00000623
619370.00	2360440.00	0.00028457	0.00007635	0.0000704	0.00000595	0.00070037	0.00009257	0.00008643	0.00000614
619870.00	2360440.00	0.0002462	0.00007449	0.00006862	0.00000587	0.00045451	0.00008475	0.00007866	0.00000609
590370.00	2360940.00	0.00165965	0.00178222	0.00148271	0.0002995	0.00222817	0.001758	0.00154425	0.00021375
590870.00	2360940.00	0.00176866	0.00183742	0.00152714	0.00031028	0.00243505	0.00205223	0.00174852	0.00030371
591370.00	2360940.00	0.0016063	0.00154219	0.00130568	0.00023651	0.00252887	0.0020144	0.00172451	0.0002899
591870.00	2360940.00	0.001343	0.0011951	0.00102702	0.00016809	0.00253712	0.0016672	0.00145423	0.00021297
592370.00	2360940.00	0.0011507	0.00093777	0.00082605	0.00011172	0.00255643	0.00132219	0.00117088	0.00015131
592870.00	2360940.00	0.00118788	0.00090328	0.00082149	0.00008179	0.00249122	0.00112074	0.00101795	0.00010279
593370.00	2360940.00	0.00151593	0.00104839	0.00097324	0.00007515	0.0025614	0.00117318	0.00109109	0.00008208
593870.00	2360940.00	0.00155819	0.00106494	0.00099882	0.00006612	0.00301629	0.00132518	0.00124929	0.00007588
594370.00	2360940.00	0.00141573	0.00093591	0.00088356	0.00005235	0.00464843	0.00132306	0.00125971	0.00006336
594870.00	2360940.00	0.00106206	0.00080896	0.00075963	0.00004934	0.00208276	0.00107726	0.00102359	0.00005367
595370.00	2360940.00	0.00102335	0.00071703	0.00066318	0.00005385	0.00166626	0.00094677	0.00089303	0.00005374
595870.00	2360940.00	0.00102993	0.00063533	0.0005772	0.00005812	0.00157854	0.0008452	0.00078629	0.00005891
596370.00	2360940.00	0.00101143	0.0005613	0.00050108	0.00006022	0.00153984	0.00074436	0.00068333	0.00006103
596870.00	2360940.00	0.00096184	0.00050266	0.00043929	0.00006337	0.00148359	0.00065854	0.00059542	0.00006311
597370.00	2360940.00	0.00088904	0.00045336	0.00038729	0.00006606	0.00139579	0.00058439	0.00051869	0.0000657
597870.00	2360940.00	0.00082199	0.00041173	0.00034516	0.00006657	0.00130811	0.00052242	0.0004551	0.00006732
598370.00	2360940.00	0.00077545	0.00037671	0.00031247	0.00006423	0.0012498	0.00047258	0.00040603	0.00006655
598870.00	2360940.00	0.00074308	0.0003464	0.00028686	0.00005954	0.0012114	0.00043148	0.0003683	0.00006318
599370.00	2360940.00	0.00071877	0.00032027	0.00026673	0.00005353	0.00118192	0.00039699	0.00033897	0.00005803
599870.00	2360940.00	0.00069847	0.00029774	0.00025053	0.00004721	0.00115455	0.00036746	0.00031541	0.00005205
600370.00	2360940.00	0.00067987	0.00027831	0.0002369	0.00004141	0.00112729	0.00034213	0.00029591	0.00004622
600870.00	2360940.00	0.00065831	0.0002599	0.00022367	0.00003623	0.0010912	0.00031805	0.00027746	0.00004059
601370.00	2360940.00	0.00063533	0.00024301	0.00021103	0.00003199	0.00105117	0.00029605	0.00026031	0.00003573
601870.00	2360940.00	0.00061379	0.00022869	0.00019963	0.00002905	0.0010155	0.00027789	0.0002455	0.00003239
602370.00	2360940.00	0.00058925	0.00021474	0.0001882	0.00002653	0.000974	0.0002602	0.0002308	0.00002939
602870.00	2360940.00	0.00056508	0.00020233	0.00017766	0.00002467	0.00093068	0.00024413	0.00021711	0.00002703
603370.00	2360940.00	0.00054205	0.00019131	0.00016802	0.00002329	0.00088925	0.00022986	0.0002046	0.00002526
603870.00	2360940.00	0.00052093	0.00018171	0.00015945	0.00002226	0.00085182	0.00021737	0.00019344	0.00002393
604370.00	2360940.00	0.00050149	0.0001733	0.00015186	0.00002145	0.00081737	0.00020639	0.0001835	0.0000229
604870.00	2360940.00	0.00048316	0.00016546	0.00014476	0.0000207	0.00078274	0.00019569	0.0001738	0.00002189
605370.00	2360940.00	0.00046731	0.00015928	0.00013913	0.00002016	0.00075711	0.00018794	0.0001666	0.00002134
605870.00	2360940.00	0.00045056	0.00015311	0.00013352	0.00001959	0.00072543	0.00017982	0.00015914	0.00002068
606370.00	2360940.00	0.00043647	0.00014772	0.0001287	0.00001902	0.00070024	0.00017276	0.0001527	0.00002005
606870.00	2360940.00	0.00042342	0.00014279	0.00012434	0.00001845	0.00067687	0.00016632	0.00014688	0.00001944
607370.00	2360940.00	0.00041127	0.00013824	0.00012037	0.00001787	0.00065513	0.00016041	0.00014158	0.00001883
607870.00	2360940.00	0.00040116	0.00013421	0.00011692	0.00001728	0.00063845	0.00015518	0.00013697	0.00001821

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2360940.00	0.00039012	0.00013021	0.00011352	0.00001669	0.00061827	0.00015009	0.00013249	0.0000176
608870.00	2360940.00	0.00038006	0.00012649	0.00011039	0.0000161	0.00060036	0.00014535	0.00012836	0.00001698
609370.00	2360940.00	0.00037035	0.00012294	0.00010744	0.0000155	0.00058292	0.00014086	0.00012449	0.00001637
609870.00	2360940.00	0.00036147	0.00011964	0.00010472	0.00001492	0.00056741	0.00013672	0.00012095	0.00001577
610370.00	2360940.00	0.00035314	0.00011652	0.00010218	0.00001434	0.0005531	0.00013279	0.00011761	0.00001518
610870.00	2360940.00	0.00034319	0.00011294	0.00009921	0.00001373	0.00053306	0.00012808	0.00011358	0.0000145
611370.00	2360940.00	0.00033601	0.00011026	0.00009706	0.0000132	0.00052109	0.00012481	0.00011086	0.00001395
611870.00	2360940.00	0.00032825	0.00010746	0.0000948	0.00001266	0.00050756	0.00012139	0.00010799	0.00001339
612370.00	2360940.00	0.00031684	0.00010376	0.00009172	0.00001204	0.00048444	0.00011664	0.00010396	0.00001268
612870.00	2360940.00	0.00030955	0.00010116	0.00008963	0.00001153	0.00047199	0.00011347	0.00010133	0.00001214
613370.00	2360940.00	0.00030381	0.000099	0.00008793	0.00001108	0.00046294	0.00011094	0.00009926	0.00001168
613870.00	2360940.00	0.00029928	0.00009719	0.00008652	0.00001067	0.00045679	0.00010888	0.00009759	0.00001129
614370.00	2360940.00	0.0002964	0.00009596	0.00008562	0.00001034	0.0004556	0.00010777	0.00009673	0.00001104
614870.00	2360940.00	0.00029058	0.00009388	0.00008394	0.00000994	0.00044574	0.00010527	0.00009466	0.00001061
615370.00	2360940.00	0.0002844	0.00009177	0.00008223	0.00000955	0.0004343	0.00010276	0.00009255	0.0000102
615870.00	2360940.00	0.00027467	0.00008856	0.00007956	0.000009	0.00041548	0.00009855	0.00008905	0.0000095
616370.00	2360940.00	0.0002678	0.00008624	0.00007765	0.00000858	0.00040663	0.00009583	0.0000868	0.00000903
616870.00	2360940.00	0.00026258	0.00008438	0.00007615	0.00000823	0.00039973	0.0000937	0.00008505	0.00000865
617370.00	2360940.00	0.0002573	0.00008246	0.00007458	0.00000788	0.00039648	0.00009159	0.00008333	0.00000826
617870.00	2360940.00	0.00025629	0.00008009	0.00007267	0.00000743	0.00046033	0.00009084	0.00008311	0.00000773
618370.00	2360940.00	0.00043357	0.00008311	0.00007623	0.00000688	0.00105439	0.00010454	0.00009748	0.00000706
618870.00	2360940.00	0.00075478	0.00009089	0.00008442	0.00000646	0.00068792	0.00009179	0.00008518	0.0000066
619370.00	2360940.00	0.00077647	0.0000898	0.00008368	0.00000612	0.00041657	0.00008182	0.00007558	0.00000623
619870.00	2360940.00	0.0003578	0.0000771	0.00007095	0.00000615	0.00093727	0.00009729	0.00009098	0.00000631
590370.00	2361440.00	0.00149785	0.00156894	0.00130385	0.00026509	0.00201711	0.00160662	0.0013883	0.00021833
590870.00	2361440.00	0.00150663	0.00149624	0.00125313	0.00024311	0.00212694	0.0017535	0.00148956	0.00026394
591370.00	2361440.00	0.00134719	0.0012339	0.00104935	0.00018455	0.00226025	0.00161354	0.00139035	0.0002232
591870.00	2361440.00	0.00118123	0.00099008	0.00085097	0.00013911	0.00238379	0.00135013	0.00117975	0.00017038
592370.00	2361440.00	0.00109086	0.00080773	0.00071165	0.00009608	0.00326116	0.00113606	0.00100966	0.0001264
592870.00	2361440.00	0.00115009	0.00076996	0.00069849	0.00007147	0.0044059	0.00101745	0.00092985	0.0000876
593370.00	2361440.00	0.00137871	0.00088349	0.00081736	0.00006613	0.00392956	0.00102797	0.00095777	0.0000702
593870.00	2361440.00	0.00147841	0.00094068	0.00087853	0.00006216	0.0033273	0.00114303	0.00107537	0.00006766
594370.00	2361440.00	0.00135321	0.0008716	0.00082056	0.00005104	0.00407118	0.0011858	0.00112483	0.00006098
594870.00	2361440.00	0.00108884	0.00075717	0.00071338	0.00004379	0.00309376	0.00103642	0.00098631	0.00005011
595370.00	2361440.00	0.00091996	0.00067778	0.00063265	0.00004513	0.00159297	0.00087603	0.00082933	0.0000467
595870.00	2361440.00	0.00090432	0.00060377	0.00055489	0.00004887	0.00145074	0.00078691	0.00073844	0.00004847
596370.00	2361440.00	0.00090826	0.00054378	0.00049201	0.00005177	0.00137938	0.00071086	0.00065831	0.00005254
596870.00	2361440.00	0.0008938	0.00048982	0.00043615	0.00005367	0.00135233	0.0006381	0.00058383	0.00005427
597370.00	2361440.00	0.0008512	0.00044272	0.00038663	0.00005609	0.0013031	0.00057121	0.00051549	0.00005572
597870.00	2361440.00	0.00079466	0.00040383	0.00034526	0.00005857	0.00123794	0.0005142	0.00045612	0.00005808
598370.00	2361440.00	0.00074115	0.0003703	0.00031085	0.00005945	0.00117162	0.00046522	0.0004055	0.00005972
598870.00	2361440.00	0.00070106	0.00034136	0.00028322	0.00005814	0.00112316	0.00042459	0.00036504	0.00005955
599370.00	2361440.00	0.00067263	0.00031605	0.00026121	0.00005484	0.00109097	0.00039066	0.00033333	0.00005733
599870.00	2361440.00	0.00065309	0.00029452	0.00024423	0.00005029	0.00107131	0.00036276	0.00030912	0.00005363
600370.00	2361440.00	0.00063664	0.00027546	0.0002303	0.00004515	0.00105169	0.00033829	0.00028931	0.00004898
600870.00	2361440.00	0.00062196	0.00025873	0.00021867	0.00004007	0.00103131	0.0003168	0.00027274	0.00004406
601370.00	2361440.00	0.00060733	0.0002438	0.00020833	0.00003547	0.00100861	0.00029763	0.00025825	0.00003938
601870.00	2361440.00	0.00058899	0.0002289	0.00019771	0.00003118	0.00097513	0.00027812	0.00024347	0.00003464
602370.00	2361440.00	0.00057053	0.0002156	0.00018785	0.00002775	0.00094176	0.00026086	0.00023013	0.00003073
602870.00	2361440.00	0.00055408	0.00020453	0.00017913	0.00002541	0.00091419	0.00024693	0.00021881	0.00002812
603370.00	2361440.00	0.00053474	0.00019343	0.00017012	0.00002331	0.00087911	0.00023257	0.00020699	0.00002558
603870.00	2361440.00	0.0005139	0.00018324	0.00016152	0.00002173	0.00084141	0.00021968	0.00019596	0.00002372
604370.00	2361440.00	0.00049612	0.00017443	0.00015388	0.00002054	0.00081014	0.00020833	0.0001861	0.00002223
604870.00	2361440.00	0.00047874	0.0001665	0.00014685	0.00001965	0.00077919	0.00019805	0.00017695	0.00002111
605370.00	2361440.00	0.0004623	0.00015943	0.00014046	0.00001896	0.0007499	0.00018885	0.00016861	0.00002024
605870.00	2361440.00	0.00044613	0.00015297	0.00013456	0.00001841	0.00072014	0.00018036	0.0001608	0.00001955
606370.00	2361440.00	0.00043196	0.00014731	0.00012939	0.00001793	0.00069508	0.00017298	0.00015401	0.00001898
606870.00	2361440.00	0.00041863	0.00014218	0.00012469	0.00001749	0.00067135	0.00016627	0.0001478	0.00001847
607370.00	2361440.00	0.00040741	0.0001377	0.00012064	0.00001707	0.00065279	0.00016043	0.00014244	0.00001799
607870.00	2361440.00	0.0003958	0.0001334	0.00011675	0.00001665	0.00063208	0.00015483	0.0001373	0.00001753
608370.00	2361440.00	0.00038546	0.00012944	0.00011321	0.00001622	0.00061382	0.00014967	0.0001326	0.00001708
608870.00	2361440.00	0.00037456	0.00012547	0.00010971	0.00001577	0.00059262	0.0001443	0.00012774	0.00001656
609370.00	2361440.00	0.00036585	0.00012226	0.00010692	0.00001534	0.00057783	0.00014021	0.00012409	0.00001613
609870.00	2361440.00	0.00035677	0.00011897	0.00010409	0.00001488	0.00056177	0.00013601	0.00012036	0.00001565
610370.00	2361440.00	0.00034704	0.00011553	0.00010114	0.0000144	0.00054415	0.00013165	0.00011652	0.00001514
610870.00	2361440.00	0.00033613	0.00011184	0.00009796	0.00001388	0.00052286	0.00012691	0.00011235	0.00001456
611370.00	2361440.00	0.00032838	0.00010906	0.00009564	0.00001342	0.00050944	0.00012344	0.00010936	0.00001408
611870.00	2361440.00	0.00031896	0.00010586	0.00009294	0.00001291	0.00049121	0.00011935	0.00010582	0.00001353
612370.00	2361440.00	0.0003114	0.00010318	0.00009073	0.00001244	0.00047799	0.00011603	0.000103	0.00001304
612870.00	2361440.00	0.000311	0.00010254	0.00009041	0.00001213	0.00048423	0.0001158	0.00010296	0.00001284

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2361440.00	0.00030381	0.00010009	0.00008839	0.00001169	0.00047118	0.00011283	0.00010044	0.00001239
613870.00	2361440.00	0.00029509	0.00009702	0.00008583	0.00001119	0.00045347	0.00010877	0.00009698	0.00001179
614370.00	2361440.00	0.00029199	0.00009577	0.00008492	0.00001085	0.00045179	0.00010764	0.00009611	0.00001152
614870.00	2361440.00	0.00028676	0.00009372	0.00008327	0.00001045	0.00044238	0.00010498	0.00009389	0.00001108
615370.00	2361440.00	0.00027515	0.00009009	0.00008018	0.0000099	0.00041976	0.00010037	0.00008997	0.0000104
615870.00	2361440.00	0.00026967	0.00008813	0.00007861	0.00000952	0.00041153	0.00009806	0.00008807	0.00000999
616370.00	2361440.00	0.0002633	0.00008548	0.00007642	0.00000906	0.00042147	0.00009552	0.00008606	0.00000946
616870.00	2361440.00	0.00027558	0.00008338	0.00007479	0.00000858	0.00060074	0.00009792	0.00008902	0.0000089
617370.00	2361440.00	0.00025401	0.0000821	0.00007372	0.00000838	0.00040844	0.00009164	0.00008289	0.00000875
617870.00	2361440.00	0.00024946	0.00008063	0.00007255	0.00000809	0.00039519	0.00008975	0.0000813	0.00000845
618370.00	2361440.00	0.00025376	0.00007856	0.0000709	0.00000766	0.00049644	0.00009021	0.00008227	0.00000794
618870.00	2361440.00	0.00074155	0.00009073	0.00008366	0.00000707	0.00073115	0.00009315	0.00008592	0.00000723
619370.00	2361440.00	0.00065179	0.00008691	0.00008009	0.00000682	0.00084687	0.0000952	0.00008822	0.00000698
619870.00	2361440.00	0.00046319	0.00007869	0.00007237	0.00000632	0.00028739	0.00007487	0.00006844	0.00000643
590370.00	2361940.00	0.00133486	0.00136294	0.00113736	0.00022557	0.00182302	0.00145588	0.00124679	0.00020909
590870.00	2361940.00	0.00131263	0.00123385	0.00104271	0.00019115	0.00201435	0.00149585	0.00127662	0.00021924
591370.00	2361940.00	0.00124155	0.00103357	0.00088191	0.00015167	0.00257181	0.00134934	0.00117197	0.00017737
591870.00	2361940.00	0.00120377	0.00085452	0.00073665	0.00011787	0.0034516	0.00117377	0.00103214	0.00014163
592370.00	2361940.00	0.00116876	0.00071831	0.00063401	0.0000843	0.00457285	0.00102877	0.00092063	0.00010814
592870.00	2361940.00	0.00193181	0.00070613	0.00064266	0.00006347	0.00682461	0.00096938	0.00089299	0.00007639
593370.00	2361940.00	0.00211053	0.00079641	0.00073767	0.00005874	0.00623065	0.0009637	0.00090206	0.00006164
593870.00	2361940.00	0.00196164	0.00085822	0.00080066	0.00005756	0.00568618	0.00107044	0.00101045	0.00005999
594370.00	2361940.00	0.00224287	0.00084552	0.000796	0.00004952	0.005131	0.00111451	0.00105736	0.00005715
594870.00	2361940.00	0.0010727	0.00072121	0.00067962	0.00004159	0.00308388	0.00097817	0.00092931	0.00004887
595370.00	2361940.00	0.00090672	0.0006369	0.0005981	0.0000388	0.00224921	0.00083932	0.00079742	0.0000419
595870.00	2361940.00	0.00081987	0.00057825	0.00053684	0.00004141	0.00142186	0.00073783	0.00069632	0.00004151
596370.00	2361940.00	0.00081915	0.0005199	0.00047568	0.00004422	0.00145053	0.0006779	0.00063402	0.00004388
596870.00	2361940.00	0.0008121	0.00047616	0.00042969	0.00004647	0.0012264	0.00061373	0.00056657	0.00004717
597370.00	2361940.00	0.00079934	0.00043447	0.00038634	0.00004813	0.00120318	0.00055795	0.00050942	0.00004852
597870.00	2361940.00	0.00076409	0.00039647	0.00034627	0.0000502	0.00116269	0.00050516	0.00045538	0.00004978
598370.00	2361940.00	0.00071712	0.00036377	0.00031146	0.00005231	0.00110895	0.00045878	0.00040709	0.00005169
598870.00	2361940.00	0.00067318	0.00033614	0.00028272	0.00005342	0.0010562	0.00041894	0.0003656	0.00005335
599370.00	2361940.00	0.00064002	0.00031233	0.00025948	0.00005285	0.00101913	0.00038585	0.00033218	0.00005367
599870.00	2361940.00	0.00061623	0.00029133	0.00024073	0.00005061	0.00099508	0.00035795	0.00030562	0.00005233
600370.00	2361940.00	0.00059899	0.00027291	0.00022576	0.00004716	0.00097909	0.00033432	0.00028469	0.00004963
600870.00	2361940.00	0.00058711	0.00025738	0.00021424	0.00004314	0.00097002	0.00031489	0.00026868	0.00004621
601370.00	2361940.00	0.00057616	0.0002437	0.00020471	0.00003899	0.00096023	0.00029829	0.00025576	0.00004253
601870.00	2361940.00	0.00056237	0.00022939	0.00019476	0.00003463	0.00093476	0.00027937	0.00024135	0.00003802
602370.00	2361940.00	0.00054778	0.00021633	0.00018572	0.00003062	0.00090799	0.0002624	0.00022865	0.00003375
602870.00	2361940.00	0.00053549	0.00020562	0.00017813	0.0000275	0.0008871	0.00024877	0.00021833	0.00003044
603370.00	2361940.00	0.00051991	0.00019504	0.00017027	0.00002477	0.00085928	0.00023551	0.00020801	0.00002749
603870.00	2361940.00	0.00050535	0.00018521	0.00016271	0.00002251	0.00083128	0.00022242	0.00019765	0.00002476
604370.00	2361940.00	0.00048815	0.00017601	0.00015527	0.00002074	0.0007997	0.00021079	0.00018805	0.00002274
604870.00	2361940.00	0.00047195	0.00016769	0.00014831	0.00001937	0.00076952	0.00019996	0.00017888	0.00002108
605370.00	2361940.00	0.0004567	0.00016026	0.00014192	0.00001834	0.00074198	0.00019036	0.00017055	0.00001981
605870.00	2361940.00	0.00044242	0.00015364	0.00013609	0.00001756	0.0007168	0.00018183	0.000163	0.00001883
606370.00	2361940.00	0.0004296	0.00014777	0.00013082	0.00001695	0.00069508	0.00017421	0.00015612	0.00001808
606870.00	2361940.00	0.00041498	0.00014214	0.00012566	0.00001648	0.0006674	0.00016686	0.00014936	0.0000175
607370.00	2361940.00	0.00040297	0.00013729	0.00012121	0.00001608	0.00064649	0.00016057	0.00014355	0.00001702
607870.00	2361940.00	0.00039104	0.00013276	0.00011704	0.00001573	0.00062503	0.00015465	0.00013805	0.00001661
608370.00	2361940.00	0.00038165	0.00012885	0.00011345	0.0000154	0.00060906	0.00014947	0.00013325	0.00001622
608870.00	2361940.00	0.00037057	0.000125	0.00010992	0.00001508	0.00058976	0.0001446	0.00012872	0.00001588
609370.00	2361940.00	0.00036053	0.00012142	0.00010666	0.00001476	0.00057168	0.00013994	0.00012441	0.00001553
609870.00	2361940.00	0.0003519	0.00011822	0.00010379	0.00001443	0.00055709	0.00013584	0.00012066	0.00001518
610370.00	2361940.00	0.00034169	0.0001145	0.00010046	0.00001404	0.00053683	0.00013077	0.00011607	0.0000147
610870.00	2361940.00	0.00033051	0.00011074	0.00009711	0.00001363	0.00051468	0.00012587	0.00011164	0.00001423
611370.00	2361940.00	0.00032057	0.00010736	0.00009412	0.00001323	0.00049552	0.00012147	0.00010768	0.00001378
611870.00	2361940.00	0.00031081	0.00010374	0.00009093	0.00001282	0.00048544	0.00011704	0.00010375	0.00001329
612370.00	2361940.00	0.00030761	0.00010269	0.00009016	0.00001253	0.00047437	0.00011572	0.00010263	0.00001308
612870.00	2361940.00	0.00030677	0.00010205	0.00008978	0.00001227	0.00047944	0.00011545	0.00010251	0.00001294
613370.00	2361940.00	0.00030023	0.00009976	0.00008786	0.0000119	0.00046831	0.00011262	0.00010006	0.00001255
613870.00	2361940.00	0.00029409	0.00009757	0.00008605	0.00001152	0.00045807	0.00010995	0.00009778	0.00001217
614370.00	2361940.00	0.0002819	0.00009356	0.00008255	0.00001101	0.00043226	0.00010455	0.00009304	0.00001151
614870.00	2361940.00	0.00027964	0.0000925	0.00008179	0.00001072	0.0004301	0.00010345	0.00009219	0.00001126
615370.00	2361940.00	0.00027025	0.00008934	0.00007908	0.00001026	0.00041749	0.0000996	0.0000889	0.00001071
615870.00	2361940.00	0.00026529	0.00008756	0.00007765	0.00000991	0.00040958	0.0000975	0.00008715	0.00001035
616370.00	2361940.00	0.000265	0.00008496	0.00007549	0.00000947	0.00048334	0.00009668	0.00008685	0.00000983
616870.00	2361940.00	0.00037037	0.00008596	0.00007693	0.00000903	0.0010273	0.0001093	0.00009999	0.00000931
617370.00	2361940.00	0.00037615	0.00008464	0.00007595	0.00000869	0.00103169	0.00010768	0.00009873	0.00000895
617870.00	2361940.00	0.00025116	0.00008012	0.00007163	0.00000849	0.00045715	0.00009091	0.0000821	0.00000881

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2361940.00	0.0002469	0.00007862	0.00007043	0.00000818	0.00044927	0.00008914	0.00008064	0.00000849
618870.00	2361940.00	0.0004547	0.00008276	0.00007504	0.00000772	0.00103265	0.00010258	0.00009465	0.00000792
619370.00	2361940.00	0.00059555	0.00008554	0.00007815	0.00000739	0.00092637	0.00009774	0.00009016	0.00000757
619870.00	2361940.00	0.00040165	0.00007691	0.00007001	0.0000069	0.0002755	0.00007442	0.0000674	0.00000702
590370.00	2362440.00	0.00122883	0.00120091	0.00101237	0.00018854	0.00170496	0.0013323	0.0011419	0.0001904
590870.00	2362440.00	0.00116621	0.00106661	0.00090756	0.00015905	0.00174683	0.00129986	0.00111732	0.00018254
591370.00	2362440.00	0.00110398	0.00089384	0.00076479	0.00012905	0.00227086	0.00114959	0.00100264	0.00014696
591870.00	2362440.00	0.00233514	0.00079143	0.00069021	0.00010122	0.00492128	0.00106352	0.00094316	0.00012037
592370.00	2362440.00	0.00131533	0.00065142	0.0005765	0.00007493	0.00522462	0.00093609	0.00084205	0.00009404
592870.00	2362440.00	0.00307114	0.00067296	0.00061575	0.00005721	0.00523394	0.00083139	0.00076345	0.00006793
593370.00	2362440.00	0.00298535	0.00073549	0.00068258	0.00005291	0.00495507	0.00082449	0.00076909	0.0000554
593870.00	2362440.00	0.00285091	0.00080581	0.00075286	0.00005295	0.00476283	0.00092254	0.00086877	0.00005377
594370.00	2362440.00	0.0024062	0.00079309	0.00074495	0.00004814	0.00464368	0.00099703	0.00094368	0.00005335
594870.00	2362440.00	0.00248135	0.00074281	0.00070296	0.00003986	0.00345219	0.00093288	0.0008861	0.00004677
595370.00	2362440.00	0.0010335	0.00061421	0.00057868	0.00003552	0.00309679	0.00082998	0.00079011	0.00003987
595870.00	2362440.00	0.00091487	0.00055609	0.00052081	0.00003528	0.00251365	0.00072699	0.00069058	0.00003641
596370.00	2362440.00	0.00083264	0.00050679	0.00046885	0.00003794	0.00205594	0.00066226	0.00062483	0.00003742
596870.00	2362440.00	0.00073938	0.00046032	0.00041971	0.00004061	0.00122115	0.00059033	0.00054972	0.00004061
597370.00	2362440.00	0.00073783	0.00042648	0.00038415	0.00004233	0.00110562	0.00054257	0.00049951	0.00004305
597870.00	2362440.00	0.00072201	0.00039036	0.00034697	0.00004339	0.00108231	0.0004956	0.00045202	0.00004358
598370.00	2362440.00	0.00069266	0.00035896	0.00031375	0.00004521	0.00104895	0.00045293	0.00040819	0.00004474
598870.00	2362440.00	0.00065439	0.00033174	0.00028458	0.00004716	0.00100642	0.00041505	0.00036854	0.00004651
599370.00	2362440.00	0.00061785	0.0003084	0.00026004	0.00004836	0.00096357	0.00038184	0.00033373	0.00004811
599870.00	2362440.00	0.00058995	0.00028835	0.00024007	0.00004828	0.00093441	0.00035424	0.00030552	0.00004872
600370.00	2362440.00	0.00057352	0.00027189	0.00022497	0.00004692	0.00092665	0.00033273	0.00028452	0.00004821
600870.00	2362440.00	0.00055722	0.00025577	0.00021145	0.00004432	0.00091095	0.00031224	0.00026599	0.00004624
601370.00	2362440.00	0.00054525	0.00024217	0.00020103	0.00004115	0.00090166	0.00029581	0.00025211	0.0000437
601870.00	2362440.00	0.00053374	0.00022901	0.00019151	0.00003749	0.0008867	0.00027931	0.00023893	0.00004037
602370.00	2362440.00	0.0005244	0.00021717	0.00018337	0.0000338	0.00087306	0.00026413	0.00022737	0.00003676
602870.00	2362440.00	0.00051205	0.00020596	0.00017566	0.0000303	0.00085123	0.00025002	0.00021672	0.00003329
603370.00	2362440.00	0.00050048	0.00019568	0.00016856	0.00002713	0.00082947	0.00023673	0.00020678	0.00002996
603870.00	2362440.00	0.00048856	0.00018618	0.00016181	0.00002436	0.00080667	0.00022443	0.00019749	0.00002694
604370.00	2362440.00	0.000476	0.00017733	0.00015529	0.00002204	0.00078311	0.00021298	0.00018865	0.00002432
604870.00	2362440.00	0.00046417	0.00016935	0.00014922	0.00002014	0.00076256	0.00020275	0.00018062	0.00002213
605370.00	2362440.00	0.00045093	0.0001618	0.00014318	0.00001862	0.00073776	0.00019295	0.00017261	0.00002034
605870.00	2362440.00	0.00043798	0.00015491	0.00013747	0.00001744	0.0007141	0.00018398	0.00016507	0.00001892
606370.00	2362440.00	0.00042392	0.00014843	0.0001319	0.00001653	0.00068682	0.00017555	0.00015774	0.00001781
606870.00	2362440.00	0.00041129	0.00014269	0.00012686	0.00001583	0.00066378	0.0001681	0.00015114	0.00001696
607370.00	2362440.00	0.00039999	0.00013762	0.00012233	0.00001529	0.00064426	0.00016158	0.00014528	0.0000163
607870.00	2362440.00	0.00038793	0.00013278	0.00011791	0.00001487	0.00062196	0.00015525	0.00013947	0.00001578
608370.00	2362440.00	0.00037713	0.00012848	0.00011396	0.00001453	0.00060282	0.00014967	0.0001343	0.00001537
608870.00	2362440.00	0.00036691	0.00012455	0.00011031	0.00001423	0.00058483	0.00014456	0.00012954	0.00001502
609370.00	2362440.00	0.00035727	0.00012093	0.00010696	0.00001397	0.00056793	0.00013986	0.00012514	0.00001471
609870.00	2362440.00	0.00034861	0.00011766	0.00010394	0.00001372	0.00055335	0.00013565	0.00012122	0.00001443
610370.00	2362440.00	0.00033771	0.00011365	0.00010028	0.00001337	0.00053155	0.00013018	0.00011621	0.00001397
610870.00	2362440.00	0.00033011	0.00011091	0.00009777	0.00001314	0.00051884	0.00012669	0.00011294	0.00001374
611370.00	2362440.00	0.00031946	0.00010734	0.00009451	0.00001282	0.00049799	0.00012201	0.00010866	0.00001336
611870.00	2362440.00	0.00030748	0.00010269	0.00009027	0.00001241	0.00048848	0.00011634	0.00010352	0.00001282
612370.00	2362440.00	0.00030171	0.00010014	0.00008799	0.00001215	0.00049227	0.00011353	0.00010099	0.00001254
612870.00	2362440.00	0.00029499	0.0000988	0.00008686	0.00001194	0.00045691	0.00011118	0.0000988	0.00001238
613370.00	2362440.00	0.00029682	0.00009925	0.00008742	0.00001182	0.00046468	0.00011224	0.0000998	0.00001244
613870.00	2362440.00	0.00028659	0.00009577	0.00008434	0.00001143	0.00044224	0.00010753	0.00009559	0.00001194
614370.00	2362440.00	0.0002818	0.00009401	0.00008287	0.00001114	0.00043521	0.00010542	0.00009376	0.00001166
614870.00	2362440.00	0.00027196	0.00009037	0.00007964	0.00001073	0.00042974	0.00010118	0.00009005	0.00001114
615370.00	2362440.00	0.00026688	0.00008856	0.00007814	0.00001042	0.0004222	0.00009904	0.00008821	0.00001082
615870.00	2362440.00	0.0002622	0.00008672	0.00007661	0.00001011	0.00042032	0.00009702	0.00008653	0.0000105
616370.00	2362440.00	0.00026516	0.0000847	0.00007493	0.00000976	0.00049917	0.00009686	0.00008676	0.0000101
616870.00	2362440.00	0.0003383	0.00008498	0.00007557	0.00000941	0.00091396	0.00010617	0.00009648	0.00000969
617370.00	2362440.00	0.00083022	0.00009776	0.00008872	0.00000904	0.00059695	0.00009394	0.00008468	0.00000926
617870.00	2362440.00	0.00082598	0.00009627	0.00008755	0.00000873	0.00066396	0.00009437	0.00008543	0.00000894
618370.00	2362440.00	0.00025128	0.00007853	0.00006999	0.00000855	0.00050112	0.00009039	0.00008154	0.00000884
618870.00	2362440.00	0.00031495	0.00007878	0.00007058	0.0000082	0.00086256	0.00009855	0.0000901	0.00000845
619370.00	2362440.00	0.0007396	0.00008927	0.00008148	0.00000779	0.00039281	0.00008135	0.00007339	0.00000796
619870.00	2362440.00	0.00081654	0.00009055	0.00008302	0.00000752	0.00051632	0.00008427	0.00007658	0.00000769
590370.00	2362940.00	0.00110798	0.0010474	0.00089057	0.00015683	0.00155926	0.00119462	0.00102738	0.00016724
590870.00	2362940.00	0.00104666	0.00091354	0.0007825	0.00013103	0.00169104	0.00111935	0.00097019	0.00014916
591370.00	2362940.00	0.00332529	0.00085604	0.00074642	0.00010962	0.00288027	0.0010112	0.00088926	0.00012194
591870.00	2362940.00	0.00390404	0.00075936	0.00067138	0.00008798	0.00216833	0.00085656	0.00075224	0.00010432
592370.00	2362940.00	0.00424489	0.00068335	0.00061778	0.00006557	0.00283412	0.0007651	0.00068337	0.00008173
592870.00	2362940.00	0.00439451	0.00065715	0.00060563	0.00005152	0.00268676	0.00067695	0.00061636	0.00006059

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2362940.00	0.00378887	0.00069256	0.00064534	0.00004723	0.00170484	0.0006202	0.00057101	0.0000492
593870.00	2362940.00	0.00391209	0.0007742	0.00072584	0.00004836	0.00261974	0.00074566	0.00069743	0.00004823
594370.00	2362940.00	0.00359612	0.00078903	0.000743	0.00004603	0.00260793	0.00083197	0.00078287	0.0000491
594870.00	2362940.00	0.00302352	0.00073972	0.00070067	0.00003905	0.00231703	0.00082831	0.0007831	0.00004521
595370.00	2362940.00	0.00164422	0.00061727	0.00058359	0.00003369	0.00318708	0.00080398	0.00076542	0.00003856
595870.00	2362940.00	0.00212787	0.00058254	0.0005515	0.00003105	0.00162093	0.00065315	0.00061995	0.00003321
596370.00	2362940.00	0.00105892	0.0005014	0.00046869	0.00003271	0.00247723	0.0006404	0.00060757	0.00003283
596870.00	2362940.00	0.00069532	0.0004488	0.00041318	0.00003563	0.00134524	0.00057068	0.00053546	0.00003522
597370.00	2362940.00	0.00067905	0.00041843	0.00038055	0.00003788	0.00102405	0.00052531	0.00048699	0.00003832
597870.00	2362940.00	0.00067258	0.00038479	0.00034633	0.00003846	0.00100501	0.0004846	0.00044557	0.00003903
598370.00	2362940.00	0.00065847	0.00035483	0.00031543	0.0000394	0.00098478	0.00044627	0.00040681	0.00003946
598870.00	2362940.00	0.00063409	0.00032861	0.00028753	0.00004108	0.0009568	0.00041108	0.00037048	0.00004061
599370.00	2362940.00	0.0006031	0.0003058	0.0002629	0.00004291	0.00092182	0.00037923	0.00033691	0.00004232
599870.00	2362940.00	0.0005724	0.00028561	0.0002415	0.0000441	0.0008886	0.0003515	0.00030772	0.00004378
600370.00	2362940.00	0.00055504	0.00027047	0.00022596	0.00004452	0.00088322	0.00033112	0.0002862	0.00004492
600870.00	2362940.00	0.00053608	0.00025515	0.00021156	0.00004359	0.00086689	0.00031159	0.00026696	0.00004463
601370.00	2362940.00	0.00051995	0.00024067	0.00019903	0.00004164	0.00084908	0.00029312	0.00024992	0.0000432
601870.00	2362940.00	0.00050769	0.00022779	0.00018879	0.000039	0.00083588	0.00027708	0.00023608	0.000041
602370.00	2362940.00	0.00049747	0.00021613	0.00018018	0.00003595	0.00082362	0.00026264	0.00022435	0.00003829
602870.00	2362940.00	0.00048831	0.00020549	0.00017273	0.00003276	0.00081072	0.0002494	0.0002141	0.0000353
603370.00	2362940.00	0.00047943	0.00019571	0.00016608	0.00002963	0.00079606	0.00023709	0.00020486	0.00003223
603870.00	2362940.00	0.00047167	0.00018668	0.00016003	0.00002665	0.00078274	0.00022537	0.00019628	0.00002909
604370.00	2362940.00	0.00046107	0.00017821	0.00015417	0.00002405	0.00076321	0.00021478	0.00018834	0.00002644
604870.00	2362940.00	0.00045053	0.00017021	0.00014847	0.00002174	0.0007426	0.00020435	0.00018043	0.00002392
605370.00	2362940.00	0.00044092	0.000163	0.00014322	0.00001978	0.00072564	0.0001951	0.00017338	0.00002172
605870.00	2362940.00	0.00043022	0.00015611	0.00013794	0.00001817	0.00070545	0.00018611	0.00016624	0.00001987
606370.00	2362940.00	0.00041759	0.00014951	0.00013265	0.00001686	0.00067987	0.00017746	0.00015911	0.00001834
606870.00	2362940.00	0.00040638	0.00014363	0.0001278	0.00001583	0.00065893	0.00016981	0.0001527	0.00001711
607370.00	2362940.00	0.00039676	0.00013838	0.00012337	0.000015	0.00064098	0.00016277	0.00014671	0.00001606
607870.00	2362940.00	0.00038491	0.00013333	0.00011895	0.00001438	0.00061992	0.00015649	0.00014111	0.00001538
608370.00	2362940.00	0.00037417	0.00012875	0.00011485	0.0000139	0.00060016	0.00015051	0.00013572	0.00001479
608870.00	2362940.00	0.0003642	0.0001246	0.00011109	0.00001351	0.00058234	0.00014514	0.00013081	0.00001433
609370.00	2362940.00	0.00035514	0.00012089	0.00010768	0.00001321	0.00056681	0.00014035	0.00012639	0.00001396
609870.00	2362940.00	0.00034656	0.00011747	0.00010452	0.00001295	0.00055232	0.0001359	0.00012224	0.00001366
610370.00	2362940.00	0.00033366	0.00011278	0.00010025	0.00001253	0.00052537	0.00012953	0.00011647	0.00001306
610870.00	2362940.00	0.00032714	0.00011031	0.0000979	0.00001241	0.00051525	0.00012638	0.00011343	0.00001296
611370.00	2362940.00	0.00031497	0.00010616	0.00009408	0.00001208	0.00049102	0.00012093	0.00010841	0.00001252
611870.00	2362940.00	0.00030642	0.00010314	0.00009127	0.00001187	0.00047627	0.00011705	0.00010477	0.00001228
612370.00	2362940.00	0.0003038	0.00010211	0.00009029	0.00001182	0.00047414	0.00011586	0.00010355	0.00001231
612870.00	2362940.00	0.00029775	0.00009997	0.00008833	0.00001164	0.00046434	0.00011316	0.00010103	0.00001214
613370.00	2362940.00	0.00029169	0.00009784	0.00008641	0.00001143	0.00045429	0.0001105	0.00009856	0.00001193
613870.00	2362940.00	0.00028096	0.00009427	0.00008317	0.00001111	0.00043365	0.00010586	0.00009434	0.00001152
614370.00	2362940.00	0.00027449	0.00009162	0.00008078	0.00001084	0.00043314	0.00010288	0.00009167	0.00001121
614870.00	2362940.00	0.00027678	0.00008933	0.00007876	0.00001057	0.00050316	0.00010207	0.00009118	0.0000109
615370.00	2362940.00	0.00029974	0.00008813	0.00007781	0.00001032	0.00068269	0.00010487	0.00009425	0.00001061
615870.00	2362940.00	0.00031103	0.00008689	0.00007682	0.00001007	0.00075614	0.00010502	0.00009466	0.00001036
616370.00	2362940.00	0.0002591	0.00008431	0.00007446	0.00000985	0.0004547	0.00009543	0.00008525	0.00001018
616870.00	2362940.00	0.00055517	0.00009121	0.00008167	0.00000954	0.00092933	0.00010538	0.0000956	0.00000979
617370.00	2362940.00	0.00078587	0.00009647	0.0000872	0.00000927	0.00066663	0.00009603	0.00008654	0.0000095
617870.00	2362940.00	0.00064275	0.00009027	0.00008126	0.00000901	0.00034725	0.00008369	0.00007448	0.00000921
618370.00	2362940.00	0.00055897	0.00008719	0.00007845	0.00000874	0.00090024	0.00009994	0.00009097	0.00000896
618870.00	2362940.00	0.00025918	0.0000772	0.00006868	0.00000852	0.0005827	0.00009093	0.00008214	0.00000879
619370.00	2362940.00	0.00042045	0.00008057	0.00007236	0.00000821	0.000942	0.00009868	0.00009025	0.00000843
619870.00	2362940.00	0.00079347	0.00008991	0.00008201	0.00000791	0.00045654	0.00008247	0.00007439	0.00000809
590370.00	2363440.00	0.00099875	0.00090748	0.00077905	0.00012843	0.0014809	0.00105896	0.00091642	0.00014254
590870.00	2363440.00	0.0020142	0.00083247	0.00072307	0.0001094	0.00312575	0.00102208	0.00090032	0.00012176
591370.00	2363440.00	0.00260646	0.00074878	0.00065286	0.00009592	0.00143177	0.00083741	0.00073225	0.00010516
591870.00	2363440.00	0.00355587	0.0006854	0.00060743	0.00007797	0.00188844	0.00075928	0.00066764	0.00009164
592370.00	2363440.00	0.00189438	0.00055151	0.0004931	0.00005841	0.00104967	0.00061762	0.00054534	0.00007228
592870.00	2363440.00	0.00173378	0.00051251	0.00046633	0.00004617	0.00094805	0.00054002	0.00048606	0.00005396
593370.00	2363440.00	0.00234875	0.00057879	0.00053576	0.00004303	0.00110744	0.00053276	0.00048794	0.00004482
593870.00	2363440.00	0.0033329	0.00069243	0.00064822	0.00004421	0.00163767	0.0006207	0.00057697	0.00004373
594370.00	2363440.00	0.00320614	0.00072907	0.00068541	0.00004366	0.00181692	0.00070845	0.00066326	0.00004518
594870.00	2363440.00	0.00290344	0.00070646	0.00066799	0.00003846	0.00195324	0.00074941	0.00070598	0.00004343
595370.00	2363440.00	0.00237049	0.00062884	0.00059615	0.00003269	0.00235604	0.00074368	0.00070603	0.00003765
595870.00	2363440.00	0.00129693	0.00053208	0.00050252	0.00002957	0.00272206	0.00068643	0.00065377	0.00003266
596370.00	2363440.00	0.00079404	0.00047412	0.00044478	0.00002934	0.00214098	0.00060753	0.00057707	0.00003046
596870.00	2363440.00	0.0006451	0.00043741	0.00040608	0.00003133	0.00124158	0.00054401	0.00051282	0.0000312
597370.00	2363440.00	0.00062633	0.00040844	0.00037474	0.0000337	0.00096638	0.00050563	0.00047196	0.00003367
597870.00	2363440.00	0.00062553	0.0003797	0.00034487	0.00003484	0.00093782	0.00047261	0.00043728	0.00003533

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2363440.00	0.00061968	0.00035193	0.00031662	0.00003532	0.00092195	0.00043907	0.00040324	0.00003583
598870.00	2363440.00	0.0006069	0.00032656	0.00029036	0.0000362	0.00090432	0.00040683	0.00037058	0.00003625
599370.00	2363440.00	0.00058478	0.00030323	0.00026566	0.00003756	0.00087984	0.00037653	0.00033942	0.00003711
599870.00	2363440.00	0.00055829	0.00028325	0.00024406	0.00003919	0.00085121	0.00034954	0.00031093	0.00003862
600370.00	2363440.00	0.00054112	0.00026944	0.00022861	0.00004083	0.00084746	0.00033033	0.00028951	0.00004082
600870.00	2363440.00	0.00051906	0.00025351	0.00021242	0.00004109	0.00082462	0.00030935	0.00026793	0.00004142
601370.00	2363440.00	0.00050102	0.00023933	0.00019886	0.00004047	0.00080616	0.00029106	0.00024984	0.00004122
601870.00	2363440.00	0.00048716	0.00022672	0.00018771	0.00003902	0.0007927	0.00027523	0.00023503	0.0000402
602370.00	2363440.00	0.00047572	0.00021522	0.0001783	0.00003692	0.00078031	0.00026093	0.00022244	0.0000385
602870.00	2363440.00	0.00046652	0.00020482	0.00017043	0.00003439	0.00076993	0.00024817	0.00021188	0.00003629
603370.00	2363440.00	0.00045901	0.00019506	0.00016349	0.00003158	0.00076032	0.00023591	0.00020231	0.0000336
603870.00	2363440.00	0.00045227	0.00018674	0.00015786	0.00002888	0.00075305	0.00022602	0.0001949	0.00003112
604370.00	2363440.00	0.00044454	0.00017857	0.00015237	0.00002621	0.00073992	0.00021572	0.00018726	0.00002846
604870.00	2363440.00	0.0004357	0.00017079	0.00014706	0.00002373	0.00072217	0.0002057	0.00017979	0.00002591
605370.00	2363440.00	0.00042789	0.00016373	0.00014223	0.0000215	0.00070802	0.00019669	0.00017315	0.00002354
605870.00	2363440.00	0.00041889	0.00015669	0.00013723	0.00001946	0.00068908	0.00018716	0.00016595	0.0000212
606370.00	2363440.00	0.00040897	0.00015054	0.00013265	0.00001789	0.00066992	0.00017937	0.00015981	0.00001955
606870.00	2363440.00	0.00039946	0.00014464	0.00012814	0.0000165	0.0006515	0.00017167	0.00015371	0.00001797
607370.00	2363440.00	0.00039011	0.00013922	0.00012385	0.00001536	0.00063397	0.00016463	0.00014798	0.00001665
607870.00	2363440.00	0.00038104	0.00013424	0.00011979	0.00001445	0.00061757	0.00015817	0.0001426	0.00001557
608370.00	2363440.00	0.0003713	0.00012951	0.00011579	0.00001372	0.00059924	0.00015204	0.00013732	0.00001471
608870.00	2363440.00	0.00036113	0.00012504	0.00011189	0.00001315	0.00057971	0.00014616	0.00013213	0.00001403
609370.00	2363440.00	0.00035201	0.00012106	0.00010835	0.0000127	0.00056321	0.000141	0.0001275	0.0000135
609870.00	2363440.00	0.00034335	0.00011741	0.00010506	0.00001235	0.00054788	0.00013628	0.0001232	0.00001308
610370.00	2363440.00	0.00033598	0.00011417	0.00010209	0.00001207	0.00053559	0.00013206	0.00011931	0.00001275
610870.00	2363440.00	0.00032744	0.00011101	0.00009917	0.00001184	0.00052051	0.00012802	0.00011553	0.00001248
611370.00	2363440.00	0.00031521	0.00010657	0.00009514	0.00001144	0.00049491	0.00012198	0.0001101	0.00001188
611870.00	2363440.00	0.0003052	0.000103	0.00009182	0.00001117	0.00047638	0.00011735	0.0001058	0.00001155
612370.00	2363440.00	0.00029677	0.00009985	0.00008888	0.00001097	0.00046384	0.00011339	0.00010209	0.0000113
612870.00	2363440.00	0.0002901	0.00009686	0.0000861	0.00001077	0.00046491	0.00010999	0.00009893	0.00001106
613370.00	2363440.00	0.00029073	0.00009427	0.0000837	0.00001057	0.00052155	0.00010836	0.00009754	0.00001082
613870.00	2363440.00	0.00027795	0.00009285	0.00008231	0.00001055	0.00044046	0.00010477	0.00009391	0.00001086
614370.00	2363440.00	0.00027326	0.00009181	0.00008133	0.00001048	0.00042227	0.00010313	0.00009228	0.00001085
614870.00	2363440.00	0.00026986	0.00008878	0.00007856	0.00001022	0.00045378	0.00010048	0.00008997	0.00001051
615370.00	2363440.00	0.00034818	0.00008895	0.00007895	0.00000999	0.00081675	0.00010768	0.00009746	0.00001022
615870.00	2363440.00	0.00053637	0.00009315	0.00008334	0.00000981	0.00086822	0.0001065	0.00009648	0.00001002
616370.00	2363440.00	0.00057286	0.00009279	0.00008315	0.00000964	0.00084523	0.00010417	0.00009432	0.00000985
616870.00	2363440.00	0.00027994	0.0000827	0.00007322	0.00000948	0.00061731	0.00009748	0.00008774	0.00000974
617370.00	2363440.00	0.00077932	0.00009578	0.00008652	0.00000926	0.0004552	0.00008899	0.00007953	0.00000946
617870.00	2363440.00	0.00072073	0.00009297	0.00008393	0.00000905	0.00066251	0.00009419	0.00008494	0.00000925
618370.00	2363440.00	0.00059842	0.00008739	0.00007853	0.00000885	0.00033049	0.00008135	0.0000723	0.00000904
618870.00	2363440.00	0.00076302	0.00009136	0.00008275	0.00000861	0.00043294	0.00008414	0.00007534	0.0000088
619370.00	2363440.00	0.00038445	0.00007936	0.00007097	0.00000839	0.00087887	0.00009684	0.00008823	0.00000861
619870.00	2363440.00	0.00034353	0.00007698	0.00006882	0.00000816	0.00084511	0.00009473	0.00008635	0.00000838
590370.00	2363940.00	0.0022475	0.00084417	0.0007389	0.00010527	0.0023161	0.0009757	0.00085687	0.00011884
590870.00	2363940.00	0.00269095	0.00077043	0.00067539	0.00009504	0.00240708	0.00089036	0.00078723	0.00010312
591370.00	2363940.00	0.00209378	0.00066525	0.00058019	0.00008506	0.00107563	0.0007286	0.00063616	0.00009244
591870.00	2363940.00	0.00197244	0.0005779	0.00050832	0.00006958	0.00098772	0.00063947	0.000558	0.00008147
592370.00	2363940.00	0.00126907	0.00048159	0.00042866	0.00005294	0.00081189	0.00054595	0.00048123	0.00006472
592870.00	2363940.00	0.00112656	0.00044029	0.00039809	0.00004219	0.00073316	0.00047792	0.000429	0.00004891
593370.00	2363940.00	0.00142646	0.00047811	0.00043889	0.00003922	0.00075448	0.00045686	0.00041609	0.00004077
593870.00	2363940.00	0.00217366	0.0005897	0.00054928	0.00004042	0.00101953	0.00051664	0.00047684	0.00003981
594370.00	2363940.00	0.00305858	0.0006709	0.0006298	0.00004111	0.00168832	0.00063888	0.00059728	0.0000416
594870.00	2363940.00	0.00260703	0.00066471	0.00062708	0.00003763	0.00160793	0.00067065	0.00062934	0.00004131
595370.00	2363940.00	0.00136402	0.000571	0.00053829	0.00003271	0.00335549	0.00074559	0.00070818	0.00003742
595870.00	2363940.00	0.00103012	0.00051114	0.00048252	0.00002862	0.00278138	0.00067362	0.00064136	0.00003226
596370.00	2363940.00	0.00071233	0.00045741	0.00043033	0.00002708	0.00186127	0.00058461	0.00055556	0.00002905
596870.00	2363940.00	0.00059892	0.00042608	0.00039806	0.00002802	0.00103889	0.00051982	0.00049119	0.00002863
597370.00	2363940.00	0.00058506	0.00039898	0.00036907	0.0000299	0.00092826	0.0004866	0.00045679	0.00002981
597870.00	2363940.00	0.00058197	0.0003729	0.00034142	0.00003149	0.00088448	0.00045819	0.00042657	0.00003162
598370.00	2363940.00	0.00057932	0.00034761	0.00031549	0.00003212	0.00086585	0.00042953	0.00039691	0.00003262
598870.00	2363940.00	0.00057364	0.00032402	0.00029151	0.00003252	0.00085149	0.00040111	0.00036817	0.00003294
599370.00	2363940.00	0.00056183	0.00030198	0.00026868	0.00003331	0.00083548	0.00037343	0.00034012	0.0000333
599870.00	2363940.00	0.00054888	0.00028509	0.00024997	0.00003512	0.00082949	0.00035084	0.00031584	0.000035
600370.00	2363940.00	0.00052849	0.00026794	0.0002314	0.00003654	0.00081167	0.00032819	0.00029185	0.00003634
600870.00	2363940.00	0.00050229	0.00025036	0.00021299	0.00003737	0.00077761	0.00030513	0.00026799	0.00003713
601370.00	2363940.00	0.00047719	0.00023132	0.00019396	0.00003737	0.00083689	0.00028902	0.000252	0.00003702
601870.00	2363940.00	0.00045654	0.00022013	0.00018297	0.00003717	0.00073808	0.00026976	0.0002325	0.00003726
602370.00	2363940.00	0.00044919	0.00020793	0.00017191	0.00003602	0.00081154	0.00025905	0.0002226	0.00003645
602870.00	2363940.00	0.00043827	0.00019767	0.00016342	0.00003425	0.00078386	0.0002452	0.00021016	0.00003504

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2363940.00	0.00042715	0.00018909	0.00015697	0.00003213	0.00071475	0.00023083	0.00019759	0.00003324
603870.00	2363940.00	0.00042885	0.00017934	0.00014991	0.00002943	0.00081648	0.00022409	0.0001934	0.00003069
604370.00	2363940.00	0.0004209	0.00017155	0.00014468	0.00002686	0.0007825	0.00021311	0.00018487	0.00002825
604870.00	2363940.00	0.00040996	0.0001653	0.00014072	0.00002457	0.00070143	0.00020155	0.0001755	0.00002605
605370.00	2363940.00	0.00041197	0.000158	0.00013608	0.00002193	0.00077281	0.00019533	0.00017203	0.00002329
605870.00	2363940.00	0.00040426	0.00015212	0.00013232	0.0000198	0.00073742	0.00018618	0.0001651	0.00002108
606370.00	2363940.00	0.00039155	0.00014724	0.00012905	0.00001819	0.00066023	0.00017712	0.00015769	0.00001943
606870.00	2363940.00	0.00039229	0.00014121	0.00012504	0.00001617	0.00071585	0.00017115	0.00015398	0.00001716
607370.00	2363940.00	0.00038254	0.00013613	0.00012133	0.0000148	0.00068182	0.0001636	0.00014795	0.00001565
607870.00	2363940.00	0.00036801	0.00013178	0.00011783	0.00001395	0.00060913	0.00015613	0.00014139	0.00001475
608370.00	2363940.00	0.00036724	0.00012647	0.00011383	0.00001264	0.00065617	0.00015063	0.00013744	0.0000132
608870.00	2363940.00	0.00035669	0.00012203	0.00011009	0.00001193	0.00063028	0.00014472	0.00013233	0.00001239
609370.00	2363940.00	0.00034204	0.00011841	0.00010676	0.00001165	0.00055828	0.00013843	0.00012633	0.0000121
609870.00	2363940.00	0.00034098	0.00011385	0.00010297	0.00001088	0.00060918	0.00013416	0.00012299	0.00001117
610370.00	2363940.00	0.00033623	0.00011018	0.00009968	0.0000105	0.0006177	0.00012984	0.00011912	0.00001072
610870.00	2363940.00	0.00031722	0.00010751	0.00009692	0.00001059	0.0005124	0.00012416	0.00011328	0.00001088
611370.00	2363940.00	0.00031761	0.00010378	0.00009362	0.00001015	0.00056896	0.00012101	0.00011068	0.00001033
611870.00	2363940.00	0.00031341	0.00010095	0.00009094	0.00001	0.00057619	0.00011777	0.0001076	0.00001017
612370.00	2363940.00	0.00029586	0.00009883	0.00008872	0.00001011	0.00048101	0.00011311	0.00010276	0.00001034
612870.00	2363940.00	0.00030349	0.00009602	0.00008618	0.00000984	0.00057454	0.00011187	0.00010187	0.00001
613370.00	2363940.00	0.0003144	0.00009413	0.00008441	0.00000973	0.00064201	0.00011084	0.00010097	0.00000986
613870.00	2363940.00	0.00033154	0.00009268	0.00008304	0.00000964	0.00069756	0.00010974	0.00009997	0.00000977
614370.00	2363940.00	0.00029837	0.0000902	0.00008054	0.00000966	0.00060208	0.0001055	0.00009567	0.00000983
614870.00	2363940.00	0.0002652	0.00008867	0.00007893	0.00000975	0.00041781	0.00009978	0.00008975	0.00001002
615370.00	2363940.00	0.00026028	0.00008681	0.00007718	0.00000963	0.00041309	0.00009756	0.00008765	0.0000099
615870.00	2363940.00	0.00042696	0.00008931	0.00007996	0.00000935	0.00083478	0.00010525	0.00009574	0.00000951
616370.00	2363940.00	0.0007285	0.00009656	0.00008736	0.0000092	0.00044022	0.0000908	0.00008147	0.00000933
616870.00	2363940.00	0.00071838	0.0000948	0.00008569	0.00000911	0.0004196	0.00008856	0.0000793	0.00000925
617370.00	2363940.00	0.00076714	0.00009503	0.00008604	0.00000899	0.00045311	0.00008856	0.00007942	0.00000915
617870.00	2363940.00	0.00077398	0.00009411	0.00008525	0.00000886	0.0005085	0.00008912	0.0000801	0.00000902
618370.00	2363940.00	0.00034198	0.00007836	0.00006958	0.00000878	0.00026847	0.00007741	0.00006849	0.00000892
618870.00	2363940.00	0.00058572	0.00008547	0.00007689	0.00000857	0.00032899	0.00007972	0.00007098	0.00000874
619370.00	2363940.00	0.00048815	0.00008117	0.00007275	0.00000841	0.00029811	0.00007704	0.00006847	0.00000857
619870.00	2363940.00	0.00074841	0.0000884	0.0000802	0.00000819	0.00040906	0.00008067	0.00007231	0.00000837
590370.00	2364440.00	0.00233591	0.00076788	0.00067818	0.0000897	0.00132339	0.00083453	0.00073447	0.00010007
590870.00	2364440.00	0.00219067	0.00068704	0.00060326	0.00008379	0.0011548	0.0007439	0.0006553	0.00008861
591370.00	2364440.00	0.00191542	0.00060512	0.00052914	0.00007598	0.00098505	0.00065602	0.00057376	0.00008226
591870.00	2364440.00	0.00083777	0.0004863	0.00042356	0.00006274	0.00073895	0.00056391	0.00049079	0.00007312
592370.00	2364440.00	0.00100723	0.00043794	0.00038948	0.00004846	0.00073343	0.00049894	0.00044049	0.00005845
592870.00	2364440.00	0.00062466	0.00038106	0.00034238	0.00003868	0.00061838	0.00043374	0.00038922	0.00004453
593370.00	2364440.00	0.00060357	0.00038415	0.00034839	0.00003576	0.00058482	0.00040505	0.00036811	0.00003694
593870.00	2364440.00	0.00141984	0.0004984	0.00046126	0.00003714	0.00075615	0.00044623	0.00040978	0.00003645
594370.00	2364440.00	0.00234897	0.00060107	0.00056266	0.00003841	0.0011965	0.00054747	0.0005092	0.00003828
594870.00	2364440.00	0.00286731	0.00062994	0.00059336	0.00003658	0.00184327	0.0006446	0.00060569	0.00003891
595370.00	2364440.00	0.00212475	0.00059541	0.00056367	0.00003174	0.00139617	0.00061723	0.00058114	0.00003609
595870.00	2364440.00	0.00202033	0.00053782	0.00051019	0.00002763	0.00197501	0.00062725	0.00059595	0.0000313
596370.00	2364440.00	0.00145013	0.0004725	0.00044728	0.00002521	0.00204186	0.00057236	0.00054485	0.00002751
596870.00	2364440.00	0.00065871	0.00041348	0.00038842	0.00002506	0.00168467	0.00051908	0.00049296	0.00002613
597370.00	2364440.00	0.00055353	0.00038887	0.00036227	0.00002659	0.00090713	0.00046921	0.0004424	0.00002681
597870.00	2364440.00	0.00054493	0.00036427	0.00033611	0.00002816	0.00086314	0.00044249	0.00041445	0.00002804
598370.00	2364440.00	0.00054271	0.00034272	0.00031335	0.00002937	0.00081921	0.00041858	0.00038897	0.00002961
598870.00	2364440.00	0.00053973	0.00032092	0.00029117	0.00002975	0.00080412	0.00039387	0.00036363	0.00003024
599370.00	2364440.00	0.00053432	0.00030056	0.00027045	0.00003011	0.00079101	0.00036935	0.00033888	0.00003048
599870.00	2364440.00	0.00052426	0.00028168	0.00025075	0.00003093	0.00077773	0.00034562	0.00031467	0.00003096
600370.00	2364440.00	0.00050878	0.00026452	0.00023236	0.00003217	0.00076227	0.00032353	0.00029161	0.00003192
600870.00	2364440.00	0.00049045	0.00024919	0.00021569	0.0000335	0.00074548	0.00030358	0.00027041	0.00003317
601370.00	2364440.00	0.00063842	0.00023656	0.00020274	0.00003381	0.00116926	0.00029674	0.00026357	0.00003318
601870.00	2364440.00	0.00057107	0.0002222	0.00018765	0.00003456	0.00114986	0.00027991	0.00024578	0.00003412
602370.00	2364440.00	0.00056449	0.00021172	0.00017716	0.00003456	0.00112712	0.00026529	0.00023087	0.00003442
602870.00	2364440.00	0.00059165	0.00020356	0.00016976	0.00003381	0.00109439	0.00025172	0.00021773	0.00003399
603370.00	2364440.00	0.00055194	0.00019307	0.00016069	0.00003238	0.00110615	0.00024114	0.00020827	0.00003287
603870.00	2364440.00	0.00054429	0.00018446	0.00015401	0.00003045	0.00109533	0.00023034	0.00019915	0.00003119
604370.00	2364440.00	0.00057986	0.00017831	0.00015012	0.00002819	0.00107981	0.00022033	0.00019121	0.00002912
604870.00	2364440.00	0.00054113	0.00016947	0.00014362	0.00002585	0.00108114	0.00021149	0.0001846	0.0000269
605370.00	2364440.00	0.00053184	0.00016257	0.00013907	0.0000235	0.00106739	0.00020277	0.00017817	0.0000246
605870.00	2364440.00	0.0005643	0.00015807	0.00013687	0.0000212	0.00104048	0.00019394	0.00017166	0.00002228
606370.00	2364440.00	0.00051954	0.00015081	0.00013164	0.00001917	0.00102209	0.00018615	0.00016595	0.0000202
606870.00	2364440.00	0.00051193	0.00014554	0.00012826	0.00001728	0.00099349	0.00017835	0.00016013	0.00001822
607370.00	2364440.00	0.00053764	0.0001419	0.00012635	0.00001555	0.00095545	0.00017047	0.00015413	0.00001635
607870.00	2364440.00	0.00049358	0.00013573	0.00012157	0.00001416	0.00093198	0.00016383	0.00014899	0.00001484

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2364440.00	0.00048363	0.00013108	0.00011815	0.00001293	0.0009015	0.00015713	0.00014365	0.00001347
608870.00	2364440.00	0.00050493	0.00012772	0.00011589	0.00001184	0.00086631	0.00015045	0.00013822	0.00001224
609370.00	2364440.00	0.00046337	0.00012226	0.00011119	0.00001107	0.00084864	0.00014499	0.00013362	0.00001137
609870.00	2364440.00	0.00045239	0.00011814	0.00010773	0.00001041	0.00086411	0.0001408	0.00013017	0.00001063
610370.00	2364440.00	0.00047471	0.00011529	0.00010546	0.00000983	0.00082001	0.00013479	0.00012484	0.00000995
610870.00	2364440.00	0.00044217	0.00011086	0.00010136	0.0000095	0.00080585	0.00013033	0.00012076	0.00000958
611370.00	2364440.00	0.00039261	0.0001062	0.00009688	0.00000933	0.00078131	0.0001263	0.00011691	0.00000939
611870.00	2364440.00	0.0004622	0.00010549	0.00009652	0.00000897	0.00073157	0.00012067	0.0001117	0.00000897
612370.00	2364440.00	0.00045026	0.0001025	0.00009363	0.00000886	0.00072462	0.00011732	0.00010846	0.00000886
612870.00	2364440.00	0.00038833	0.00009825	0.00008937	0.00000889	0.00074349	0.00011538	0.00010648	0.00000891
613370.00	2364440.00	0.0004922	0.00009923	0.00009053	0.00000869	0.00067797	0.00011039	0.00010171	0.00000868
613870.00	2364440.00	0.00035725	0.00009331	0.00008443	0.00000888	0.00074995	0.00011098	0.00010205	0.00000894
614370.00	2364440.00	0.00027203	0.00008972	0.0000806	0.00000912	0.00045084	0.00010203	0.00009272	0.0000093
614870.00	2364440.00	0.00033009	0.00008897	0.00008011	0.00000885	0.00069981	0.00010533	0.00009638	0.00000895
615370.00	2364440.00	0.00032676	0.00008727	0.00007845	0.00000883	0.00069757	0.00010335	0.00009442	0.00000893
615870.00	2364440.00	0.00025615	0.00008438	0.00007543	0.00000895	0.00042285	0.00009527	0.00008611	0.00000916
616370.00	2364440.00	0.00030835	0.00008382	0.00007506	0.00000875	0.0006663	0.00009912	0.00009022	0.00000889
616870.00	2364440.00	0.00069968	0.00009414	0.00008555	0.00000858	0.0005902	0.00009412	0.00008544	0.00000867
617370.00	2364440.00	0.00073451	0.00009367	0.00008516	0.00000851	0.00044128	0.0000876	0.00007899	0.00000861
617870.00	2364440.00	0.00053589	0.00008587	0.00007742	0.00000845	0.00033105	0.00008152	0.00007297	0.00000855
618370.00	2364440.00	0.00066724	0.00008938	0.00008099	0.00000839	0.00059897	0.00009017	0.00008165	0.00000852
618870.00	2364440.00	0.00030542	0.00007522	0.00006689	0.00000833	0.00025369	0.00007485	0.00006641	0.00000844
619370.00	2364440.00	0.00026044	0.00007206	0.0000638	0.00000826	0.00023531	0.00007267	0.0000643	0.00000837
619870.00	2364440.00	0.00028598	0.00007242	0.00006429	0.00000813	0.00024255	0.00007217	0.00006393	0.00000825
590370.00	2364940.00	0.00197641	0.00068748	0.00060793	0.00007956	0.0021757	0.00079519	0.00070876	0.00008643
590870.00	2364940.00	0.0013669	0.00060067	0.00052544	0.00007523	0.00083361	0.0006503	0.00057234	0.00007796
591370.00	2364940.00	0.0008973	0.00051634	0.00044759	0.00006876	0.0007299	0.00057923	0.0005051	0.00007413
591870.00	2364940.00	0.00070468	0.0004443	0.00038739	0.00005691	0.00067682	0.00051597	0.00045006	0.0000659
592370.00	2364940.00	0.00050878	0.00038016	0.00033598	0.00004418	0.0006001	0.00045116	0.00039819	0.00005297
592870.00	2364940.00	0.00050002	0.00034965	0.00031381	0.00003584	0.00056013	0.00040136	0.00036039	0.00004096
593370.00	2364940.00	0.00063938	0.00036248	0.00032911	0.00003337	0.00056452	0.00037978	0.00034521	0.00003457
593870.00	2364940.00	0.00131706	0.00045372	0.00041933	0.00003438	0.00070176	0.00041003	0.00037625	0.00003378
594370.00	2364940.00	0.00100572	0.00047552	0.0004397	0.00003582	0.00070955	0.00044578	0.00041073	0.00003506
594870.00	2364940.00	0.00166918	0.00055598	0.0005209	0.00003508	0.00099158	0.00051912	0.00048255	0.00003657
595370.00	2364940.00	0.00206898	0.00057117	0.00053978	0.00003139	0.00131276	0.00057797	0.000543	0.00003498
595870.00	2364940.00	0.00208324	0.00053516	0.00050802	0.00002714	0.00147568	0.00058262	0.00055178	0.00003084
596370.00	2364940.00	0.00146056	0.00046594	0.00044154	0.0000244	0.00204109	0.00056642	0.00053938	0.00002704
596870.00	2364940.00	0.00084966	0.00041002	0.00038681	0.00002321	0.00206426	0.00051775	0.00049303	0.00002472
597370.00	2364940.00	0.00054022	0.0003769	0.00035311	0.00002379	0.00104331	0.00045673	0.00043235	0.00002437
597870.00	2364940.00	0.00051989	0.00035559	0.00033048	0.00002511	0.00090197	0.00042857	0.00040354	0.00002503
598370.00	2364940.00	0.00051045	0.00033549	0.00030894	0.00002655	0.00080612	0.00040587	0.00037939	0.00002648
598870.00	2364940.00	0.00050935	0.00031795	0.00029044	0.00002751	0.00076139	0.00038587	0.000358	0.00002787
599370.00	2364940.00	0.00050535	0.00029829	0.00027062	0.00002767	0.00075015	0.00036375	0.0003356	0.00002815
599870.00	2364940.00	0.00049987	0.00028024	0.00025227	0.00002798	0.00073852	0.00034214	0.00031384	0.00002829
600370.00	2364940.00	0.0004922	0.00026434	0.00023545	0.00002889	0.00073034	0.00032215	0.00029318	0.00002898
600870.00	2364940.00	0.00047844	0.00024895	0.00021897	0.00002997	0.00071745	0.0003027	0.00027288	0.00002982
601370.00	2364940.00	0.00059765	0.00023492	0.00020471	0.0000302	0.00112943	0.00029393	0.00026436	0.00002958
601870.00	2364940.00	0.00057741	0.00022211	0.00019074	0.00003137	0.00113657	0.00027938	0.00024863	0.00003076
602370.00	2364940.00	0.0005835	0.00021199	0.00017987	0.00003212	0.00109816	0.00026427	0.00023262	0.00003165
602870.00	2364940.00	0.00056233	0.0002019	0.00016961	0.00003229	0.00104977	0.00024925	0.0002172	0.00003205
603370.00	2364940.00	0.00056077	0.00019349	0.00016168	0.00003181	0.00102646	0.00023721	0.00020538	0.00003183
603870.00	2364940.00	0.00057097	0.00018614	0.00015543	0.00003071	0.00101724	0.00022732	0.00019633	0.000031
604370.00	2364940.00	0.00055318	0.00017797	0.00014883	0.00002914	0.00101502	0.00021768	0.00018802	0.00002966
604870.00	2364940.00	0.00055037	0.00017085	0.00014362	0.00002723	0.00101197	0.00020903	0.0001811	0.00002794
605370.00	2364940.00	0.00054722	0.00016418	0.00013902	0.00002516	0.0010069	0.00020085	0.00017486	0.00002599
605870.00	2364940.00	0.00054327	0.00015796	0.00013492	0.00002304	0.00099786	0.00019301	0.00016906	0.00002395
606370.00	2364940.00	0.00053823	0.00015221	0.00013123	0.00002098	0.00098397	0.00018546	0.00016354	0.00002191
606870.00	2364940.00	0.00053202	0.00014688	0.00012785	0.00001903	0.00096537	0.00017817	0.00015823	0.00001994
607370.00	2364940.00	0.0005247	0.00014191	0.00012468	0.00001723	0.00094292	0.00017117	0.00015308	0.00001809
607870.00	2364940.00	0.00051643	0.00013722	0.00012162	0.00001561	0.0009178	0.00016446	0.00014808	0.00001638
608370.00	2364940.00	0.00050741	0.00013275	0.00011858	0.00001417	0.00089122	0.00015804	0.00014321	0.00001483
608870.00	2364940.00	0.00049785	0.00012844	0.00011553	0.00001291	0.00086424	0.00015192	0.00013846	0.00001345
609370.00	2364940.00	0.00047847	0.00012391	0.00011206	0.00001185	0.00084049	0.00014622	0.00013393	0.00001228
609870.00	2364940.00	0.00050618	0.00012133	0.00011044	0.00001088	0.00084232	0.00014167	0.00013048	0.00001119
610370.00	2364940.00	0.00043703	0.0001153	0.00010505	0.00001026	0.0008366	0.00013719	0.00012669	0.0000105
610870.00	2364940.00	0.00043674	0.00011194	0.0001023	0.00000964	0.00081175	0.00013213	0.00012233	0.0000098
611370.00	2364940.00	0.00050523	0.00011107	0.00010204	0.00000903	0.00074819	0.00012626	0.00011718	0.00000908
611870.00	2364940.00	0.00048048	0.00010719	0.00009849	0.0000087	0.00073854	0.00012218	0.00011347	0.00000872
612370.00	2364940.00	0.00037215	0.00010089	0.00009225	0.00000864	0.00073669	0.00011939	0.00011071	0.00000868
612870.00	2364940.00	0.00036141	0.000098	0.00008954	0.00000846	0.00071734	0.00011575	0.00010727	0.00000848

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2364940.00	0.0004106	0.00009712	0.00008891	0.00000821	0.00071416	0.00011214	0.00010395	0.00000819
613870.00	2364940.00	0.00049336	0.00009774	0.00008969	0.00000806	0.00074801	0.00011017	0.00010216	0.00000802
614370.00	2364940.00	0.00030577	0.00009001	0.00008171	0.0000083	0.000611	0.00010542	0.00009706	0.00000836
614870.00	2364940.00	0.00032074	0.00008856	0.00008035	0.00000821	0.00066041	0.00010426	0.000096	0.00000825
615370.00	2364940.00	0.00027074	0.00008567	0.00007735	0.00000832	0.00049124	0.00009834	0.00008991	0.00000843
615870.00	2364940.00	0.00038846	0.0000873	0.00007922	0.00000808	0.00074028	0.00010186	0.00009374	0.00000812
616370.00	2364940.00	0.00071806	0.00009561	0.00008773	0.00000788	0.00050391	0.00009237	0.00008449	0.00000788
616870.00	2364940.00	0.00028465	0.00008136	0.00007321	0.00000815	0.00058544	0.00009504	0.00008679	0.00000825
617370.00	2364940.00	0.00027366	0.00007974	0.00007162	0.00000812	0.00055645	0.00009276	0.00008451	0.00000825
617870.00	2364940.00	0.00068422	0.0000906	0.00008269	0.00000792	0.00052863	0.00008887	0.00008089	0.00000798
618370.00	2364940.00	0.00045032	0.00008155	0.00007372	0.00000783	0.00029689	0.00007787	0.00006999	0.00000788
618870.00	2364940.00	0.00063003	0.00008633	0.0000785	0.00000783	0.00036179	0.00008019	0.00007228	0.00000791
619370.00	2364940.00	0.00055225	0.00008273	0.00007495	0.00000779	0.00032269	0.00007733	0.00006945	0.00000788
619870.00	2364940.00	0.00048273	0.00007945	0.00007172	0.00000773	0.0002958	0.00007498	0.00006715	0.00000783
590370.00	2365440.00	0.0007344	0.00060235	0.00052855	0.0000738	0.00112132	0.00070725	0.00062823	0.00007902
590870.00	2365440.00	0.00214032	0.00058368	0.00051555	0.00006813	0.00224326	0.00066931	0.00059878	0.00007053
591370.00	2365440.00	0.00240406	0.00053785	0.00047602	0.00006183	0.00112737	0.00056872	0.000502	0.00006672
591870.00	2365440.00	0.00116056	0.00044047	0.00038861	0.00005186	0.00072657	0.00048683	0.00042731	0.00005952
592370.00	2365440.00	0.00040604	0.00033976	0.00029911	0.00004065	0.00050618	0.00040098	0.00035261	0.00004838
592870.00	2365440.00	0.00036882	0.00030833	0.00027556	0.00003277	0.00046583	0.00035549	0.00031807	0.00003742
593370.00	2365440.00	0.00044644	0.00032209	0.00029124	0.00003085	0.00049693	0.00034978	0.00031789	0.00003189
593870.00	2365440.00	0.00053024	0.00035696	0.00032534	0.00003162	0.00051781	0.0003579	0.00032719	0.00003071
594370.00	2365440.00	0.00067452	0.00040871	0.00037533	0.00003338	0.00059437	0.00039779	0.00036551	0.00003228
594870.00	2365440.00	0.00098467	0.00047058	0.00043699	0.0000336	0.0007362	0.00045204	0.00041788	0.00003416
595370.00	2365440.00	0.00147012	0.00052164	0.00049082	0.00003082	0.00095083	0.00050262	0.00046892	0.0000337
595870.00	2365440.00	0.0021253	0.00051835	0.00049123	0.00002712	0.00183504	0.00058126	0.00055079	0.00003046
596370.00	2365440.00	0.00107751	0.0004458	0.0004217	0.0000241	0.00237571	0.00056748	0.00054049	0.00002699
596870.00	2365440.00	0.00075403	0.00040002	0.00037781	0.00002221	0.00199065	0.00050993	0.00048578	0.00002415
597370.00	2365440.00	0.00055807	0.0003678	0.00034599	0.00002181	0.00130202	0.00045244	0.00042964	0.0000228
597870.00	2365440.00	0.00049482	0.00034825	0.00032552	0.00002273	0.0008343	0.00041523	0.00039221	0.00002302
598370.00	2365440.00	0.00049251	0.00032828	0.00030444	0.00002384	0.00088981	0.00039545	0.00037178	0.00002367
598870.00	2365440.00	0.0004801	0.00031234	0.0002872	0.00002514	0.00073288	0.00037526	0.00035004	0.00002521
599370.00	2365440.00	0.00047748	0.00029388	0.00026838	0.0000255	0.00073401	0.00035619	0.00033037	0.00002582
599870.00	2365440.00	0.00047386	0.00027764	0.00025198	0.00002567	0.00070994	0.00033728	0.00031121	0.00002607
600370.00	2365440.00	0.00046897	0.00026217	0.00023614	0.00002602	0.00069276	0.00031833	0.00029206	0.00002627
600870.00	2365440.00	0.00046119	0.00024765	0.00022084	0.0000268	0.00068216	0.00030018	0.00027336	0.00002682
601370.00	2365440.00	0.00054808	0.00023366	0.0002067	0.00002696	0.00114303	0.00029476	0.00026824	0.00002652
601870.00	2365440.00	0.00051072	0.00021965	0.0001915	0.00002815	0.00109713	0.0002779	0.00025033	0.00002757
602370.00	2365440.00	0.00053896	0.0002099	0.0001807	0.00002919	0.00107125	0.00026227	0.00023366	0.00002861
602870.00	2365440.00	0.00052928	0.00020002	0.00017007	0.00002995	0.00100728	0.00024661	0.00021715	0.00002946
603370.00	2365440.00	0.00053972	0.00019214	0.00016192	0.00003023	0.00098632	0.00023506	0.00020515	0.00002991
603870.00	2365440.00	0.0005192	0.00018376	0.00015381	0.00002995	0.00098718	0.00022532	0.00019546	0.00002986
604370.00	2365440.00	0.00052907	0.00017716	0.00014803	0.00002913	0.00095879	0.000215	0.00018574	0.00002927
604870.00	2365440.00	0.0005262	0.00017039	0.00014254	0.00002786	0.00095511	0.00020663	0.00017843	0.0000282
605370.00	2365440.00	0.00052405	0.00016398	0.00013773	0.00002625	0.00095876	0.00019923	0.00017246	0.00002677
605870.00	2365440.00	0.00052158	0.00015789	0.00013344	0.00002445	0.0009556	0.00019188	0.00016678	0.0000251
606370.00	2365440.00	0.00051137	0.00015185	0.00012929	0.00002256	0.0009473	0.00018464	0.00016133	0.00002332
606870.00	2365440.00	0.00051441	0.00014681	0.00012613	0.00002068	0.00093448	0.00017776	0.00015628	0.00002148
607370.00	2365440.00	0.00050945	0.00014184	0.00012296	0.00001888	0.00092049	0.00017121	0.00015152	0.00001968
607870.00	2365440.00	0.00050084	0.00013709	0.0001199	0.00001719	0.00090331	0.00016489	0.00014692	0.00001797
608370.00	2365440.00	0.00050416	0.00013315	0.00011753	0.00001562	0.00088311	0.00015887	0.00014253	0.00001634
608870.00	2365440.00	0.00051091	0.00012965	0.00011546	0.0000142	0.00089722	0.00015429	0.00013946	0.00001483
609370.00	2365440.00	0.00045728	0.00012388	0.00011086	0.00001302	0.00088963	0.0001493	0.00013572	0.00001358
609870.00	2365440.00	0.00046884	0.00012084	0.00010895	0.00001189	0.00085778	0.00014349	0.00013115	0.00001234
610370.00	2365440.00	0.0005279	0.00011969	0.00010885	0.00001084	0.00079006	0.0001373	0.00012614	0.00001116
610870.00	2365440.00	0.00038022	0.00011101	0.0001007	0.00001032	0.00078415	0.00013357	0.00012295	0.00001062
611370.00	2365440.00	0.00051966	0.00011285	0.0001035	0.00000935	0.00073489	0.00012753	0.00011803	0.00000949
611870.00	2365440.00	0.00031339	0.00010302	0.00009365	0.00000937	0.0005886	0.00012146	0.00011185	0.00000961
612370.00	2365440.00	0.00059276	0.0001093	0.00010112	0.00000818	0.00058495	0.00011507	0.00010689	0.00000817
612870.00	2365440.00	0.00038971	0.00009991	0.00009164	0.00000827	0.00077931	0.00011835	0.00011003	0.00000831
613370.00	2365440.00	0.00052541	0.00010158	0.00009387	0.00000771	0.00061252	0.00011024	0.00010258	0.00000765
613870.00	2365440.00	0.00033744	0.00009341	0.00008549	0.00000791	0.00068569	0.0001103	0.00010237	0.00000793
614370.00	2365440.00	0.00046695	0.00009537	0.0000878	0.00000757	0.00074869	0.00010816	0.00010063	0.00000753
614870.00	2365440.00	0.00041315	0.00009162	0.00008408	0.00000754	0.00073898	0.00010578	0.00009827	0.00000751
615370.00	2365440.00	0.00069936	0.00009824	0.00009112	0.00000712	0.00047997	0.00009465	0.00008763	0.00000703
615870.00	2365440.00	0.00070249	0.0000967	0.00008953	0.00000717	0.00050263	0.00009393	0.00008683	0.0000071
616370.00	2365440.00	0.0003652	0.00008494	0.00007746	0.00000748	0.00069932	0.00009892	0.00009144	0.00000748
616870.00	2365440.00	0.00050405	0.00008676	0.00007974	0.00000702	0.0003322	0.00008261	0.00007565	0.00000696
617370.00	2365440.00	0.00058211	0.00008808	0.00008095	0.00000713	0.00036098	0.00008297	0.00007587	0.0000071
617870.00	2365440.00	0.00038802	0.00008147	0.00007404	0.00000744	0.00069207	0.00009372	0.00008625	0.00000747

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2365440.00	0.0004639	0.00008253	0.00007514	0.0000074	0.00066905	0.00009139	0.00008396	0.00000744
618870.00	2365440.00	0.00060567	0.00008517	0.00007791	0.00000726	0.0003608	0.00007959	0.00007231	0.00000728
619370.00	2365440.00	0.00040328	0.00007725	0.00007003	0.00000722	0.00027495	0.00007404	0.00006679	0.00000725
619870.00	2365440.00	0.00027171	0.00007042	0.00006319	0.00000723	0.00022777	0.00007008	0.00006283	0.00000725
590370.00	2365940.00	0.00068944	0.0005543	0.00048794	0.00006636	0.00106462	0.00064859	0.00057867	0.00006991
590870.00	2365940.00	0.00067788	0.00050159	0.00043869	0.0000629	0.00129936	0.00059866	0.0005335	0.00006515
591370.00	2365940.00	0.00126717	0.00047249	0.00041572	0.00005678	0.0029217	0.00059312	0.0005322	0.00006093
591870.00	2365940.00	0.00264324	0.00046776	0.00042011	0.00004766	0.00118146	0.00048417	0.00043007	0.0000541
592370.00	2365940.00	0.00077709	0.00035824	0.00031988	0.00003836	0.00060784	0.00040142	0.00035674	0.00004468
592870.00	2365940.00	0.00034136	0.00028714	0.0002567	0.00003044	0.00043494	0.00033058	0.00029594	0.00003464
593370.00	2365940.00	0.00035594	0.00028795	0.00025939	0.00002856	0.00042279	0.00031345	0.00028393	0.00002952
593870.00	2365940.00	0.0003724	0.00030438	0.00027545	0.00002893	0.00042953	0.00031402	0.00028618	0.00002784
594370.00	2365940.00	0.00056422	0.00036931	0.00033822	0.00003109	0.00053507	0.00036413	0.00033423	0.0000299
594870.00	2365940.00	0.00099994	0.0004491	0.00041726	0.00003184	0.00069972	0.00041997	0.00038808	0.00003188
595370.00	2365940.00	0.00172612	0.0005099	0.00047981	0.0000301	0.00103739	0.00048867	0.00045654	0.00003212
595870.00	2365940.00	0.00211686	0.00050838	0.00048159	0.0000268	0.00143898	0.00053733	0.00050751	0.00002982
596370.00	2365940.00	0.00139169	0.0004498	0.00042607	0.00002373	0.00215444	0.00054888	0.0005223	0.00002658
596870.00	2365940.00	0.00086005	0.00039868	0.00037717	0.00002151	0.0020686	0.0005059	0.00048224	0.00002366
597370.00	2365940.00	0.00061027	0.00036218	0.00034172	0.00002046	0.00158561	0.00045261	0.00043082	0.00002179
597870.00	2365940.00	0.00048667	0.00033922	0.00031854	0.00002069	0.00093297	0.00040655	0.00038526	0.00002129
598370.00	2365940.00	0.00047802	0.00032171	0.00030018	0.00002153	0.00092574	0.0003851	0.0003636	0.0000215
598870.00	2365940.00	0.00046506	0.00030512	0.00028242	0.0000227	0.00083594	0.00036629	0.00034376	0.00002253
599370.00	2365940.00	0.00045746	0.00028936	0.00026584	0.00002352	0.00076797	0.00034882	0.00032523	0.00002359
599870.00	2365940.00	0.00045225	0.00027445	0.00025062	0.00002383	0.00071702	0.00033175	0.00030759	0.00002416
600370.00	2365940.00	0.00044698	0.00026003	0.00023608	0.00002394	0.00067717	0.00031463	0.00029033	0.0000243
600870.00	2365940.00	0.00044248	0.00024679	0.00022241	0.00002438	0.00065179	0.00029785	0.00027323	0.00002461
601370.00	2365940.00	0.00057072	0.00023576	0.0002115	0.00002425	0.00111773	0.00029266	0.00026857	0.00002409
601870.00	2365940.00	0.00054415	0.00022194	0.00019676	0.00002518	0.00109975	0.00027696	0.00025218	0.00002478
602370.00	2365940.00	0.00053917	0.00021028	0.00018404	0.00002624	0.00099877	0.00025878	0.00023308	0.0000257
602870.00	2365940.00	0.00050094	0.00019877	0.00017152	0.00002725	0.00097514	0.00024518	0.00021848	0.00002669
603370.00	2365940.00	0.000523	0.00019102	0.00016303	0.00002799	0.00094536	0.00023275	0.00020526	0.0000275
603870.00	2365940.00	0.00052184	0.0001834	0.00015505	0.00002835	0.00092642	0.00022221	0.00019422	0.00002799
604370.00	2365940.00	0.00051609	0.00017634	0.00014811	0.00002823	0.00091702	0.00021301	0.00018496	0.00002805
604870.00	2365940.00	0.00045688	0.0001675	0.00013987	0.00002764	0.00092028	0.00020494	0.00017728	0.00002766
605370.00	2365940.00	0.00039675	0.00015902	0.00013238	0.00002663	0.0008565	0.00019699	0.00017012	0.00002687
605870.00	2365940.00	0.00049985	0.00015757	0.00013231	0.00002527	0.00089993	0.00018958	0.00016394	0.00002563
606370.00	2365940.00	0.00049788	0.00015202	0.00012832	0.0000237	0.00089824	0.00018297	0.00015877	0.0000242
606870.00	2365940.00	0.00049553	0.00014675	0.00012473	0.00002203	0.00089476	0.00017667	0.00015404	0.00002263
607370.00	2365940.00	0.00049248	0.0001418	0.00012147	0.00002033	0.00088823	0.00017057	0.00014958	0.00002099
607870.00	2365940.00	0.00048882	0.00013717	0.00011851	0.00001866	0.00088447	0.00016499	0.00014563	0.00001936
608370.00	2365940.00	0.0004535	0.00013161	0.00011449	0.00001712	0.00092711	0.00016146	0.00014362	0.00001783
608870.00	2365940.00	0.00048192	0.00012896	0.00011336	0.00001561	0.00089645	0.0001551	0.00013882	0.00001627
609370.00	2365940.00	0.00044488	0.00012386	0.00010956	0.0000143	0.00088444	0.00015017	0.00013524	0.00001493
609870.00	2365940.00	0.00041925	0.00011947	0.00010636	0.00001312	0.0008583	0.00014506	0.00013138	0.00001368
610370.00	2365940.00	0.00035412	0.00011387	0.00010168	0.00001219	0.00074839	0.00013859	0.00012587	0.00001272
610870.00	2365940.00	0.00052045	0.00011702	0.00010613	0.00001088	0.00075944	0.00013346	0.00012223	0.00001123
611370.00	2365940.00	0.00061962	0.00011762	0.00010778	0.00000984	0.00060854	0.00012374	0.00011367	0.00001007
611870.00	2365940.00	0.00033042	0.00010421	0.00009448	0.00000972	0.00066872	0.00012447	0.00011445	0.00001002
612370.00	2365940.00	0.00046566	0.00010607	0.0000973	0.00000877	0.00071766	0.00012077	0.00011188	0.00000889
612870.00	2365940.00	0.00044104	0.00010268	0.0000943	0.00000837	0.00079812	0.00011958	0.00011112	0.00000846
613370.00	2365940.00	0.0003636	0.00009743	0.00008934	0.00000809	0.00073277	0.00011523	0.00010707	0.00000816
613870.00	2365940.00	0.00031247	0.00009339	0.00008549	0.00000789	0.00061948	0.00010963	0.00010167	0.00000796
614370.00	2365940.00	0.00026654	0.00009088	0.00008276	0.00000812	0.00042423	0.00010366	0.00009535	0.00000831
614870.00	2365940.00	0.00069394	0.00010106	0.00009417	0.00000689	0.00055544	0.00010081	0.00009403	0.00000679
615370.00	2365940.00	0.00062877	0.00009648	0.00008991	0.00000657	0.000426	0.00009244	0.00008599	0.00000646
615870.00	2365940.00	0.00059925	0.00009357	0.00008711	0.00000646	0.00039114	0.00008885	0.00008251	0.00000634
616370.00	2365940.00	0.0006595	0.00009384	0.00008729	0.00000654	0.00043826	0.00008953	0.00008309	0.00000644
616870.00	2365940.00	0.00044523	0.00008593	0.00007908	0.00000686	0.00067391	0.00009601	0.00008921	0.0000068
617370.00	2365940.00	0.00048572	0.00008469	0.00007829	0.00000641	0.00032401	0.00008068	0.00007437	0.00000631
617870.00	2365940.00	0.00035158	0.00007777	0.00007142	0.00000635	0.00026707	0.00007582	0.00006957	0.00000625
618370.00	2365940.00	0.00064409	0.00008752	0.00008081	0.0000067	0.00046858	0.00008497	0.00007831	0.00000666
618870.00	2365940.00	0.00047673	0.00008143	0.0000746	0.00000684	0.00062413	0.00008843	0.0000816	0.00000683
619370.00	2365940.00	0.00062132	0.00008445	0.00007769	0.00000677	0.00048541	0.00008294	0.00007618	0.00000676
619870.00	2365940.00	0.00059654	0.00008235	0.00007563	0.00000672	0.00036488	0.00007721	0.00007049	0.00000672
590370.00	2366440.00	0.00065008	0.00050953	0.00044982	0.0000597	0.0010633	0.00059585	0.00053422	0.00006163
590870.00	2366440.00	0.00063464	0.00046735	0.00040976	0.00005759	0.00116933	0.00055375	0.0004943	0.00005945
591370.00	2366440.00	0.00138383	0.00044768	0.00039571	0.00005198	0.00274769	0.00055142	0.00049571	0.00005571
591870.00	2366440.00	0.0016727	0.00041245	0.00036859	0.00004386	0.00079391	0.00043519	0.00038556	0.00004963
592370.00	2366440.00	0.00052845	0.00032579	0.00029018	0.00003561	0.0005372	0.00037271	0.0003315	0.00004121
592870.00	2366440.00	0.00032331	0.00027149	0.00024296	0.00002853	0.00040657	0.0003109	0.0002786	0.0000323

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2366440.00	0.00032248	0.00026875	0.00024219	0.00002656	0.0003856	0.00029299	0.00026552	0.00002746
593870.00	2366440.00	0.00035759	0.00028677	0.00025953	0.00002724	0.00040127	0.0002956	0.00026921	0.00002639
594370.00	2366440.00	0.00055594	0.00034704	0.000318	0.00002904	0.00050912	0.0003392	0.0003113	0.0000279
594870.00	2366440.00	0.00084254	0.00040655	0.00037644	0.0000301	0.0006301	0.00038614	0.00035638	0.00002976
595370.00	2366440.00	0.00116195	0.00045459	0.00042538	0.0000292	0.00076675	0.00042794	0.00039737	0.00003057
595870.00	2366440.00	0.00121516	0.0004608	0.00043445	0.00002636	0.00083669	0.00045054	0.00042137	0.00002917
596370.00	2366440.00	0.00179415	0.00045621	0.00043278	0.00002343	0.00168806	0.00051604	0.0004899	0.00002614
596870.00	2366440.00	0.00097811	0.00039837	0.0003773	0.00002107	0.0020586	0.00049902	0.00047568	0.00002334
597370.00	2366440.00	0.00053168	0.00035579	0.00033603	0.00001976	0.00118977	0.00043874	0.00041726	0.00002148
597870.00	2366440.00	0.00054651	0.00033318	0.00031406	0.00001912	0.00136433	0.00040912	0.00038916	0.00001997
598370.00	2366440.00	0.00048268	0.0003151	0.00029552	0.00001958	0.00106178	0.00037859	0.0003588	0.00001979
598870.00	2366440.00	0.0004612	0.00029982	0.00027926	0.00002056	0.00094002	0.00035907	0.00033866	0.00002041
599370.00	2366440.00	0.0004443	0.00028501	0.00026343	0.00002158	0.00081981	0.00034173	0.00032027	0.00002146
599870.00	2366440.00	0.00043736	0.00027107	0.00024891	0.00002216	0.00076169	0.00032622	0.00030392	0.0000223
600370.00	2366440.00	0.00042704	0.00025816	0.00023576	0.00002241	0.00065967	0.00030999	0.00028723	0.00002276
600870.00	2366440.00	0.00042254	0.00024506	0.00022258	0.00002248	0.0006292	0.00029398	0.00027117	0.00002281
601370.00	2366440.00	0.00042229	0.00023087	0.00020838	0.0000225	0.00070057	0.00028097	0.00025839	0.00002258
601870.00	2366440.00	0.00051841	0.00022196	0.00019918	0.00002278	0.00105699	0.00027485	0.00025224	0.00002261
602370.00	2366440.00	0.00044921	0.00020762	0.00018394	0.00002368	0.00095443	0.00025913	0.00023583	0.00002329
602870.00	2366440.00	0.00049279	0.00019893	0.00017435	0.00002458	0.00094412	0.00024404	0.00021997	0.00002408
603370.00	2366440.00	0.00049871	0.00019004	0.00016454	0.0000255	0.00092141	0.00023164	0.00020668	0.00002496
603870.00	2366440.00	0.00049429	0.00018191	0.00015568	0.00002623	0.00089792	0.00022046	0.00019472	0.00002574
604370.00	2366440.00	0.00049544	0.00017501	0.00014837	0.00002664	0.00088361	0.00021104	0.00018479	0.00002625
604870.00	2366440.00	0.00049038	0.00016867	0.00014203	0.00002664	0.00092686	0.00020453	0.00017814	0.0000264
605370.00	2366440.00	0.00049439	0.00016299	0.00013677	0.00002622	0.00086814	0.00019523	0.00016908	0.00002614
605870.00	2366440.00	0.00049437	0.00015754	0.00013212	0.00002541	0.00085295	0.00018771	0.00016221	0.0000255
606370.00	2366440.00	0.00047261	0.00015139	0.0001271	0.00002429	0.00085817	0.00018131	0.00015678	0.00002453
606870.00	2366440.00	0.00045225	0.00014552	0.00012258	0.00002295	0.00088661	0.00017662	0.0001533	0.00002332
607370.00	2366440.00	0.00047571	0.00014178	0.00012032	0.00002146	0.00087144	0.00017039	0.00014847	0.00002193
607870.00	2366440.00	0.00040854	0.0001344	0.00011442	0.00001998	0.000862	0.0001653	0.00014476	0.00002055
608370.00	2366440.00	0.00047139	0.00013294	0.00011454	0.0000184	0.00088172	0.00016016	0.00014117	0.00001899
608870.00	2366440.00	0.00039965	0.00012602	0.000109	0.00001701	0.00087456	0.00015592	0.00013827	0.00001765
609370.00	2366440.00	0.00046438	0.00012511	0.00010957	0.00001554	0.00086181	0.00014988	0.00013374	0.00001614
609870.00	2366440.00	0.00058598	0.00012671	0.0001126	0.00001411	0.00073867	0.00014227	0.00012764	0.00001463
610370.00	2366440.00	0.00043494	0.00011733	0.00010423	0.0000131	0.00083141	0.00014039	0.00012676	0.00001363
610870.00	2366440.00	0.00036617	0.00011165	0.00009949	0.00001216	0.000778	0.00013575	0.00012309	0.00001266
611370.00	2366440.00	0.00051578	0.00011451	0.00010357	0.00001094	0.00072838	0.00012971	0.00011842	0.00001129
611870.00	2366440.00	0.00051315	0.00011153	0.00010145	0.00001008	0.00070382	0.00012538	0.00011502	0.00001036
612370.00	2366440.00	0.00046104	0.00010702	0.00009757	0.00000945	0.00081379	0.00012429	0.0001146	0.00000969
612870.00	2366440.00	0.00041275	0.00010257	0.00009368	0.00000888	0.00079127	0.00012069	0.00011162	0.00000907
613370.00	2366440.00	0.00035347	0.00009792	0.00008948	0.00000843	0.00071817	0.00011575	0.00010717	0.00000858
613870.00	2366440.00	0.00028935	0.00009352	0.00008533	0.00000819	0.00053808	0.00010895	0.0001006	0.00000835
614370.00	2366440.00	0.00040936	0.0000951	0.00008763	0.00000748	0.00073548	0.00010972	0.00010222	0.0000075
614870.00	2366440.00	0.00029857	0.00008924	0.00008184	0.0000074	0.00058564	0.00010424	0.00009679	0.00000745
615370.00	2366440.00	0.00068315	0.00009941	0.00009292	0.00000649	0.00048222	0.00009601	0.00008962	0.00000639
615870.00	2366440.00	0.00057911	0.00009374	0.0000876	0.00000614	0.0003879	0.00008922	0.00008319	0.00000603
616370.00	2366440.00	0.00048165	0.00008825	0.00008232	0.00000592	0.00033526	0.00008446	0.00007865	0.00000581
616870.00	2366440.00	0.00040672	0.00008324	0.00007745	0.00000578	0.00029663	0.00008046	0.00007481	0.00000566
617370.00	2366440.00	0.00060257	0.00008938	0.00008313	0.00000625	0.00054236	0.00009078	0.00008464	0.00000614
617870.00	2366440.00	0.00062033	0.0000881	0.00008203	0.00000607	0.00041042	0.00008383	0.00007787	0.00000596
618370.00	2366440.00	0.00037102	0.00007744	0.00007162	0.00000583	0.00027215	0.00007497	0.00006926	0.00000571
618870.00	2366440.00	0.00053597	0.00008254	0.00007651	0.00000603	0.00034043	0.00007786	0.00007192	0.00000594
619370.00	2366440.00	0.00061741	0.00008409	0.0000779	0.00000619	0.00043544	0.00008104	0.00007491	0.00000613
619870.00	2366440.00	0.0005966	0.00008215	0.00007598	0.00000618	0.00038036	0.00007753	0.00007141	0.00000612
590370.00	2366940.00	0.00095702	0.00048122	0.00042741	0.00005382	0.00218168	0.00058101	0.0005267	0.00005431
590870.00	2366940.00	0.00066658	0.00043723	0.00038451	0.00005271	0.00161191	0.00052834	0.00047426	0.00005407
591370.00	2366940.00	0.00121563	0.00041775	0.00036986	0.00004789	0.00266757	0.00051802	0.00046676	0.00005126
591870.00	2366940.00	0.00153727	0.00038787	0.00034725	0.00004062	0.00073569	0.00040756	0.00036185	0.00004571
592370.00	2366940.00	0.00081962	0.0003276	0.00029408	0.00003351	0.00056974	0.00035808	0.00031978	0.0000383
592870.00	2366940.00	0.00034914	0.00026968	0.00024195	0.00002773	0.0004242	0.00030651	0.00027562	0.00003088
593370.00	2366940.00	0.00030116	0.00025134	0.00022665	0.00002468	0.00035883	0.00027434	0.00024879	0.00002555
593870.00	2366940.00	0.00034272	0.00026962	0.00024404	0.00002558	0.0003864	0.00027987	0.000255	0.00002487
594370.00	2366940.00	0.00057674	0.00032828	0.00030108	0.00002719	0.00049199	0.00031877	0.00029262	0.00002615
594870.00	2366940.00	0.00077305	0.00037764	0.00034924	0.00002839	0.00058506	0.00035825	0.00033043	0.00002782
595370.00	2366940.00	0.00132494	0.00044207	0.00041398	0.00002809	0.00080134	0.0004116	0.00038268	0.00002892
595870.00	2366940.00	0.00182628	0.0004682	0.00044215	0.00002605	0.00112343	0.00046668	0.00043853	0.00002815
596370.00	2366940.00	0.00163699	0.00043937	0.000416	0.00002337	0.00188668	0.00050603	0.00048017	0.00002585
596870.00	2366940.00	0.00095793	0.00039279	0.00037192	0.00002087	0.00207697	0.00049173	0.00046855	0.00002318
597370.00	2366940.00	0.00064365	0.00035501	0.00033592	0.0000191	0.00168199	0.0004468	0.00042591	0.00002089
597870.00	2366940.00	0.0005967	0.0003296	0.00031148	0.00001811	0.00152332	0.00040817	0.00038896	0.00001921

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2366940.00	0.00052662	0.00031001	0.00029196	0.00001805	0.0013044	0.00037674	0.00035822	0.00001852
598870.00	2366940.00	0.00046836	0.00029453	0.00027582	0.00001871	0.00105849	0.00035297	0.00033425	0.00001872
599370.00	2366940.00	0.00042631	0.00028052	0.00026078	0.00001975	0.00079743	0.0003329	0.00031331	0.00001959
599870.00	2366940.00	0.00042212	0.00026751	0.00024698	0.00002054	0.00077241	0.00031952	0.00029904	0.00002048
600370.00	2366940.00	0.00041329	0.00025519	0.00023424	0.00002095	0.00069841	0.00030521	0.00028406	0.00002115
600870.00	2366940.00	0.00040801	0.00024292	0.00022192	0.000021	0.00065203	0.00029027	0.00026894	0.00002133
601370.00	2366940.00	0.00050041	0.0002339	0.00021318	0.00002072	0.00102379	0.00028575	0.00026475	0.00002099
601870.00	2366940.00	0.00054822	0.00022419	0.00020332	0.00002087	0.00100017	0.00027181	0.00025087	0.00002094
602370.00	2366940.00	0.00054341	0.00021264	0.00019126	0.00002139	0.00098335	0.00025845	0.00023723	0.00002122
602870.00	2366940.00	0.00048671	0.00019963	0.00017744	0.00002218	0.0009171	0.00024324	0.00022141	0.00002183
603370.00	2366940.00	0.00045891	0.000189	0.00016592	0.00002308	0.00090413	0.00023155	0.00020894	0.00002261
603870.00	2366940.00	0.00046708	0.00018093	0.000157	0.00002393	0.00090256	0.00022089	0.00019747	0.00002342
604370.00	2366940.00	0.00054714	0.00017685	0.00015223	0.00002462	0.00082568	0.00020992	0.00018579	0.00002413
604870.00	2366940.00	0.00046344	0.00016711	0.00014203	0.00002507	0.00089965	0.00020281	0.00017814	0.00002467
605370.00	2366940.00	0.00044734	0.00016071	0.00013554	0.00002517	0.00089062	0.00019499	0.00017011	0.00002488
605870.00	2366940.00	0.00048319	0.00015693	0.00013204	0.0000249	0.00085606	0.00018732	0.00016258	0.00002474
606370.00	2366940.00	0.00045561	0.00015071	0.00012645	0.00002426	0.00081191	0.00017904	0.00015478	0.00002426
606870.00	2366940.00	0.00045571	0.00014596	0.00012263	0.00002333	0.00081175	0.00017332	0.00014986	0.00002346
607370.00	2366940.00	0.00040834	0.00013938	0.00011719	0.00002219	0.00084494	0.00016962	0.00014717	0.00002245
607870.00	2366940.00	0.00043473	0.00013614	0.00011526	0.00002088	0.00086118	0.00016466	0.00014342	0.00002124
608370.00	2366940.00	0.00043953	0.00013217	0.00011267	0.0000195	0.0008562	0.00015951	0.00013957	0.00001993
608870.00	2366940.00	0.00041297	0.00012711	0.00010898	0.00001813	0.00085894	0.0001552	0.00013657	0.00001863
609370.00	2366940.00	0.00043556	0.0001244	0.00010765	0.00001675	0.00084545	0.0001499	0.00013263	0.00001727
609870.00	2366940.00	0.00040606	0.00011974	0.00010426	0.00001548	0.00083917	0.00014576	0.00012973	0.00001603
610370.00	2366940.00	0.00032593	0.00011348	0.00009905	0.00001444	0.00068883	0.00013876	0.00012373	0.00001503
610870.00	2366940.00	0.00054951	0.00011936	0.00010641	0.00001295	0.00070847	0.00013382	0.00012042	0.0000134
611370.00	2366940.00	0.00055218	0.00011651	0.00010462	0.0000119	0.00068216	0.00012932	0.00011703	0.00001229
611870.00	2366940.00	0.00057201	0.00011443	0.00010353	0.0000109	0.00063392	0.00012387	0.00011263	0.00001124
612370.00	2366940.00	0.00027962	0.00010219	0.00009117	0.00001102	0.00045511	0.00011912	0.00010756	0.00001156
612870.00	2366940.00	0.0005666	0.00010893	0.00009953	0.0000094	0.00075701	0.00012063	0.000111	0.00000963
613370.00	2366940.00	0.00067463	0.00011008	0.00010148	0.0000086	0.00063933	0.00011426	0.00010553	0.00000874
613870.00	2366940.00	0.00043281	0.00009911	0.00009084	0.00000827	0.00075494	0.00011385	0.00010545	0.00000841
614370.00	2366940.00	0.00066498	0.00010456	0.00009723	0.00000733	0.00048579	0.00010148	0.00009412	0.00000735
614870.00	2366940.00	0.00064131	0.00010149	0.00009439	0.0000071	0.00060269	0.00010463	0.00009754	0.00000709
615370.00	2366940.00	0.00029582	0.00008775	0.00008052	0.00000723	0.0005821	0.00010242	0.00009514	0.00000729
615870.00	2366940.00	0.00038986	0.00008884	0.0000821	0.00000674	0.00068532	0.00010171	0.00009501	0.0000067
616370.00	2366940.00	0.00056882	0.00009238	0.00008647	0.00000591	0.00038301	0.0000878	0.00008199	0.00000581
616870.00	2366940.00	0.00037199	0.00008215	0.00007667	0.00000548	0.0002815	0.0000801	0.00007473	0.00000537
617370.00	2366940.00	0.00030958	0.00007714	0.00007185	0.00000529	0.00025563	0.00007662	0.00007147	0.00000515
617870.00	2366940.00	0.00042461	0.00008161	0.00007617	0.00000544	0.00029986	0.00007822	0.00007291	0.00000531
618370.00	2366940.00	0.00050585	0.00008318	0.00007765	0.00000553	0.00033605	0.00007897	0.00007357	0.0000054
618870.00	2366940.00	0.00026194	0.00007057	0.00006537	0.0000052	0.00023042	0.00007084	0.00006579	0.00000505
619370.00	2366940.00	0.00041275	0.00007701	0.00007155	0.00000546	0.00028637	0.00007368	0.00006834	0.00000534
619870.00	2366940.00	0.00039314	0.00007507	0.00006959	0.00000548	0.00027506	0.00007191	0.00006653	0.00000538
590370.00	2367440.00	0.0020036	0.00048391	0.00043472	0.00004919	0.00113237	0.00050738	0.00045846	0.00004892
590870.00	2367440.00	0.00073998	0.00041356	0.00036496	0.0000486	0.0020005	0.0005071	0.00045736	0.00004974
591370.00	2367440.00	0.00200918	0.0004193	0.00037519	0.0000441	0.00201009	0.00046964	0.00042239	0.00004725
591870.00	2367440.00	0.0024807	0.00040048	0.0003626	0.00003788	0.00116373	0.00040648	0.00036422	0.00004226
592370.00	2367440.00	0.00136135	0.0003351	0.00030348	0.00003162	0.00065342	0.00034841	0.00031266	0.00003575
592870.00	2367440.00	0.000492	0.00027529	0.00024865	0.00002664	0.00046531	0.00030493	0.00027556	0.00002938
593370.00	2367440.00	0.00028553	0.00023909	0.00021569	0.0000234	0.00033736	0.00026052	0.00023628	0.00002424
593870.00	2367440.00	0.00031753	0.00025266	0.00022867	0.00002399	0.00036245	0.00026385	0.0002405	0.00002335
594370.00	2367440.00	0.00046017	0.00029864	0.00027316	0.00002548	0.0004433	0.0002952	0.00027079	0.00002441
594870.00	2367440.00	0.00081892	0.00036352	0.00033677	0.00002675	0.00056598	0.00033691	0.00031081	0.00002609
595370.00	2367440.00	0.00124551	0.00041542	0.00038849	0.00002693	0.00073836	0.00038418	0.00035685	0.00002733
595870.00	2367440.00	0.00203516	0.00045237	0.0004268	0.00002557	0.00127064	0.00045634	0.00042927	0.00002707
596370.00	2367440.00	0.00150645	0.00042352	0.00040029	0.00002323	0.00198932	0.00049431	0.00046889	0.00002542
596870.00	2367440.00	0.00095735	0.00038678	0.00036604	0.00002074	0.00207799	0.00048185	0.00045884	0.000023
597370.00	2367440.00	0.00077769	0.00035632	0.00033762	0.0000187	0.00183231	0.00044597	0.00042542	0.00002055
597870.00	2367440.00	0.00067948	0.00032871	0.00031129	0.00001742	0.00161969	0.00040705	0.00038837	0.00001868
598370.00	2367440.00	0.00054778	0.00030541	0.00028844	0.00001697	0.00137083	0.00037298	0.0003553	0.00001768
598870.00	2367440.00	0.00044871	0.00028848	0.00027121	0.00001727	0.00100192	0.00034416	0.00032664	0.00001752
599370.00	2367440.00	0.00044938	0.00027633	0.00025836	0.00001797	0.00101436	0.00033002	0.00031216	0.00001786
599870.00	2367440.00	0.00041386	0.00026366	0.00024477	0.00001889	0.00081451	0.00031327	0.00029455	0.00001873
600370.00	2367440.00	0.00040272	0.00025208	0.00023254	0.00001953	0.00073492	0.00030002	0.00028047	0.00001954
600870.00	2367440.00	0.0003955	0.0002408	0.00022103	0.00001977	0.00066759	0.00028619	0.00026619	0.00002
601370.00	2367440.00	0.00046564	0.000232	0.00021244	0.00001956	0.00096885	0.00028131	0.00026143	0.00001989
601870.00	2367440.00	0.00047695	0.00022159	0.00020207	0.00001952	0.00097113	0.00026923	0.00024947	0.00001976
602370.00	2367440.00	0.00046815	0.00021044	0.00019071	0.00001973	0.00095887	0.00025686	0.00023709	0.00001977
602870.00	2367440.00	0.00048312	0.00020064	0.00018045	0.00002019	0.00092219	0.00024368	0.00022366	0.00002002

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2367440.00	0.00047331	0.00019054	0.00016966	0.00002089	0.00090248	0.00023167	0.00021111	0.00002056
603870.00	2367440.00	0.0004669	0.00018148	0.00015978	0.0000217	0.00085146	0.00021895	0.00019769	0.00002126
604370.00	2367440.00	0.00043098	0.00017237	0.00014986	0.00002252	0.0008911	0.00021111	0.00018908	0.00002204
604870.00	2367440.00	0.00042331	0.00016528	0.00014209	0.00002319	0.00087423	0.0002018	0.00017908	0.00002272
605370.00	2367440.00	0.00046933	0.00016118	0.00013755	0.00002364	0.00084294	0.00019292	0.0001697	0.00002322
605870.00	2367440.00	0.00042112	0.00015393	0.00013013	0.00002381	0.00084953	0.00018614	0.00016265	0.00002349
606370.00	2367440.00	0.00042626	0.00014929	0.00012565	0.00002365	0.00084118	0.00017954	0.0001561	0.00002344
606870.00	2367440.00	0.00041484	0.0001442	0.00012104	0.00002317	0.0008085	0.00017288	0.00014979	0.00002309
607370.00	2367440.00	0.00044292	0.00014106	0.00011866	0.0000224	0.00081302	0.00016764	0.0001452	0.00002244
607870.00	2367440.00	0.00051924	0.00014014	0.00011875	0.00002139	0.00074745	0.0001617	0.00014017	0.00002154
608370.00	2367440.00	0.00041947	0.0001318	0.00011154	0.00002026	0.00082888	0.00015842	0.00013789	0.00002053
608870.00	2367440.00	0.00041508	0.00012773	0.0001087	0.00001903	0.00082705	0.00015387	0.00013449	0.00001937
609370.00	2367440.00	0.00046813	0.00012633	0.0001086	0.00001773	0.00079113	0.00014832	0.00013021	0.00001811
609870.00	2367440.00	0.00051043	0.00012463	0.0001082	0.00001643	0.00074265	0.00014315	0.0001263	0.00001685
610370.00	2367440.00	0.00042634	0.00011781	0.00010252	0.00001529	0.00080057	0.00014037	0.00012462	0.00001575
610870.00	2367440.00	0.00031686	0.00011043	0.00009611	0.00001433	0.00067276	0.00013475	0.00011989	0.00001486
611370.00	2367440.00	0.00029077	0.00010701	0.00009361	0.00001341	0.00053826	0.00012769	0.00011372	0.00001396
611870.00	2367440.00	0.00058572	0.00011547	0.00010363	0.00001184	0.00058372	0.0001219	0.00010969	0.0000122
612370.00	2367440.00	0.00047209	0.0001086	0.00009749	0.00001112	0.00080327	0.00012552	0.00011404	0.00001149
612870.00	2367440.00	0.00053321	0.00010833	0.00009809	0.00001024	0.00077065	0.00012146	0.00011091	0.00001055
613370.00	2367440.00	0.00026901	0.00009681	0.00008669	0.00001012	0.00044836	0.0001126	0.00010204	0.00001056
613870.00	2367440.00	0.00053824	0.00010362	0.00009483	0.00000879	0.0007209	0.00011375	0.00010478	0.00000897
614370.00	2367440.00	0.00051343	0.00009974	0.00009206	0.00000768	0.00038453	0.00009667	0.00008884	0.00000784
614870.00	2367440.00	0.00043574	0.00009422	0.00008716	0.00000706	0.00034675	0.00009249	0.00008531	0.00000718
615370.00	2367440.00	0.00055525	0.00009714	0.00009046	0.00000668	0.00038382	0.00009237	0.00008565	0.00000673
615870.00	2367440.00	0.00063868	0.00009786	0.00009121	0.00000665	0.00054823	0.00009871	0.0000921	0.00000661
616370.00	2367440.00	0.00031042	0.00008494	0.00007821	0.00000673	0.00061246	0.00009893	0.00009218	0.00000675
616870.00	2367440.00	0.00063752	0.00009361	0.00008766	0.00000596	0.00046207	0.00009073	0.00008487	0.00000586
617370.00	2367440.00	0.0003968	0.00008253	0.00007718	0.00000535	0.00029145	0.00007978	0.00007453	0.00000526
617870.00	2367440.00	0.00028622	0.000075	0.00006997	0.00000503	0.00024547	0.00007509	0.00007019	0.0000049
618370.00	2367440.00	0.00032713	0.00007586	0.00007085	0.00000501	0.00025583	0.00007445	0.00006957	0.00000488
618870.00	2367440.00	0.00026321	0.00007095	0.0000661	0.00000485	0.00023196	0.00007128	0.00006658	0.0000047
619370.00	2367440.00	0.00027957	0.00007064	0.00006577	0.00000487	0.00023244	0.00007017	0.00006545	0.00000472
619870.00	2367440.00	0.00018695	0.00006333	0.00005867	0.00000466	0.0002019	0.00006585	0.00006136	0.00000449
590370.00	2367940.00	0.0018082	0.00045208	0.00040633	0.00004575	0.00095867	0.00046903	0.00042385	0.00004518
590870.00	2367940.00	0.00216129	0.00043306	0.00038834	0.00004472	0.00130225	0.00045314	0.0004074	0.00004574
591370.00	2367940.00	0.00220736	0.00040404	0.00036323	0.00004081	0.00106513	0.00041328	0.00036948	0.0000438
591870.00	2367940.00	0.001971	0.00036765	0.00033236	0.00003529	0.00085882	0.00037357	0.00033432	0.00003925
592370.00	2367940.00	0.00073447	0.00029632	0.00026673	0.00002959	0.00052037	0.00032167	0.00028834	0.00003332
592870.00	2367940.00	0.00042491	0.00026044	0.00023526	0.00002518	0.00043858	0.00028956	0.00026192	0.00002764
593370.00	2367940.00	0.00027312	0.00022784	0.00020572	0.00002212	0.00032156	0.00024823	0.00022529	0.00002294
593870.00	2367940.00	0.0003029	0.00023919	0.00021656	0.00002263	0.00034847	0.00025106	0.00022898	0.00002208
594370.00	2367940.00	0.00045415	0.00028175	0.00025777	0.00002398	0.00042617	0.00027897	0.00025598	0.00002299
594870.00	2367940.00	0.00091515	0.00034972	0.00032449	0.00002523	0.00056297	0.00031971	0.00029516	0.00002455
595370.00	2367940.00	0.00153288	0.0004072	0.00038147	0.00002573	0.00083831	0.00037789	0.00035208	0.00002582
595870.00	2367940.00	0.0020316	0.00043076	0.00040582	0.00002494	0.00139286	0.0004398	0.00041384	0.00002597
596370.00	2367940.00	0.00161224	0.00041384	0.00039089	0.00002295	0.00182129	0.00046585	0.00044105	0.0000248
596870.00	2367940.00	0.00123257	0.00038927	0.00036873	0.00002054	0.00189181	0.00046483	0.00044218	0.00002265
597370.00	2367940.00	0.00091579	0.00035757	0.00033912	0.00001845	0.00181505	0.00043977	0.00041946	0.00002031
597870.00	2367940.00	0.00072113	0.00032759	0.00031061	0.00001698	0.00163444	0.00040476	0.00038639	0.00001837
598370.00	2367940.00	0.00056547	0.00030211	0.0002859	0.0000162	0.00140472	0.00037039	0.00035327	0.00001712
598870.00	2367940.00	0.00050412	0.00028495	0.00026889	0.00001607	0.00123814	0.00034389	0.00032739	0.0000165
599370.00	2367940.00	0.00046799	0.00027211	0.00025561	0.0000165	0.00111488	0.00032519	0.00030865	0.00001654
599870.00	2367940.00	0.00043608	0.00026031	0.00024303	0.00001728	0.00098878	0.00031027	0.00029315	0.00001712
600370.00	2367940.00	0.00040151	0.00024879	0.00023071	0.00001808	0.00081297	0.00029551	0.00027755	0.00001795
600870.00	2367940.00	0.00038424	0.00023814	0.00021958	0.00001856	0.00067917	0.00028141	0.00026277	0.00001863
601370.00	2367940.00	0.00045511	0.00023031	0.00021178	0.00001853	0.00093805	0.00027657	0.00025778	0.00001879
601870.00	2367940.00	0.0004744	0.00022123	0.0002028	0.00001843	0.00093614	0.00026552	0.00024677	0.00001875
602370.00	2367940.00	0.00046534	0.00021087	0.00019245	0.00001842	0.00092655	0.00025435	0.00023572	0.00001863
602870.00	2367940.00	0.00047972	0.00020149	0.00018288	0.00001861	0.00088749	0.00024202	0.00022338	0.00001863
603370.00	2367940.00	0.00047141	0.00019158	0.00017251	0.00001906	0.00087201	0.00023066	0.00021176	0.0000189
603870.00	2367940.00	0.0004387	0.00018137	0.00016164	0.00001973	0.00088386	0.00022069	0.00020127	0.00001942
604370.00	2367940.00	0.00044156	0.00017338	0.00015291	0.00002046	0.00086793	0.00021029	0.00019023	0.00002006
604870.00	2367940.00	0.00044045	0.00016613	0.00014492	0.00002121	0.0008484	0.00020067	0.00017992	0.00002075
605370.00	2367940.00	0.00037372	0.00015729	0.00013541	0.00002188	0.00079765	0.00019218	0.00017075	0.00002143
605870.00	2367940.00	0.00050956	0.00015712	0.00013481	0.00002232	0.00075159	0.00018354	0.00016165	0.00002189
606370.00	2367940.00	0.00041418	0.00014836	0.00012582	0.00002254	0.00081053	0.00017782	0.00015562	0.0000222
606870.00	2367940.00	0.00037725	0.0001424	0.00011992	0.00002247	0.00079725	0.00017222	0.00014998	0.00002224
607370.00	2367940.00	0.00039241	0.0001388	0.00011668	0.00002212	0.00079972	0.00016666	0.00014468	0.00002198
607870.00	2367940.00	0.00045087	0.00013721	0.00011572	0.00002149	0.00075838	0.00016054	0.00013908	0.00002146

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2367940.00	0.00031553	0.00012786	0.00010718	0.00002068	0.00066228	0.0001552	0.00013439	0.00002081
608870.00	2367940.00	0.00030265	0.00012368	0.00010396	0.00001972	0.00060572	0.0001495	0.00012955	0.00001995
609370.00	2367940.00	0.00052925	0.0001294	0.00011091	0.00001849	0.00068714	0.00014613	0.00012742	0.00001871
609870.00	2367940.00	0.00039483	0.00012019	0.00010279	0.0000174	0.00078878	0.00014423	0.00012652	0.00001771
610370.00	2367940.00	0.00036566	0.0001157	0.00009942	0.00001628	0.00077824	0.00014056	0.00012391	0.00001665
610870.00	2367940.00	0.00052379	0.00011927	0.00010426	0.00001501	0.0006765	0.00013381	0.00011845	0.00001536
611370.00	2367940.00	0.00052272	0.00011627	0.00010236	0.00001392	0.00066693	0.0001299	0.00011562	0.00001428
611870.00	2367940.00	0.00031483	0.00010518	0.00009201	0.00001317	0.00067394	0.00012764	0.000114	0.00001364
612370.00	2367940.00	0.00026782	0.00010238	0.00008971	0.00001267	0.00044028	0.00012014	0.0001069	0.00001325
612870.00	2367940.00	0.00057361	0.00011017	0.00009926	0.00001091	0.00052434	0.00011332	0.0001021	0.00001122
613370.00	2367940.00	0.00026241	0.00009722	0.00008626	0.00001096	0.00043085	0.00011334	0.00010188	0.00001146
613870.00	2367940.00	0.00049945	0.00010277	0.00009322	0.00000955	0.00073568	0.00011463	0.00010482	0.00000981
614370.00	2367940.00	0.000669	0.00010644	0.00009775	0.0000087	0.00059136	0.00010825	0.00009939	0.00000887
614870.00	2367940.00	0.00068021	0.00010451	0.00009647	0.00000803	0.00054012	0.00010357	0.00009542	0.00000815
615370.00	2367940.00	0.0004947	0.00009536	0.00008824	0.00000712	0.00034812	0.00009094	0.00008367	0.00000728
615870.00	2367940.00	0.00029612	0.00008336	0.00007688	0.00000648	0.00028484	0.00008534	0.00007877	0.00000658
616370.00	2367940.00	0.00064098	0.00009669	0.00009011	0.00000659	0.00050589	0.00009568	0.00008911	0.00000657
616870.00	2367940.00	0.00046779	0.00008908	0.00008264	0.00000644	0.00063353	0.00009716	0.00009074	0.00000642
617370.00	2367940.00	0.00051667	0.0000888	0.00008271	0.00000608	0.00059075	0.00009409	0.00008807	0.00000602
617870.00	2367940.00	0.00054806	0.00008795	0.00008216	0.00000579	0.00054987	0.00009111	0.00008542	0.00000569
618370.00	2367940.00	0.00060074	0.00008777	0.00008231	0.00000546	0.00045006	0.00008569	0.00008036	0.00000533
618870.00	2367940.00	0.00055923	0.00008471	0.00007953	0.00000518	0.00037732	0.00008037	0.00007532	0.00000505
619370.00	2367940.00	0.000419	0.00007815	0.00007327	0.00000488	0.00029296	0.00007463	0.00006988	0.00000475
619870.00	2367940.00	0.00021596	0.00006599	0.00006154	0.00000445	0.00021301	0.00006759	0.0000633	0.00000429
590370.00	2368440.00	0.0012733	0.00041224	0.00036946	0.00004278	0.00067252	0.00042517	0.00038316	0.00004201
590870.00	2368440.00	0.0005925	0.00035515	0.00031306	0.00004209	0.00051173	0.00038399	0.00034099	0.000043
591370.00	2368440.00	0.0004571	0.00031969	0.00028129	0.00003841	0.00048304	0.0003557	0.0003144	0.0000413
591870.00	2368440.00	0.00066152	0.00030495	0.00027196	0.00003299	0.00051393	0.00033252	0.00029584	0.00003668
592370.00	2368440.00	0.00045205	0.00026929	0.0002415	0.00002779	0.00045236	0.00030112	0.00026994	0.00003118
592870.00	2368440.00	0.00028097	0.00022964	0.00020634	0.0000233	0.00034194	0.0002582	0.00023255	0.00002565
593370.00	2368440.00	0.00025191	0.00021121	0.00019053	0.00002068	0.00029313	0.00022966	0.00020814	0.00002152
593870.00	2368440.00	0.00028567	0.0002265	0.00020516	0.00002134	0.00033059	0.00023871	0.00021784	0.00002086
594370.00	2368440.00	0.00041983	0.0002644	0.0002418	0.0000226	0.00040398	0.00026348	0.00024181	0.00002167
594870.00	2368440.00	0.00072588	0.00031854	0.00029471	0.00002382	0.00050091	0.00029582	0.00027276	0.00002305
595370.00	2368440.00	0.00153398	0.00038618	0.00036164	0.00002454	0.00081725	0.00035676	0.00033236	0.0000244
595870.00	2368440.00	0.00175821	0.0004083	0.00038419	0.00002411	0.00100239	0.00039465	0.00036979	0.00002486
596370.00	2368440.00	0.00183836	0.00041019	0.00038764	0.00002255	0.00141562	0.00043301	0.00040895	0.00002407
596870.00	2368440.00	0.00142388	0.00038785	0.00036747	0.00002038	0.00168811	0.00044175	0.00041945	0.0000223
597370.00	2368440.00	0.00092217	0.00035354	0.0003352	0.00001833	0.00181854	0.00043315	0.00041296	0.00002019
597870.00	2368440.00	0.00067432	0.00032386	0.00030714	0.00001673	0.00162095	0.00040195	0.0003837	0.00001825
598370.00	2368440.00	0.0005716	0.00029969	0.00028401	0.00001568	0.00141285	0.00036841	0.00035166	0.00001675
598870.00	2368440.00	0.00054291	0.000282	0.0002668	0.00001521	0.0013075	0.00034138	0.00032556	0.00001581
599370.00	2368440.00	0.00048303	0.00026785	0.00025253	0.00001533	0.00116386	0.00032035	0.00030481	0.00001554
599870.00	2368440.00	0.00044131	0.00025634	0.00024045	0.00001589	0.00103158	0.0003046	0.00028878	0.00001582
600370.00	2368440.00	0.00040604	0.0002455	0.00022885	0.00001666	0.00088762	0.00029094	0.00027445	0.00001649
600870.00	2368440.00	0.00038155	0.0002352	0.0002179	0.0000173	0.00072423	0.00027686	0.00025963	0.00001723
601370.00	2368440.00	0.00049049	0.00022961	0.00021214	0.00001747	0.00089222	0.00027023	0.00025264	0.0000176
601870.00	2368440.00	0.00042326	0.00021829	0.00020073	0.00001756	0.00087877	0.0002614	0.00024356	0.00001783
602370.00	2368440.00	0.00045352	0.00021032	0.00019289	0.00001743	0.00089211	0.0002513	0.00023358	0.00001772
602870.00	2368440.00	0.00045416	0.00020109	0.00018366	0.00001742	0.00088035	0.00024077	0.00022317	0.0000176
603370.00	2368440.00	0.0004603	0.0001921	0.00017448	0.00001762	0.00081501	0.00022824	0.00021061	0.00001762
603870.00	2368440.00	0.00043682	0.00018237	0.00016431	0.00001806	0.00085888	0.0002199	0.000202	0.0000179
604370.00	2368440.00	0.00035787	0.00017118	0.00015244	0.00001873	0.0007078	0.00020751	0.00018907	0.00001844
604870.00	2368440.00	0.00042384	0.00016608	0.00014674	0.00001934	0.00082862	0.00020029	0.00018134	0.00001895
605370.00	2368440.00	0.0004283	0.00015949	0.00013947	0.00002002	0.00077241	0.00019017	0.00017058	0.00001959
605870.00	2368440.00	0.00038382	0.00015197	0.00013131	0.00002066	0.00079407	0.00018386	0.00016364	0.00002022
606370.00	2368440.00	0.00042743	0.00014851	0.0001274	0.00002111	0.00077579	0.00017619	0.0001555	0.00002069
606870.00	2368440.00	0.00053694	0.0001484	0.00012703	0.00002137	0.00064907	0.00016794	0.00014695	0.00002099
607370.00	2368440.00	0.00042737	0.00013982	0.00011845	0.00002137	0.00075118	0.00016422	0.00014313	0.00002109
607870.00	2368440.00	0.00043071	0.00013611	0.000115	0.00002111	0.00074175	0.0001591	0.00013818	0.00002092
608370.00	2368440.00	0.00039735	0.00013104	0.00011043	0.0000206	0.00075823	0.00015498	0.00013446	0.00002052
608870.00	2368440.00	0.00043226	0.00012895	0.00010906	0.00001989	0.00073437	0.0001501	0.00013021	0.00001989
609370.00	2368440.00	0.00052459	0.00012941	0.00011042	0.00001899	0.000642	0.00014468	0.00012562	0.00001906
609870.00	2368440.00	0.00045171	0.00012299	0.00010497	0.00001802	0.00071547	0.00014181	0.00012364	0.00001817
610370.00	2368440.00	0.00048579	0.00012122	0.00010426	0.00001695	0.00068112	0.00013755	0.00012039	0.00001716
610870.00	2368440.00	0.00027578	0.00010991	0.00009376	0.00001615	0.00050223	0.00013058	0.00011405	0.00001652
611370.00	2368440.00	0.00050171	0.00011584	0.00010103	0.00001481	0.00065536	0.00012979	0.00011469	0.0000151
611870.00	2368440.00	0.00035364	0.00010699	0.00009304	0.00001395	0.00076683	0.00012903	0.0001147	0.00001432
612370.00	2368440.00	0.00026808	0.00010154	0.00008831	0.00001323	0.00047991	0.00012004	0.00010635	0.00001369
612870.00	2368440.00	0.00026143	0.0001012	0.00008837	0.00001283	0.00042562	0.00011857	0.00010512	0.00001345

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2368440.00	0.0006315	0.00011036	0.00009936	0.00001101	0.00066667	0.00011684	0.00010554	0.0000113
613870.00	2368440.00	0.00060217	0.00010695	0.00009672	0.00001023	0.00067106	0.00011408	0.00010358	0.0000105
614370.00	2368440.00	0.0006796	0.0001072	0.00009793	0.00000927	0.00047751	0.00010183	0.00009232	0.00000951
614870.00	2368440.00	0.00059367	0.00010185	0.00009337	0.00000848	0.00040755	0.00009625	0.00008752	0.00000873
615370.00	2368440.00	0.00066725	0.0001025	0.00009442	0.00000808	0.00051715	0.00010077	0.00009255	0.00000822
615870.00	2368440.00	0.00064515	0.00009965	0.0000922	0.00000744	0.00046161	0.00009558	0.00008804	0.00000755
616370.00	2368440.00	0.00047197	0.00009117	0.00008447	0.0000067	0.00033208	0.00008687	0.00008003	0.00000684
616870.00	2368440.00	0.00031244	0.000081	0.00007492	0.00000608	0.00026014	0.00008085	0.00007468	0.00000616
617370.00	2368440.00	0.00061787	0.00009278	0.00008662	0.00000616	0.0004493	0.0000897	0.00008357	0.00000613
617870.00	2368440.00	0.00052218	0.00008777	0.00008211	0.00000566	0.00035685	0.00008319	0.00007756	0.00000563
618370.00	2368440.00	0.00058744	0.00008812	0.0000826	0.00000551	0.00041344	0.00008447	0.00007904	0.00000543
618870.00	2368440.00	0.00038097	0.00007855	0.00007358	0.00000497	0.00027796	0.00007568	0.00007078	0.0000049
619370.00	2368440.00	0.00043445	0.00007947	0.0000746	0.00000487	0.00030212	0.00007568	0.0000709	0.00000478
619870.00	2368440.00	0.0001837	0.00006394	0.00005968	0.00000426	0.0002024	0.00006679	0.00006267	0.00000412
590370.00	2368940.00	0.00066257	0.00037437	0.00033389	0.00004049	0.00168733	0.00044874	0.00040868	0.00004007
590870.00	2368940.00	0.00156472	0.00037604	0.00033708	0.00003897	0.00074623	0.00038502	0.00034506	0.00003996
591370.00	2368940.00	0.00037392	0.00029637	0.00026033	0.00003604	0.00043505	0.00033149	0.00029277	0.00003872
591870.00	2368940.00	0.00047113	0.00028136	0.00025036	0.00003101	0.00045957	0.00031276	0.0002784	0.00003436
592370.00	2368940.00	0.00032957	0.00024423	0.00021808	0.00002615	0.0003974	0.00027672	0.00024744	0.00002928
592870.00	2368940.00	0.00026931	0.00021911	0.00019693	0.00002218	0.0003263	0.00024511	0.0002208	0.00002432
593370.00	2368940.00	0.00024281	0.00020183	0.00018227	0.00001955	0.00028505	0.00022017	0.00019979	0.00002039
593870.00	2368940.00	0.00026713	0.00021468	0.00019456	0.00002012	0.00030968	0.00022678	0.00020709	0.00001969
594370.00	2368940.00	0.00035146	0.00024175	0.00022045	0.0000213	0.00036999	0.0002464	0.00022602	0.00002038
594870.00	2368940.00	0.00060247	0.00029068	0.00026816	0.00002252	0.00045742	0.00027605	0.00025435	0.0000217
595370.00	2368940.00	0.00112005	0.00034945	0.00032612	0.00002333	0.0006395	0.00031914	0.0002961	0.00002304
595870.00	2368940.00	0.00170082	0.00038872	0.00036544	0.00002328	0.00095231	0.00037188	0.00034816	0.00002372
596370.00	2368940.00	0.00181989	0.00039578	0.00037366	0.00002213	0.00131994	0.00041004	0.00038672	0.00002332
596870.00	2368940.00	0.00145696	0.00037872	0.00035849	0.00002023	0.00160852	0.00042514	0.00040321	0.00002193
597370.00	2368940.00	0.00092036	0.00034822	0.00032996	0.00001826	0.00181761	0.00042476	0.0004047	0.00002006
597870.00	2368940.00	0.00072762	0.00032312	0.00030659	0.00001654	0.00164581	0.00039873	0.00038064	0.00001809
598370.00	2368940.00	0.00070404	0.000302	0.00028674	0.00001526	0.00147608	0.00036738	0.00035098	0.00001639
598870.00	2368940.00	0.00058952	0.00028047	0.00026588	0.00001458	0.00134058	0.00033935	0.00032403	0.00001532
599370.00	2368940.00	0.00051788	0.00026472	0.00025031	0.00001441	0.00121684	0.00031696	0.00030217	0.00001479
599870.00	2368940.00	0.00046462	0.00025283	0.00023812	0.00001471	0.00109833	0.00030025	0.00028548	0.00001477
600370.00	2368940.00	0.00040981	0.00024183	0.0002265	0.00001532	0.00084882	0.00028287	0.00026768	0.00001519
600870.00	2368940.00	0.00036395	0.00023183	0.00021575	0.00001608	0.00068196	0.00027043	0.0002545	0.00001593
601370.00	2368940.00	0.0004553	0.00022593	0.0002095	0.00001643	0.00084175	0.00026423	0.00024782	0.00001641
601870.00	2368940.00	0.00042828	0.00021683	0.00020017	0.00001666	0.00086666	0.000257	0.00024018	0.00001682
602370.00	2368940.00	0.00045253	0.00020951	0.00019292	0.0000166	0.0008576	0.00024753	0.00023066	0.00001688
602870.00	2368940.00	0.00042418	0.00019998	0.00018346	0.00001652	0.00084852	0.00023845	0.00022167	0.00001678
603370.00	2368940.00	0.00044458	0.00019213	0.00017562	0.00001651	0.00078882	0.00022674	0.00021008	0.00001666
603870.00	2368940.00	0.00042195	0.00018276	0.00016603	0.00001673	0.00082244	0.00021866	0.00020194	0.00001672
604370.00	2368940.00	0.0004204	0.00017452	0.00015739	0.00001712	0.00082086	0.00020928	0.00019231	0.00001697
604870.00	2368940.00	0.00047986	0.00016921	0.00015158	0.00001763	0.00076341	0.000199	0.00018164	0.00001736
605370.00	2368940.00	0.00040768	0.00015935	0.00014105	0.0000183	0.00078963	0.00019106	0.00017312	0.00001794
605870.00	2368940.00	0.00039879	0.00015271	0.00013376	0.00001895	0.00074243	0.00018188	0.00016334	0.00001854
606370.00	2368940.00	0.00044612	0.00014913	0.00012961	0.00001952	0.00073587	0.00017505	0.00015596	0.00001909
606870.00	2368940.00	0.00038937	0.0001421	0.0001221	0.00001999	0.00075321	0.00016914	0.00014955	0.00001959
607370.00	2368940.00	0.00028376	0.00013482	0.00011451	0.00002031	0.00046082	0.0001591	0.00013906	0.00002004
607870.00	2368940.00	0.00032582	0.00013152	0.0001112	0.00002033	0.0006924	0.00015821	0.00013816	0.00002005
608370.00	2368940.00	0.00055083	0.00013701	0.00011684	0.00002017	0.00055352	0.00014884	0.00012892	0.00001992
608870.00	2368940.00	0.0003681	0.0001261	0.00010635	0.00001975	0.00072977	0.00014937	0.00012975	0.00001962
609370.00	2368940.00	0.00031571	0.0001207	0.00010154	0.00001917	0.00067919	0.00014525	0.00012611	0.00001914
609870.00	2368940.00	0.00034648	0.0001187	0.00010029	0.00001841	0.00072354	0.00014193	0.00012348	0.00001845
610370.00	2368940.00	0.00051451	0.00012266	0.00010516	0.00001749	0.00060763	0.00013568	0.00011811	0.00001757
610870.00	2368940.00	0.00036215	0.00011323	0.00009662	0.00001661	0.00072635	0.00013473	0.00011796	0.00001677
611370.00	2368940.00	0.00055926	0.0001185	0.00010299	0.00001551	0.00052278	0.00012396	0.00010828	0.00001569
611870.00	2368940.00	0.00025687	0.00010467	0.00008966	0.00001501	0.00042566	0.0001231	0.00010769	0.00001541
612370.00	2368940.00	0.00032753	0.00010366	0.00008987	0.00001379	0.00071406	0.0001248	0.00011069	0.00001411
612870.00	2368940.00	0.00036174	0.00010262	0.00008978	0.00001285	0.00075392	0.00012238	0.00010921	0.00001317
613370.00	2368940.00	0.00025119	0.00009712	0.00008472	0.0000124	0.00041702	0.00011375	0.00010089	0.00001286
613870.00	2368940.00	0.00025019	0.00009464	0.00008309	0.00001155	0.00042086	0.00011062	0.00009862	0.00001199
614370.00	2368940.00	0.00058962	0.00010464	0.00009441	0.00001023	0.00065026	0.00011125	0.00010077	0.00001048
614870.00	2368940.00	0.00061467	0.00010296	0.00009373	0.00000924	0.00041838	0.00009697	0.00008746	0.00000951
615370.00	2368940.00	0.0005091	0.0000966	0.00008814	0.00000847	0.00035188	0.00009166	0.0000829	0.00000876
615870.00	2368940.00	0.00034796	0.00008643	0.00007871	0.00000772	0.00027484	0.00008543	0.00007744	0.00000799
616370.00	2368940.00	0.00040408	0.00008795	0.00008073	0.00000722	0.00029563	0.00008511	0.00007767	0.00000744
616870.00	2368940.00	0.00044923	0.00008895	0.00008219	0.00000676	0.00031601	0.00008467	0.00007774	0.00000693
617370.00	2368940.00	0.00031158	0.00007988	0.00007371	0.00000618	0.00025582	0.00007946	0.00007317	0.00000629
617870.00	2368940.00	0.00026703	0.00007588	0.00007016	0.00000572	0.00024172	0.00007689	0.00007112	0.00000577

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2368940.00	0.00022206	0.00007145	0.00006617	0.00000528	0.00022696	0.00007416	0.00006887	0.00000528
618870.00	2368940.00	0.00028202	0.00007393	0.00006886	0.00000507	0.00023916	0.00007385	0.00006879	0.00000505
619370.00	2368940.00	0.00024663	0.00007047	0.00006572	0.00000475	0.00022709	0.00007146	0.00006677	0.00000469
619870.00	2368940.00	0.0001681	0.00006302	0.00005879	0.00000423	0.00019288	0.00006631	0.00006217	0.00000414
590370.00	2369440.00	0.00049225	0.00035378	0.00031543	0.00003835	0.00084857	0.00040675	0.00036852	0.00003823
590870.00	2369440.00	0.00080893	0.00033864	0.00030192	0.00003673	0.00200291	0.00041219	0.00037455	0.00003765
591370.00	2369440.00	0.00203949	0.00035219	0.00031878	0.00003341	0.00134406	0.00036626	0.0003306	0.00003566
591870.00	2369440.00	0.0019535	0.00032676	0.00029749	0.00002928	0.00087984	0.0003261	0.00029399	0.0000321
592370.00	2369440.00	0.00110663	0.000279	0.00025384	0.00002516	0.00054912	0.00028667	0.00025889	0.00002778
592870.00	2369440.00	0.00047431	0.00023707	0.00021527	0.0000218	0.00041312	0.00025656	0.00023297	0.00002359
593370.00	2369440.00	0.00024032	0.00019756	0.00017868	0.00001888	0.00027946	0.00021451	0.00019486	0.00001965
593870.00	2369440.00	0.00025196	0.00020371	0.00018472	0.00001899	0.00029019	0.00021515	0.00019654	0.00001861
594370.00	2369440.00	0.00029998	0.0002226	0.00020253	0.00002007	0.00033308	0.00022823	0.00020905	0.00001918
594870.00	2369440.00	0.00040155	0.00025657	0.00023529	0.00002128	0.00038944	0.00025335	0.000233	0.00002035
595370.00	2369440.00	0.00096714	0.00032465	0.00030246	0.00002219	0.00056725	0.00029631	0.00027453	0.00002178
595870.00	2369440.00	0.00154252	0.00036693	0.00034453	0.0000224	0.00085055	0.00034658	0.00032397	0.00002261
596370.00	2369440.00	0.00175753	0.00037866	0.00035701	0.00002165	0.00132155	0.0003914	0.00036887	0.00002253
596870.00	2369440.00	0.00142191	0.00036783	0.00034779	0.00002004	0.00160369	0.00040937	0.00038787	0.0000215
597370.00	2369440.00	0.0012165	0.00035243	0.00033433	0.00001809	0.00158014	0.00040824	0.00038849	0.00001975
597870.00	2369440.00	0.00091269	0.00032628	0.00030992	0.00001636	0.00158696	0.00039186	0.00037398	0.00001788
598370.00	2369440.00	0.00078522	0.00030304	0.00028805	0.00001499	0.00145149	0.00036446	0.00034827	0.00001619
598870.00	2369440.00	0.00062459	0.00027957	0.00026542	0.00001414	0.00134642	0.00033769	0.00032269	0.00001499
599370.00	2369440.00	0.00053839	0.00026206	0.00024832	0.00001374	0.00122916	0.0003141	0.00029985	0.00001425
599870.00	2369440.00	0.00045713	0.00024854	0.00023475	0.00001379	0.00108614	0.00029531	0.0002813	0.000014
600370.00	2369440.00	0.00040502	0.00023789	0.00022369	0.0000142	0.00084532	0.00027721	0.00026305	0.00001416
600870.00	2369440.00	0.00033456	0.00022913	0.00021409	0.00001504	0.00053831	0.00026332	0.00024834	0.00001498
601370.00	2369440.00	0.00043317	0.00022257	0.00020722	0.00001535	0.00082448	0.00025916	0.00024395	0.00001522
601870.00	2369440.00	0.00041125	0.00021417	0.00019842	0.00001575	0.00084078	0.00025234	0.00023656	0.00001577
602370.00	2369440.00	0.00057588	0.00021285	0.0001971	0.00001575	0.00067858	0.00023745	0.00022152	0.00001593
602870.00	2369440.00	0.00043566	0.00019989	0.00018413	0.00001575	0.00082104	0.00023519	0.00021917	0.00001602
603370.00	2369440.00	0.0004086	0.00019097	0.00017529	0.00001568	0.00081251	0.00022672	0.00021081	0.00001591
603870.00	2369440.00	0.00042648	0.00018366	0.00016798	0.00001568	0.00080622	0.00021751	0.00020171	0.0000158
604370.00	2369440.00	0.00043559	0.00017611	0.00016023	0.00001587	0.00079193	0.00020827	0.00019242	0.00001585
604870.00	2369440.00	0.00039263	0.00016678	0.00015051	0.00001627	0.0007802	0.00019955	0.00018343	0.00001612
605370.00	2369440.00	0.00042148	0.00016077	0.00014402	0.00001675	0.00076453	0.0001906	0.00017411	0.0000165
605870.00	2369440.00	0.00040072	0.00015343	0.00013609	0.00001735	0.00075566	0.00018259	0.00016558	0.00001701
606370.00	2369440.00	0.00039945	0.00014755	0.00012961	0.00001795	0.00074439	0.00017508	0.00015752	0.00001756
606870.00	2369440.00	0.00029294	0.00013894	0.00012036	0.00001857	0.00051914	0.00016509	0.00014688	0.00001821
607370.00	2369440.00	0.00040834	0.00013823	0.00011929	0.00001894	0.00070747	0.0001618	0.00014326	0.00001854
607870.00	2369440.00	0.00040757	0.00013421	0.00011497	0.00001924	0.00069479	0.0001563	0.00013743	0.00001886
608370.00	2369440.00	0.00035082	0.00012839	0.00010904	0.00001935	0.00070628	0.0001523	0.00013326	0.00001903
608870.00	2369440.00	0.00040227	0.0001271	0.00010786	0.00001924	0.00068193	0.00014707	0.00012809	0.00001898
609370.00	2369440.00	0.00050449	0.00012815	0.00010921	0.00001894	0.00057245	0.00014157	0.00012283	0.00001874
609870.00	2369440.00	0.00035142	0.00011884	0.0001004	0.00001844	0.00069883	0.00014026	0.00012191	0.00001834
610370.00	2369440.00	0.00048746	0.00012153	0.00010375	0.00001778	0.00059182	0.00013488	0.00011716	0.00001772
610870.00	2369440.00	0.00034147	0.00011268	0.00009564	0.00001704	0.00073367	0.00013391	0.00011681	0.0000171
611370.00	2369440.00	0.00025699	0.00010695	0.00009063	0.00001632	0.00044827	0.00012568	0.00010917	0.00001651
611870.00	2369440.00	0.00031768	0.00010616	0.00009081	0.00001535	0.00069245	0.0001271	0.00011157	0.00001553
612370.00	2369440.00	0.00055616	0.00011326	0.00009892	0.00001434	0.00069271	0.00012316	0.00010866	0.0000145
612870.00	2369440.00	0.00044508	0.00010635	0.00009286	0.00001349	0.00074593	0.00012121	0.0001075	0.00001371
613370.00	2369440.00	0.00025848	0.00009669	0.00008382	0.00001287	0.00048492	0.00011422	0.00010101	0.00001321
613870.00	2369440.00	0.00052185	0.00010469	0.00009292	0.00001176	0.00069001	0.00011458	0.00010257	0.00001201
614370.00	2369440.00	0.00060804	0.00010562	0.0000947	0.00001092	0.00061969	0.0001108	0.00009965	0.00001115
614870.00	2369440.00	0.00044175	0.0000974	0.00008709	0.00001031	0.00070414	0.00010981	0.00009924	0.00001057
615370.00	2369440.00	0.00064117	0.0001023	0.00009298	0.00000932	0.00044462	0.00009671	0.00008716	0.00000955
615870.00	2369440.00	0.00046653	0.00009321	0.00008473	0.00000848	0.0003248	0.00008857	0.00007978	0.00000879
616370.00	2369440.00	0.00042949	0.00008941	0.00008154	0.00000787	0.00030767	0.00008592	0.00007777	0.00000815
616870.00	2369440.00	0.00040807	0.00008684	0.00007952	0.00000731	0.00029713	0.00008374	0.0000762	0.00000755
617370.00	2369440.00	0.00039186	0.00008456	0.00007776	0.0000068	0.00028885	0.00008175	0.00007475	0.000007
617870.00	2369440.00	0.00036331	0.00008163	0.00007532	0.00000632	0.00027139	0.00007934	0.00007287	0.00000647
618370.00	2369440.00	0.00021702	0.00007136	0.00006562	0.00000574	0.00022248	0.00007413	0.00006831	0.00000581
618870.00	2369440.00	0.00018166	0.00006759	0.00006233	0.00000526	0.00020707	0.00007117	0.00006588	0.00000529
619370.00	2369440.00	0.00017505	0.0000657	0.00006082	0.00000488	0.00020048	0.0000692	0.00006432	0.00000487
619870.00	2369440.00	0.00016233	0.00006258	0.00005816	0.00000442	0.00018636	0.00006593	0.00006154	0.00000439
590370.00	2369940.00	0.00047189	0.00033782	0.00030161	0.00003621	0.0007854	0.00038677	0.00035058	0.00003619
590870.00	2369940.00	0.00047721	0.00031533	0.00028059	0.00003474	0.00099667	0.00036892	0.00033318	0.00003574
591370.00	2369940.00	0.00078079	0.0003028	0.00027109	0.0000317	0.00208927	0.00037574	0.00034207	0.00003367
591870.00	2369940.00	0.00202927	0.0003194	0.0002916	0.0000278	0.00144552	0.00033138	0.0003011	0.00003028
592370.00	2369940.00	0.0018741	0.00029613	0.00027205	0.00002408	0.00082405	0.00029056	0.00026419	0.00002637
592870.00	2369940.00	0.00070704	0.00024117	0.0002202	0.00002098	0.00044694	0.00025165	0.00022906	0.00002259

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2369940.00	0.00040515	0.0002177	0.00019856	0.00001913	0.0003734	0.00023213	0.00021236	0.00001977
593870.00	2369940.00	0.00024023	0.00019449	0.00017648	0.00001801	0.0002765	0.0002059	0.00018822	0.00001768
594370.00	2369940.00	0.00026554	0.00020706	0.00018815	0.00001892	0.00030029	0.00021323	0.00019518	0.00001805
594870.00	2369940.00	0.00040988	0.00024534	0.00022517	0.00002017	0.00037937	0.00024151	0.00022222	0.00001929
595370.00	2369940.00	0.00086735	0.00030357	0.00028246	0.0000211	0.00051942	0.00027753	0.00025692	0.00002061
595870.00	2369940.00	0.00153438	0.00034991	0.00032838	0.00002153	0.00083356	0.00032914	0.00030761	0.00002153
596370.00	2369940.00	0.00173859	0.00036549	0.00034444	0.00002105	0.00110998	0.00036468	0.00034299	0.00002169
596870.00	2369940.00	0.00160196	0.0003633	0.00034357	0.00001973	0.00129526	0.00038434	0.00036339	0.00002095
597370.00	2369940.00	0.00114869	0.00034274	0.00032471	0.00001803	0.00162254	0.00039843	0.00037887	0.00001955
597870.00	2369940.00	0.0010995	0.00032895	0.00031272	0.00001623	0.00143469	0.00038142	0.00036372	0.0000177
598370.00	2369940.00	0.00086243	0.00030382	0.00028901	0.00001481	0.0014105	0.00036067	0.00034463	0.00001604
598870.00	2369940.00	0.0006492	0.00027893	0.0002651	0.00001383	0.00134677	0.00033634	0.00032157	0.00001477
599370.00	2369940.00	0.00056114	0.00026043	0.00024719	0.00001324	0.00123524	0.00031219	0.00029833	0.00001386
599870.00	2369940.00	0.00047697	0.00024571	0.00023265	0.00001306	0.00111484	0.00029241	0.00027901	0.0000134
600370.00	2369940.00	0.00038358	0.00023351	0.00022022	0.00001329	0.0008021	0.00027169	0.00025831	0.00001338
600870.00	2369940.00	0.00032483	0.00022575	0.00021176	0.00001399	0.00051809	0.00025825	0.00024424	0.00001401
601370.00	2369940.00	0.00041423	0.00021913	0.00020486	0.00001428	0.00082021	0.00025445	0.00024035	0.0000141
601870.00	2369940.00	0.00043155	0.00021248	0.00019773	0.00001475	0.00082837	0.00024721	0.00023254	0.00001467
602370.00	2369940.00	0.00042851	0.00020539	0.00019036	0.00001503	0.000807	0.0002394	0.0002243	0.0000151
602870.00	2369940.00	0.00040433	0.0001976	0.00018252	0.00001508	0.00079559	0.00023207	0.00021678	0.00001529
603370.00	2369940.00	0.00041815	0.00019098	0.00017601	0.00001497	0.0007863	0.00022392	0.00020869	0.00001523
603870.00	2369940.00	0.00033376	0.00018052	0.00016552	0.00001499	0.00064214	0.0002136	0.00019841	0.00001519
604370.00	2369940.00	0.00043418	0.00017677	0.00016187	0.0000149	0.00076179	0.00020699	0.00019199	0.000015
604870.00	2369940.00	0.0003817	0.00016732	0.00015219	0.00001513	0.00076217	0.00019912	0.00018401	0.0000151
605370.00	2369940.00	0.00042482	0.00016189	0.00014645	0.00001544	0.00073842	0.00019017	0.00017487	0.0000153
605870.00	2369940.00	0.00043459	0.00015558	0.00013967	0.00001591	0.00070491	0.00018168	0.00016602	0.00001566
606370.00	2369940.00	0.00042844	0.00014923	0.00013278	0.00001645	0.00069573	0.0001742	0.00015807	0.00001613
606870.00	2369940.00	0.00038788	0.00014222	0.0001252	0.00001702	0.0007153	0.00016786	0.0001512	0.00001666
607370.00	2369940.00	0.00052645	0.00014278	0.00012527	0.00001751	0.00054013	0.00015713	0.00014002	0.0000171
607870.00	2369940.00	0.00038154	0.00013289	0.00011491	0.00001798	0.0006888	0.00015564	0.00013806	0.00001758
608370.00	2369940.00	0.00042086	0.00013068	0.00011239	0.00001828	0.00064563	0.00015005	0.00013215	0.0000179
608870.00	2369940.00	0.00036753	0.00012522	0.0001068	0.00001843	0.00067565	0.00014614	0.00012805	0.00001809
609370.00	2369940.00	0.00025553	0.00011932	0.00010088	0.00001844	0.00039868	0.00013913	0.00012083	0.0000183
609870.00	2369940.00	0.00048289	0.00012386	0.0001057	0.00001816	0.00055927	0.00013688	0.00011896	0.00001792
610370.00	2369940.00	0.00048011	0.00012098	0.00010323	0.00001775	0.00056045	0.00013349	0.00011591	0.00001758
610870.00	2369940.00	0.00049598	0.00011891	0.00010172	0.00001718	0.00053825	0.00012944	0.00011236	0.00001708
611370.00	2369940.00	0.00038354	0.00011162	0.00009511	0.00001651	0.00065221	0.00012821	0.00011172	0.00001649
611870.00	2369940.00	0.00030253	0.00010576	0.00008996	0.0000158	0.00065313	0.00012581	0.00010994	0.00001587
612370.00	2369940.00	0.00045355	0.00010944	0.0000945	0.00001494	0.00071955	0.000123	0.00010798	0.00001502
612870.00	2369940.00	0.00041722	0.00010549	0.00009138	0.00001412	0.00072941	0.00012069	0.00010643	0.00001425
613370.00	2369940.00	0.00037086	0.00010123	0.00008791	0.00001332	0.00072603	0.00011846	0.00010495	0.0000135
613870.00	2369940.00	0.00050857	0.00010437	0.00009201	0.00001236	0.00049572	0.00010955	0.00009703	0.00001252
614370.00	2369940.00	0.00047202	0.00009915	0.00008786	0.00001129	0.00032526	0.00009447	0.00008286	0.00001161
614870.00	2369940.00	0.00065563	0.00010512	0.00009441	0.00001072	0.00045815	0.0001002	0.00008928	0.00001092
615370.00	2369940.00	0.00046934	0.00009674	0.0000865	0.00001023	0.00066792	0.00010673	0.00009627	0.00001046
615870.00	2369940.00	0.00053305	0.00009715	0.00008762	0.00000953	0.00061814	0.0001036	0.00009387	0.00000973
616370.00	2369940.00	0.00057897	0.00009686	0.00008798	0.00000888	0.00057069	0.00010018	0.00009113	0.00000905
616870.00	2369940.00	0.00058829	0.00009515	0.00008704	0.00000811	0.00040197	0.00008955	0.00008126	0.00000829
617370.00	2369940.00	0.00051169	0.00009045	0.00008296	0.00000749	0.00034891	0.00008529	0.0000776	0.0000077
617870.00	2369940.00	0.00046986	0.00008721	0.00008026	0.00000696	0.00032448	0.00008252	0.00007537	0.00000715
618370.00	2369940.00	0.00022349	0.00007232	0.00006604	0.00000628	0.00022505	0.0000749	0.00006849	0.00000641
618870.00	2369940.00	0.00018719	0.00006847	0.00006269	0.00000579	0.00020887	0.00007188	0.000066	0.00000588
619370.00	2369940.00	0.00016842	0.00006545	0.00006016	0.00000529	0.00019476	0.00006902	0.00006368	0.00000534
619870.00	2369940.00	0.00017898	0.00006546	0.00006044	0.00000502	0.00020135	0.00006869	0.00006365	0.00000504
590370.00	2370440.00	0.00045546	0.0003214	0.00028726	0.00003413	0.00078164	0.00036773	0.00033366	0.00003408
590870.00	2370440.00	0.00045342	0.00030152	0.00026875	0.00003277	0.00090627	0.00035061	0.00031685	0.00003375
591370.00	2370440.00	0.00062644	0.00028641	0.00025645	0.00002996	0.00184955	0.00035527	0.0003235	0.00003177
591870.00	2370440.00	0.0011081	0.00028271	0.00025617	0.00002655	0.0021189	0.00034111	0.00031239	0.00002872
592370.00	2370440.00	0.00204075	0.0002938	0.00027067	0.00002312	0.00132814	0.00029761	0.00027247	0.00002514
592870.00	2370440.00	0.00166331	0.00026935	0.00024897	0.00002038	0.00071942	0.00026062	0.00023882	0.00002181
593370.00	2370440.00	0.0007837	0.00023121	0.00021261	0.0000186	0.00043864	0.00023239	0.00021316	0.00001923
593870.00	2370440.00	0.00036333	0.00020782	0.00018997	0.00001785	0.00034729	0.00021678	0.00019912	0.00001766
594370.00	2370440.00	0.00025681	0.00019813	0.00018015	0.00001799	0.00029176	0.00020469	0.0001875	0.00001719
594870.00	2370440.00	0.00043861	0.00023766	0.00021849	0.00001917	0.00037672	0.00023197	0.00021363	0.00001834
595370.00	2370440.00	0.00077981	0.00028442	0.00026434	0.00002008	0.00048197	0.00026111	0.00024157	0.00001953
595870.00	2370440.00	0.00133167	0.00032834	0.00030772	0.00002062	0.00071568	0.00030471	0.0002842	0.00002051
596370.00	2370440.00	0.00164566	0.00034962	0.0003292	0.00002042	0.00096301	0.00034069	0.00031985	0.00002085
596870.00	2370440.00	0.0014896	0.00034726	0.00032782	0.00001944	0.00137134	0.00037129	0.00035087	0.00002042
597370.00	2370440.00	0.00141925	0.00034404	0.00032621	0.00001783	0.00128886	0.00037322	0.00035404	0.00001919
597870.00	2370440.00	0.00117355	0.00032615	0.00030999	0.00001616	0.00135336	0.00036872	0.00035115	0.00001757

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2370440.00	0.00091956	0.0003035	0.0002888	0.0000147	0.00137436	0.00035624	0.00034029	0.00001595
598870.00	2370440.00	0.00071867	0.00027994	0.00026634	0.0000136	0.00132867	0.00033415	0.00031956	0.00001459
599370.00	2370440.00	0.00050594	0.00025719	0.00024427	0.00001291	0.00119578	0.00031053	0.00029687	0.00001366
599870.00	2370440.00	0.00046318	0.00024268	0.00023015	0.00001253	0.00109446	0.00028973	0.00027674	0.00001299
600370.00	2370440.00	0.00032809	0.00023033	0.0002176	0.00001273	0.00055744	0.0002651	0.00025204	0.00001306
600870.00	2370440.00	0.00039133	0.00022242	0.00020962	0.0000128	0.00080667	0.00025745	0.00024467	0.00001278
601370.00	2370440.00	0.0004041	0.00021579	0.00020252	0.00001327	0.00079673	0.00024902	0.00023591	0.00001311
601870.00	2370440.00	0.00037967	0.00020823	0.00019441	0.00001382	0.0007958	0.00024264	0.00022897	0.00001367
602370.00	2370440.00	0.00031609	0.0002001	0.00018577	0.00001433	0.00057246	0.00023181	0.00021751	0.0000143
602870.00	2370440.00	0.00039204	0.00019558	0.0001812	0.00001439	0.00077264	0.00022837	0.00021388	0.00001449
603370.00	2370440.00	0.00039835	0.00018929	0.00017493	0.00001436	0.00071989	0.00021969	0.00020512	0.00001457
603870.00	2370440.00	0.0004664	0.00018522	0.00017101	0.00001421	0.00070257	0.00021178	0.00019734	0.00001444
604370.00	2370440.00	0.00043505	0.00017713	0.00016298	0.00001414	0.00072564	0.00020513	0.0001908	0.00001433
604870.00	2370440.00	0.00039793	0.00016868	0.00015447	0.0000142	0.000735	0.00019784	0.00018355	0.00001429
605370.00	2370440.00	0.00033252	0.00015931	0.00014486	0.00001445	0.00066858	0.00018929	0.00017487	0.00001442
605870.00	2370440.00	0.00039861	0.00015515	0.00014044	0.00001472	0.00071362	0.00018207	0.00016749	0.00001457
606370.00	2370440.00	0.00041614	0.0001496	0.00013446	0.00001514	0.00068809	0.00017428	0.00015937	0.00001491
606870.00	2370440.00	0.0003355	0.00014085	0.00012517	0.00001568	0.00068544	0.00016802	0.00015262	0.00001539
607370.00	2370440.00	0.00038692	0.00013761	0.00012145	0.00001616	0.00068236	0.00016101	0.00014519	0.00001582
607870.00	2370440.00	0.00027851	0.00012941	0.00011269	0.00001673	0.00051181	0.00015304	0.00013665	0.00001639
608370.00	2370440.00	0.00045805	0.00013181	0.00011474	0.00001707	0.00058146	0.00014862	0.00013195	0.00001667
608870.00	2370440.00	0.00049823	0.00012981	0.00011242	0.00001739	0.00050217	0.00014134	0.00012435	0.00001699
609370.00	2370440.00	0.00046877	0.00012559	0.00010802	0.00001757	0.00054728	0.00013939	0.00012219	0.0000172
609870.00	2370440.00	0.00051265	0.00012445	0.00010686	0.00001759	0.0004578	0.00013124	0.00011397	0.00001727
610370.00	2370440.00	0.00024491	0.00011296	0.00009547	0.00001748	0.00038114	0.00013131	0.00011391	0.0000174
610870.00	2370440.00	0.00024266	0.00011024	0.00009306	0.00001718	0.00037996	0.00012819	0.00011103	0.00001716
611370.00	2370440.00	0.00026071	0.00010685	0.00009021	0.00001663	0.00050287	0.00012528	0.00010871	0.00001657
611870.00	2370440.00	0.00049404	0.00011341	0.00009741	0.000016	0.0004804	0.00012043	0.00010452	0.00001591
612370.00	2370440.00	0.00026487	0.00010193	0.00008653	0.00001539	0.00053437	0.00012016	0.00010472	0.00001544
612870.00	2370440.00	0.00034102	0.00010254	0.00008792	0.00001462	0.00069726	0.00012022	0.00010555	0.00001468
613370.00	2370440.00	0.00023698	0.0000966	0.00008257	0.00001403	0.00040591	0.00011268	0.00009847	0.00001421
613870.00	2370440.00	0.00050602	0.00010448	0.00009152	0.00001295	0.00045838	0.00010799	0.00009495	0.00001305
614370.00	2370440.00	0.00040002	0.00009544	0.00008349	0.00001196	0.00029201	0.00009294	0.00008072	0.00001222
614870.00	2370440.00	0.00038852	0.00009278	0.00008161	0.00001117	0.00028315	0.00009036	0.00007891	0.00001145
615370.00	2370440.00	0.00063303	0.00010249	0.00009186	0.00001063	0.0004367	0.00009738	0.00008658	0.0000108
615870.00	2370440.00	0.0006127	0.0000998	0.00008986	0.00000993	0.00041652	0.00009389	0.00008377	0.00001012
616370.00	2370440.00	0.00055385	0.00009564	0.0000864	0.00000924	0.00037191	0.00008975	0.00008028	0.00000947
616870.00	2370440.00	0.00054528	0.00009364	0.00008499	0.00000864	0.00036793	0.00008791	0.00007904	0.00000887
617370.00	2370440.00	0.00033055	0.00008136	0.00007345	0.00000791	0.00025448	0.00008002	0.00007184	0.00000818
617870.00	2370440.00	0.00022016	0.00007318	0.00006587	0.00000731	0.00022373	0.00007588	0.00006836	0.00000752
618370.00	2370440.00	0.00017295	0.00006865	0.00006194	0.00000671	0.00020083	0.00007244	0.00006557	0.00000688
618870.00	2370440.00	0.00017463	0.00006765	0.00006138	0.00000627	0.00020093	0.00007132	0.00006492	0.00000641
619370.00	2370440.00	0.00018231	0.00006724	0.00006135	0.00000588	0.0002039	0.00007053	0.00006454	0.00000599
619870.00	2370440.00	0.00055867	0.00008483	0.00007886	0.00000596	0.00040901	0.00008185	0.00007586	0.00000598
590370.00	2370940.00	0.00043895	0.00030752	0.00027519	0.00003233	0.00074693	0.00035095	0.00031861	0.00003234
590870.00	2370940.00	0.00043561	0.00028882	0.00025784	0.00003098	0.00085838	0.00033467	0.00030273	0.00003193
591370.00	2370940.00	0.00045324	0.00027106	0.0002426	0.00002846	0.00114898	0.00032361	0.00029345	0.00003016
591870.00	2370940.00	0.00067883	0.00026053	0.00023521	0.00002532	0.00202487	0.00032847	0.00030119	0.00002728
592370.00	2370940.00	0.00111998	0.00025414	0.00023242	0.00002172	0.00053508	0.00025684	0.00023319	0.00002366
592870.00	2370940.00	0.00097421	0.00023704	0.00021773	0.00001931	0.00048337	0.00023835	0.00021769	0.00002065
593370.00	2370940.00	0.00045482	0.000208	0.00019036	0.00001763	0.0003703	0.00021814	0.00019993	0.00001821
593870.00	2370940.00	0.00030815	0.00019633	0.00017937	0.00001697	0.00032389	0.00020699	0.0001902	0.00001679
594370.00	2370940.00	0.00024623	0.00018948	0.00017238	0.00001711	0.00028101	0.00019642	0.00018006	0.00001637
594870.00	2370940.00	0.00041064	0.00022508	0.00020686	0.00001822	0.0003588	0.00022082	0.00020341	0.00001742
595370.00	2370940.00	0.00078092	0.00027141	0.00025229	0.00001913	0.00046761	0.0002489	0.00023035	0.00001855
595870.00	2370940.00	0.00125979	0.00031145	0.0002917	0.00001975	0.00067142	0.00028776	0.00026824	0.00001953
596370.00	2370940.00	0.00158739	0.00033417	0.0003144	0.00001977	0.00091069	0.00032254	0.00030254	0.00002001
596870.00	2370940.00	0.00159002	0.00034167	0.00032267	0.000019	0.00102391	0.00034318	0.0003234	0.00001979
597370.00	2370940.00	0.001481	0.00033817	0.00032052	0.00001765	0.00114936	0.00035613	0.00033729	0.00001884
597870.00	2370940.00	0.00115056	0.00032055	0.00030443	0.00001612	0.00137498	0.00036429	0.00034685	0.00001745
598370.00	2370940.00	0.00086266	0.00029865	0.00028398	0.00001467	0.00142508	0.00035351	0.00033758	0.00001592
598870.00	2370940.00	0.00075734	0.00027985	0.0002664	0.00001345	0.00131456	0.0003319	0.00031742	0.00001448
599370.00	2370940.00	0.00060256	0.00025905	0.00024644	0.00001261	0.00123749	0.00030991	0.00029651	0.00001339
599870.00	2370940.00	0.00038756	0.00023882	0.00022663	0.00001219	0.000882	0.00028372	0.00027092	0.0000128
600370.00	2370940.00	0.00033217	0.0002269	0.00021484	0.00001207	0.00062898	0.00026315	0.00025068	0.00001247
600870.00	2370940.00	0.00038876	0.00021906	0.00020703	0.00001203	0.00080266	0.00025346	0.00024135	0.00001211
601370.00	2370940.00	0.00041447	0.000213	0.00020065	0.00001235	0.00079409	0.0002443	0.00023205	0.00001225
601870.00	2370940.00	0.0003621	0.00020496	0.00019207	0.00001289	0.00076969	0.00023776	0.00022502	0.00001273
602370.00	2370940.00	0.00029574	0.00019825	0.00018469	0.00001356	0.00046593	0.00022632	0.0002128	0.00001352
602870.00	2370940.00	0.00040599	0.00019412	0.00018049	0.00001363	0.00075239	0.00022405	0.00021043	0.00001362

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2370940.00	0.00039696	0.0001879	0.00017416	0.00001374	0.00074053	0.00021763	0.00020376	0.00001387
603870.00	2370940.00	0.00035604	0.00018042	0.0001667	0.00001372	0.00072025	0.00021132	0.00019739	0.00001393
604370.00	2370940.00	0.00042253	0.00017652	0.00016297	0.00001355	0.00070422	0.00020324	0.00018947	0.00001377
604870.00	2370940.00	0.00039819	0.00016909	0.0001556	0.00001349	0.00070926	0.00019647	0.00018281	0.00001366
605370.00	2370940.00	0.00042008	0.00016337	0.00014984	0.00001353	0.00068265	0.00018856	0.00017497	0.00001359
605870.00	2370940.00	0.0003895	0.00015573	0.000142	0.00001373	0.00070061	0.00018189	0.0001682	0.00001369
606370.00	2370940.00	0.00039905	0.00014988	0.00013585	0.00001403	0.00068479	0.00017447	0.00016058	0.00001389
606870.00	2370940.00	0.00035672	0.00014242	0.00012796	0.00001445	0.00068899	0.00016802	0.00015378	0.00001424
607370.00	2370940.00	0.00042374	0.00013959	0.00012472	0.00001488	0.0006327	0.00016036	0.00014577	0.00001459
607870.00	2370940.00	0.00041563	0.00013443	0.00011907	0.00001536	0.0006237	0.00015428	0.00013925	0.00001503
608370.00	2370940.00	0.00048472	0.00013277	0.00011696	0.00001581	0.00052124	0.0001465	0.00013106	0.00001544
608870.00	2370940.00	0.00030199	0.00012215	0.00010588	0.00001627	0.00061982	0.00014474	0.00012883	0.00001591
609370.00	2370940.00	0.00024689	0.00011804	0.00010139	0.00001665	0.00038251	0.00013702	0.00012064	0.00001639
609870.00	2370940.00	0.00024303	0.00011494	0.00009812	0.00001682	0.00037635	0.00013331	0.00011671	0.00001659
610370.00	2370940.00	0.00041297	0.0001173	0.00010049	0.00001681	0.0005664	0.00013155	0.00011507	0.00001648
610870.00	2370940.00	0.00034155	0.00011195	0.00009526	0.00001669	0.00061989	0.00012909	0.00011266	0.00001643
611370.00	2370940.00	0.0002719	0.00010686	0.00009042	0.00001644	0.00056192	0.0001261	0.00010984	0.00001626
611870.00	2370940.00	0.0002356	0.00010541	0.00008918	0.00001623	0.00037021	0.00012247	0.00010617	0.0000163
612370.00	2370940.00	0.00048712	0.00011064	0.00009513	0.00001551	0.00045464	0.00011636	0.00010098	0.00001538
612870.00	2370940.00	0.00022995	0.00009913	0.00008408	0.00001505	0.00037214	0.00011497	0.00009985	0.00001512
613370.00	2370940.00	0.00046398	0.00010524	0.00009103	0.00001421	0.00050121	0.00011334	0.00009916	0.00001418
613870.00	2370940.00	0.00022722	0.00009535	0.00008147	0.00001388	0.00036518	0.0001109	0.00009681	0.00001409
614370.00	2370940.00	0.00040872	0.00009649	0.0000839	0.00001259	0.00029168	0.00009355	0.00008079	0.00001276
614870.00	2370940.00	0.00036964	0.0000923	0.00008049	0.00001181	0.00027191	0.00009021	0.00007819	0.00001202
615370.00	2370940.00	0.00036163	0.00008987	0.00007881	0.00001106	0.00026812	0.00008788	0.00007658	0.0000113
615870.00	2370940.00	0.00043384	0.00009174	0.00008135	0.00001038	0.00029931	0.0000878	0.00007717	0.00001063
616370.00	2370940.00	0.00049544	0.00009324	0.00008346	0.00000977	0.00033213	0.00008785	0.00007784	0.00001001
616870.00	2370940.00	0.00027201	0.0000798	0.00007077	0.00000903	0.00023572	0.0000804	0.00007112	0.00000928
617370.00	2370940.00	0.00021835	0.00007487	0.00006646	0.00000841	0.0002206	0.00007759	0.00006896	0.00000864
617870.00	2370940.00	0.00017123	0.00006986	0.0000621	0.00000776	0.00020138	0.00007381	0.00006586	0.00000795
618370.00	2370940.00	0.00044514	0.00008501	0.00007749	0.00000752	0.00030578	0.00008034	0.00007258	0.00000776
618870.00	2370940.00	0.00056988	0.00008855	0.00008133	0.00000722	0.00040534	0.00008443	0.0000771	0.00000734
619370.00	2370940.00	0.00040949	0.00008183	0.00007482	0.00000701	0.00057805	0.00008931	0.00008218	0.00000712
619870.00	2370940.00	0.00037975	0.00007937	0.00007275	0.00000662	0.00057583	0.00008762	0.00008091	0.00000671
590370.00	2371440.00	0.000424	0.00029526	0.00026454	0.00003072	0.0007103	0.00033604	0.00030522	0.00003082
590870.00	2371440.00	0.00041537	0.00027771	0.00024832	0.00002939	0.00076716	0.00031952	0.00028917	0.00003035
591370.00	2371440.00	0.00042134	0.00026038	0.00023336	0.00002702	0.00098574	0.00030711	0.00027851	0.0000286
591870.00	2371440.00	0.00089662	0.00025791	0.00023392	0.000024	0.00202438	0.00031618	0.00029039	0.00002579
592370.00	2371440.00	0.00154574	0.0002604	0.00023957	0.00002084	0.0006772	0.00025466	0.00023209	0.00002257
592870.00	2371440.00	0.00024738	0.00018721	0.00016927	0.00001795	0.00029685	0.00020658	0.0001873	0.00001927
593370.00	2371440.00	0.00022916	0.0001781	0.00016176	0.00001633	0.00027308	0.0001937	0.0001768	0.0000169
593870.00	2371440.00	0.00021518	0.00017293	0.00015734	0.00001559	0.00024655	0.0001834	0.00016799	0.00001541
594370.00	2371440.00	0.00024375	0.00018287	0.00016651	0.00001636	0.0002778	0.00018998	0.0001743	0.00001569
594870.00	2371440.00	0.00040596	0.00021575	0.00019839	0.00001735	0.00034858	0.00021172	0.00019513	0.00001659
595370.00	2371440.00	0.00076478	0.00025856	0.00024033	0.00001823	0.00045891	0.00023745	0.00021981	0.00001764
595870.00	2371440.00	0.00120168	0.00029589	0.00027698	0.00001891	0.00063477	0.00027243	0.00025383	0.0000186
596370.00	2371440.00	0.00150321	0.0003188	0.00029971	0.0000191	0.0008361	0.00030405	0.00028488	0.00001918
596870.00	2371440.00	0.00154706	0.0003273	0.0003087	0.0000186	0.00109657	0.00033196	0.0003128	0.00001917
597370.00	2371440.00	0.00142918	0.00032665	0.00030918	0.00001747	0.00117088	0.00034438	0.0003259	0.00001847
597870.00	2371440.00	0.00129415	0.00031893	0.00030293	0.000016	0.00117843	0.00034585	0.00032863	0.00001722
598370.00	2371440.00	0.00102878	0.00030084	0.00028627	0.00001457	0.00128516	0.00034404	0.00032826	0.00001578
598870.00	2371440.00	0.00068776	0.00027582	0.00026243	0.00001339	0.00135318	0.00033085	0.00031638	0.00001447
599370.00	2371440.00	0.00052664	0.00025571	0.00024324	0.00001247	0.00121458	0.00030893	0.00029558	0.00001334
599870.00	2371440.00	0.00056774	0.00024277	0.00023099	0.00001177	0.00114304	0.00028768	0.00027532	0.00001236
600370.00	2371440.00	0.00037419	0.00022525	0.00021372	0.00001152	0.00085902	0.00026595	0.00025399	0.00001196
600870.00	2371440.00	0.00039549	0.00021636	0.00020495	0.00001141	0.00080789	0.00025042	0.00023884	0.00001158
601370.00	2371440.00	0.00040815	0.00020968	0.00019809	0.00001159	0.0007861	0.00024021	0.00022864	0.00001157
601870.00	2371440.00	0.00038887	0.00020293	0.00019094	0.00001199	0.00075041	0.00023232	0.00022047	0.00001186
602370.00	2371440.00	0.00037898	0.00019678	0.00018431	0.00001246	0.00076194	0.00022681	0.00021451	0.0000123
602870.00	2371440.00	0.00038764	0.00019137	0.00017852	0.00001285	0.0007401	0.0002203	0.00020754	0.00001276
603370.00	2371440.00	0.00043122	0.00018734	0.00017427	0.00001306	0.00069382	0.00021282	0.00019974	0.00001308
603870.00	2371440.00	0.00037465	0.00017989	0.00016674	0.00001315	0.00071318	0.00020825	0.00019495	0.00001329
604370.00	2371440.00	0.00036961	0.000174	0.00016093	0.00001307	0.00070578	0.00020201	0.00018873	0.00001328
604870.00	2371440.00	0.0003572	0.00016759	0.00015462	0.00001297	0.00069971	0.00019558	0.00018241	0.00001317
605370.00	2371440.00	0.00029491	0.00015928	0.00014628	0.000013	0.00054631	0.00018606	0.00017292	0.00001314
605870.00	2371440.00	0.00038969	0.00015648	0.00014354	0.00001294	0.00067829	0.00018122	0.00016823	0.00001299
606370.00	2371440.00	0.00030165	0.00014716	0.00013397	0.00001319	0.00059344	0.00017339	0.00016024	0.00001315
606870.00	2371440.00	0.00032277	0.00014205	0.00012861	0.00001344	0.00065321	0.0001679	0.00015458	0.00001332
607370.00	2371440.00	0.00033479	0.000137	0.0001232	0.00001379	0.00066058	0.00016151	0.00014791	0.0000136
607870.00	2371440.00	0.00033603	0.00013199	0.00011778	0.00001421	0.00065263	0.00015529	0.00014133	0.00001395

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m³-g)	Total dep rate/unit emission (g-s/m²-yr-g)	Dry dep rate/unit emission (g-s/m²-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m³-g)	Total dep rate/unit emission (g-s/m²-yr-g)	Dry dep rate/unit emission (g-s/m²-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2371440.00	0.00029863	0.00012612	0.00011144	0.00001468	0.00060732	0.00014933	0.00013494	0.00001438
608870.00	2371440.00	0.00045216	0.00012772	0.00011266	0.00001506	0.00052976	0.00014221	0.00012751	0.0000147
609370.00	2371440.00	0.00039487	0.00012199	0.00010652	0.00001547	0.00058088	0.00013854	0.00012345	0.00001509
609870.00	2371440.00	0.00043938	0.00012054	0.00010476	0.00001578	0.00051978	0.00013368	0.00011828	0.0000154
610370.00	2371440.00	0.0002371	0.00011113	0.00009509	0.00001605	0.00037717	0.00012865	0.00011286	0.00001579
610870.00	2371440.00	0.00047578	0.00011662	0.00010054	0.00001609	0.00043987	0.00012373	0.000108	0.00001574
611370.00	2371440.00	0.00041542	0.00011197	0.00009595	0.00001602	0.00052749	0.000124	0.00010828	0.00001572
611870.00	2371440.00	0.00046098	0.00011148	0.00009566	0.00001582	0.00046118	0.00011946	0.00010389	0.00001556
612370.00	2371440.00	0.00022715	0.00010102	0.0000855	0.00001553	0.00036661	0.00011677	0.00010133	0.00001545
612870.00	2371440.00	0.00046559	0.00010734	0.00009231	0.00001503	0.00045208	0.00011378	0.00009891	0.00001487
613370.00	2371440.00	0.00045802	0.00010493	0.00009045	0.00001448	0.0004735	0.00011192	0.00009756	0.00001437
613870.00	2371440.00	0.00022368	0.00009577	0.00008156	0.00001421	0.0003563	0.00011115	0.00009678	0.00001437
614370.00	2371440.00	0.00046832	0.00010007	0.00008696	0.00001311	0.00031214	0.00009545	0.00008227	0.00001318
614870.00	2371440.00	0.00045364	0.0000973	0.00008491	0.00001239	0.00030607	0.00009283	0.00008032	0.0000125
615370.00	2371440.00	0.00028792	0.00008636	0.00007471	0.00001165	0.00023768	0.00008639	0.00007458	0.00001181
615870.00	2371440.00	0.00026681	0.00008324	0.00007231	0.00001093	0.00023172	0.00008398	0.00007287	0.00001111
616370.00	2371440.00	0.00021067	0.00007762	0.00006739	0.00001022	0.00021382	0.00008046	0.00007007	0.0000104
616870.00	2371440.00	0.00020811	0.00007584	0.00006627	0.00000957	0.00021298	0.00007869	0.00006892	0.00000976
617370.00	2371440.00	0.00017299	0.00007171	0.00006282	0.00000889	0.00020043	0.00007559	0.00006651	0.00000908
617870.00	2371440.00	0.0001717	0.00007024	0.00006192	0.00000833	0.00019945	0.00007406	0.00006555	0.00000851
618370.00	2371440.00	0.00057847	0.00009058	0.00008238	0.0000082	0.00041451	0.00008681	0.00007848	0.00000833
618870.00	2371440.00	0.00024601	0.0000774	0.00006931	0.00000809	0.00048953	0.00009024	0.00008194	0.0000083
619370.00	2371440.00	0.00020793	0.00007531	0.00006744	0.00000786	0.00034274	0.00008607	0.00007794	0.00000812
619870.00	2371440.00	0.00020595	0.00007395	0.0000665	0.00000745	0.00033734	0.00008425	0.00007656	0.00000769
590370.00	2371940.00	0.00040991	0.00028289	0.00025371	0.00002918	0.00069433	0.00032152	0.00029221	0.0000293
590870.00	2371940.00	0.00040243	0.00026664	0.00023876	0.00002788	0.0007549	0.00030645	0.00027764	0.0000288
591370.00	2371940.00	0.00043374	0.00025091	0.00022529	0.00002562	0.00113535	0.00029944	0.00027237	0.00002707
591870.00	2371940.00	0.00128618	0.00026083	0.00023807	0.00002276	0.00172422	0.00029626	0.00027183	0.00002443
592370.00	2371940.00	0.00179188	0.00026122	0.0002412	0.00002002	0.00084019	0.00025276	0.00023119	0.00002158
592870.00	2371940.00	0.00030775	0.00019288	0.00017546	0.00001742	0.00033017	0.00021024	0.00019164	0.0000186
593370.00	2371940.00	0.0002012	0.00016311	0.00014796	0.00001514	0.00023417	0.00017709	0.00016129	0.00001581
593870.00	2371940.00	0.00021872	0.00017	0.00015482	0.00001518	0.00025649	0.0001811	0.00016606	0.00001504
594370.00	2371940.00	0.00027528	0.00018429	0.00016852	0.00001576	0.00029736	0.00019109	0.00017592	0.00001517
594870.00	2371940.00	0.00047102	0.00021281	0.00019622	0.00001658	0.00035585	0.00020587	0.00018999	0.00001589
595370.00	2371940.00	0.00072813	0.00024553	0.00022814	0.00001739	0.00043693	0.00022612	0.00020933	0.00001679
595870.00	2371940.00	0.00127716	0.00028559	0.00026746	0.00001813	0.0006651	0.00026322	0.00024548	0.00001774
596370.00	2371940.00	0.00145724	0.00030479	0.00028637	0.00001842	0.00080146	0.00028894	0.00027057	0.00001837
596870.00	2371940.00	0.00150369	0.00031591	0.00029781	0.00001811	0.0009048	0.00031008	0.00029156	0.00001852
597370.00	2371940.00	0.00142032	0.00031692	0.0002997	0.00001722	0.00111596	0.00032993	0.00031188	0.00001805
597870.00	2371940.00	0.00131511	0.00031287	0.00029697	0.0000159	0.00111838	0.00033411	0.00031711	0.000017
598370.00	2371940.00	0.00110977	0.00029879	0.00028428	0.00001451	0.00119191	0.00033197	0.00031631	0.00001566
598870.00	2371940.00	0.00075894	0.00027595	0.00026264	0.00001331	0.00132595	0.00032666	0.00031228	0.00001438
599370.00	2371940.00	0.00054278	0.00025513	0.00024279	0.00001234	0.00122699	0.00030782	0.00029456	0.00001325
599870.00	2371940.00	0.00059217	0.00024266	0.00023112	0.00001154	0.00113891	0.00028674	0.00027455	0.00001219
600370.00	2371940.00	0.00037985	0.00022392	0.00021274	0.00001118	0.00087947	0.00026523	0.00025354	0.00001169
600870.00	2371940.00	0.00042321	0.00021482	0.00020392	0.0000109	0.00081819	0.00024803	0.00023689	0.00001114
601370.00	2371940.00	0.0003832	0.00020603	0.00019505	0.00001098	0.00077377	0.00023704	0.00022599	0.00001105
601870.00	2371940.00	0.00037342	0.00019955	0.00018831	0.00001125	0.00073814	0.00022837	0.0002172	0.00001117
602370.00	2371940.00	0.00036432	0.00019371	0.00018205	0.00001166	0.00074681	0.00022266	0.00021116	0.00001151
602870.00	2371940.00	0.00033095	0.00018734	0.00017522	0.00001211	0.00069082	0.00021624	0.00020426	0.00001198
603370.00	2371940.00	0.00052353	0.0001887	0.00017639	0.00001231	0.00053332	0.00020323	0.000191	0.00001223
603870.00	2371940.00	0.00037464	0.00017835	0.00016578	0.00001257	0.00069386	0.0002049	0.00019228	0.00001262
604370.00	2371940.00	0.00035538	0.00017253	0.00015994	0.00001259	0.0006863	0.00019953	0.00018679	0.00001274
604870.00	2371940.00	0.00037468	0.00016781	0.00015533	0.00001248	0.00067775	0.00019324	0.00018057	0.00001268
605370.00	2371940.00	0.00036405	0.00016179	0.00014941	0.00001238	0.00067607	0.00018724	0.00017467	0.00001256
605870.00	2371940.00	0.0003002	0.0001537	0.0001413	0.0000124	0.00059429	0.00017983	0.00016731	0.00001252
606370.00	2371940.00	0.00034585	0.00014948	0.00013709	0.0000124	0.00066508	0.00017441	0.00016197	0.00001244
606870.00	2371940.00	0.00043582	0.00014719	0.00013468	0.00001251	0.00058423	0.00016598	0.00015351	0.00001246
607370.00	2371940.00	0.00031201	0.00013703	0.00012418	0.00001285	0.00062909	0.00016138	0.00014865	0.00001273
607870.00	2371940.00	0.00025307	0.00013118	0.00011778	0.0000134	0.00037306	0.00015122	0.00013793	0.00001329
608370.00	2371940.00	0.00046658	0.00013287	0.00011936	0.00001351	0.00050097	0.00014624	0.000133	0.00001325
608870.00	2371940.00	0.00028093	0.00012176	0.00010775	0.00001401	0.00056348	0.00014359	0.00012986	0.00001373
609370.00	2371940.00	0.00040127	0.00012223	0.00010787	0.00001436	0.00055657	0.00013801	0.00012399	0.00001402
609870.00	2371940.00	0.00045468	0.00012083	0.0001061	0.00001473	0.00047459	0.00013163	0.00011727	0.00001436
610370.00	2371940.00	0.00046893	0.00011838	0.00010333	0.00001505	0.00042568	0.00012568	0.00011101	0.00001467
610870.00	2371940.00	0.00046919	0.00011575	0.00010047	0.00001528	0.00041266	0.00012193	0.00010702	0.00001491
611370.00	2371940.00	0.00027389	0.00010607	0.00009068	0.00001539	0.00055881	0.00012421	0.00010912	0.00001509
611870.00	2371940.00	0.00022743	0.00010479	0.00008924	0.00001555	0.00035128	0.00012108	0.00010557	0.00001551
612370.00	2371940.00	0.00022378	0.00010197	0.00008661	0.00001536	0.00034651	0.00011774	0.00010242	0.00001531
612870.00	2371940.00	0.00027998	0.00009974	0.0000848	0.00001494	0.00056838	0.00011632	0.00010157	0.00001475

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2371940.00	0.00021833	0.00009645	0.00008181	0.00001464	0.00034637	0.00011121	0.00009661	0.0000146
613870.00	2371940.00	0.00025167	0.00009463	0.00008052	0.00001411	0.00051627	0.00011101	0.00009699	0.00001403
614370.00	2371940.00	0.00039822	0.00009736	0.00008387	0.00001349	0.00027746	0.00009384	0.00008034	0.00001349
614870.00	2371940.00	0.0004474	0.00009734	0.0000845	0.00001284	0.00029903	0.00009294	0.00008007	0.00001287
615370.00	2371940.00	0.00041144	0.00009383	0.00008166	0.00001216	0.00028376	0.00008989	0.00007765	0.00001224
615870.00	2371940.00	0.00025236	0.00008296	0.00007146	0.00001149	0.00022378	0.00008395	0.00007235	0.0000116
616370.00	2371940.00	0.00019454	0.00007722	0.00006643	0.0000108	0.0002056	0.00008036	0.00006944	0.00001092
616870.00	2371940.00	0.00020432	0.00007605	0.00006592	0.00001014	0.00020771	0.00007877	0.00006849	0.00001028
617370.00	2371940.00	0.00048182	0.00008982	0.00008018	0.00000964	0.00031926	0.00008442	0.00007461	0.0000098
617870.00	2371940.00	0.00053404	0.00009104	0.00008175	0.0000093	0.00051757	0.00009362	0.00008423	0.00000939
618370.00	2371940.00	0.00043614	0.00008482	0.0000763	0.00000851	0.00029654	0.0000801	0.00007137	0.00000873
618870.00	2371940.00	0.00055355	0.00008855	0.0000803	0.00000825	0.00046296	0.00008867	0.00008033	0.00000835
619370.00	2371940.00	0.00024875	0.00007625	0.00006819	0.00000805	0.000501	0.00008894	0.0000807	0.00000824
619870.00	2371940.00	0.0002016	0.00007457	0.00006658	0.00000799	0.00032337	0.0000852	0.00007692	0.00000828
590370.00	2372440.00	0.00039681	0.00027172	0.00024393	0.00002779	0.0006758	0.00030834	0.0002804	0.00002794
590870.00	2372440.00	0.00039113	0.00025632	0.00022982	0.0000265	0.00075242	0.00029451	0.00026713	0.00002737
591370.00	2372440.00	0.00042106	0.00024184	0.00021746	0.00002438	0.001103	0.00028802	0.00026229	0.00002573
591870.00	2372440.00	0.0008751	0.00024119	0.00021938	0.00002181	0.00188089	0.00029247	0.00026914	0.00002333
592370.00	2372440.00	0.00154194	0.00024625	0.00022714	0.00001912	0.00068503	0.00023875	0.00021818	0.00002057
592870.00	2372440.00	0.00039433	0.00019331	0.00017646	0.00001686	0.00034623	0.00020617	0.00018824	0.00001793
593370.00	2372440.00	0.0002294	0.00016938	0.00015414	0.00001525	0.00027088	0.00018342	0.00016768	0.00001574
593870.00	2372440.00	0.00022303	0.0001663	0.00015159	0.00001471	0.00026075	0.00017717	0.00016258	0.0000146
594370.00	2372440.00	0.00027444	0.00017901	0.00016392	0.0000151	0.00029195	0.00018547	0.00017092	0.00001456
594870.00	2372440.00	0.00037047	0.00019686	0.00018106	0.0000158	0.00032323	0.00019466	0.00017957	0.00001509
595370.00	2372440.00	0.00063494	0.00023034	0.00021374	0.0000166	0.00040207	0.000214	0.00019801	0.00001599
595870.00	2372440.00	0.00123371	0.00027239	0.00025503	0.00001736	0.0006362	0.00025044	0.00023351	0.00001693
596370.00	2372440.00	0.0014294	0.00029186	0.00027411	0.00001775	0.00078418	0.00027573	0.00025813	0.0000176
596870.00	2372440.00	0.00146712	0.0003034	0.00028579	0.00001761	0.00088108	0.00029593	0.00027806	0.00001787
597370.00	2372440.00	0.00142138	0.00030766	0.00029074	0.00001692	0.00103366	0.00031459	0.000297	0.00001759
597870.00	2372440.00	0.00131459	0.00030545	0.00028967	0.00001577	0.00107926	0.00032254	0.00030579	0.00001675
598370.00	2372440.00	0.00117743	0.00029638	0.00028193	0.00001445	0.00109496	0.00032178	0.00030626	0.00001553
598870.00	2372440.00	0.00093598	0.00027923	0.00026601	0.00001321	0.00118988	0.00031854	0.0003043	0.00001424
599370.00	2372440.00	0.0008251	0.00026301	0.00025087	0.00001214	0.00112366	0.00030189	0.00028889	0.000013
599870.00	2372440.00	0.0006816	0.00024476	0.00023341	0.00001135	0.00109766	0.00028444	0.00027242	0.00001201
600370.00	2372440.00	0.00040623	0.00022362	0.00021273	0.0000109	0.00095486	0.0002661	0.00025465	0.00001145
600870.00	2372440.00	0.00046142	0.0002142	0.0002037	0.0000105	0.00080758	0.00024574	0.00023494	0.00001079
601370.00	2372440.00	0.0003851	0.00020362	0.00019316	0.00001046	0.00076632	0.00023428	0.00022367	0.00001061
601870.00	2372440.00	0.00037912	0.00019697	0.00018637	0.0000106	0.00073996	0.00022502	0.00021443	0.00001059
602370.00	2372440.00	0.00038255	0.00019162	0.00018072	0.0000109	0.00071055	0.00021756	0.00020678	0.00001078
602870.00	2372440.00	0.00034974	0.00018549	0.00017416	0.00001133	0.00071296	0.00021275	0.00020158	0.00001117
603370.00	2372440.00	0.00029514	0.00017903	0.00016725	0.00001177	0.00058914	0.00020559	0.00019392	0.00001167
603870.00	2372440.00	0.00035171	0.00017582	0.00016385	0.00001197	0.00068007	0.00020187	0.00018993	0.00001194
604370.00	2372440.00	0.00034613	0.00017088	0.00015879	0.00001209	0.00066876	0.00019671	0.00018454	0.00001216
604870.00	2372440.00	0.00032823	0.00016539	0.00015332	0.00001207	0.00065366	0.00019146	0.00017922	0.00001223
605370.00	2372440.00	0.00031924	0.00015993	0.00014796	0.00001198	0.00064096	0.00018577	0.0001736	0.00001217
605870.00	2372440.00	0.00039122	0.00015715	0.00014534	0.00001182	0.00062813	0.0001788	0.00016682	0.00001199
606370.00	2372440.00	0.00028566	0.00014788	0.000136	0.00001188	0.0005535	0.00017225	0.00016026	0.00001199
606870.00	2372440.00	0.00035778	0.00014494	0.00013309	0.00001185	0.0006385	0.00016729	0.0001554	0.00001189
607370.00	2372440.00	0.00045101	0.00014308	0.00013112	0.00001197	0.00052132	0.00015836	0.00014644	0.00001192
607870.00	2372440.00	0.00026987	0.00013129	0.00011895	0.00001234	0.00050557	0.00015336	0.00014112	0.00001224
608370.00	2372440.00	0.0002714	0.00012647	0.00011382	0.00001264	0.00052371	0.00014821	0.00013574	0.00001248
608870.00	2372440.00	0.00024399	0.0001216	0.00010852	0.00001308	0.00038609	0.00014046	0.00012757	0.00001289
609370.00	2372440.00	0.00047267	0.00012514	0.00011186	0.00001328	0.00041856	0.00013323	0.00012023	0.00001299
609870.00	2372440.00	0.00034538	0.0001168	0.00010308	0.00001372	0.00057923	0.00013385	0.00012045	0.0000134
610370.00	2372440.00	0.00025433	0.00011049	0.00009637	0.00001412	0.00049505	0.00012932	0.00011551	0.00001381
610870.00	2372440.00	0.00022552	0.00010783	0.00009334	0.00001449	0.00034341	0.00012401	0.00010976	0.00001425
611370.00	2372440.00	0.0003379	0.00010796	0.00009335	0.00001461	0.00055564	0.00012249	0.00010823	0.00001426
611870.00	2372440.00	0.00042181	0.00010885	0.00009411	0.00001474	0.00046468	0.0001184	0.00010401	0.00001439
612370.00	2372440.00	0.00039483	0.00010576	0.00009101	0.00001475	0.00049101	0.00011625	0.00010181	0.00001443
612870.00	2372440.00	0.00036481	0.00010263	0.00008799	0.00001464	0.00051866	0.00011392	0.00009955	0.00001436
613370.00	2372440.00	0.00021389	0.00009613	0.00008165	0.00001448	0.00033467	0.00011049	0.00009611	0.00001438
613870.00	2372440.00	0.0003838	0.00009958	0.00008549	0.00001409	0.00049761	0.00010921	0.00009532	0.00001389
614370.00	2372440.00	0.00032469	0.0000934	0.00007967	0.00001373	0.00024731	0.00009216	0.00007851	0.00001365
614870.00	2372440.00	0.00026102	0.00008784	0.0000746	0.00001324	0.00022312	0.00008838	0.00007518	0.0000132
615370.00	2372440.00	0.00025547	0.00008559	0.00007296	0.00001263	0.00022097	0.00008624	0.00007361	0.00001262
615870.00	2372440.00	0.00022016	0.00008156	0.00006956	0.000012	0.00021073	0.00008346	0.00007144	0.00001202
616370.00	2372440.00	0.00018504	0.00007712	0.00006578	0.00001134	0.00019823	0.00008031	0.00006891	0.00001139
616870.00	2372440.00	0.00036555	0.00008602	0.00007534	0.00001068	0.00026247	0.00008322	0.00007242	0.00001079
617370.00	2372440.00	0.00029554	0.00008388	0.00007346	0.00001041	0.00059252	0.00009758	0.00008709	0.00001049
617870.00	2372440.00	0.00021063	0.00007936	0.00006932	0.00001004	0.0003709	0.0000916	0.0000814	0.0000102

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2372440.00	0.00021072	0.00007788	0.00006836	0.00000953	0.0003738	0.00008988	0.00008017	0.00000971
618870.00	2372440.00	0.00021167	0.00007649	0.00006746	0.00000903	0.00037968	0.00008825	0.00007902	0.00000922
619370.00	2372440.00	0.00020243	0.00007513	0.00006649	0.00000864	0.00034036	0.00008619	0.00007732	0.00000887
619870.00	2372440.00	0.00019876	0.00007474	0.00006634	0.0000084	0.00031959	0.00008563	0.00007693	0.00000869
590370.00	2372940.00	0.0003849	0.0002609	0.00023442	0.00002648	0.00067056	0.00029595	0.0002693	0.00002664
590870.00	2372940.00	0.0003855	0.00024656	0.00022135	0.00002521	0.00079356	0.00028431	0.00025828	0.00002603
591370.00	2372940.00	0.000457	0.00023447	0.00021126	0.0000232	0.00131769	0.00028381	0.00025936	0.00002445
591870.00	2372940.00	0.0011377	0.00024148	0.0002207	0.00002078	0.00166762	0.0002768	0.00025461	0.00002219
592370.00	2372940.00	0.00171823	0.00024579	0.00022738	0.00001841	0.00084016	0.00023727	0.00021754	0.00001973
592870.00	2372940.00	0.00082692	0.00020668	0.00019027	0.00001641	0.00042503	0.00020721	0.00018982	0.00001739
593370.00	2372940.00	0.0002965	0.00017578	0.00016087	0.00001491	0.00030472	0.00018785	0.00017249	0.00001537
593870.00	2372940.00	0.00019775	0.00015664	0.00014287	0.00001377	0.000227	0.00016632	0.00015263	0.00001369
594370.00	2372940.00	0.00021891	0.00016313	0.00014884	0.00001429	0.00025171	0.00017045	0.0001567	0.00001375
594870.00	2372940.00	0.00029275	0.00018274	0.0001677	0.00001504	0.0002939	0.00018428	0.00016995	0.00001433
595370.00	2372940.00	0.00065583	0.00022226	0.00020638	0.00001587	0.00039899	0.00020619	0.00019092	0.00001528
595870.00	2372940.00	0.00091593	0.00025063	0.00023406	0.00001657	0.00050244	0.00022964	0.00021352	0.00001613
596370.00	2372940.00	0.0012466	0.00027582	0.00025876	0.00001706	0.00066385	0.00025713	0.00024028	0.00001685
596870.00	2372940.00	0.00142268	0.00029126	0.00027417	0.00001709	0.00083375	0.00028181	0.00026459	0.00001722
597370.00	2372940.00	0.00139137	0.00029693	0.00028034	0.00001659	0.00100197	0.0003014	0.00028429	0.0000171
597870.00	2372940.00	0.00132066	0.00029802	0.00028241	0.00001561	0.00101802	0.00031005	0.0002936	0.00001645
598370.00	2372940.00	0.00114642	0.0002896	0.0002752	0.00001441	0.00112547	0.00031493	0.00029952	0.00001541
598870.00	2372940.00	0.0007928	0.00027092	0.00025768	0.00001324	0.00130462	0.00031709	0.00030282	0.00001427
599370.00	2372940.00	0.00087508	0.00026302	0.00025095	0.00001207	0.00108515	0.00029837	0.00028543	0.00001294
599870.00	2372940.00	0.0005818	0.00024072	0.00022949	0.00001123	0.00088246	0.00027708	0.00026514	0.00001194
600370.00	2372940.00	0.00038424	0.00022227	0.00021155	0.00001072	0.00088397	0.00026392	0.00025256	0.00001136
600870.00	2372940.00	0.00049502	0.00021401	0.00020383	0.00001019	0.0007841	0.00024379	0.00023326	0.00001053
601370.00	2372940.00	0.00039919	0.00020209	0.00019205	0.00001005	0.0008081	0.00023353	0.00022327	0.00001026
601870.00	2372940.00	0.00038816	0.00019474	0.00018468	0.00001006	0.00073545	0.00022204	0.00021192	0.00001012
602370.00	2372940.00	0.000372	0.00018865	0.00017838	0.00001027	0.0007047	0.00021424	0.00020404	0.0000102
602870.00	2372940.00	0.00036563	0.00018355	0.00017294	0.00001061	0.00071105	0.00020893	0.00019847	0.00001046
603370.00	2372940.00	0.00044046	0.00018141	0.00017047	0.00001094	0.00062832	0.00020088	0.00019012	0.00001076
603870.00	2372940.00	0.00036834	0.00017442	0.0001631	0.00001132	0.00066464	0.00019808	0.00018687	0.00001121
604370.00	2372940.00	0.00039222	0.00017078	0.00015927	0.00001152	0.00063037	0.00019231	0.00018081	0.0000115
604870.00	2372940.00	0.00035356	0.00016505	0.00015345	0.0000116	0.00064224	0.00018846	0.00017676	0.00001169
605370.00	2372940.00	0.00028374	0.0001582	0.00014658	0.00001162	0.00055457	0.00018267	0.00017089	0.00001178
605870.00	2372940.00	0.00029178	0.00015349	0.000142	0.00001149	0.00058232	0.00017787	0.00016619	0.00001168
606370.00	2372940.00	0.00032913	0.00014962	0.00013826	0.00001135	0.00063094	0.00017287	0.00016136	0.00001151
606870.00	2372940.00	0.00030571	0.00014357	0.00013223	0.00001134	0.00061144	0.00016704	0.0001556	0.00001144
607370.00	2372940.00	0.00038809	0.00014141	0.00013007	0.00001134	0.00058467	0.00016009	0.00014873	0.00001137
607870.00	2372940.00	0.00036567	0.00013548	0.00012397	0.0000115	0.00059757	0.00015479	0.00014333	0.00001146
608370.00	2372940.00	0.00042311	0.00013274	0.00012103	0.00001171	0.00052081	0.00014771	0.00013612	0.00001159
608870.00	2372940.00	0.00025484	0.00012215	0.00011003	0.00001212	0.00046606	0.0001421	0.00013014	0.00001197
609370.00	2372940.00	0.00024414	0.00011769	0.00010522	0.00001247	0.00042241	0.00013638	0.0001241	0.00001227
609870.00	2372940.00	0.00023228	0.00011588	0.00010276	0.00001311	0.00034441	0.00013302	0.00011997	0.00001304
610370.00	2372940.00	0.00039712	0.00011553	0.00010244	0.00001309	0.00050203	0.00012856	0.00011579	0.00001277
610870.00	2372940.00	0.00022563	0.00010706	0.00009353	0.00001354	0.00036288	0.00012323	0.00010996	0.00001327
611370.00	2372940.00	0.00021956	0.00010525	0.00009134	0.00001391	0.0003298	0.00012072	0.00010701	0.00001371
611870.00	2372940.00	0.00021647	0.00010248	0.00008839	0.00001409	0.0003277	0.00011751	0.00010363	0.00001389
612370.00	2372940.00	0.00021836	0.0000993	0.00008515	0.00001415	0.00036234	0.00011411	0.00010021	0.0000139
612870.00	2372940.00	0.0004132	0.00010391	0.00008974	0.00001417	0.00044037	0.00011212	0.00009829	0.00001383
613370.00	2372940.00	0.00043916	0.00010299	0.00008889	0.0000141	0.00038133	0.00010712	0.00009332	0.0000138
613870.00	2372940.00	0.00043088	0.00010091	0.000087	0.00001392	0.00039936	0.00010598	0.00009233	0.00001365
614370.00	2372940.00	0.00021389	0.00008681	0.00007291	0.0000139	0.00020711	0.00008903	0.00007531	0.00001371
614870.00	2372940.00	0.00021681	0.00008532	0.00007186	0.00001347	0.00020737	0.00008728	0.00007395	0.00001333
615370.00	2372940.00	0.00017978	0.00008069	0.00006766	0.00001303	0.00019337	0.00008398	0.00007104	0.00001294
615870.00	2372940.00	0.0001732	0.00007845	0.00006599	0.00001246	0.00019002	0.00008181	0.0000694	0.00001241
616370.00	2372940.00	0.00016205	0.00007577	0.00006393	0.00001185	0.00018394	0.00007938	0.00006755	0.00001183
616870.00	2372940.00	0.0002741	0.00008163	0.0000705	0.00001113	0.00022314	0.00008113	0.00006996	0.00001117
617370.00	2372940.00	0.00043533	0.00008939	0.00007867	0.00001071	0.00055341	0.00009572	0.00008502	0.0000107
617870.00	2372940.00	0.00023846	0.00008021	0.0000699	0.00001031	0.00048608	0.00009361	0.00008323	0.00001038
618370.00	2372940.00	0.00019928	0.00007796	0.00006798	0.00000998	0.00032962	0.00008956	0.00007943	0.00001013
618870.00	2372940.00	0.00019722	0.0000771	0.00006749	0.0000096	0.00031938	0.0000887	0.00007888	0.00000982
619370.00	2372940.00	0.0001963	0.00007585	0.00006668	0.00000917	0.00031726	0.00008717	0.00007776	0.00000941
619870.00	2372940.00	0.00019826	0.00007573	0.00006682	0.00000891	0.00032063	0.00008706	0.00007782	0.00000924
590370.00	2373440.00	0.00037373	0.00025115	0.00022586	0.00002529	0.00066029	0.00028466	0.00025918	0.00002548
590870.00	2373440.00	0.0003782	0.00023775	0.00021371	0.00002405	0.0008055	0.00027449	0.00024966	0.00002483
591370.00	2373440.00	0.00044906	0.00022665	0.00020449	0.00002216	0.0012984	0.00027415	0.00025083	0.00002332
591870.00	2373440.00	0.00135631	0.00024083	0.00022098	0.00001985	0.00141747	0.00026092	0.00023975	0.00002116
592370.00	2373440.00	0.00122346	0.00022357	0.000206	0.00001756	0.00053457	0.00021857	0.00019975	0.00001882
592870.00	2373440.00	0.00036902	0.00018178	0.00016616	0.00001562	0.00032699	0.00019327	0.00017672	0.00001655

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2373440.00	0.00019674	0.00015502	0.00014118	0.00001384	0.00022952	0.00016721	0.00015288	0.00001433
593870.00	2373440.00	0.00019974	0.00015319	0.0001399	0.00001329	0.00023711	0.00016393	0.00015071	0.00001322
594370.00	2373440.00	0.00020388	0.00015533	0.00014185	0.00001348	0.00024035	0.00016355	0.00015058	0.00001297
594870.00	2373440.00	0.0002432	0.00016993	0.0001556	0.00001433	0.000269	0.00017443	0.00016082	0.00001362
595370.00	2373440.00	0.00034479	0.00019158	0.00017644	0.00001513	0.00031073	0.00018826	0.00017382	0.00001443
595870.00	2373440.00	0.00085257	0.00023828	0.0002224	0.00001587	0.00047378	0.00021875	0.00020334	0.00001541
596370.00	2373440.00	0.00126847	0.00026548	0.00024906	0.00001642	0.00066868	0.00024709	0.00023095	0.00001614
596870.00	2373440.00	0.00139055	0.00027971	0.00026314	0.00001657	0.00083421	0.00026978	0.0002532	0.00001658
597370.00	2373440.00	0.00137332	0.00028712	0.0002709	0.00001622	0.00093515	0.0002871	0.0002705	0.0000166
597870.00	2373440.00	0.0012659	0.00028767	0.00027225	0.00001543	0.00104817	0.00030052	0.00028438	0.00001614
598370.00	2373440.00	0.00108428	0.00028114	0.0002668	0.00001435	0.00116499	0.0003077	0.00029244	0.00001526
598870.00	2373440.00	0.00102118	0.00027429	0.00026115	0.00001314	0.0010917	0.0003024	0.00028831	0.00001409
599370.00	2373440.00	0.00091297	0.00026163	0.0002496	0.00001203	0.00104607	0.00029182	0.00027892	0.00001289
599870.00	2373440.00	0.00061809	0.00024098	0.00022985	0.00001113	0.0008536	0.00027478	0.00026293	0.00001186
600370.00	2373440.00	0.00044149	0.00022304	0.00021252	0.00001052	0.00087306	0.00026137	0.00025025	0.00001113
600870.00	2373440.00	0.00046628	0.00021233	0.00020235	0.00000998	0.00079813	0.00024401	0.00023363	0.00001039
601370.00	2373440.00	0.00040401	0.00020079	0.00019106	0.00000972	0.00080734	0.00023225	0.00022226	0.00000999
601870.00	2373440.00	0.00038145	0.00019245	0.00018282	0.00000964	0.00076538	0.00022101	0.00021125	0.00000976
602370.00	2373440.00	0.00037665	0.00018635	0.00017663	0.00000973	0.00073211	0.00021221	0.0002025	0.00000971
602870.00	2373440.00	0.00036046	0.00018092	0.00017094	0.00000998	0.0007064	0.00020565	0.00019578	0.00000987
603370.00	2373440.00	0.00026781	0.00017388	0.00016343	0.00001045	0.00050002	0.00019708	0.00018676	0.00001033
603870.00	2373440.00	0.00032277	0.00017093	0.00016023	0.0000107	0.00065089	0.00019527	0.0001847	0.00001057
604370.00	2373440.00	0.00043134	0.00017031	0.00015939	0.00001092	0.00056635	0.00018725	0.00017643	0.00001082
604870.00	2373440.00	0.00033062	0.00016285	0.00015171	0.00001114	0.00063029	0.00018605	0.00017489	0.00001115
605370.00	2373440.00	0.00034	0.00015895	0.00014779	0.00001115	0.00062297	0.00018127	0.00017002	0.00001126
605870.00	2373440.00	0.00033137	0.00015425	0.00014317	0.00001108	0.00061934	0.00017662	0.00016538	0.00001124
606370.00	2373440.00	0.00024539	0.0001477	0.00013652	0.00001118	0.0003669	0.00016785	0.00015646	0.00001139
606870.00	2373440.00	0.00024352	0.00014278	0.00013167	0.00001111	0.00035895	0.00016239	0.00015107	0.00001131
607370.00	2373440.00	0.00046157	0.00014469	0.00013391	0.00001077	0.00043413	0.00015488	0.00014403	0.00001086
607870.00	2373440.00	0.0003176	0.00013441	0.00012349	0.00001092	0.00060238	0.00015533	0.00014439	0.00001094
608370.00	2373440.00	0.00028204	0.00012833	0.00011724	0.00001109	0.00056349	0.00014952	0.00013847	0.00001105
608870.00	2373440.00	0.00034343	0.00012591	0.00011466	0.00001126	0.00057707	0.00014399	0.00013284	0.00001115
609370.00	2373440.00	0.00025063	0.00011839	0.00010678	0.00001161	0.00046666	0.00013751	0.00012605	0.00001146
609870.00	2373440.00	0.00027342	0.00011504	0.00010316	0.00001188	0.0005452	0.00013434	0.00012266	0.00001168
610370.00	2373440.00	0.0002516	0.00011072	0.00009848	0.00001224	0.00048905	0.00012907	0.00011706	0.000012
610870.00	2373440.00	0.00027667	0.0001082	0.00009564	0.00001255	0.00054534	0.0001259	0.00011363	0.00001227
611370.00	2373440.00	0.00031603	0.00010667	0.00009381	0.00001286	0.00054116	0.0001216	0.00010906	0.00001254
611870.00	2373440.00	0.00042508	0.00010803	0.0000949	0.00001313	0.00040492	0.00011522	0.00010244	0.00001278
612370.00	2373440.00	0.00028679	0.00010076	0.00008738	0.00001339	0.00053598	0.00011569	0.00010263	0.00001306
612870.00	2373440.00	0.00020902	0.00009779	0.00008413	0.00001366	0.00031651	0.00011189	0.00009839	0.0000135
613370.00	2373440.00	0.00037395	0.00010005	0.00008645	0.0000136	0.00046208	0.00010939	0.00009612	0.00001327
613870.00	2373440.00	0.00042229	0.00010005	0.00008648	0.00001356	0.00038275	0.00010477	0.00009151	0.00001326
614370.00	2373440.00	0.00036518	0.00009552	0.00008202	0.0000135	0.00025535	0.00009287	0.0000796	0.00001327
614870.00	2373440.00	0.00029108	0.00008981	0.00007651	0.00001331	0.00022924	0.00008912	0.000076	0.00001312
615370.00	2373440.00	0.00021738	0.0000837	0.00007065	0.00001306	0.0002038	0.0000853	0.00007241	0.00001289
615870.00	2373440.00	0.00015965	0.00007756	0.00006477	0.00001278	0.0001801	0.00008113	0.00006847	0.00001266
616370.00	2373440.00	0.00015485	0.00007537	0.0000631	0.00001227	0.00017541	0.0000789	0.00006671	0.00001219
616870.00	2373440.00	0.00016747	0.00007504	0.00006344	0.0000116	0.00018429	0.0000782	0.00006665	0.00001155
617370.00	2373440.00	0.00039981	0.00008684	0.00007593	0.00001091	0.00026893	0.00008273	0.00007181	0.00001091
617870.00	2373440.00	0.00054993	0.00009155	0.0000811	0.00001045	0.0003832	0.00008838	0.00007799	0.0000104
618370.00	2373440.00	0.00024331	0.00007899	0.00006886	0.00001013	0.00049996	0.00009199	0.00008183	0.00001016
618870.00	2373440.00	0.00019368	0.0000771	0.00006716	0.00000994	0.00031235	0.00008864	0.00007854	0.0000101
619370.00	2373440.00	0.00019464	0.00007654	0.00006693	0.0000096	0.00031408	0.00008807	0.00007823	0.00000984
619870.00	2373440.00	0.00019588	0.00007599	0.00006671	0.00000928	0.00031788	0.00008746	0.00007788	0.00000958
590370.00	2373940.00	0.00036489	0.00024184	0.00021766	0.00002418	0.00066968	0.00027436	0.00024999	0.00002437
590870.00	2373940.00	0.00043129	0.00023064	0.00020772	0.00002292	0.00115088	0.00027385	0.00025023	0.00002362
591370.00	2373940.00	0.00047339	0.00022016	0.00019899	0.00002118	0.00138859	0.00026791	0.00024565	0.00002226
591870.00	2373940.00	0.0014875	0.00023796	0.00021897	0.00001899	0.00120839	0.00024689	0.00022666	0.00002022
592370.00	2373940.00	0.00074794	0.00020141	0.00018459	0.00001682	0.00040377	0.00020433	0.00018632	0.00001801
592870.00	2373940.00	0.00020093	0.00015743	0.00014275	0.00001468	0.00023961	0.00017173	0.00015609	0.00001564
593370.00	2373940.00	0.00019982	0.00015313	0.00013961	0.00001352	0.00023768	0.00016547	0.0001515	0.00001397
593870.00	2373940.00	0.00023961	0.00015898	0.00014572	0.00001326	0.00026673	0.00016895	0.00015574	0.0000132
594370.00	2373940.00	0.00021603	0.00015401	0.0001408	0.00001321	0.00024713	0.000161	0.00014823	0.00001277
594870.00	2373940.00	0.00021657	0.00015847	0.00014484	0.00001363	0.000256	0.0001645	0.00015157	0.00001293
595370.00	2373940.00	0.0003458	0.0001852	0.0001707	0.00001449	0.00030527	0.00018165	0.00016783	0.00001382
595870.00	2373940.00	0.00072256	0.00022245	0.00020725	0.0000152	0.00041705	0.00020479	0.00019007	0.00001472
596370.00	2373940.00	0.0012999	0.00025631	0.00024048	0.00001583	0.00069511	0.00023896	0.00022348	0.00001548
596870.00	2373940.00	0.0013518	0.00026863	0.00025259	0.00001604	0.00080378	0.00025766	0.0002417	0.00001596
597370.00	2373940.00	0.00132931	0.00027598	0.00026014	0.00001584	0.00093691	0.00027633	0.00026024	0.00001609
597870.00	2373940.00	0.00129253	0.00028091	0.00026573	0.00001518	0.00093793	0.00028637	0.00027061	0.00001577

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2373940.00	0.00118456	0.00027862	0.0002644	0.00001421	0.00100694	0.00029414	0.00027911	0.00001502
598870.00	2373940.00	0.00108174	0.00027207	0.00025899	0.00001308	0.00100459	0.00029343	0.00027945	0.00001398
599370.00	2373940.00	0.00092126	0.00025923	0.00024722	0.00001201	0.00103987	0.00028783	0.00027496	0.00001286
599870.00	2373940.00	0.00065767	0.00024068	0.00022963	0.00001105	0.00081033	0.0002696	0.00025782	0.00001179
600370.00	2373940.00	0.00047318	0.00022334	0.00021295	0.00001039	0.0008615	0.00025995	0.00024893	0.00001102
600870.00	2373940.00	0.00038896	0.00020952	0.00019965	0.00000987	0.00080326	0.00024492	0.00023455	0.00001037
601370.00	2373940.00	0.00037419	0.00019897	0.00018947	0.00000949	0.00079578	0.00023173	0.0002219	0.00000983
601870.00	2373940.00	0.00036349	0.00019031	0.000181	0.00000931	0.00075873	0.00021969	0.0002102	0.00000949
602370.00	2373940.00	0.0003659	0.00018385	0.00017456	0.00000929	0.00072657	0.00020995	0.00020061	0.00000934
602870.00	2373940.00	0.00036845	0.00017877	0.00016934	0.00000943	0.00066629	0.00020148	0.00019212	0.00000936
603370.00	2373940.00	0.00033558	0.00017333	0.0001636	0.00000973	0.00067189	0.00019697	0.00018737	0.0000096
603870.00	2373940.00	0.00032211	0.00016879	0.00015871	0.00001008	0.00064623	0.00019203	0.00018211	0.00000992
604370.00	2373940.00	0.00034068	0.0001654	0.00015502	0.00001038	0.00063248	0.00018727	0.00017702	0.00001025
604870.00	2373940.00	0.0003708	0.0001625	0.0001519	0.0000106	0.00059866	0.00018201	0.00017148	0.00001053
605370.00	2373940.00	0.00037322	0.00015873	0.00014802	0.00001071	0.00058274	0.00017758	0.00016684	0.00001074
605870.00	2373940.00	0.00036843	0.00015462	0.00014392	0.0000107	0.00057824	0.00017336	0.00016256	0.00001081
606370.00	2373940.00	0.00024477	0.00014674	0.00013597	0.00001076	0.00040352	0.00016689	0.00015596	0.00001094
606870.00	2373940.00	0.00031919	0.00014431	0.00013378	0.00001053	0.00059682	0.00016522	0.00015453	0.00001069
607370.00	2373940.00	0.00030593	0.00013923	0.00012878	0.00001045	0.00059104	0.00016027	0.00014969	0.00001058
607870.00	2373940.00	0.00024059	0.00013254	0.000122	0.00001054	0.00039459	0.00015138	0.00014075	0.00001064
608370.00	2373940.00	0.00024707	0.00012792	0.00011736	0.00001056	0.00044107	0.00014716	0.00013657	0.00001059
608870.00	2373940.00	0.00039446	0.00012856	0.00011798	0.00001057	0.00050649	0.00014277	0.00013224	0.00001052
609370.00	2373940.00	0.00024495	0.00011892	0.00010804	0.00001088	0.0004483	0.00013743	0.00012663	0.0000108
609870.00	2373940.00	0.00026958	0.00011554	0.00010445	0.0000111	0.00053562	0.00013448	0.00012353	0.00001095
610370.00	2373940.00	0.00023179	0.00011069	0.00009925	0.00001144	0.00040318	0.00012757	0.00011631	0.00001126
610870.00	2373940.00	0.00043208	0.000114	0.00010237	0.00001163	0.00038715	0.00012089	0.00010952	0.00001137
611370.00	2373940.00	0.00021405	0.00010508	0.00009286	0.00001222	0.0003167	0.00011988	0.00010781	0.00001207
611870.00	2373940.00	0.00040914	0.00010728	0.000095	0.00001228	0.00041305	0.00011559	0.00010363	0.00001196
612370.00	2373940.00	0.00020907	0.00009998	0.00008718	0.0000128	0.00031265	0.00011415	0.0001015	0.00001265
612870.00	2373940.00	0.00025634	0.00009723	0.0000844	0.00001283	0.00050665	0.00011242	0.0000999	0.00001252
613370.00	2373940.00	0.0003929	0.00010018	0.0000872	0.00001298	0.00041876	0.00010791	0.00009528	0.00001263
613870.00	2373940.00	0.00038857	0.00009826	0.0000852	0.00001306	0.00042114	0.00010585	0.00009313	0.00001273
614370.00	2373940.00	0.00022368	0.00008687	0.00007359	0.00001327	0.00020384	0.0000884	0.00007544	0.00001297
614870.00	2373940.00	0.00019855	0.0000837	0.00007048	0.00001323	0.00019557	0.00008598	0.00007304	0.00001295
615370.00	2373940.00	0.00017227	0.00007999	0.00006689	0.0000131	0.00018495	0.0000832	0.00007035	0.00001285
615870.00	2373940.00	0.00015432	0.00007694	0.00006402	0.00001292	0.00017343	0.00008043	0.00006771	0.00001272
616370.00	2373940.00	0.00014789	0.00007449	0.00006183	0.00001266	0.0001668	0.00007796	0.00006545	0.00001251
616870.00	2373940.00	0.00021658	0.00007898	0.00006719	0.0000118	0.00019907	0.00008012	0.00006843	0.00001169
617370.00	2373940.00	0.00025399	0.00008237	0.00007106	0.00001131	0.00051821	0.00009504	0.00008382	0.00001122
617870.00	2373940.00	0.00019846	0.00007906	0.00006812	0.00001094	0.00034256	0.00009031	0.00007938	0.00001093
618370.00	2373940.00	0.00019155	0.00007776	0.00006721	0.00001055	0.00031225	0.00008883	0.00007823	0.00001059
618870.00	2373940.00	0.00019097	0.00007739	0.00006713	0.00001026	0.00030603	0.00008891	0.00007851	0.0000104
619370.00	2373940.00	0.0001931	0.00007708	0.00006712	0.00000996	0.00031228	0.00008872	0.00007854	0.00001018
619870.00	2373940.00	0.00019187	0.00007581	0.00006625	0.00000956	0.00031119	0.00008735	0.00007753	0.00000982
590370.00	2374440.00	0.00045939	0.00023492	0.00021187	0.00002306	0.00119677	0.00027748	0.00025431	0.00002317
590870.00	2374440.00	0.00145759	0.00025192	0.00023017	0.00002175	0.00077733	0.00024926	0.00022681	0.00002246
591370.00	2374440.00	0.00152339	0.00024293	0.00022287	0.00002006	0.00090841	0.00024182	0.0002207	0.00002112
591870.00	2374440.00	0.00156876	0.00023377	0.00021559	0.00001818	0.00093485	0.00023115	0.00021181	0.00001935
592370.00	2374440.00	0.00077085	0.00019701	0.00018081	0.0000162	0.00040651	0.00019863	0.00018133	0.0000173
592870.00	2374440.00	0.00019179	0.00015144	0.00013735	0.00001409	0.00022725	0.00016532	0.00015026	0.00001505
593370.00	2374440.00	0.00020094	0.00015001	0.00013687	0.00001314	0.00023827	0.00016178	0.00014823	0.00001355
593870.00	2374440.00	0.00025728	0.00015741	0.00014455	0.00001285	0.00027028	0.0001659	0.00015308	0.00001282
594370.00	2374440.00	0.00034548	0.0001652	0.00015223	0.00001297	0.00029279	0.00016743	0.00015481	0.00001261
594870.00	2374440.00	0.0004698	0.00017888	0.0001655	0.00001338	0.00032539	0.00017308	0.00016023	0.00001285
595370.00	2374440.00	0.00031825	0.0001763	0.00016242	0.00001388	0.00029065	0.00017414	0.00016093	0.00001321
595870.00	2374440.00	0.00072017	0.00021392	0.00019934	0.00001458	0.00041295	0.00019697	0.00018288	0.00001409
596370.00	2374440.00	0.00121254	0.0002446	0.0002294	0.00001521	0.00063289	0.00022639	0.00021156	0.00001483
596870.00	2374440.00	0.00130169	0.00025792	0.00024242	0.0000155	0.00073652	0.00024517	0.00022982	0.00001535
597370.00	2374440.00	0.00131066	0.00026706	0.00025165	0.00001542	0.00081811	0.00026125	0.00024568	0.00001557
597870.00	2374440.00	0.00127447	0.0002722	0.00025728	0.00001492	0.00089615	0.00027472	0.00025933	0.00001539
598370.00	2374440.00	0.00119505	0.00027239	0.00025831	0.00001407	0.00094746	0.00028331	0.00026853	0.00001479
598870.00	2374440.00	0.00111	0.00026826	0.00025523	0.00001303	0.0009509	0.00028493	0.00027107	0.00001386
599370.00	2374440.00	0.00074897	0.00025105	0.00023908	0.00001197	0.00082263	0.00027645	0.00026363	0.00001282
599870.00	2374440.00	0.00059755	0.00023721	0.00022615	0.00001107	0.00088014	0.00027167	0.00025984	0.00001183
600370.00	2374440.00	0.00044183	0.00022153	0.00021118	0.00001035	0.00088779	0.00026006	0.00024904	0.00001102
600870.00	2374440.00	0.00050692	0.00021259	0.00020293	0.00000966	0.0007729	0.00024219	0.00023207	0.00001013
601370.00	2374440.00	0.00048722	0.00020162	0.0001924	0.00000922	0.00074598	0.00022829	0.00021875	0.00000954
601870.00	2374440.00	0.00036816	0.00018924	0.00018021	0.00000903	0.0007562	0.00021854	0.00020928	0.00000926
602370.00	2374440.00	0.00034166	0.00018137	0.00017243	0.00000894	0.0007146	0.00020835	0.00019929	0.00000905
602870.00	2374440.00	0.00035326	0.00017612	0.00016714	0.00000898	0.00066967	0.00019942	0.00019045	0.00000897

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2374440.00	0.00038777	0.00017274	0.00016359	0.00000915	0.00063544	0.00019242	0.00018339	0.00000903
603870.00	2374440.00	0.00033181	0.00016694	0.00015746	0.00000948	0.00064536	0.00018887	0.00017954	0.00000933
604370.00	2374440.00	0.00023913	0.00016157	0.00015158	0.00001	0.00037918	0.00018087	0.00017095	0.00000993
604870.00	2374440.00	0.00034739	0.00015996	0.00014989	0.00001007	0.00060215	0.00017972	0.00016976	0.00000996
605370.00	2374440.00	0.00035746	0.00015668	0.00014642	0.00001025	0.00057969	0.00017528	0.00016507	0.00001022
605870.00	2374440.00	0.00037339	0.00015358	0.00014327	0.00001032	0.00055268	0.00017062	0.00016026	0.00001036
606370.00	2374440.00	0.00037061	0.00014973	0.00013945	0.00001028	0.00054758	0.0001666	0.0001562	0.0000104
606870.00	2374440.00	0.00038039	0.00014609	0.00013592	0.00001018	0.00052994	0.00016191	0.00015158	0.00001032
607370.00	2374440.00	0.00030618	0.00013928	0.00012917	0.00001011	0.00057865	0.00015932	0.00014906	0.00001026
607870.00	2374440.00	0.00038364	0.00013766	0.00012767	0.00000999	0.00051509	0.00015254	0.00014244	0.0000101
608370.00	2374440.00	0.00039735	0.00013373	0.00012377	0.00000997	0.00048807	0.00014712	0.00013709	0.00001003
608870.00	2374440.00	0.00043289	0.00013064	0.00012064	0.00001	0.00041218	0.00013974	0.00012973	0.00001001
609370.00	2374440.00	0.0003232	0.00012229	0.0001121	0.00001019	0.00055362	0.0001393	0.00012916	0.00001015
609870.00	2374440.00	0.00023975	0.00011532	0.00010487	0.00001045	0.00044202	0.00013299	0.00012262	0.00001037
610370.00	2374440.00	0.00021951	0.00011124	0.00010049	0.00001075	0.000339	0.00012678	0.00011613	0.00001065
610870.00	2374440.00	0.0003379	0.00011111	0.00010023	0.00001088	0.00051286	0.0001251	0.00011441	0.00001068
611370.00	2374440.00	0.00035084	0.00010825	0.00009708	0.00001117	0.00048889	0.00012077	0.00010984	0.00001093
611870.00	2374440.00	0.00021353	0.00010102	0.00008944	0.00001158	0.00035046	0.00011556	0.0001042	0.00001136
612370.00	2374440.00	0.00024985	0.00009912	0.00008731	0.00001181	0.00049367	0.00011477	0.00010324	0.00001153
612870.00	2374440.00	0.00036986	0.00010098	0.00008893	0.00001205	0.00043731	0.00011031	0.00009859	0.00001172
613370.00	2374440.00	0.00040568	0.00010012	0.00008785	0.00001228	0.00036413	0.00010518	0.00009325	0.00001193
613870.00	2374440.00	0.00028795	0.00009411	0.00008166	0.00001246	0.00049806	0.00010626	0.00009413	0.00001214
614370.00	2374440.00	0.00023882	0.0000876	0.00007491	0.0000127	0.00020769	0.00008854	0.00007617	0.00001237
614870.00	2374440.00	0.00016	0.00007946	0.00006649	0.00001297	0.00017654	0.00008306	0.00007044	0.00001262
615370.00	2374440.00	0.00015303	0.00007759	0.00006461	0.00001298	0.0001709	0.00008111	0.00006844	0.00001267
615870.00	2374440.00	0.00018615	0.00007969	0.00006709	0.0000126	0.00018739	0.00008204	0.0000697	0.00001234
616370.00	2374440.00	0.00016075	0.00007621	0.00006378	0.00001243	0.00017623	0.0000793	0.0000671	0.0000122
616870.00	2374440.00	0.00032452	0.00008505	0.00007325	0.0000118	0.00023408	0.00008278	0.00007112	0.00001165
617370.00	2374440.00	0.00023522	0.00008156	0.00007012	0.00001143	0.00047604	0.00009376	0.00008246	0.0000113
617870.00	2374440.00	0.00019371	0.00007887	0.00006777	0.0000111	0.00032821	0.00008969	0.00007865	0.00001104
618370.00	2374440.00	0.00018707	0.00007801	0.00006722	0.0000108	0.00029748	0.00008914	0.00007832	0.00001081
618870.00	2374440.00	0.00018627	0.00007663	0.00006624	0.0000104	0.0002976	0.00008763	0.00007719	0.00001044
619370.00	2374440.00	0.00018997	0.00007703	0.00006683	0.0000102	0.0003064	0.00008856	0.00007819	0.00001038
619870.00	2374440.00	0.0001889	0.0000757	0.00006591	0.0000098	0.00030609	0.00008712	0.00007711	0.00001001
590370.00	2374940.00	0.00064131	0.00023267	0.00021059	0.00002208	0.00139026	0.00027292	0.00025071	0.0000222
590870.00	2374940.00	0.00085913	0.00022617	0.00020529	0.00002088	0.00043879	0.00022733	0.00020574	0.00002159
591370.00	2374940.00	0.00121078	0.00022627	0.00020706	0.00001921	0.00054761	0.00022189	0.00020165	0.00002024
591870.00	2374940.00	0.00122254	0.00021644	0.00019904	0.0000174	0.00054294	0.00021084	0.00019232	0.00001852
592370.00	2374940.00	0.00020507	0.00015935	0.00014395	0.0000154	0.00024646	0.00017421	0.00015769	0.00001653
592870.00	2374940.00	0.00019923	0.00015133	0.00013757	0.00001376	0.00023648	0.00016437	0.00014979	0.00001458
593370.00	2374940.00	0.00020848	0.00014758	0.00013479	0.00001278	0.00024129	0.00015868	0.00014552	0.00001317
593870.00	2374940.00	0.00045408	0.00016586	0.00015324	0.00001262	0.00031534	0.00016726	0.00015463	0.00001263
594370.00	2374940.00	0.00058819	0.00017359	0.00016096	0.00001263	0.00034151	0.00016851	0.00015616	0.00001235
594870.00	2374940.00	0.00075947	0.00018638	0.00017341	0.00001297	0.00039706	0.00017463	0.00016213	0.00001251
595370.00	2374940.00	0.00069126	0.00019312	0.0001797	0.00001342	0.00038397	0.00017948	0.00016659	0.00001289
595870.00	2374940.00	0.00057553	0.00019915	0.00018517	0.00001398	0.00036092	0.00018532	0.00017186	0.00001346
596370.00	2374940.00	0.00107961	0.00023201	0.0002174	0.0000146	0.00055936	0.0002138	0.00019958	0.00001422
596870.00	2374940.00	0.00125256	0.00024767	0.00023269	0.00001498	0.00069404	0.00023376	0.00021899	0.00001477
597370.00	2374940.00	0.0012783	0.00025725	0.00024225	0.000015	0.00079338	0.00025038	0.00023532	0.00001506
597870.00	2374940.00	0.00125427	0.00026357	0.00024894	0.00001463	0.00085097	0.00026326	0.00024827	0.00001499
598370.00	2374940.00	0.00120469	0.00026607	0.00025216	0.00001391	0.00087898	0.00027208	0.00025755	0.00001452
598870.00	2374940.00	0.00082861	0.00025442	0.00024145	0.00001296	0.00078613	0.00027243	0.00025868	0.00001375
599370.00	2374940.00	0.00066426	0.00024464	0.00023263	0.00001201	0.00093836	0.00027793	0.00026509	0.00001284
599870.00	2374940.00	0.00060532	0.00023537	0.00022433	0.00001105	0.00088978	0.00026904	0.00025723	0.00001181
600370.00	2374940.00	0.0006056	0.00022551	0.00021533	0.00001018	0.00077391	0.00025232	0.00024152	0.00001081
600870.00	2374940.00	0.00056093	0.0002136	0.00020407	0.00000953	0.00072231	0.00023858	0.00022858	0.00001001
601370.00	2374940.00	0.00037117	0.00019772	0.00018857	0.00000915	0.00078993	0.00023082	0.00022124	0.00000957
601870.00	2374940.00	0.00040211	0.00018936	0.00018058	0.00000878	0.00075385	0.00021733	0.00020829	0.00000904
602370.00	2374940.00	0.00034431	0.00018007	0.00017143	0.00000864	0.00071554	0.0002071	0.0001983	0.0000088
602870.00	2374940.00	0.0003785	0.000175	0.00016642	0.00000858	0.00067946	0.00019746	0.00018885	0.00000861
603370.00	2374940.00	0.00033392	0.00016889	0.00016016	0.00000872	0.00065836	0.00019133	0.00018266	0.00000867
603870.00	2374940.00	0.0003052	0.00016397	0.00015499	0.00000897	0.00062282	0.00018592	0.00017707	0.00000885
604370.00	2374940.00	0.00035955	0.00016202	0.0001528	0.00000922	0.00060081	0.00018048	0.00017143	0.00000905
604870.00	2374940.00	0.00023347	0.00015552	0.00014582	0.00000971	0.00038175	0.00017412	0.0001645	0.00000963
605370.00	2374940.00	0.00024962	0.00015192	0.00014206	0.00000987	0.00047498	0.00017207	0.00016228	0.0000098
605870.00	2374940.00	0.0002284	0.00014925	0.00013911	0.00001014	0.00034515	0.00016729	0.00015708	0.00001021
606370.00	2374940.00	0.00022832	0.0001452	0.00013506	0.00001014	0.00035177	0.00016325	0.000153	0.00001025
606870.00	2374940.00	0.00022958	0.00014109	0.00013103	0.00001006	0.0003658	0.00015921	0.000149	0.00001021
607370.00	2374940.00	0.00037567	0.00014143	0.00013165	0.00000978	0.00050791	0.00015599	0.00014608	0.00000992
607870.00	2374940.00	0.00023587	0.00013279	0.00012298	0.00000981	0.00041055	0.00015105	0.0001411	0.00000995

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2374940.00	0.00022323	0.00012869	0.00011887	0.00000982	0.00033357	0.00014533	0.00013535	0.00000998
608870.00	2374940.00	0.00022267	0.00012418	0.0001144	0.00000978	0.00034031	0.00014055	0.00013067	0.00000988
609370.00	2374940.00	0.00041557	0.00012629	0.00011666	0.00000963	0.00041243	0.00013552	0.00012589	0.00000963
609870.00	2374940.00	0.0004003	0.00012164	0.00011188	0.00000976	0.00043891	0.00013228	0.00012257	0.00000971
610370.00	2374940.00	0.00022893	0.00011177	0.00010171	0.00001005	0.00040706	0.00012819	0.00011821	0.00000998
610870.00	2374940.00	0.0003279	0.00011134	0.00010116	0.00001019	0.00051016	0.00012542	0.00011537	0.00001005
611370.00	2374940.00	0.00031963	0.00010759	0.00009715	0.00001045	0.0005069	0.00012135	0.00011109	0.00001026
611870.00	2374940.00	0.00040839	0.00010752	0.00009683	0.00001069	0.00036956	0.00011386	0.00010341	0.00001045
612370.00	2374940.00	0.00036965	0.00010336	0.00009236	0.000011	0.00043212	0.00011301	0.00010229	0.00001073
612870.00	2374940.00	0.00020031	0.00009607	0.00008464	0.00001143	0.00030314	0.00010906	0.00009783	0.00001123
613370.00	2374940.00	0.00020725	0.00009333	0.0000817	0.00001163	0.00035802	0.00010667	0.0000953	0.00001137
613870.00	2374940.00	0.00028165	0.00009352	0.00008173	0.0000118	0.00048895	0.00010567	0.00009419	0.00001148
614370.00	2374940.00	0.00017076	0.0000812	0.00006903	0.00001218	0.00018171	0.00008495	0.00007314	0.00001181
614870.00	2374940.00	0.00015791	0.00007858	0.00006618	0.00001239	0.00017378	0.00008226	0.00007024	0.00001202
615370.00	2374940.00	0.0003204	0.0000892	0.00007705	0.00001216	0.00022923	0.00008712	0.00007525	0.00001187
615870.00	2374940.00	0.00043923	0.00009301	0.00008098	0.00001203	0.00046731	0.00009738	0.00008564	0.00001174
616370.00	2374940.00	0.00051578	0.00009401	0.0000821	0.00001191	0.00034579	0.00009171	0.00008008	0.00001163
616870.00	2374940.00	0.00051455	0.00009261	0.00008091	0.0000117	0.00034852	0.00009035	0.00007891	0.00001145
617370.00	2374940.00	0.00039061	0.00008723	0.00007581	0.00001142	0.00049669	0.00009276	0.00008156	0.00001121
617870.00	2374940.00	0.00026455	0.00008113	0.00007002	0.00001112	0.00051531	0.00009228	0.00008133	0.00001095
618370.00	2374940.00	0.00018379	0.00007794	0.00006702	0.00001092	0.00028925	0.00008885	0.00007795	0.0000109
618870.00	2374940.00	0.00018376	0.00007693	0.00006633	0.00001061	0.00029045	0.00008789	0.00007726	0.00001063
619370.00	2374940.00	0.0001844	0.0000761	0.00006581	0.00001029	0.00029357	0.00008712	0.00007675	0.00001037
619870.00	2374940.00	0.0001851	0.00007545	0.00006546	0.00000999	0.00029775	0.00008666	0.00007651	0.00001015
590370.00	2375440.00	0.00132775	0.00024495	0.00022381	0.00002114	0.0007368	0.00024316	0.00022186	0.0000213
590870.00	2375440.00	0.00097152	0.00022331	0.00020328	0.00002003	0.00046469	0.00022223	0.00020152	0.00002071
591370.00	2375440.00	0.00037362	0.0001907	0.00017219	0.00001851	0.00033047	0.00020202	0.0001825	0.00001952
591870.00	2375440.00	0.00029856	0.00017654	0.00015984	0.0000167	0.00030541	0.00018975	0.00017194	0.00001781
592370.00	2375440.00	0.00021958	0.00015894	0.00014404	0.0000149	0.00026142	0.00017307	0.00015715	0.00001592
592870.00	2375440.00	0.00020906	0.00015049	0.00013709	0.0000134	0.00024954	0.00016175	0.00014761	0.00001414
593370.00	2375440.00	0.00032012	0.00015691	0.00014431	0.0000126	0.00028619	0.00016442	0.00015146	0.00001296
593870.00	2375440.00	0.0006103	0.00016845	0.00015617	0.00001228	0.00034226	0.00016587	0.00015356	0.00001231
594370.00	2375440.00	0.00075925	0.00017687	0.00016462	0.00001226	0.00038585	0.00016882	0.00015681	0.00001201
594870.00	2375440.00	0.00085566	0.00018564	0.00017312	0.00001252	0.00042247	0.00017328	0.0001612	0.00001209
595370.00	2375440.00	0.00104094	0.00020053	0.00018751	0.00001302	0.00050348	0.00018356	0.00017107	0.00001249
595870.00	2375440.00	0.00111944	0.00021363	0.00020006	0.00001357	0.00056481	0.0001955	0.00018246	0.00001304
596370.00	2375440.00	0.00121775	0.00022756	0.00021344	0.00001412	0.00065277	0.00021107	0.0001974	0.00001367
596870.00	2375440.00	0.00124294	0.00023859	0.00022411	0.00001448	0.00072636	0.00022587	0.00021166	0.00001421
597370.00	2375440.00	0.00123385	0.00024785	0.00023328	0.00001456	0.00073115	0.00023796	0.00022341	0.00001455
597870.00	2375440.00	0.00122973	0.00025495	0.00024063	0.00001432	0.00080564	0.00025194	0.00023735	0.00001458
598370.00	2375440.00	0.00118216	0.00025816	0.00024444	0.00001373	0.00086206	0.0002627	0.00024846	0.00001424
598870.00	2375440.00	0.00072452	0.00024487	0.00023194	0.00001294	0.00093639	0.00027242	0.00025877	0.00001365
599370.00	2375440.00	0.00072153	0.0002422	0.00023025	0.00001195	0.00084871	0.00026699	0.00025426	0.00001272
599870.00	2375440.00	0.0007139	0.00023659	0.00022563	0.00001096	0.00073878	0.00025825	0.00024655	0.00001169
600370.00	2375440.00	0.00065429	0.00022604	0.00021593	0.00001011	0.00070838	0.00024827	0.00023753	0.00001074
600870.00	2375440.00	0.00059215	0.00021407	0.00020464	0.00000943	0.00068865	0.00023649	0.00022656	0.00000993
601370.00	2375440.00	0.00038588	0.00019772	0.00018869	0.00000903	0.0008006	0.00023053	0.00022106	0.00000947
601870.00	2375440.00	0.00030365	0.00018629	0.00017759	0.0000087	0.00063702	0.00021579	0.00020671	0.00000908
602370.00	2375440.00	0.00036814	0.00017972	0.00017133	0.00000838	0.00071851	0.00020594	0.00019737	0.00000857
602870.00	2375440.00	0.00033243	0.00017213	0.00016383	0.0000083	0.00068241	0.00019685	0.00018846	0.00000839
603370.00	2375440.00	0.00036894	0.00016803	0.00015973	0.0000083	0.00065122	0.00018858	0.00018031	0.00000828
603870.00	2375440.00	0.00032992	0.00016266	0.00015418	0.00000848	0.00063476	0.00018338	0.00017499	0.00000839
604370.00	2375440.00	0.00030404	0.00015822	0.00014947	0.00000875	0.00060243	0.00017862	0.00017001	0.00000861
604870.00	2375440.00	0.00031945	0.00015532	0.0001463	0.00000902	0.00059514	0.00017454	0.00016568	0.00000886
605370.00	2375440.00	0.00034843	0.000153	0.00014373	0.00000927	0.00056212	0.00016993	0.0001608	0.00000913
605870.00	2375440.00	0.00038072	0.00015087	0.00014141	0.00000946	0.00050839	0.00016485	0.00015547	0.00000938
606370.00	2375440.00	0.00039191	0.00014806	0.0001385	0.00000956	0.00047441	0.0001605	0.00015094	0.00000956
606870.00	2375440.00	0.00023648	0.00014006	0.00013037	0.00000969	0.00042892	0.00015862	0.00014884	0.00000978
607370.00	2375440.00	0.00026477	0.0001372	0.00012763	0.00000958	0.00052463	0.0001566	0.00014689	0.00000971
607870.00	2375440.00	0.00028732	0.00013417	0.00012472	0.00000945	0.00054736	0.00015276	0.00014317	0.00000959
608370.00	2375440.00	0.00030571	0.00013089	0.00012156	0.00000933	0.00054424	0.00014823	0.00013877	0.00000946
608870.00	2375440.00	0.00024683	0.00012492	0.0001156	0.00000932	0.00047871	0.00014311	0.00013368	0.00000943
609370.00	2375440.00	0.00022699	0.00012028	0.00011093	0.00000935	0.00039457	0.00013689	0.00012747	0.00000942
609870.00	2375440.00	0.00021297	0.00011685	0.00010728	0.00000957	0.00030912	0.00013168	0.00012201	0.00000967
610370.00	2375440.00	0.00021071	0.00011277	0.00010312	0.00000965	0.00030708	0.0001272	0.00011752	0.00000969
610870.00	2375440.00	0.00022132	0.00010848	0.0000988	0.00000968	0.00038689	0.00012395	0.00011434	0.00000961
611370.00	2375440.00	0.00030963	0.00010781	0.00009801	0.0000098	0.00050413	0.00012172	0.00011205	0.00000967
611870.00	2375440.00	0.00020491	0.00010325	0.00009286	0.00001039	0.00030057	0.00011687	0.00010649	0.00001037
612370.00	2375440.00	0.00030675	0.00010143	0.00009112	0.00001031	0.00048745	0.00011404	0.00010396	0.00001009
612870.00	2375440.00	0.00035878	0.00010053	0.00008997	0.00001057	0.00042376	0.00010978	0.00009948	0.0000103

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2375440.00	0.0003515	0.00009787	0.00008703	0.00001084	0.00042321	0.00010685	0.0000963	0.00001055
613870.00	2375440.00	0.00019278	0.00009184	0.00008057	0.00001127	0.00028719	0.00010398	0.00009288	0.00001109
614370.00	2375440.00	0.00016384	0.00007983	0.00006836	0.00001148	0.00017643	0.0000839	0.00007278	0.00001112
614870.00	2375440.00	0.00014612	0.00007582	0.00006398	0.00001184	0.00016267	0.0000797	0.00006826	0.00001144
615370.00	2375440.00	0.00034817	0.00008979	0.00007816	0.00001163	0.00023531	0.00008748	0.00007614	0.00001133
615870.00	2375440.00	0.00041595	0.00009168	0.00008004	0.00001164	0.00046837	0.00009663	0.0000853	0.00001132
616370.00	2375440.00	0.00021444	0.00008306	0.00007145	0.00001161	0.0004138	0.00009458	0.00008321	0.00001137
616870.00	2375440.00	0.00018745	0.00008107	0.00006954	0.00001153	0.00030544	0.00009141	0.00008006	0.00001135
617370.00	2375440.00	0.00019166	0.00007971	0.00006836	0.00001135	0.00032873	0.00009003	0.00007885	0.00001118
617870.00	2375440.00	0.00020416	0.0000787	0.00006759	0.00001111	0.00038383	0.00008944	0.0000785	0.00001094
618370.00	2375440.00	0.00021631	0.00007781	0.00006698	0.00001083	0.0004266	0.00008882	0.00007815	0.00001067
618870.00	2375440.00	0.00020247	0.00007606	0.00006553	0.00001052	0.00038198	0.00008659	0.00007619	0.0000104
619370.00	2375440.00	0.00017885	0.00007472	0.00006444	0.00001028	0.00028365	0.00008479	0.00007455	0.00001024
619870.00	2375440.00	0.00018167	0.00007519	0.00006506	0.00001013	0.00029022	0.00008614	0.00007589	0.00001025
590370.00	2375940.00	0.00021636	0.00018702	0.00016591	0.00002111	0.00025256	0.00020117	0.00017989	0.00002127
590870.00	2375940.00	0.00020419	0.00017537	0.0001553	0.00002007	0.00023849	0.00018958	0.00016884	0.00002074
591370.00	2375940.00	0.00020136	0.00016686	0.00014876	0.0000181	0.0002389	0.00018138	0.00016227	0.00001912
591870.00	2375940.00	0.00032731	0.00017381	0.00015773	0.00001609	0.00030759	0.00018498	0.00016787	0.00001712
592370.00	2375940.00	0.00042582	0.0001703	0.0001558	0.00001449	0.00032092	0.0001776	0.00016219	0.00001541
592870.00	2375940.00	0.00045544	0.00016482	0.00015161	0.0000132	0.00031828	0.00016983	0.00015596	0.00001387
593370.00	2375940.00	0.00049226	0.00016169	0.00014938	0.00001231	0.00031823	0.00016385	0.00015119	0.00001266
593870.00	2375940.00	0.00066141	0.00016647	0.00015457	0.0000119	0.00035062	0.00016249	0.00015055	0.00001194
594370.00	2375940.00	0.00098041	0.00018007	0.00016816	0.00001191	0.00044874	0.00016827	0.00015659	0.00001168
594870.00	2375940.00	0.00100972	0.00018573	0.00017361	0.00001213	0.00047423	0.00017147	0.00015977	0.00001171
595370.00	2375940.00	0.00106463	0.0001952	0.00018265	0.00001255	0.00051808	0.00017874	0.00016671	0.00001203
595870.00	2375940.00	0.00114015	0.00020723	0.00019415	0.00001307	0.00057493	0.00018961	0.00017707	0.00001254
596370.00	2375940.00	0.00121833	0.00021978	0.00020616	0.00001361	0.00067757	0.00020473	0.00019159	0.00001314
596870.00	2375940.00	0.00120462	0.00022957	0.00021559	0.00001398	0.00067676	0.0002161	0.00020242	0.00001367
597370.00	2375940.00	0.0012095	0.00023884	0.0002247	0.00001414	0.0007268	0.00022948	0.00021543	0.00001405
597870.00	2375940.00	0.00119873	0.00024594	0.00023195	0.000014	0.00080408	0.00024317	0.000229	0.00001417
598370.00	2375940.00	0.00081173	0.00023893	0.00022538	0.00001354	0.00081534	0.00025233	0.00023835	0.00001398
598870.00	2375940.00	0.00081521	0.0002425	0.00022972	0.00001278	0.00073985	0.00025581	0.00024241	0.00001341
599370.00	2375940.00	0.00077555	0.00024033	0.00022846	0.00001187	0.00073408	0.00025719	0.00024459	0.0000126
599870.00	2375940.00	0.0007222	0.00023404	0.0002231	0.00001094	0.00072229	0.00025363	0.00024197	0.00001166
600370.00	2375940.00	0.00067205	0.00022508	0.000215	0.00001009	0.00069012	0.00024525	0.00023453	0.00001072
600870.00	2375940.00	0.00063222	0.0002148	0.00020545	0.00000935	0.00063029	0.00023313	0.00022327	0.00000987
601370.00	2375940.00	0.00041012	0.00019798	0.00018906	0.00000893	0.00080557	0.0002299	0.00022052	0.00000938
601870.00	2375940.00	0.00031018	0.00018599	0.00017743	0.00000856	0.00065573	0.00021578	0.00020681	0.00000897
602370.00	2375940.00	0.00036574	0.00017896	0.00017076	0.0000082	0.00071653	0.00020542	0.000197	0.00000842
602870.00	2375940.00	0.00037416	0.00017213	0.00016411	0.00000802	0.00067748	0.000195	0.00018687	0.00000813
603370.00	2375940.00	0.00031982	0.00016494	0.00015693	0.00000801	0.00065154	0.00018773	0.00017968	0.00000805
603870.00	2375940.00	0.00031965	0.00016044	0.00015235	0.00000809	0.0006302	0.0001813	0.00017326	0.00000804
604370.00	2375940.00	0.0003087	0.00015638	0.0001481	0.00000828	0.00060746	0.00017625	0.00016809	0.00000816
604870.00	2375940.00	0.00030996	0.0001531	0.00014458	0.00000853	0.0005889	0.00017195	0.00016357	0.00000837
605370.00	2375940.00	0.00030692	0.00014989	0.00014109	0.0000088	0.00057328	0.00016827	0.00015961	0.00000865
605870.00	2375940.00	0.00029263	0.00014644	0.00013739	0.00000905	0.00055811	0.000165	0.00015605	0.00000895
606370.00	2375940.00	0.0002307	0.00014192	0.00013262	0.0000093	0.00041845	0.00015979	0.00015052	0.00000927
606870.00	2375940.00	0.00025635	0.00013941	0.00013008	0.00000932	0.00050839	0.00015827	0.00014891	0.00000936
607370.00	2375940.00	0.00037819	0.00014008	0.00013085	0.00000923	0.00046034	0.00015192	0.00014262	0.0000093
607870.00	2375940.00	0.00031524	0.00013465	0.00012548	0.00000918	0.00052679	0.00015082	0.00014152	0.0000093
608370.00	2375940.00	0.00021558	0.00012837	0.00011914	0.00000923	0.00033579	0.0001443	0.00013491	0.00000939
608870.00	2375940.00	0.00023817	0.00012485	0.00011581	0.00000904	0.0004547	0.00014233	0.00013316	0.00000917
609370.00	2375940.00	0.00036197	0.00012522	0.00011633	0.00000889	0.00046409	0.0001373	0.00012832	0.00000897
609870.00	2375940.00	0.00023345	0.00011696	0.00010798	0.00000898	0.00044144	0.00013365	0.00012461	0.00000904
610370.00	2375940.00	0.00029823	0.00011532	0.00010634	0.00000897	0.00051555	0.00013051	0.00012153	0.00000898
610870.00	2375940.00	0.0003985	0.00011517	0.00010614	0.00000903	0.00037597	0.00012252	0.00011353	0.00000899
611370.00	2375940.00	0.00020326	0.00010563	0.00009622	0.00000941	0.0003014	0.0001191	0.00010973	0.00000937
611870.00	2375940.00	0.00025712	0.00010326	0.0000938	0.00000946	0.00049476	0.00011859	0.00010926	0.00000934
612370.00	2375940.00	0.00037638	0.00010426	0.00009463	0.00000963	0.000394	0.00011241	0.00010295	0.00000945
612870.00	2375940.00	0.00027908	0.00009803	0.00008811	0.00000992	0.00048604	0.00011114	0.00010142	0.00000972
613370.00	2375940.00	0.00035845	0.00009818	0.00008802	0.00001015	0.00040202	0.00010644	0.00009654	0.0000099
613870.00	2375940.00	0.00020022	0.00009083	0.00008033	0.0000105	0.00034318	0.00010336	0.00009309	0.00001027
614370.00	2375940.00	0.00017624	0.00008119	0.00007046	0.00001073	0.0001804	0.00008498	0.00007457	0.00001042
614870.00	2375940.00	0.00014295	0.00007459	0.00006346	0.00001113	0.00015888	0.00007865	0.00006791	0.00001074
615370.00	2375940.00	0.00016592	0.00007747	0.00006626	0.00001121	0.00017436	0.00008087	0.00007002	0.00001086
615870.00	2375940.00	0.00041984	0.00009085	0.00007968	0.00001117	0.00025513	0.00008709	0.00007623	0.00001086
616370.00	2375940.00	0.00049232	0.00009207	0.00008085	0.00001121	0.00031886	0.00008973	0.00007883	0.0000109
616870.00	2375940.00	0.00019161	0.00008065	0.00006943	0.00001122	0.00033097	0.00009096	0.00007997	0.000011
617370.00	2375940.00	0.00017931	0.00007952	0.00006835	0.00001117	0.00027689	0.00008957	0.00007856	0.00001101
617870.00	2375940.00	0.00017849	0.00007875	0.00006767	0.00001108	0.00027436	0.00008918	0.00007821	0.00001098

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m³-g)	Total dep rate/unit emission (g-s/m²-yr-g)	Dry dep rate/unit emission (g-s/m²-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m³-g)	Total dep rate/unit emission (g-s/m²-yr-g)	Dry dep rate/unit emission (g-s/m²-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2375940.00	0.00017792	0.00007758	0.00006668	0.0000109	0.00027502	0.00008798	0.00007715	0.00001083
618870.00	2375940.00	0.00019403	0.00007561	0.00006507	0.00001054	0.00035327	0.00008557	0.00007518	0.00001039
619370.00	2375940.00	0.00017631	0.0000743	0.00006399	0.00001032	0.00027939	0.0000838	0.00007358	0.00001023
619870.00	2375940.00	0.00017753	0.00007445	0.00006429	0.00001016	0.00028012	0.00008484	0.00007466	0.00001019
590370.00	2376440.00	0.00021343	0.0001817	0.00016145	0.00002025	0.00025075	0.00019523	0.00017478	0.00002044
590870.00	2376440.00	0.00021372	0.00017501	0.00015605	0.00001895	0.00025429	0.00018899	0.00016938	0.00001961
591370.00	2376440.00	0.00024207	0.00017167	0.00015446	0.00001721	0.00027925	0.00018528	0.00016715	0.00001812
591870.00	2376440.00	0.00032905	0.0001695	0.00015399	0.00001551	0.00030199	0.00017988	0.0001634	0.00001648
592370.00	2376440.00	0.00061666	0.0001735	0.00015945	0.00001405	0.00035342	0.00017561	0.00016071	0.000149
592870.00	2376440.00	0.00077919	0.00017365	0.00016077	0.00001288	0.00039025	0.00017122	0.00015771	0.0000135
593370.00	2376440.00	0.00084297	0.00017174	0.00015968	0.00001205	0.00040433	0.00016645	0.00015406	0.00001239
593870.00	2376440.00	0.00085314	0.00017044	0.00015885	0.0000116	0.00040634	0.00016314	0.0001515	0.00001164
594370.00	2376440.00	0.00109663	0.0001798	0.00016823	0.00001157	0.00051553	0.00016687	0.00015552	0.00001135
594870.00	2376440.00	0.00115941	0.00018589	0.00017412	0.00001177	0.00055915	0.00017077	0.00015941	0.00001136
595370.00	2376440.00	0.0012035	0.000194	0.00018183	0.00001217	0.0006256	0.00017839	0.00016674	0.00001165
595870.00	2376440.00	0.00115835	0.00020125	0.00018864	0.00001261	0.0005989	0.00018465	0.00017258	0.00001208
596370.00	2376440.00	0.0011822	0.00021164	0.00019853	0.00001311	0.0006496	0.00019651	0.00018388	0.00001263
596870.00	2376440.00	0.00118913	0.00022097	0.00020743	0.00001354	0.00078824	0.00021261	0.00019942	0.00001318
597370.00	2376440.00	0.00118277	0.00023024	0.00021652	0.00001372	0.00071894	0.00022099	0.00020742	0.00001357
597870.00	2376440.00	0.00115884	0.00023688	0.00022321	0.00001367	0.00081392	0.00023496	0.0002212	0.00001376
598370.00	2376440.00	0.00082755	0.00023327	0.00021998	0.00001329	0.00069858	0.00024007	0.00022643	0.00001365
598870.00	2376440.00	0.00080992	0.00023647	0.00022383	0.00001264	0.00070398	0.00024686	0.00023366	0.0000132
599370.00	2376440.00	0.00077773	0.00023583	0.00022401	0.00001181	0.00070689	0.00024996	0.00023747	0.00001249
599870.00	2376440.00	0.00073994	0.00023174	0.00022083	0.00001091	0.000676	0.00024742	0.00023581	0.00001161
600370.00	2376440.00	0.00068505	0.00022365	0.00021358	0.00001007	0.00066615	0.00024162	0.00023092	0.0000107
600870.00	2376440.00	0.00064285	0.0002142	0.00020489	0.00000931	0.00061561	0.00023112	0.00022127	0.00000985
601370.00	2376440.00	0.0003946	0.00019696	0.00018808	0.00000888	0.0007895	0.00022901	0.00021964	0.00000937
601870.00	2376440.00	0.00036484	0.00018701	0.00017861	0.00000841	0.00075259	0.000217	0.00020821	0.00000879
602370.00	2376440.00	0.00036411	0.00017845	0.0001704	0.00000805	0.00071444	0.00020508	0.00019677	0.00000831
602870.00	2376440.00	0.00033981	0.00017031	0.00016248	0.00000783	0.00067927	0.00019492	0.00018692	0.000008
603370.00	2376440.00	0.00023924	0.0001624	0.00015452	0.00000787	0.00042547	0.00018335	0.00017531	0.00000804
603870.00	2376440.00	0.00023475	0.00015699	0.00014911	0.00000787	0.00042673	0.00017658	0.00016865	0.00000793
604370.00	2376440.00	0.0003279	0.00015509	0.00014723	0.00000786	0.00060418	0.00017372	0.00016595	0.00000777
604870.00	2376440.00	0.000284	0.00015042	0.00014232	0.0000081	0.00057443	0.00016959	0.00016163	0.00000797
605370.00	2376440.00	0.0003226	0.00014857	0.00014025	0.00000832	0.00055847	0.00016521	0.00015706	0.00000815
605870.00	2376440.00	0.00038037	0.00014756	0.00013902	0.00000854	0.00048194	0.00015944	0.00015106	0.00000837
606370.00	2376440.00	0.00033502	0.00014326	0.00013448	0.00000878	0.00051943	0.00015812	0.00014945	0.00000867
606870.00	2376440.00	0.00035878	0.00014123	0.00013232	0.0000089	0.00047982	0.00015392	0.00014506	0.00000886
607370.00	2376440.00	0.00036167	0.00013847	0.00012953	0.00000894	0.00046552	0.00015057	0.0001416	0.00000897
607870.00	2376440.00	0.00036904	0.00013572	0.00012682	0.0000089	0.00044781	0.00014693	0.00013795	0.00000898
608370.00	2376440.00	0.00038808	0.00013318	0.00012438	0.0000088	0.00040868	0.0001423	0.00013339	0.00000891
608870.00	2376440.00	0.00023983	0.00012488	0.00011609	0.00000879	0.00046668	0.00014207	0.00013315	0.00000893
609370.00	2376440.00	0.00033549	0.00012445	0.00011582	0.00000863	0.00047952	0.00013745	0.00012872	0.00000874
609870.00	2376440.00	0.0002966	0.00011945	0.00011086	0.0000086	0.00050922	0.0001345	0.00012582	0.00000868
610370.00	2376440.00	0.00038038	0.00011873	0.00011018	0.00000855	0.00040209	0.00012755	0.00011896	0.00000859
610870.00	2376440.00	0.00032609	0.0001132	0.00010456	0.00000864	0.00047374	0.00012568	0.00011705	0.00000863
611370.00	2376440.00	0.00020072	0.00010696	0.00009789	0.00000907	0.00029105	0.00012013	0.00011098	0.00000915
611870.00	2376440.00	0.0002023	0.0001024	0.00009338	0.00000902	0.00032268	0.0001157	0.00010673	0.00000896
612370.00	2376440.00	0.00020462	0.00009918	0.00009	0.00000918	0.00034446	0.00011254	0.00010346	0.00000908
612870.00	2376440.00	0.00034225	0.00010063	0.00009134	0.00000929	0.00042114	0.00011008	0.00010096	0.00000912
613370.00	2376440.00	0.00027436	0.00009555	0.000086	0.00000955	0.00047291	0.00010799	0.00009863	0.00000935
613870.00	2376440.00	0.00036531	0.00009616	0.0000864	0.00000976	0.00036553	0.00010274	0.00009322	0.00000951
614370.00	2376440.00	0.00014587	0.00007662	0.00006652	0.0000101	0.00016149	0.0000814	0.00007159	0.00000981
614870.00	2376440.00	0.00013968	0.00007345	0.00006303	0.00001042	0.00015563	0.00007782	0.00006776	0.00001007
615370.00	2376440.00	0.0003253	0.00008805	0.00007761	0.00001044	0.00022318	0.00008657	0.00007641	0.00001016
615870.00	2376440.00	0.00028	0.000086	0.00007537	0.00001063	0.00050199	0.00009649	0.00008615	0.00001034
616370.00	2376440.00	0.00021421	0.00008224	0.00007148	0.00001076	0.00041579	0.00009349	0.000083	0.00001049
616870.00	2376440.00	0.00019696	0.00008036	0.00006953	0.00001083	0.00035859	0.00009081	0.00008023	0.00001058
617370.00	2376440.00	0.00017692	0.00007897	0.00006811	0.00001086	0.00027313	0.00008867	0.000078	0.00001067
617870.00	2376440.00	0.00017589	0.00007845	0.00006759	0.00001086	0.00026831	0.00008864	0.00007789	0.00001074
618370.00	2376440.00	0.00017497	0.00007719	0.00006644	0.00001074	0.00026834	0.00008728	0.00007663	0.00001064
618870.00	2376440.00	0.00017783	0.00007714	0.00006646	0.00001068	0.00027713	0.00008757	0.0000769	0.00001067
619370.00	2376440.00	0.00017698	0.00007594	0.00006546	0.00001047	0.00027812	0.00008641	0.00007591	0.00001049
619870.00	2376440.00	0.00017602	0.00007473	0.0000645	0.00001023	0.0002779	0.00008511	0.00007484	0.00001027
590370.00	2376940.00	0.00019839	0.00017367	0.00015383	0.00001985	0.00022918	0.00018629	0.00016627	0.00002002
590870.00	2376940.00	0.00021884	0.00017128	0.00015315	0.00001814	0.00026048	0.00018449	0.00016572	0.00001877
591370.00	2376940.00	0.00030034	0.00017194	0.00015541	0.00001653	0.00029517	0.00018304	0.00016566	0.00001738
591870.00	2376940.00	0.00039152	0.00016843	0.00015345	0.00001498	0.0003108	0.00017619	0.00016031	0.00001588
592370.00	2376940.00	0.00055344	0.00016722	0.00015364	0.00001358	0.00033278	0.00017009	0.0001557	0.00001439
592870.00	2376940.00	0.00073836	0.00016851	0.00015604	0.00001247	0.00037388	0.00016543	0.00015236	0.00001306

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2376940.00	0.00082727	0.00016757	0.00015588	0.00001169	0.00039685	0.00016235	0.00015034	0.00001201
593870.00	2376940.00	0.00095104	0.00016993	0.00015866	0.00001126	0.00043005	0.00016048	0.00014918	0.00001131
594370.00	2376940.00	0.00101855	0.00017309	0.00016192	0.00001117	0.0004722	0.00016116	0.00015019	0.00001097
594870.00	2376940.00	0.00104211	0.00017739	0.00016607	0.00001132	0.00049852	0.00016349	0.00015255	0.00001094
595370.00	2376940.00	0.00110249	0.00018541	0.00017373	0.00001168	0.00054101	0.00016968	0.00015849	0.00001119
595870.00	2376940.00	0.00113529	0.0001945	0.00018235	0.00001215	0.00058827	0.00017847	0.00016685	0.00001162
596370.00	2376940.00	0.00112775	0.00020344	0.00019083	0.00001261	0.00059899	0.00018775	0.00017562	0.00001214
596870.00	2376940.00	0.00114655	0.00021324	0.0002002	0.00001303	0.00064197	0.0001997	0.00018703	0.00001267
597370.00	2376940.00	0.0011497	0.00022207	0.00020879	0.00001329	0.00068402	0.00021174	0.00019864	0.0000131
597870.00	2376940.00	0.00081618	0.00021966	0.00020635	0.00001331	0.00064421	0.00022066	0.00020731	0.00001335
598370.00	2376940.00	0.00081464	0.00022616	0.00021312	0.00001304	0.0006658	0.00023056	0.00021724	0.00001331
598870.00	2376940.00	0.00080123	0.00023056	0.00021808	0.00001248	0.00064081	0.00023668	0.00022371	0.00001297
599370.00	2376940.00	0.00077829	0.00023136	0.00021963	0.00001173	0.00065088	0.00024108	0.00022873	0.00001236
599870.00	2376940.00	0.0007431	0.00022849	0.00021761	0.00001088	0.00063972	0.00024094	0.00022938	0.00001155
600370.00	2376940.00	0.00069713	0.00022197	0.00021192	0.00001005	0.00063406	0.00023712	0.00022643	0.00001068
600870.00	2376940.00	0.00065134	0.00021328	0.00020399	0.00000929	0.00060166	0.0002287	0.00021886	0.00000984
601370.00	2376940.00	0.00042179	0.00019709	0.00018827	0.00000882	0.00085142	0.0002297	0.00022037	0.00000932
601870.00	2376940.00	0.00031523	0.00018535	0.00017697	0.00000838	0.00068396	0.00021582	0.00020697	0.00000885
602370.00	2376940.00	0.00032984	0.00017718	0.00016923	0.00000796	0.00069633	0.00020497	0.0001967	0.00000827
602870.00	2376940.00	0.00043777	0.00017257	0.00016496	0.0000076	0.00061293	0.00019131	0.00018356	0.00000775
603370.00	2376940.00	0.00040034	0.00016493	0.00015747	0.00000746	0.00060987	0.00018332	0.00017579	0.00000753
603870.00	2376940.00	0.00035776	0.00015843	0.000151	0.00000744	0.0006123	0.0001771	0.00016966	0.00000744
604370.00	2376940.00	0.00022383	0.00015115	0.00014348	0.00000767	0.00039177	0.00016911	0.00016142	0.00000769
604870.00	2376940.00	0.00029531	0.00014893	0.00014125	0.00000768	0.00058003	0.00016739	0.00015982	0.00000757
605370.00	2376940.00	0.00023879	0.00014433	0.00013638	0.00000796	0.00047598	0.00016216	0.00015432	0.00000784
605870.00	2376940.00	0.000289	0.00014291	0.00013477	0.00000815	0.00054742	0.00016004	0.00015205	0.00000799
606370.00	2376940.00	0.0003357	0.00014169	0.00013334	0.00000835	0.00050912	0.00015563	0.00014743	0.00000821
606870.00	2376940.00	0.00037967	0.00014048	0.00013196	0.00000851	0.00043568	0.00015037	0.00014196	0.00000841
607370.00	2376940.00	0.00020823	0.00013331	0.00012452	0.00000879	0.00033301	0.00014861	0.00013979	0.00000882
607870.00	2376940.00	0.00024771	0.00013098	0.00012227	0.00000871	0.00048782	0.00014819	0.00013942	0.00000877
608370.00	2376940.00	0.00024907	0.00012804	0.00011939	0.00000865	0.00048919	0.00014507	0.00013632	0.00000876
608870.00	2376940.00	0.00035632	0.00012839	0.00011989	0.00000849	0.00043691	0.00013912	0.00013052	0.0000086
609370.00	2376940.00	0.00020673	0.00012053	0.00011198	0.00000855	0.00033174	0.00013515	0.00012646	0.00000869
609870.00	2376940.00	0.00038782	0.00012282	0.00011454	0.00000828	0.00036556	0.00012976	0.00012138	0.00000838
610370.00	2376940.00	0.00037812	0.00011901	0.00011077	0.00000824	0.00038469	0.00012699	0.00011868	0.00000831
610870.00	2376940.00	0.00031717	0.00011339	0.00010511	0.00000828	0.00046915	0.00012574	0.00011743	0.00000831
611370.00	2376940.00	0.00022068	0.00010669	0.00009828	0.00000841	0.00041479	0.00012151	0.0001131	0.00000841
611870.00	2376940.00	0.00020858	0.00010299	0.00009446	0.00000853	0.00036573	0.00011679	0.00010829	0.0000085
612370.00	2376940.00	0.00027367	0.00010182	0.00009322	0.0000086	0.00048034	0.00011518	0.00010666	0.00000852
612870.00	2376940.00	0.00024059	0.00009765	0.00008886	0.0000088	0.00046409	0.00011177	0.00010308	0.00000868
613370.00	2376940.00	0.00037716	0.00009941	0.00009048	0.00000893	0.00032621	0.00010418	0.00009541	0.00000877
613870.00	2376940.00	0.00034111	0.00009561	0.00008644	0.00000917	0.00039304	0.00010365	0.00009468	0.00000897
614370.00	2376940.00	0.0001453	0.00007699	0.00006753	0.00000946	0.00016093	0.00008208	0.00007285	0.00000922
614870.00	2376940.00	0.00014226	0.00007471	0.00006499	0.00000971	0.00015762	0.00007935	0.00006992	0.00000943
615370.00	2376940.00	0.00026575	0.00008487	0.00007504	0.00000983	0.00020435	0.0000851	0.00007551	0.00000959
615870.00	2376940.00	0.0004585	0.00009159	0.00008154	0.00001004	0.00037811	0.00009354	0.0000838	0.00000974
616370.00	2376940.00	0.00019656	0.00008137	0.00007111	0.00001026	0.00035765	0.00009198	0.00008197	0.00001001
616870.00	2376940.00	0.00017944	0.00007968	0.00006928	0.0000104	0.00028822	0.00008934	0.00007917	0.00001017
617370.00	2376940.00	0.0001752	0.00007842	0.00006795	0.00001047	0.00027221	0.00008784	0.00007758	0.00001026
617870.00	2376940.00	0.00017244	0.00007747	0.00006697	0.0000105	0.00026229	0.00008703	0.00007669	0.00001034
618370.00	2376940.00	0.00017294	0.00007701	0.00006649	0.00001053	0.00026364	0.00008692	0.00007649	0.00001043
618870.00	2376940.00	0.00017469	0.00007673	0.00006623	0.00001051	0.00027084	0.000087	0.00007651	0.00001049
619370.00	2376940.00	0.00017345	0.00007547	0.0000651	0.00001036	0.00026984	0.00008562	0.00007526	0.00001036
619870.00	2376940.00	0.00017263	0.00007429	0.00006411	0.00001018	0.0002699	0.00008436	0.00007418	0.00001019
590370.00	2377440.00	0.00019908	0.00017049	0.00015158	0.00001891	0.00023267	0.0001828	0.00016367	0.00001913
590870.00	2377440.00	0.00020722	0.00016566	0.00014813	0.00001753	0.00024777	0.00017837	0.00016022	0.00001814
591370.00	2377440.00	0.00027776	0.00016644	0.00015048	0.00001596	0.00028469	0.00017755	0.00016079	0.00001676
591870.00	2377440.00	0.00041598	0.00016542	0.00015095	0.00001447	0.00030937	0.0001718	0.00015648	0.00001532
592370.00	2377440.00	0.00065174	0.00016692	0.00015375	0.00001317	0.0003506	0.00016707	0.00015315	0.00001392
592870.00	2377440.00	0.00070055	0.00016291	0.00015082	0.00001209	0.0003585	0.00016092	0.00014828	0.00001265
593370.00	2377440.00	0.00094087	0.00016776	0.00015639	0.00001137	0.00042342	0.00015987	0.0001482	0.00001167
593870.00	2377440.00	0.00095134	0.00016638	0.00015546	0.00001093	0.00043681	0.00015695	0.00014598	0.00001098
594370.00	2377440.00	0.00098403	0.0001681	0.0001573	0.00001081	0.000457	0.00015656	0.00014594	0.00001062
594870.00	2377440.00	0.00103839	0.00017298	0.00016203	0.00001095	0.00049539	0.00015944	0.00014885	0.00001059
595370.00	2377440.00	0.00106508	0.00017926	0.00016799	0.00001126	0.00051941	0.00016409	0.0001533	0.00001079
595870.00	2377440.00	0.00109225	0.00018754	0.00017584	0.0000117	0.00055758	0.00017178	0.0001606	0.00001119
596370.00	2377440.00	0.00109552	0.00019623	0.00018407	0.00001215	0.00057765	0.00018077	0.00016909	0.00001168
596870.00	2377440.00	0.00111203	0.00020559	0.00019302	0.00001258	0.00061394	0.00019177	0.00017958	0.00001219
597370.00	2377440.00	0.00111968	0.0002143	0.00020143	0.00001287	0.00066018	0.00020345	0.00019082	0.00001263
597870.00	2377440.00	0.00079592	0.0002121	0.00019915	0.00001296	0.00061918	0.00021218	0.00019925	0.00001293

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2377440.00	0.00079399	0.00021891	0.00020615	0.00001277	0.00062211	0.00022119	0.00020822	0.00001297
598870.00	2377440.00	0.00078623	0.00022372	0.00021141	0.00001232	0.00063607	0.00022904	0.00021632	0.00001273
599370.00	2377440.00	0.00076741	0.00022562	0.00021397	0.00001165	0.00065013	0.00023475	0.00022254	0.00001221
599870.00	2377440.00	0.00073709	0.00022415	0.00021328	0.00001086	0.00064371	0.00023611	0.00022462	0.00001149
600370.00	2377440.00	0.0006979	0.00021931	0.00020927	0.00001005	0.0006248	0.00023313	0.00022246	0.00001067
600870.00	2377440.00	0.00065457	0.00021179	0.00020251	0.00000928	0.00059713	0.00022632	0.00021648	0.00000984
601370.00	2377440.00	0.00043257	0.00019651	0.00018771	0.00000879	0.00085957	0.00022869	0.00021939	0.0000093
601870.00	2377440.00	0.00038143	0.00018669	0.00017842	0.00000827	0.0007997	0.00021735	0.00020866	0.00000869
602370.00	2377440.00	0.00027509	0.00017575	0.0001678	0.00000794	0.00054144	0.00020213	0.00019376	0.00000836
602870.00	2377440.00	0.00035275	0.00016969	0.00016217	0.00000752	0.00067518	0.0001939	0.00018617	0.00000774
603370.00	2377440.00	0.00032677	0.0001621	0.00015477	0.00000733	0.00064413	0.00018474	0.00017727	0.00000747
603870.00	2377440.00	0.00036191	0.00015739	0.0001502	0.0000072	0.00060316	0.00017575	0.00016852	0.00000723
604370.00	2377440.00	0.00018604	0.00013232	0.00012442	0.0000079	0.00028636	0.00014803	0.0001397	0.00000833
604870.00	2377440.00	0.00039411	0.00015034	0.00014308	0.00000726	0.00050977	0.00016226	0.00015511	0.00000715
605370.00	2377440.00	0.00031112	0.00014463	0.00013715	0.00000748	0.00055801	0.00016092	0.00015357	0.00000735
605870.00	2377440.00	0.00017522	0.00012273	0.00011435	0.00000838	0.00026453	0.00013589	0.0001273	0.00000859
606370.00	2377440.00	0.00020592	0.00013695	0.00012884	0.00000811	0.00033531	0.00015183	0.00014381	0.00000802
606870.00	2377440.00	0.00025162	0.00013501	0.00012682	0.0000082	0.0004995	0.00015185	0.00014376	0.00000809
607370.00	2377440.00	0.00017073	0.00011583	0.0001069	0.00000893	0.00025281	0.00012842	0.00011923	0.00000919
607870.00	2377440.00	0.00038273	0.00013407	0.00012573	0.00000834	0.00038386	0.00014159	0.00013326	0.00000833
608370.00	2377440.00	0.00025772	0.0001275	0.0001191	0.0000084	0.0004946	0.0001437	0.00013523	0.00000847
608870.00	2377440.00	0.00016848	0.00010833	0.00009937	0.00000896	0.00024598	0.00012078	0.00011145	0.00000932
609370.00	2377440.00	0.00025819	0.00012162	0.00011338	0.00000824	0.0004919	0.00013739	0.00012903	0.00000836
609870.00	2377440.00	0.00036644	0.00012204	0.00011397	0.00000807	0.0003886	0.0001303	0.00012211	0.00000818
610370.00	2377440.00	0.00016574	0.00009949	0.00009078	0.00000871	0.00024013	0.00011129	0.00010224	0.00000905
610870.00	2377440.00	0.00036989	0.00011558	0.00010762	0.00000795	0.0003701	0.00012294	0.00011492	0.00000801
611370.00	2377440.00	0.00022737	0.00010739	0.00009933	0.00000805	0.00044142	0.00012227	0.00011418	0.00000809
611870.00	2377440.00	0.00016265	0.00009112	0.00008241	0.00000871	0.00023504	0.00010211	0.00009318	0.00000893
612370.00	2377440.00	0.0003568	0.00010528	0.00009716	0.00000813	0.00038035	0.00011309	0.00010501	0.00000808
612870.00	2377440.00	0.00021835	0.00009752	0.00008918	0.00000834	0.00041829	0.0001113	0.00010303	0.00000827
613370.00	2377440.00	0.00015759	0.0000833	0.00007422	0.00000908	0.00022887	0.00009352	0.00008433	0.00000919
613870.00	2377440.00	0.00020239	0.00009148	0.00008277	0.00000871	0.00036742	0.00010401	0.00009542	0.00000858
614370.00	2377440.00	0.00013809	0.00007525	0.00006635	0.0000089	0.00015344	0.00008053	0.00007181	0.00000872
614870.00	2377440.00	0.00014591	0.00007594	0.00006684	0.00000909	0.00016064	0.00008079	0.00007192	0.00000887
615370.00	2377440.00	0.00043613	0.00009223	0.000083	0.00000923	0.00026051	0.00008955	0.00008055	0.00000901
615870.00	2377440.00	0.00042301	0.00009027	0.00008079	0.00000948	0.00041184	0.0000942	0.000085	0.00000921
616370.00	2377440.00	0.00044981	0.00008944	0.00007977	0.00000967	0.00036694	0.00009112	0.00008174	0.00000937
616870.00	2377440.00	0.00018436	0.00007934	0.00006944	0.0000099	0.00031508	0.00008913	0.00007947	0.00000966
617370.00	2377440.00	0.00017147	0.00007818	0.00006813	0.00001005	0.00025995	0.00008751	0.00007765	0.00000986
617870.00	2377440.00	0.00016993	0.00007708	0.00006694	0.00001014	0.00025668	0.00008644	0.00007648	0.00000996
618370.00	2377440.00	0.00017172	0.00007701	0.00006675	0.00001025	0.00026123	0.0000868	0.00007663	0.00001017
618870.00	2377440.00	0.000172	0.0000763	0.00006604	0.00001026	0.00026487	0.00008626	0.00007603	0.00001023
619370.00	2377440.00	0.00017074	0.00007506	0.00006488	0.00001018	0.0002638	0.00008491	0.00007476	0.00001016
619870.00	2377440.00	0.00016989	0.00007391	0.00006386	0.00001005	0.00026375	0.00008369	0.00007365	0.00001004
590370.00	2377940.00	0.00020601	0.00016907	0.00015101	0.00001806	0.00024425	0.00018096	0.00016267	0.00001829
590870.00	2377940.00	0.00023195	0.00016617	0.00014937	0.0000168	0.00026566	0.00017786	0.00016049	0.00001738
591370.00	2377940.00	0.00031615	0.00016467	0.00014928	0.00001539	0.00028936	0.00017366	0.00015751	0.00001615
591870.00	2377940.00	0.00050166	0.00016479	0.00015079	0.000014	0.00031993	0.00016852	0.00015372	0.0000148
592370.00	2377940.00	0.00063882	0.00016287	0.00015011	0.00001276	0.00034365	0.0001628	0.00014933	0.00001347
592870.00	2377940.00	0.00084929	0.00016487	0.0001531	0.00001177	0.00039666	0.00016011	0.00014781	0.00001229
593370.00	2377940.00	0.00091809	0.00016366	0.00015262	0.00001104	0.00041436	0.00015589	0.00014456	0.00001133
593870.00	2377940.00	0.00098245	0.00016407	0.00015345	0.00001063	0.0004485	0.00015408	0.0001434	0.00001067
594370.00	2377940.00	0.00100852	0.00016534	0.00015485	0.00001049	0.00046931	0.00015365	0.00014333	0.00001032
594870.00	2377940.00	0.00102383	0.00016846	0.00015787	0.00001059	0.00048895	0.00015528	0.00014503	0.00001025
595370.00	2377940.00	0.00107578	0.00017503	0.00016413	0.00001089	0.00053343	0.00016039	0.00014995	0.00001044
595870.00	2377940.00	0.00106576	0.00018145	0.00017017	0.00001128	0.0005425	0.00016618	0.0001554	0.00001078
596370.00	2377940.00	0.00108797	0.00019014	0.0001784	0.00001173	0.00058425	0.00017545	0.0001642	0.00001125
596870.00	2377940.00	0.00109641	0.00019876	0.00018661	0.00001215	0.00063362	0.00018607	0.00017432	0.00001175
597370.00	2377940.00	0.00110012	0.00020696	0.00019449	0.00001247	0.00067271	0.00019719	0.00018499	0.00001219
597870.00	2377940.00	0.00109329	0.00021443	0.00020183	0.00001259	0.0007001	0.0002074	0.0001949	0.0000125
598370.00	2377940.00	0.00077699	0.00021166	0.00019917	0.00001249	0.00062556	0.00021387	0.00020125	0.00001262
598870.00	2377940.00	0.00077601	0.00021734	0.00020521	0.00001213	0.00060946	0.00022087	0.00020841	0.00001247
599370.00	2377940.00	0.00076292	0.00022044	0.0002089	0.00001154	0.00060458	0.00022624	0.00021419	0.00001205
599870.00	2377940.00	0.00073849	0.00022019	0.00020937	0.00001081	0.00060673	0.00022914	0.00021773	0.00001141
600370.00	2377940.00	0.00070182	0.00021679	0.00020677	0.00001002	0.00057949	0.00022715	0.00021651	0.00001064
600870.00	2377940.00	0.00065986	0.00021063	0.00020138	0.00000925	0.00053176	0.00022078	0.00021096	0.00000983
601370.00	2377940.00	0.00043149	0.0001953	0.00018652	0.00000878	0.00087892	0.0002278	0.0002185	0.00000931
601870.00	2377940.00	0.00039067	0.00018637	0.00017815	0.00000823	0.00080907	0.00021682	0.00020816	0.00000866
602370.00	2377940.00	0.00035521	0.00017727	0.00016949	0.00000778	0.00069345	0.0002039	0.00019579	0.00000812
602870.00	2377940.00	0.00033289	0.00016887	0.00016143	0.00000744	0.0006731	0.00019399	0.00018631	0.00000769

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2377940.00	0.00027018	0.00016027	0.00015304	0.00000723	0.00056332	0.00018342	0.00017598	0.00000745
603870.00	2377940.00	0.00032812	0.00015556	0.00014854	0.00000703	0.00061815	0.00017591	0.00016881	0.0000071
604370.00	2377940.00	0.00021648	0.00014981	0.00014259	0.00000722	0.00034439	0.00016735	0.00015995	0.0000074
604870.00	2377940.00	0.00031168	0.00014619	0.00013918	0.00000701	0.00057458	0.00016349	0.00015653	0.00000695
605370.00	2377940.00	0.00029394	0.00014242	0.00013528	0.00000714	0.00055683	0.0001592	0.00015216	0.00000703
605870.00	2377940.00	0.00026466	0.00013876	0.00013141	0.00000735	0.0005296	0.00015562	0.00014841	0.00000721
606370.00	2377940.00	0.00031337	0.00013772	0.00013019	0.00000753	0.00051338	0.00015168	0.00014432	0.00000737
606870.00	2377940.00	0.0002096	0.00013251	0.00012465	0.00000787	0.0003768	0.00014755	0.0001398	0.00000775
607370.00	2377940.00	0.00024298	0.00013088	0.00012289	0.00000799	0.0004808	0.000147	0.0001391	0.0000079
607870.00	2377940.00	0.00019698	0.00012834	0.0001201	0.00000825	0.00030194	0.00014209	0.00013383	0.00000826
608370.00	2377940.00	0.00020519	0.00012537	0.00011715	0.00000822	0.00035144	0.00013981	0.00013156	0.00000825
608870.00	2377940.00	0.00022924	0.0001233	0.00011514	0.00000816	0.00045345	0.00013915	0.00013092	0.00000823
609370.00	2377940.00	0.00042083	0.00012664	0.00011864	0.000008	0.00048793	0.00013552	0.00012743	0.00000808
609870.00	2377940.00	0.00020065	0.00011678	0.00010874	0.00000804	0.00033008	0.00013041	0.00012224	0.00000817
610370.00	2377940.00	0.00021648	0.00011401	0.00010611	0.0000079	0.00040658	0.00012859	0.00012057	0.00000802
610870.00	2377940.00	0.00023072	0.00011125	0.00010344	0.00000781	0.00046098	0.00012636	0.00011845	0.00000791
611370.00	2377940.00	0.00036988	0.00011277	0.00010506	0.00000771	0.00052113	0.00012356	0.0001158	0.00000776
611870.00	2377940.00	0.00027056	0.00010618	0.00009842	0.00000776	0.00053078	0.00012081	0.00011302	0.00000779
612370.00	2377940.00	0.00021752	0.00010122	0.00009337	0.00000785	0.00041823	0.00011492	0.00010707	0.00000785
612870.00	2377940.00	0.00018829	0.0000975	0.00008949	0.00000801	0.00028885	0.00010899	0.00010099	0.000008
613370.00	2377940.00	0.00023788	0.0000959	0.00008785	0.00000805	0.00047575	0.00010956	0.00010159	0.00000798
613870.00	2377940.00	0.00012349	0.00006353	0.00005471	0.00000882	0.00019095	0.00007205	0.00006311	0.00000894
614370.00	2377940.00	0.00030272	0.00009214	0.00008387	0.00000827	0.00022229	0.00009334	0.00008517	0.00000817
614870.00	2377940.00	0.0002429	0.00008677	0.0000783	0.00000847	0.00020384	0.00008891	0.00008057	0.00000834
615370.00	2377940.00	0.00033336	0.00008881	0.00008013	0.00000869	0.00023582	0.00008892	0.00008042	0.0000085
615870.00	2377940.00	0.00028708	0.00008549	0.00007655	0.00000895	0.00040476	0.00009377	0.00008505	0.00000871
616370.00	2377940.00	0.00023565	0.00008202	0.00007286	0.00000916	0.00042511	0.00009246	0.00008353	0.00000892
616870.00	2377940.00	0.00019625	0.00007927	0.0000699	0.00000937	0.00036963	0.00008997	0.00008084	0.00000913
617370.00	2377940.00	0.00018406	0.00007755	0.00006802	0.00000953	0.00032841	0.00008754	0.00007824	0.00000929
617870.00	2377940.00	0.00016877	0.00007733	0.00006755	0.00000978	0.00025286	0.00008677	0.00007712	0.00000965
618370.00	2377940.00	0.00016868	0.00007495	0.00006521	0.00000975	0.00026502	0.00008378	0.00007424	0.00000954
618870.00	2377940.00	0.00018077	0.00007383	0.00006407	0.00000975	0.0003242	0.00008313	0.00007361	0.00000952
619370.00	2377940.00	0.00016835	0.00007265	0.0000629	0.00000975	0.00026871	0.00008097	0.00007141	0.00000955
619870.00	2377940.00	0.00016669	0.0000716	0.0000619	0.00000969	0.00026437	0.00007977	0.00007027	0.00000951
590370.00	2378440.00	0.00020215	0.00016451	0.00014708	0.00001742	0.00024015	0.0001759	0.00015824	0.00001767
590870.00	2378440.00	0.00030218	0.00016768	0.00015155	0.00001614	0.00028528	0.00017655	0.00015986	0.00001668
591370.00	2378440.00	0.00045409	0.00016665	0.0001518	0.00001485	0.00031086	0.00017128	0.00015572	0.00001556
591870.00	2378440.00	0.00061354	0.00016499	0.00015142	0.00001356	0.00033726	0.00016571	0.00015139	0.00001431
592370.00	2378440.00	0.00090536	0.00016866	0.00015625	0.00001242	0.00041199	0.00016315	0.00015007	0.00001308
592870.00	2378440.00	0.00096644	0.0001656	0.00015414	0.00001146	0.00043788	0.00015817	0.00014622	0.00001195
593370.00	2378440.00	0.00099	0.00016289	0.00015214	0.00001075	0.00045435	0.0001539	0.00014287	0.00001103
593870.00	2378440.00	0.0009651	0.00016029	0.00014997	0.00001032	0.00044548	0.0001504	0.00014003	0.00001037
594370.00	2378440.00	0.00106062	0.00016365	0.00015344	0.0000102	0.00049947	0.00015145	0.00014141	0.00001004
594870.00	2378440.00	0.00103288	0.00016497	0.0001547	0.00001026	0.0004926	0.0001518	0.00014186	0.00000994
595370.00	2378440.00	0.00106424	0.00017036	0.00015983	0.00001053	0.00053228	0.00015624	0.00014615	0.0000101
595870.00	2378440.00	0.00109522	0.00017751	0.00016658	0.00001093	0.00061495	0.00016394	0.0001535	0.00001043
596370.00	2378440.00	0.00107212	0.00018417	0.00017284	0.00001133	0.0005831	0.00017012	0.00015927	0.00001085
596870.00	2378440.00	0.00107147	0.00019211	0.00018037	0.00001174	0.00061901	0.00017958	0.00016826	0.00001132
597370.00	2378440.00	0.00104654	0.00019867	0.00018656	0.00001211	0.00077166	0.00019387	0.00018208	0.00001179
597870.00	2378440.00	0.00106798	0.00020739	0.00019515	0.00001224	0.00066326	0.00019914	0.00018704	0.0000121
598370.00	2378440.00	0.00075773	0.0002048	0.00019259	0.0000122	0.00059945	0.00020563	0.00019336	0.00001227
598870.00	2378440.00	0.00074896	0.00021075	0.00019884	0.00001191	0.00056577	0.00021168	0.00019948	0.0000122
599370.00	2378440.00	0.00073081	0.00021454	0.00020314	0.0000114	0.00054419	0.00021675	0.00020488	0.00001187
599870.00	2378440.00	0.00071897	0.00021563	0.00020489	0.00001074	0.00055172	0.00022091	0.0002096	0.00001131
600370.00	2378440.00	0.00069632	0.00021353	0.00020353	0.00001	0.00054927	0.00022143	0.00021083	0.0000106
600870.00	2378440.00	0.00064361	0.00020824	0.00019901	0.00000923	0.00050234	0.00021608	0.00020626	0.00000983
601370.00	2378440.00	0.00043953	0.00019414	0.00018537	0.00000877	0.00088574	0.00022611	0.00021681	0.0000093
601870.00	2378440.00	0.00035444	0.0001845	0.00017627	0.00000823	0.00079671	0.00021605	0.00020734	0.00000871
602370.00	2378440.00	0.0003669	0.00017724	0.00016952	0.00000772	0.00071713	0.00020406	0.00019599	0.00000807
602870.00	2378440.00	0.00032759	0.00016848	0.00016112	0.00000736	0.00067031	0.00019384	0.0001862	0.00000764
603370.00	2378440.00	0.00033406	0.00016147	0.00015441	0.00000706	0.00064432	0.00018403	0.00017679	0.00000724
603870.00	2378440.00	0.00024813	0.00015309	0.00014614	0.00000694	0.0005005	0.00017405	0.00016694	0.00000711
604370.00	2378440.00	0.00032642	0.00014958	0.00014281	0.00000676	0.00058985	0.0001679	0.00016111	0.00000679
604870.00	2378440.00	0.0002846	0.0001441	0.00013733	0.00000677	0.00056816	0.00016243	0.00015568	0.00000675
605370.00	2378440.00	0.00034698	0.00014251	0.00013571	0.0000068	0.00052546	0.000156	0.0001493	0.00000669
605870.00	2378440.00	0.00032507	0.00013898	0.00013203	0.00000695	0.00052065	0.00015263	0.00014582	0.00000681
606370.00	2378440.00	0.00039249	0.00013875	0.00013166	0.0000071	0.0004066	0.00014569	0.00013877	0.00000692
606870.00	2378440.00	0.00036106	0.0001353	0.00012797	0.00000734	0.00043455	0.00014443	0.00013728	0.00000716
607370.00	2378440.00	0.0001959	0.00013045	0.00012253	0.00000792	0.00029535	0.00014384	0.00013586	0.00000798
607870.00	2378440.00	0.00020621	0.00012646	0.00011862	0.00000784	0.00037075	0.00014082	0.00013305	0.00000777

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2378440.00	0.00037255	0.00012915	0.00012131	0.00000783	0.00052435	0.0001406	0.00013281	0.00000779
608870.00	2378440.00	0.0001923	0.000122	0.00011398	0.00000802	0.00029656	0.00013514	0.00012705	0.00000809
609370.00	2378440.00	0.00031554	0.00012259	0.00011476	0.00000783	0.00054304	0.00013654	0.00012864	0.0000079
609870.00	2378440.00	0.00019144	0.00011651	0.00010861	0.0000079	0.00029423	0.00012934	0.00012131	0.00000803
610370.00	2378440.00	0.00018927	0.00011372	0.00010589	0.00000783	0.00028196	0.0001262	0.00011821	0.00000799
610870.00	2378440.00	0.0001889	0.00011139	0.00010352	0.00000787	0.00027456	0.00012363	0.00011555	0.00000809
611370.00	2378440.00	0.00026941	0.00010961	0.00010209	0.00000751	0.00052706	0.00012422	0.00011662	0.0000076
611870.00	2378440.00	0.00030787	0.00010785	0.00010038	0.00000747	0.0005333	0.00012078	0.00011326	0.00000752
612370.00	2378440.00	0.00018441	0.0001015	0.0000938	0.00000771	0.00026741	0.00011275	0.00010493	0.00000781
612870.00	2378440.00	0.00018301	0.00009818	0.00009047	0.00000771	0.00026831	0.00010925	0.00010149	0.00000776
613370.00	2378440.00	0.000205	0.00009537	0.00008768	0.00000768	0.00037968	0.0001078	0.00010014	0.00000765
613870.00	2378440.00	0.00013092	0.00006912	0.00006074	0.00000838	0.00019736	0.00007786	0.00006933	0.00000853
614370.00	2378440.00	0.00015512	0.00008137	0.00007291	0.00000846	0.00022393	0.000091	0.00008244	0.00000856
614870.00	2378440.00	0.00018986	0.00008697	0.00007884	0.00000813	0.0003328	0.00009819	0.00009018	0.00000802
615370.00	2378440.00	0.0002732	0.00008723	0.00007898	0.00000824	0.00041643	0.00009655	0.00008847	0.00000807
615870.00	2378440.00	0.00018415	0.00008248	0.00007397	0.00000851	0.00031842	0.00009299	0.00008465	0.00000834
616370.00	2378440.00	0.00026829	0.00008308	0.00007445	0.00000863	0.00040472	0.00009161	0.0000832	0.00000841
616870.00	2378440.00	0.0001939	0.00007907	0.00007021	0.00000886	0.0003635	0.00008965	0.000081	0.00000865
617370.00	2378440.00	0.0001699	0.00007909	0.00006983	0.00000926	0.0002538	0.00008862	0.00007942	0.0000092
617870.00	2378440.00	0.00023852	0.00007755	0.00006839	0.00000916	0.00040824	0.0000864	0.00007751	0.00000889
618370.00	2378440.00	0.00021349	0.00007549	0.00006621	0.00000928	0.00039995	0.00008511	0.00007609	0.00000902
618870.00	2378440.00	0.00023673	0.00007508	0.00006572	0.00000936	0.00037682	0.00008265	0.00007357	0.00000909
619370.00	2378440.00	0.0002414	0.0000742	0.00006479	0.0000094	0.00037359	0.00008125	0.00007213	0.00000913
619870.00	2378440.00	0.00024101	0.0000732	0.00006379	0.0000094	0.00037249	0.00008004	0.00007091	0.00000913
590370.00	2378940.00	0.00021751	0.00016405	0.00014732	0.00001673	0.00025333	0.00017478	0.0001578	0.00001699
590870.00	2378940.00	0.00024323	0.00016018	0.00014453	0.00001565	0.00026521	0.00017031	0.00015414	0.00001618
591370.00	2378940.00	0.0002666	0.00015427	0.00013986	0.0000144	0.00026826	0.00016356	0.00014847	0.00001509
591870.00	2378940.00	0.00041611	0.00015435	0.00014122	0.00001313	0.00029534	0.00015902	0.00014518	0.00001385
592370.00	2378940.00	0.00045522	0.00014958	0.00013759	0.00001198	0.00029924	0.00015265	0.00014003	0.00001262
592870.00	2378940.00	0.00068763	0.00015335	0.00014228	0.00001108	0.00034894	0.00015065	0.00013909	0.00001156
593370.00	2378940.00	0.00095475	0.00015865	0.0001482	0.00001045	0.00043447	0.00014999	0.00013927	0.00001072
593870.00	2378940.00	0.00098238	0.00015781	0.00014777	0.00001004	0.00045378	0.00014769	0.0001376	0.0000101
594370.00	2378940.00	0.00100449	0.00015854	0.00014865	0.00000989	0.0004734	0.00014706	0.00013732	0.00000974
594870.00	2378940.00	0.00105614	0.00016221	0.00015224	0.00000997	0.00051571	0.00014927	0.00013961	0.00000966
595370.00	2378940.00	0.00110569	0.00016789	0.00015763	0.00001025	0.00064183	0.00015659	0.00014676	0.00000983
595870.00	2378940.00	0.00107878	0.00017256	0.00016194	0.00001062	0.00071549	0.00016374	0.00015361	0.00001013
596370.00	2378940.00	0.00096678	0.0001757	0.00016464	0.00001106	0.0008817	0.00017547	0.00016489	0.00001058
596870.00	2378940.00	0.00095351	0.0001824	0.00017096	0.00001144	0.00087492	0.00018277	0.00017176	0.00001101
597370.00	2378940.00	0.00104442	0.00019338	0.0001817	0.00001167	0.00061556	0.00018235	0.00017099	0.00001135
597870.00	2378940.00	0.00103025	0.0002005	0.00018864	0.00001187	0.00059874	0.00018991	0.00017821	0.0000117
598370.00	2378940.00	0.00073447	0.00019832	0.00018643	0.0000119	0.00054733	0.0001968	0.00018487	0.00001192
598870.00	2378940.00	0.00072096	0.00020421	0.00019253	0.00001169	0.00052032	0.00020299	0.00019107	0.00001192
599370.00	2378940.00	0.0007038	0.00020844	0.00019718	0.00001126	0.00051201	0.00020861	0.00019694	0.00001168
599870.00	2378940.00	0.00068663	0.0002104	0.00019974	0.00001066	0.00050843	0.00021271	0.0002015	0.0000112
600370.00	2378940.00	0.00066354	0.00020945	0.0001995	0.00000995	0.0005011	0.00021403	0.00020347	0.00001056
600870.00	2378940.00	0.00065446	0.00020594	0.00019671	0.00000924	0.00050523	0.00021311	0.00020329	0.00000982
601370.00	2378940.00	0.00029523	0.00018862	0.00017964	0.00000898	0.00050201	0.00021516	0.00020549	0.00000967
601870.00	2378940.00	0.00054913	0.00018963	0.00018157	0.00000807	0.00060537	0.00020623	0.00019777	0.00000846
602370.00	2378940.00	0.00038517	0.00017729	0.00016963	0.00000767	0.00071628	0.00020328	0.00019524	0.00000803
602870.00	2378940.00	0.00033937	0.00016854	0.00016126	0.00000728	0.00067621	0.00019358	0.000186	0.00000758
603370.00	2378940.00	0.00034631	0.00016157	0.00015462	0.00000695	0.00064217	0.00018365	0.0001765	0.00000715
603870.00	2378940.00	0.00032975	0.00015457	0.00014783	0.00000673	0.00061383	0.00017497	0.00016811	0.00000686
604370.00	2378940.00	0.00041687	0.00015142	0.00014489	0.00000653	0.00049447	0.00016321	0.00015666	0.00000655
604870.00	2378940.00	0.00027405	0.00014275	0.00013618	0.00000656	0.00055889	0.00016136	0.00015478	0.00000658
605370.00	2378940.00	0.00038063	0.00014215	0.00013564	0.00000651	0.00048089	0.00015286	0.00014644	0.00000642
605870.00	2378940.00	0.000307	0.00013687	0.00013022	0.00000665	0.00052785	0.00015132	0.00014478	0.00000654
606370.00	2378940.00	0.00028467	0.0001336	0.00012678	0.00000682	0.00051733	0.00014823	0.00014155	0.00000668
606870.00	2378940.00	0.00024434	0.00013008	0.00012303	0.00000705	0.00048767	0.00014544	0.00013854	0.0000069
607370.00	2378940.00	0.00022831	0.0001275	0.00012023	0.00000727	0.00045474	0.00014256	0.00013542	0.00000714
607870.00	2378940.00	0.00020351	0.00012496	0.00011747	0.0000075	0.00037031	0.00013891	0.00013151	0.0000074
608370.00	2378940.00	0.00018974	0.00012303	0.00011535	0.00000769	0.00029947	0.00013585	0.00012818	0.00000767
608870.00	2378940.00	0.0002277	0.00012133	0.00011367	0.00000767	0.00045763	0.00013642	0.00012877	0.00000766
609370.00	2378940.00	0.00022832	0.00011908	0.00011141	0.00000767	0.00045869	0.00013409	0.00012638	0.00000771
609870.00	2378940.00	0.00018967	0.00011584	0.00010814	0.0000077	0.00030131	0.00012845	0.00012065	0.0000078
610370.00	2378940.00	0.0001877	0.00011318	0.00010555	0.00000763	0.0002911	0.00012548	0.00011772	0.00000775
610870.00	2378940.00	0.00018489	0.00011053	0.00010296	0.00000757	0.00027515	0.00012243	0.00011471	0.00000772
611370.00	2378940.00	0.00018375	0.00010793	0.00010038	0.00000755	0.00026743	0.00011945	0.00011173	0.00000773
611870.00	2378940.00	0.00022011	0.00010516	0.00009786	0.00000729	0.0004362	0.00011898	0.0001116	0.00000738
612370.00	2378940.00	0.00019623	0.00010145	0.00009415	0.0000073	0.00034272	0.00011361	0.00010625	0.00000736
612870.00	2378940.00	0.00035659	0.00010387	0.00009665	0.00000722	0.0004897	0.00011321	0.00010598	0.00000723

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2378940.00	0.00017939	0.0000955	0.00008806	0.00000744	0.00026615	0.0001061	0.00009863	0.00000747
613870.00	2378940.00	0.0001207	0.00006361	0.0000556	0.00000801	0.0001856	0.00007172	0.00006354	0.00000818
614370.00	2378940.00	0.00024226	0.00009146	0.00008396	0.0000075	0.00043626	0.00010308	0.00009565	0.00000743
614870.00	2378940.00	0.00017456	0.00008834	0.00008044	0.0000079	0.00025397	0.0000983	0.00009038	0.00000792
615370.00	2378940.00	0.00025029	0.00008681	0.00007901	0.0000078	0.00042375	0.00009714	0.00008948	0.00000767
615870.00	2378940.00	0.0002134	0.00008342	0.00007543	0.00000799	0.00040611	0.00009469	0.00008685	0.00000784
616370.00	2378940.00	0.00025818	0.00008285	0.0000747	0.00000815	0.00040279	0.0000917	0.00008374	0.00000796
616870.00	2378940.00	0.00016877	0.0000788	0.00007037	0.00000843	0.00026066	0.00008796	0.00007968	0.00000828
617370.00	2378940.00	0.00030052	0.00008081	0.00007232	0.00000849	0.0003544	0.00008675	0.0000785	0.00000825
617870.00	2378940.00	0.00022169	0.00007677	0.00006808	0.00000869	0.00040197	0.00008626	0.00007781	0.00000845
618370.00	2378940.00	0.00022865	0.00007569	0.00006685	0.00000883	0.00039989	0.00008449	0.00007591	0.00000858
618870.00	2378940.00	0.00022839	0.00007445	0.00006549	0.00000895	0.00037354	0.00008228	0.00007359	0.00000869
619370.00	2378940.00	0.00023744	0.00007366	0.00006462	0.00000904	0.0003669	0.00008068	0.00007191	0.00000877
619870.00	2378940.00	0.00023688	0.00007264	0.00006355	0.00000909	0.00036532	0.00007943	0.00007061	0.00000882
590370.00	2379440.00	0.00018321	0.00015289	0.00013645	0.00001644	0.00021624	0.00016329	0.0001466	0.00001669
590870.00	2379440.00	0.00018646	0.00014843	0.00013313	0.0000153	0.00022321	0.0001591	0.00014328	0.00001583
591370.00	2379440.00	0.00019732	0.000144	0.00013	0.000014	0.0002347	0.00015467	0.00014	0.00001467
591870.00	2379440.00	0.00018178	0.00013498	0.00012224	0.00001274	0.0002184	0.00014518	0.00013173	0.00001345
592370.00	2379440.00	0.00031948	0.00014102	0.00012941	0.00001161	0.00026667	0.00014692	0.0001347	0.00001222
592870.00	2379440.00	0.00064008	0.00014814	0.00013737	0.00001076	0.00033274	0.00014587	0.00013465	0.00001122
593370.00	2379440.00	0.00090216	0.00015398	0.00014382	0.00001016	0.000413	0.00014595	0.00013553	0.00001042
593870.00	2379440.00	0.0011474	0.00016046	0.00015061	0.00000985	0.00058065	0.00014946	0.00013956	0.0000099
594370.00	2379440.00	0.00103539	0.00015649	0.00014686	0.00000962	0.00049221	0.0001447	0.00013521	0.00000949
594870.00	2379440.00	0.0010565	0.00015889	0.00014921	0.00000968	0.00052621	0.00014639	0.000137	0.00000939
595370.00	2379440.00	0.0010712	0.00016324	0.00015327	0.00000997	0.00072324	0.00015568	0.00014612	0.00000956
595870.00	2379440.00	0.00101669	0.00016615	0.00015597	0.00001018	0.00052487	0.00015241	0.0001427	0.00000972
596370.00	2379440.00	0.00100468	0.00017221	0.00016166	0.00001055	0.00052851	0.00015826	0.00014818	0.00001008
596870.00	2379440.00	0.00098373	0.00017881	0.00016788	0.00001093	0.00051961	0.00016486	0.00015435	0.00001051
597370.00	2379440.00	0.00101588	0.00018702	0.00017573	0.00001129	0.00058949	0.00017557	0.00016461	0.00001096
597870.00	2379440.00	0.00099298	0.00019374	0.00018223	0.00001151	0.00054973	0.00018222	0.0001709	0.00001132
598370.00	2379440.00	0.00069047	0.00019154	0.00017996	0.00001158	0.00048156	0.00018721	0.00017563	0.00001158
598870.00	2379440.00	0.00067323	0.0001973	0.00018586	0.00001144	0.0004713	0.00019363	0.00018199	0.00001164
599370.00	2379440.00	0.00066953	0.00020213	0.00019103	0.0000111	0.00047768	0.00020033	0.00018886	0.00001147
599870.00	2379440.00	0.00066436	0.00020502	0.00019446	0.00001057	0.00048497	0.00020568	0.0001946	0.00001107
600370.00	2379440.00	0.0006533	0.0002053	0.00019538	0.00000992	0.00048809	0.0002086	0.00019811	0.00001049
600870.00	2379440.00	0.00061559	0.00020234	0.00019313	0.00000921	0.00046527	0.00020697	0.00019716	0.00000981
601370.00	2379440.00	0.00044712	0.00019075	0.00018198	0.00000877	0.00089958	0.00022173	0.00021244	0.00000929
601870.00	2379440.00	0.000426	0.00018456	0.0001764	0.00000816	0.0008304	0.00021354	0.00020492	0.00000862
602370.00	2379440.00	0.00026742	0.0001738	0.00016598	0.00000782	0.00046883	0.00019828	0.00018992	0.00000836
602870.00	2379440.00	0.00029423	0.00016701	0.00015973	0.00000728	0.00060975	0.00019219	0.00018456	0.00000764
603370.00	2379440.00	0.00025804	0.00015917	0.00015221	0.00000697	0.00050947	0.00018169	0.00017442	0.00000727
603870.00	2379440.00	0.00028841	0.00015319	0.00014653	0.00000666	0.00059649	0.00017502	0.00016818	0.00000683
604370.00	2379440.00	0.00025474	0.00014651	0.00014001	0.0000065	0.00053002	0.0001666	0.00015997	0.00000663
604870.00	2379440.00	0.00025363	0.00014142	0.00013502	0.0000064	0.0005285	0.00016022	0.00015376	0.00000645
605370.00	2379440.00	0.00022136	0.00013661	0.0001302	0.00000641	0.00043822	0.0001534	0.00014697	0.00000643
605870.00	2379440.00	0.00025983	0.0001341	0.00012768	0.00000641	0.00052174	0.0001504	0.00014406	0.00000634
606370.00	2379440.00	0.00034611	0.00013403	0.00012756	0.00000647	0.00046764	0.00014443	0.00013811	0.00000632
606870.00	2379440.00	0.00021465	0.00012781	0.00012106	0.00000675	0.00042301	0.00014246	0.00013584	0.00000662
607370.00	2379440.00	0.00020138	0.00012538	0.00011841	0.00000696	0.00037311	0.00013913	0.0001323	0.00000684
607870.00	2379440.00	0.00027417	0.00012527	0.00011821	0.00000707	0.00047382	0.00013823	0.00013131	0.00000693
608370.00	2379440.00	0.00036673	0.00012638	0.00011916	0.00000722	0.00050678	0.00013678	0.00012968	0.00000709
608870.00	2379440.00	0.00020409	0.00011958	0.00011216	0.00000742	0.00038136	0.00013321	0.00012584	0.00000737
609370.00	2379440.00	0.00038939	0.00012308	0.00011571	0.00000738	0.00047012	0.00013152	0.00012417	0.00000735
609870.00	2379440.00	0.00025318	0.00011668	0.00010927	0.00000741	0.00050162	0.00013125	0.00012379	0.00000745
610370.00	2379440.00	0.00028588	0.00011538	0.00010804	0.00000734	0.00051794	0.00012887	0.00012146	0.00000741
610870.00	2379440.00	0.00034521	0.0001148	0.00010757	0.00000723	0.00049709	0.00012527	0.00011796	0.00000732
611370.00	2379440.00	0.00023866	0.00010869	0.00010151	0.00000718	0.00048081	0.00012285	0.00011557	0.00000728
611870.00	2379440.00	0.0002208	0.00010534	0.00009824	0.00000711	0.00044113	0.000119	0.0001118	0.0000072
612370.00	2379440.00	0.00017883	0.00010168	0.00009451	0.00000718	0.00026456	0.00011254	0.00010525	0.0000073
612870.00	2379440.00	0.00023281	0.00010006	0.00009304	0.00000702	0.00046774	0.00011345	0.00010638	0.00000707
613370.00	2379440.00	0.0001791	0.00009573	0.0000886	0.00000713	0.00027606	0.00010627	0.00009909	0.00000717
613870.00	2379440.00	0.00011901	0.00006354	0.00005586	0.00000768	0.00018286	0.00007147	0.00006358	0.00000788
614370.00	2379440.00	0.00014289	0.00007756	0.00006984	0.00000772	0.00020797	0.00008641	0.00007852	0.00000789
614870.00	2379440.00	0.00019149	0.00008785	0.00008055	0.0000073	0.00034872	0.00009906	0.00009181	0.00000725
615370.00	2379440.00	0.00017579	0.00008513	0.00007766	0.00000747	0.00028343	0.00009511	0.00008771	0.0000074
615870.00	2379440.00	0.00033719	0.00008772	0.00008023	0.00000749	0.00029409	0.00009146	0.0000841	0.00000736
616370.00	2379440.00	0.00016675	0.00008154	0.00007364	0.0000079	0.00024381	0.00009065	0.0000828	0.00000785
616870.00	2379440.00	0.00019555	0.0000792	0.00007129	0.0000079	0.00036974	0.0000897	0.00008195	0.00000774
617370.00	2379440.00	0.00018501	0.00007719	0.00006911	0.00000809	0.00033998	0.00008713	0.00007922	0.00000791
617870.00	2379440.00	0.00021092	0.00007632	0.00006809	0.00000823	0.00039204	0.00008605	0.00007803	0.00000802

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2379440.00	0.0001604	0.00007434	0.00006584	0.0000085	0.00023947	0.00008273	0.00007438	0.00000835
618870.00	2379440.00	0.00020908	0.00007356	0.00006502	0.00000853	0.00037335	0.00008231	0.00007402	0.00000829
619370.00	2379440.00	0.00023382	0.00007319	0.00006455	0.00000864	0.00036107	0.00008019	0.00007182	0.00000838
619870.00	2379440.00	0.0002331	0.00007213	0.00006339	0.00000873	0.00035901	0.00007888	0.00007042	0.00000846
590370.00	2379940.00	0.00018729	0.00015162	0.00013581	0.00001581	0.00022297	0.00016171	0.00014564	0.00001607
590870.00	2379940.00	0.00018516	0.00014507	0.00013029	0.00001478	0.00022227	0.0001553	0.00014001	0.00001529
591370.00	2379940.00	0.00017954	0.00013803	0.00012443	0.0000136	0.00021622	0.0001482	0.00013396	0.00001425
591870.00	2379940.00	0.0001731	0.00013113	0.00011877	0.00001236	0.00020842	0.00014097	0.00012793	0.00001304
592370.00	2379940.00	0.00034803	0.00013936	0.00012807	0.00001129	0.00026922	0.00014409	0.00013222	0.00001187
592870.00	2379940.00	0.00071763	0.00014844	0.00013795	0.00001049	0.00035091	0.00014439	0.00013347	0.00001093
593370.00	2379940.00	0.0008995	0.00015109	0.0001412	0.00000989	0.0004114	0.00014287	0.00013273	0.00001014
593870.00	2379940.00	0.00106171	0.00015469	0.00014514	0.00000955	0.00050679	0.00014368	0.00013408	0.0000096
594370.00	2379940.00	0.0010343	0.00015353	0.00014417	0.00000936	0.00049787	0.00014192	0.00013268	0.00000924
594870.00	2379940.00	0.00053732	0.00014197	0.00013224	0.00000973	0.00117113	0.00016525	0.00015577	0.00000948
595370.00	2379940.00	0.00100869	0.0001572	0.00014764	0.00000955	0.0005087	0.00014435	0.00013518	0.00000917
595870.00	2379940.00	0.00098974	0.00016125	0.00015141	0.00000984	0.00050736	0.00014785	0.00013845	0.00000939
596370.00	2379940.00	0.0009592	0.00016628	0.0001561	0.00001018	0.00049272	0.00015239	0.00014266	0.00000973
596870.00	2379940.00	0.00093729	0.00017249	0.00016194	0.00001055	0.000485	0.00015848	0.00014834	0.00001014
597370.00	2379940.00	0.00097054	0.00018055	0.00016964	0.00001092	0.00052658	0.00016776	0.00015719	0.00001057
597870.00	2379940.00	0.00096898	0.00018751	0.00017634	0.00001117	0.00053363	0.00017584	0.00016489	0.00001095
598370.00	2379940.00	0.00068053	0.0001855	0.00017422	0.00001128	0.00047545	0.00018116	0.00016993	0.00001123
598870.00	2379940.00	0.00068507	0.00019169	0.00018047	0.00001121	0.00048582	0.00018895	0.00017762	0.00001133
599370.00	2379940.00	0.0007064	0.00019718	0.00018623	0.00001095	0.00051575	0.00019717	0.00018594	0.00001122
599870.00	2379940.00	0.00065449	0.00019979	0.00018932	0.00001047	0.00047374	0.00019962	0.0001887	0.00001092
600370.00	2379940.00	0.00064514	0.00020099	0.00019111	0.00000988	0.00047602	0.00020311	0.0001927	0.00001042
600870.00	2379940.00	0.00061029	0.00019909	0.00018988	0.0000092	0.00045851	0.00020279	0.000193	0.00000978
601370.00	2379940.00	0.00045288	0.00018873	0.00017997	0.00000876	0.00089345	0.00021863	0.00020936	0.00000927
601870.00	2379940.00	0.00043082	0.0001833	0.00017514	0.00000816	0.00084554	0.00021218	0.00020356	0.00000862
602370.00	2379940.00	0.00037902	0.00017564	0.00016801	0.00000764	0.00071496	0.00020155	0.00019352	0.00000803
602870.00	2379940.00	0.00036648	0.0001686	0.00016142	0.00000718	0.00067746	0.00019249	0.000185	0.00000749
603370.00	2379940.00	0.00032856	0.00016065	0.00015382	0.00000683	0.00064316	0.00018361	0.00017653	0.00000708
603870.00	2379940.00	0.00042638	0.00015682	0.00015035	0.00000647	0.00052244	0.00017053	0.00016394	0.00000659
604370.00	2379940.00	0.0003342	0.00014815	0.00014182	0.00000632	0.00057947	0.00016618	0.00015976	0.00000641
604870.00	2379940.00	0.00022495	0.00014029	0.000134	0.00000628	0.00044144	0.00015821	0.00015182	0.00000639
605370.00	2379940.00	0.00021619	0.00013563	0.0001294	0.00000623	0.00042002	0.00015224	0.00014596	0.00000627
605870.00	2379940.00	0.00024895	0.0001326	0.00012642	0.00000619	0.00050911	0.00014904	0.00014289	0.00000615
606370.00	2379940.00	0.00019497	0.00012869	0.00012232	0.00000636	0.00034374	0.00014266	0.00013634	0.00000632
606870.00	2379940.00	0.00018818	0.0001263	0.00011977	0.00000653	0.00031031	0.00013923	0.00013276	0.00000647
607370.00	2379940.00	0.00022599	0.00012442	0.00011784	0.00000658	0.00045341	0.00013879	0.00013234	0.00000645
607870.00	2379940.00	0.0002943	0.00012446	0.00011774	0.00000672	0.00045654	0.00013571	0.00012915	0.00000656
608370.00	2379940.00	0.00035357	0.00012445	0.00011759	0.00000686	0.00036025	0.00013026	0.00012355	0.00000671
608870.00	2379940.00	0.00023973	0.00011926	0.00011218	0.00000709	0.00048413	0.00013367	0.00012666	0.000007
609370.00	2379940.00	0.00029086	0.00011894	0.00011178	0.00000716	0.00051245	0.00013193	0.00012482	0.00000711
609870.00	2379940.00	0.00020696	0.00011452	0.00010728	0.00000724	0.00039863	0.00012792	0.00012066	0.00000725
610370.00	2379940.00	0.00017902	0.0001129	0.00010551	0.00000739	0.00026388	0.00012426	0.00011671	0.00000755
610870.00	2379940.00	0.00017792	0.00011012	0.00010283	0.00000729	0.00026273	0.00012132	0.00011389	0.00000744
611370.00	2379940.00	0.00043573	0.00011477	0.00010781	0.00000696	0.00038059	0.0001184	0.00011136	0.00000704
611870.00	2379940.00	0.000192	0.00010452	0.00009753	0.00000699	0.00033928	0.00011647	0.00010938	0.00000709
612370.00	2379940.00	0.00022746	0.0001029	0.00009603	0.00000687	0.0004573	0.00011624	0.00010928	0.00000695
612870.00	2379940.00	0.00027123	0.00010166	0.00009487	0.00000679	0.00049866	0.00011404	0.00010719	0.00000686
613370.00	2379940.00	0.0003228	0.00010066	0.00009391	0.00000676	0.00048468	0.0001105	0.00010371	0.00000679
613870.00	2379940.00	0.00012579	0.00006938	0.00006198	0.0000074	0.00018903	0.00007756	0.00006994	0.00000762
614370.00	2379940.00	0.00014304	0.00007886	0.00007145	0.0000074	0.0002073	0.0000876	0.00008001	0.00000759
614870.00	2379940.00	0.00017894	0.00008801	0.00008102	0.00000699	0.00029958	0.0000983	0.00009133	0.00000697
615370.00	2379940.00	0.00028949	0.00008898	0.00008198	0.000007	0.00037801	0.00009671	0.00008978	0.00000693
615870.00	2379940.00	0.00017969	0.00008324	0.00007603	0.00000721	0.00031137	0.00009334	0.00008621	0.00000713
616370.00	2379940.00	0.00028234	0.0000842	0.00007693	0.00000727	0.0003728	0.00009153	0.00008439	0.00000714
616870.00	2379940.00	0.00017259	0.00007891	0.0000714	0.00000751	0.00028907	0.00008827	0.00008088	0.00000739
617370.00	2379940.00	0.0002062	0.00007786	0.00007023	0.00000763	0.00038722	0.00008794	0.00008048	0.00000746
617870.00	2379940.00	0.00016175	0.00007542	0.00006755	0.00000787	0.00024747	0.00008383	0.00007609	0.00000773
618370.00	2379940.00	0.00016163	0.0000738	0.00006578	0.00000802	0.00025287	0.00008207	0.00007421	0.00000786
618870.00	2379940.00	0.00017877	0.00007255	0.00006443	0.00000812	0.00032752	0.00008161	0.00007369	0.00000792
619370.00	2379940.00	0.00016308	0.00007105	0.00006277	0.00000828	0.00026844	0.00007915	0.00007107	0.00000808
619870.00	2379940.00	0.00022545	0.00007154	0.00006319	0.00000835	0.00035477	0.0000785	0.0000704	0.00000809
590370.00	2380440.00	0.00022885	0.00015471	0.00013957	0.00001514	0.00025123	0.00016352	0.00014812	0.00001539
590870.00	2380440.00	0.00026111	0.00014999	0.00013581	0.00001418	0.0002572	0.00015816	0.00014351	0.00001465
591370.00	2380440.00	0.00047283	0.00015279	0.00013972	0.00001307	0.00029802	0.00015512	0.00014146	0.00001366
591870.00	2380440.00	0.00021457	0.00013514	0.00012316	0.00001198	0.00023732	0.00014391	0.0001313	0.00001261
592370.00	2380440.00	0.00020825	0.00012924	0.00011831	0.00001093	0.00023001	0.00013752	0.00012603	0.00001149
592870.00	2380440.00	0.00025055	0.00012728	0.0001172	0.00001008	0.00023738	0.00013335	0.00012286	0.00001049

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2380440.00	0.00029441	0.00012609	0.00011665	0.00000945	0.00024388	0.00012986	0.00012017	0.00000969
593870.00	2380440.00	0.00046391	0.00013087	0.00012177	0.0000091	0.00027772	0.00012949	0.00012033	0.00000916
594370.00	2380440.00	0.00106142	0.00015174	0.00014261	0.00000913	0.00053699	0.00014055	0.00013153	0.00000902
594870.00	2380440.00	0.00106423	0.00015334	0.00014415	0.00000919	0.00065499	0.00014476	0.00013584	0.00000893
595370.00	2380440.00	0.00098461	0.00015304	0.00014379	0.00000926	0.00049462	0.00014052	0.00013162	0.00000889
595870.00	2380440.00	0.00098238	0.00015726	0.00014773	0.00000953	0.00051131	0.00014439	0.00013529	0.0000091
596370.00	2380440.00	0.00093906	0.0001614	0.00015155	0.00000985	0.0004816	0.00014787	0.00013847	0.0000094
596870.00	2380440.00	0.00095369	0.00016827	0.00015805	0.00001022	0.00050859	0.00015507	0.00014527	0.0000098
597370.00	2380440.00	0.00096427	0.00017529	0.00016471	0.00001058	0.00053499	0.00016315	0.00015293	0.00001022
597870.00	2380440.00	0.00097541	0.00018209	0.00017123	0.00001086	0.00060409	0.00017301	0.00016241	0.0000106
598370.00	2380440.00	0.0006948	0.00018017	0.00016916	0.000011	0.00051505	0.00017751	0.00016662	0.00001089
598870.00	2380440.00	0.00070114	0.00018624	0.00017526	0.00001098	0.00052933	0.00018541	0.00017438	0.00001103
599370.00	2380440.00	0.00067038	0.00019108	0.00018033	0.00001076	0.00047678	0.00018924	0.00017825	0.00001099
599870.00	2380440.00	0.0006437	0.00019452	0.00018416	0.00001036	0.00046223	0.00019361	0.00018285	0.00001076
600370.00	2380440.00	0.00067577	0.0001973	0.00018746	0.00000984	0.00049675	0.0001997	0.00018939	0.00001031
600870.00	2380440.00	0.00067569	0.000197	0.00018776	0.00000923	0.0005178	0.00020221	0.00019248	0.00000973
601370.00	2380440.00	0.00040777	0.00018477	0.00017599	0.00000879	0.00088554	0.0002154	0.0002061	0.0000093
601870.00	2380440.00	0.00043771	0.00018189	0.00017373	0.00000816	0.00084093	0.00020989	0.00020128	0.00000861
602370.00	2380440.00	0.00039868	0.00017527	0.00016765	0.00000762	0.0007154	0.00020019	0.00019217	0.00000801
602870.00	2380440.00	0.00034779	0.00016749	0.00016032	0.00000717	0.00067987	0.00019216	0.00018464	0.00000751
603370.00	2380440.00	0.00034495	0.00016085	0.00015408	0.00000678	0.00064412	0.00018315	0.00017612	0.00000703
603870.00	2380440.00	0.00032235	0.0001537	0.00014722	0.00000647	0.00061296	0.00017461	0.00016794	0.00000666
604370.00	2380440.00	0.00024093	0.00014562	0.00013931	0.00000631	0.00048254	0.00016523	0.00015873	0.0000065
604870.00	2380440.00	0.00025447	0.00014035	0.00013423	0.00000612	0.00052772	0.00015924	0.00015302	0.00000621
605370.00	2380440.00	0.0002676	0.00013595	0.00012995	0.000006	0.00053642	0.00015332	0.00014729	0.00000603
605870.00	2380440.00	0.00037876	0.0001353	0.0001294	0.0000059	0.00043781	0.00014409	0.00013827	0.00000583
606370.00	2380440.00	0.00028545	0.00012945	0.00012346	0.00000599	0.00050799	0.00014342	0.00013751	0.0000059
606870.00	2380440.00	0.00023959	0.00012557	0.00011944	0.00000612	0.00048076	0.00014021	0.00013419	0.00000601
607370.00	2380440.00	0.0002065	0.00012253	0.00011623	0.00000631	0.00040543	0.00013623	0.00013004	0.00000619
607870.00	2380440.00	0.00018113	0.00012055	0.00011398	0.00000658	0.00029218	0.00013237	0.00012588	0.00000649
608370.00	2380440.00	0.00017883	0.00011891	0.00011214	0.00000677	0.00027969	0.00013037	0.00012367	0.00000671
608870.00	2380440.00	0.00024022	0.00011798	0.00011119	0.00000679	0.00048308	0.00013194	0.00012526	0.00000668
609370.00	2380440.00	0.0001776	0.00011619	0.00010905	0.00000714	0.00026623	0.00012736	0.00012016	0.0000072
609870.00	2380440.00	0.00040059	0.00011933	0.0001124	0.00000693	0.00042572	0.0001254	0.00011853	0.00000687
610370.00	2380440.00	0.00023949	0.00011249	0.0001055	0.000007	0.00047483	0.00012609	0.00011908	0.00000701
610870.00	2380440.00	0.00021936	0.00010982	0.00010285	0.00000697	0.00043873	0.00012323	0.00011619	0.00000703
611370.00	2380440.00	0.00017412	0.00010709	0.00010004	0.00000705	0.00025792	0.00011783	0.00011064	0.00000719
611870.00	2380440.00	0.00017372	0.00010442	0.00009748	0.00000694	0.00025891	0.00011502	0.00010795	0.00000707
612370.00	2380440.00	0.00017539	0.00010161	0.0000948	0.00000681	0.00027192	0.00011217	0.00010524	0.00000693
612870.00	2380440.00	0.00022638	0.00010033	0.00009369	0.00000664	0.00045339	0.00011318	0.00010645	0.00000673
613370.00	2380440.00	0.00028637	0.00009973	0.00009316	0.00000657	0.00048808	0.00011085	0.00010422	0.00000663
613870.00	2380440.00	0.00011599	0.00006371	0.00005655	0.00000716	0.0001781	0.00007131	0.0000639	0.00000741
614370.00	2380440.00	0.00016995	0.00009203	0.00008515	0.00000687	0.0002467	0.00010157	0.00009455	0.00000701
614870.00	2380440.00	0.00017047	0.00009023	0.00008322	0.00000701	0.00025005	0.00009988	0.00009269	0.00000718
615370.00	2380440.00	0.00029438	0.0000896	0.00008292	0.00000668	0.00036194	0.00009668	0.00009005	0.00000663
615870.00	2380440.00	0.0002813	0.0000868	0.00008002	0.00000678	0.00037297	0.00009433	0.00008762	0.00000671
616370.00	2380440.00	0.00028009	0.00008451	0.00007761	0.0000069	0.00036801	0.00009174	0.00008494	0.0000068
616870.00	2380440.00	0.0001618	0.0000794	0.00007221	0.00000719	0.00023973	0.00008797	0.00008084	0.00000713
617370.00	2380440.00	0.00020948	0.00007817	0.00007096	0.00000721	0.00038826	0.00008806	0.00008098	0.00000708
617870.00	2380440.00	0.00028096	0.00007868	0.00007135	0.00000733	0.00034771	0.00008472	0.00007756	0.00000716
618370.00	2380440.00	0.00030381	0.00007774	0.00007026	0.00000748	0.00031041	0.00008215	0.00007487	0.00000728
618870.00	2380440.00	0.00015647	0.00007331	0.00006544	0.00000787	0.00023098	0.00008138	0.00007359	0.00000779
619370.00	2380440.00	0.00015812	0.00007087	0.00006298	0.00000789	0.00025012	0.00007867	0.00007095	0.00000772
619870.00	2380440.00	0.00020727	0.00007074	0.00006279	0.00000796	0.00037323	0.00007904	0.00007131	0.00000773
590370.00	2380940.00	0.00029808	0.00015498	0.00014037	0.00001461	0.00026401	0.00016109	0.00014622	0.00001486
590870.00	2380940.00	0.000322	0.00014999	0.00013628	0.00001371	0.00026791	0.00015554	0.00014137	0.00001417
591370.00	2380940.00	0.0008606	0.00016244	0.00014976	0.00001268	0.00039637	0.00015698	0.00014374	0.00001324
591870.00	2380940.00	0.0004752	0.00014377	0.00013211	0.00001166	0.00029043	0.0001453	0.00013305	0.00001224
592370.00	2380940.00	0.00068927	0.00014625	0.00013551	0.00001074	0.00033891	0.00014284	0.00013158	0.00001126
592870.00	2380940.00	0.00061234	0.00013893	0.000129	0.00000993	0.00031711	0.00013628	0.00012595	0.00001033
593370.00	2380940.00	0.00067641	0.00013852	0.00012919	0.00000934	0.00033392	0.00013383	0.00012425	0.00000958
593870.00	2380940.00	0.00087631	0.00014325	0.00013426	0.000009	0.00040808	0.00013419	0.00012513	0.00000906
594370.00	2380940.00	0.00030788	0.00012897	0.00011964	0.00000932	0.00094741	0.00015394	0.00014467	0.00000927
594870.00	2380940.00	0.00101671	0.00014858	0.00013971	0.00000887	0.00052418	0.00013721	0.00012859	0.00000863
595370.00	2380940.00	0.0009882	0.00015006	0.00014106	0.000009	0.00051177	0.00013812	0.00012948	0.00000864
595870.00	2380940.00	0.00096995	0.00015333	0.00014409	0.00000924	0.00051055	0.00014095	0.00013213	0.00000882
596370.00	2380940.00	0.00098003	0.00015877	0.00014918	0.00000959	0.00058267	0.000148	0.00013886	0.00000914
596870.00	2380940.00	0.00093556	0.00016316	0.00015317	0.00000999	0.00071313	0.00015813	0.00014858	0.00000955
597370.00	2380940.00	0.00094552	0.00017	0.00015975	0.00001024	0.0005404	0.00015807	0.0001482	0.00000988
597870.00	2380940.00	0.00065911	0.00016788	0.00015735	0.00001052	0.00046273	0.0001628	0.00015253	0.00001026

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2380940.00	0.00065129	0.00017403	0.00016334	0.00001069	0.00045284	0.00016928	0.00015872	0.00001056
598870.00	2380940.00	0.00064622	0.00017992	0.00016921	0.00001071	0.00044924	0.00017584	0.0001651	0.00001074
599370.00	2380940.00	0.00062553	0.00018481	0.00017426	0.00001055	0.00043693	0.0001812	0.00017044	0.00001076
599870.00	2380940.00	0.00060641	0.00018867	0.00017845	0.00001022	0.00043175	0.00018617	0.00017558	0.00001059
600370.00	2380940.00	0.00061838	0.00019169	0.00018194	0.00000975	0.00044724	0.00019162	0.00018141	0.00001021
600870.00	2380940.00	0.00056401	0.00019094	0.00018179	0.00000915	0.00042176	0.00019198	0.00018228	0.0000097
601370.00	2380940.00	0.00028936	0.00017875	0.00016983	0.00000892	0.00048969	0.00020172	0.00019219	0.00000953
601870.00	2380940.00	0.00036678	0.00017767	0.00016946	0.0000082	0.00080934	0.000207	0.00019831	0.00000869
602370.00	2380940.00	0.00038531	0.00017366	0.00016603	0.00000763	0.00080231	0.00020144	0.00019339	0.00000805
602870.00	2380940.00	0.000314	0.00016579	0.0001586	0.00000719	0.00064544	0.00019079	0.00018322	0.00000757
603370.00	2380940.00	0.00048146	0.00016466	0.00015803	0.00000663	0.0004935	0.00017631	0.00016946	0.00000685
603870.00	2380940.00	0.00038465	0.00015535	0.00014897	0.00000638	0.0005779	0.00017277	0.00016622	0.00000655
604370.00	2380940.00	0.00023858	0.00014537	0.00013914	0.00000624	0.00047084	0.00016483	0.00015839	0.00000645
604870.00	2380940.00	0.00021822	0.00013946	0.00013339	0.00000607	0.00041101	0.00015708	0.00015085	0.00000623
605370.00	2380940.00	0.00028951	0.00013596	0.00013011	0.00000585	0.00054104	0.00015258	0.00014669	0.00000588
605870.00	2380940.00	0.00030952	0.00013239	0.00012662	0.00000577	0.00051283	0.00014636	0.00014062	0.00000574
606370.00	2380940.00	0.00033312	0.00012975	0.000124	0.00000575	0.00047003	0.00014066	0.00013499	0.00000567
606870.00	2380940.00	0.00033365	0.0001271	0.00012129	0.00000581	0.00044645	0.00013663	0.00013094	0.00000569
607370.00	2380940.00	0.00018175	0.00012108	0.00011497	0.00000611	0.00030405	0.0001333	0.00012725	0.00000605
607870.00	2380940.00	0.00028942	0.0001215	0.0001154	0.0000061	0.00045186	0.00013223	0.00012629	0.00000594
608370.00	2380940.00	0.00024281	0.00011827	0.00011196	0.0000063	0.00045384	0.00013089	0.00012473	0.00000615
608870.00	2380940.00	0.00024933	0.00011693	0.00011045	0.00000648	0.00049082	0.00013036	0.00012401	0.00000635
609370.00	2380940.00	0.00020795	0.00011411	0.00010745	0.00000666	0.0004125	0.00012709	0.00012053	0.00000656
609870.00	2380940.00	0.0002026	0.00011232	0.00010555	0.00000677	0.00039425	0.00012499	0.00011828	0.00000671
610370.00	2380940.00	0.00017672	0.00011012	0.00010325	0.00000687	0.00028813	0.0001212	0.00011432	0.00000688
610870.00	2380940.00	0.00025422	0.00011017	0.00010339	0.00000678	0.00048029	0.00012288	0.00011608	0.0000068
611370.00	2380940.00	0.00041212	0.00011303	0.00010635	0.00000668	0.00038025	0.00011702	0.00011029	0.00000672
611870.00	2380940.00	0.00021977	0.00010493	0.00009825	0.00000668	0.0004392	0.00011777	0.00011101	0.00000676
612370.00	2380940.00	0.00017017	0.00010167	0.00009495	0.00000671	0.00025408	0.00011182	0.00010497	0.00000685
612870.00	2380940.00	0.00016903	0.00009929	0.00009263	0.00000666	0.00024876	0.00010919	0.0001024	0.0000068
613370.00	2380940.00	0.00028531	0.00009986	0.00009346	0.0000064	0.00047923	0.00011061	0.00010414	0.00000647
613870.00	2380940.00	0.0001142	0.0000636	0.00005663	0.00000696	0.0001756	0.00007105	0.00006382	0.00000723
614370.00	2380940.00	0.00013638	0.00007769	0.00007077	0.00000692	0.00019868	0.00008599	0.00007884	0.00000715
614870.00	2380940.00	0.00023128	0.00009041	0.00008403	0.00000638	0.00041092	0.00010095	0.00009456	0.00000639
615370.00	2380940.00	0.00016888	0.00008623	0.00007972	0.00000651	0.00026969	0.00009558	0.00008906	0.00000652
615870.00	2380940.00	0.00025944	0.00008653	0.00008004	0.00000648	0.00038468	0.00009492	0.00008847	0.00000644
616370.00	2380940.00	0.00022135	0.00008301	0.00007642	0.0000066	0.0003984	0.00009304	0.0000865	0.00000654
616870.00	2380940.00	0.0003159	0.00008387	0.00007721	0.00000666	0.0002924	0.00008774	0.00008118	0.00000657
617370.00	2380940.00	0.00020576	0.00007835	0.00007151	0.00000685	0.00038299	0.00008821	0.00008147	0.00000674
617870.00	2380940.00	0.00018498	0.00007589	0.00006889	0.000007	0.0003458	0.00008548	0.0000786	0.00000688
618370.00	2380940.00	0.00027839	0.00007707	0.00006998	0.00000709	0.00033766	0.00008272	0.0000758	0.00000692
618870.00	2380940.00	0.00029479	0.000076	0.00006876	0.00000723	0.00030957	0.00008041	0.00007336	0.00000704
619370.00	2380940.00	0.00015498	0.00007231	0.00006464	0.00000767	0.00022987	0.0000802	0.00007258	0.00000762
619870.00	2380940.00	0.0001636	0.00006944	0.00006184	0.0000076	0.0002809	0.00007742	0.00007	0.00000742
588472.38	2364388.75	0.00077964	0.00071829	0.00063694	0.00008135	0.0011413	0.00075348	0.00068315	0.00007033
588972.38	2364388.75	0.00083525	0.00078803	0.00068857	0.00009946	0.00119183	0.00082922	0.0007385	0.00009072
589472.38	2364388.75	0.00087625	0.00082293	0.00071455	0.00010837	0.00123523	0.00089263	0.00078414	0.00010849
589972.38	2364388.75	0.00187254	0.00081465	0.00071478	0.00009987	0.00216596	0.00092529	0.00081441	0.00011088
590472.38	2364388.75	0.00261327	0.0007674	0.00067768	0.00008972	0.0015897	0.00084451	0.00074532	0.00009919
590972.38	2364388.75	0.00270992	0.00069471	0.00061115	0.00008356	0.00144414	0.00075393	0.00066551	0.00008842
588472.38	2364888.75	0.00075474	0.00069539	0.0006168	0.00007859	0.00109549	0.00073241	0.00066156	0.00007086
588972.38	2364888.75	0.00079965	0.0007466	0.00065549	0.00009111	0.00113909	0.00079591	0.00070817	0.00008774
589472.38	2364888.75	0.00082572	0.00075953	0.00066431	0.00009522	0.00116819	0.00083745	0.0007382	0.00009925
589972.38	2364888.75	0.00081117	0.00071362	0.00062471	0.00008891	0.00117417	0.00082152	0.00072366	0.00009786
590472.38	2364888.75	0.00241979	0.00069535	0.00061641	0.00007894	0.0013907	0.00075487	0.00066986	0.00008502
590972.38	2364888.75	0.00153437	0.00060008	0.00052501	0.00007506	0.00088605	0.00064726	0.00056916	0.0000781
588472.38	2365388.75	0.0007297	0.00067011	0.00059589	0.00007422	0.00105376	0.00071085	0.00064083	0.00007002
588972.38	2365388.75	0.0007596	0.00070178	0.00061968	0.0000821	0.0010746	0.00075566	0.00067314	0.00008252
589472.38	2365388.75	0.00077333	0.00069754	0.00061452	0.00008302	0.00109123	0.00077774	0.00068879	0.00008895
589972.38	2365388.75	0.000773	0.00066225	0.00058175	0.0000805	0.00112612	0.00076518	0.00067712	0.00008806
590472.38	2365388.75	0.00075829	0.00058936	0.00051677	0.00007259	0.00145126	0.00070367	0.0006269	0.00007677
590972.38	2365388.75	0.00266937	0.00059294	0.00052522	0.00006772	0.00152131	0.00063628	0.00056594	0.00007034
588472.38	2365888.75	0.0007029	0.00064179	0.00057302	0.00006878	0.00100861	0.00068515	0.00061758	0.00006757
588972.38	2365888.75	0.00071545	0.00065662	0.00058339	0.00007324	0.0010076	0.00071389	0.0006377	0.00007619
589472.38	2365888.75	0.00072765	0.00064274	0.00057007	0.00007266	0.00102983	0.00072362	0.00064451	0.0000791
589972.38	2365888.75	0.00071203	0.00059748	0.00052858	0.0000689	0.00105006	0.00069217	0.00061748	0.00007469
590472.38	2365888.75	0.00069117	0.00055116	0.00048419	0.00006696	0.00107271	0.000646	0.00057546	0.00007054
590972.38	2365888.75	0.00068909	0.00049564	0.00043307	0.00006257	0.00142842	0.00059644	0.00053135	0.00006509
588472.38	2366388.75	0.00067599	0.00061277	0.00054979	0.00006297	0.00096575	0.00065942	0.00059514	0.00006429
588972.38	2366388.75	0.00068827	0.00061767	0.00055233	0.00006534	0.00097085	0.00067953	0.00060958	0.00006995

Hg (II) Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
589472.38	2366388.75	0.00072797	0.00058583	0.00052398	0.00006185	0.00146233	0.0006795	0.00061139	0.00006811
589972.38	2366388.75	0.00067162	0.00054659	0.00048575	0.00006084	0.00108007	0.00063577	0.00057101	0.00006476
590472.38	2366388.75	0.00064793	0.00050634	0.00044611	0.00006024	0.00104039	0.00059229	0.00053011	0.00006218
590972.38	2366388.75	0.00064678	0.00046165	0.00040442	0.00005724	0.00131267	0.00055208	0.0004927	0.00005938
588472.38	2366888.75	0.00064641	0.00058211	0.00052501	0.0000571	0.00091844	0.0006309	0.00057085	0.00006004
588972.38	2366888.75	0.0006546	0.00057824	0.00052008	0.00005816	0.00092513	0.00064177	0.00057846	0.00006331
589472.38	2366888.75	0.00077267	0.00054548	0.00049077	0.00005471	0.00172984	0.00064185	0.00058208	0.00005976
589972.38	2366888.75	0.00184007	0.0005427	0.00048977	0.00005293	0.0010416	0.00057404	0.00051915	0.00005489
590472.38	2366888.75	0.00067529	0.000469	0.00041443	0.00005457	0.00151926	0.00055987	0.00050461	0.00005526
590972.38	2366888.75	0.00066788	0.00043268	0.00038021	0.00005247	0.00164719	0.00052508	0.00047084	0.00005423
591758.19	2356560.25	0.01124474	0.0122411	0.01088533	0.00135579	0.02888275	0.02549633	0.0245837	0.00091264
592258.19	2356560.25	0.00249718	0.0056005	0.00244882	0.00315169	0.02860609	0.02784409	0.02591759	0.0019265
592758.19	2356560.25	0.01310378	0.00831536	0.00574028	0.00257509	0.013165	0.01193206	0.00937856	0.00255351
593258.19	2356560.25	0.01040405	0.0066018	0.00444508	0.00215674	0.0320959	0.0174251	0.01344733	0.00397778
593758.19	2356560.25	0.00768683	0.00426158	0.00306888	0.0011927	0.02062149	0.00930596	0.00754312	0.00176286
594258.19	2356560.25	0.00592992	0.00286181	0.00216817	0.00069364	0.01365945	0.00535365	0.00443486	0.0009188
591758.19	2357060.25	0.01481787	0.01945655	0.01809836	0.0013582	0.02402509	0.02637096	0.025616	0.00075497
592258.19	2357060.25	0.00979545	0.01117208	0.00999739	0.00117469	0.03378099	0.04217203	0.03998837	0.00218368
592758.19	2357060.25	0.01018946	0.00938835	0.0089821	0.00040625	0.02488954	0.0246709	0.02391007	0.00076083
593258.19	2357060.25	0.00824837	0.00474641	0.00427417	0.00047224	0.02070656	0.0135762	0.01302008	0.0005561
593758.19	2357060.25	0.00623969	0.00333457	0.00283365	0.00050092	0.0140942	0.00701418	0.00637757	0.00063662
594258.19	2357060.25	0.00443795	0.00236763	0.00182916	0.00053848	0.00932761	0.00429155	0.00358244	0.00070912
591758.19	2357560.25	0.01057151	0.01423686	0.01230237	0.00193449	0.01369527	0.01568156	0.01513159	0.00054997
592258.19	2357560.25	0.00657812	0.00723722	0.00656421	0.000673	0.01903082	0.02191188	0.02006255	0.00184933
592758.19	2357560.25	0.00721909	0.00714355	0.00689511	0.00024844	0.01267743	0.01154107	0.01101192	0.00052916
593258.19	2357560.25	0.0055171	0.00434412	0.0040883	0.00025582	0.01199828	0.01024502	0.00997649	0.00026854
593758.19	2357560.25	0.0047776	0.00275623	0.00247733	0.0002789	0.00974468	0.005597	0.00529115	0.00030586
594258.19	2357560.25	0.00391002	0.00202724	0.00178164	0.00024561	0.00726958	0.00352802	0.00321748	0.00031055
591758.19	2358060.25	0.0067604	0.00859729	0.00736677	0.00123052	0.00943981	0.01008383	0.00925987	0.00082395
592258.19	2358060.25	0.00434235	0.00463509	0.00417842	0.00045667	0.01076518	0.01092493	0.00989224	0.0010327
592758.19	2358060.25	0.00506655	0.00467877	0.00446814	0.00021063	0.0076404	0.00641868	0.00603221	0.00038646
593258.19	2358060.25	0.00400636	0.00366317	0.00350552	0.00015765	0.00915292	0.00677468	0.00656439	0.00021029
593758.19	2358060.25	0.00356305	0.00243876	0.00225725	0.0001815	0.0064868	0.00452707	0.00434011	0.00018696
594258.19	2358060.25	0.00312861	0.00176408	0.0015686	0.00019547	0.00568561	0.0029825	0.00277684	0.00020566
591758.19	2358560.25	0.00449219	0.00528279	0.00452869	0.0007541	0.00718386	0.00731806	0.00647536	0.0008427
592258.19	2358560.25	0.00311266	0.00318208	0.00284589	0.00033619	0.00702515	0.00625847	0.00562397	0.0006345
592758.19	2358560.25	0.00357688	0.00308194	0.00290535	0.00017658	0.00528886	0.00402112	0.00373166	0.00028946
593258.19	2358560.25	0.00322963	0.00290326	0.00277673	0.00012653	0.00692154	0.00441908	0.00424094	0.00017814
593758.19	2358560.25	0.00267475	0.00215251	0.00202674	0.00012577	0.00499219	0.00356287	0.00342744	0.00013543
594258.19	2358560.25	0.00254283	0.00158355	0.00144459	0.00013895	0.00430715	0.00257748	0.00243423	0.00014325
591758.19	2359060.25	0.00320194	0.00351565	0.00301293	0.00050272	0.00546409	0.00522485	0.00455261	0.00067224
592258.19	2359060.25	0.00237641	0.00232146	0.00206067	0.00026079	0.00509683	0.00403945	0.00360709	0.00043236
592758.19	2359060.25	0.00258695	0.00216043	0.00201088	0.00014955	0.00404823	0.00279295	0.00256607	0.00022688
593258.19	2359060.25	0.00280115	0.00229673	0.00218088	0.00011585	0.00509087	0.00300697	0.00285636	0.0001506
593758.19	2359060.25	0.00214444	0.0018321	0.00173855	0.00009355	0.0045022	0.00279619	0.00268133	0.00011486
594258.19	2359060.25	0.00200749	0.00143657	0.00133308	0.0001035	0.00334958	0.00218691	0.00208128	0.00010563

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
600239.00	2356326.00	0.00121539	0.00005136	0.0000292	0.00002216	0.0017198	0.00006367	0.00003794	0.00002573
601239.00	2356326.00	0.0010508	0.00004385	0.0000257	0.00001815	0.0014676	0.00005361	0.00003278	0.00002083
602239.00	2356326.00	0.0009253	0.00003819	0.00002311	0.00001508	0.00128	0.00004613	0.00002905	0.00001709
596178.25	2355631.50	0.00322157	0.00016171	0.00014902	0.00001269	0.0051519	0.00027197	0.00025485	0.00001711
596670.63	2355544.50	0.00274221	0.000134	0.00012314	0.00001087	0.0042366	0.00021255	0.00019777	0.00001478
597163.06	2355457.75	0.00237477	0.00011382	0.00010437	0.00000945	0.0035743	0.00017253	0.00015964	0.00001289
598147.88	2355284.00	0.0018576	0.00008705	0.00007967	0.00000738	0.0026967	0.00012354	0.00011356	0.00000998
599132.63	2355110.50	0.00151808	0.00007055	0.00006459	0.00000597	0.0021546	0.00009562	0.0000877	0.00000792
600117.44	2354936.75	0.0012815	0.00005958	0.00005464	0.00000495	0.0017925	0.00007806	0.00007164	0.00000641
601102.25	2354763.25	0.00110894	0.00005184	0.00004765	0.00000419	0.0015359	0.00006615	0.00006086	0.00000529
602087.06	2354589.50	0.0009779	0.00004608	0.00004248	0.0000036	0.0013451	0.00005762	0.00005318	0.00000443
594823.13	2355385.50	0.00609507	0.00077175	0.0007626	0.00000915	0.0110427	0.00191484	0.00190501	0.00000983
595058.06	2355300.00	0.00540131	0.0006683	0.00065993	0.00000837	0.0095292	0.00154945	0.0015403	0.00000915
595527.94	2355129.00	0.00435241	0.00051841	0.00051125	0.00000716	0.0073269	0.00107332	0.0010653	0.00000802
595997.75	2354958.00	0.00361012	0.00041807	0.00041181	0.00000627	0.005848	0.00079004	0.00078294	0.0000071
596467.63	2354787.00	0.00306405	0.00034762	0.00034206	0.00000556	0.0048089	0.00060977	0.00060346	0.00000631
596937.44	2354616.00	0.0026492	0.00029612	0.00029112	0.000005	0.0040514	0.00048871	0.00048303	0.00000568
597877.19	2354274.00	0.00206955	0.00022749	0.00022334	0.00000416	0.0030414	0.00034166	0.00033697	0.00000469
598816.88	2353931.75	0.00169184	0.00018478	0.00018123	0.00000355	0.0024142	0.00025916	0.00025519	0.00000397
599756.56	2353589.75	0.00142911	0.0001562	0.0001531	0.0000031	0.0019949	0.0002081	0.00020466	0.00000344
600696.25	2353247.75	0.00123698	0.00013588	0.00013313	0.00000275	0.001698	0.00017401	0.00017099	0.00000302
601635.94	2352905.75	0.00109078	0.00012069	0.00011822	0.00000247	0.0014779	0.00014986	0.00014717	0.00000269
593971.06	2355326.00	0.0085652	0.00265794	0.00264967	0.00000828	0.0162365	0.00537306	0.00535984	0.00001321
594187.56	2355201.00	0.00743459	0.00223102	0.00222367	0.00000735	0.0135279	0.00424698	0.00423577	0.00001121
594404.06	2355076.00	0.00652865	0.00189902	0.00189239	0.00000663	0.0114745	0.00342946	0.00341975	0.0000097
594620.56	2354951.00	0.00579407	0.00163762	0.00163159	0.00000602	0.0098941	0.00282747	0.0028189	0.00000857
594837.06	2354826.00	0.00518792	0.00142876	0.00142326	0.00000551	0.0086527	0.00237474	0.00236702	0.00000772
595270.06	2354576.00	0.00425523	0.0011216	0.0011169	0.0000047	0.0068473	0.00175468	0.0017483	0.00000638
595703.13	2354326.00	0.00357799	0.00091093	0.00090682	0.00000411	0.0056212	0.00136216	0.00135675	0.00000541
596136.13	2354076.00	0.00306791	0.00076018	0.00075654	0.00000364	0.0047429	0.00109839	0.00109368	0.0000047
596569.13	2353826.00	0.00267245	0.0006482	0.00064493	0.00000327	0.0040869	0.00091207	0.0009079	0.00000417
597435.13	2353326.00	0.00211091	0.00049725	0.00049454	0.00000271	0.0031825	0.00067136	0.00066798	0.00000338
598301.19	2352826.00	0.00173625	0.00040227	0.00039997	0.0000023	0.0025964	0.00052654	0.00052372	0.00000283
599167.19	2352326.00	0.00147246	0.00033828	0.00033628	0.000002	0.0021874	0.00043169	0.00042927	0.00000242
600033.25	2351826.00	0.00127889	0.00029284	0.00029108	0.00000176	0.0018875	0.00036572	0.00036361	0.00000211
600899.25	2351326.00	0.00113152	0.00025909	0.00025752	0.00000158	0.0016584	0.00031748	0.00031561	0.00000187
593579.56	2355201.00	0.00933662	0.00363703	0.00362502	0.00001201	0.0151275	0.00454391	0.00452747	0.00001644
593771.06	2355040.50	0.00799864	0.00303454	0.00302404	0.00001051	0.0137095	0.00407556	0.0040608	0.00001476
593962.63	2354879.75	0.00693304	0.00256338	0.00255404	0.00000933	0.0121699	0.00357069	0.00355738	0.00001331
594154.13	2354719.00	0.0060751	0.0021914	0.00218299	0.00000841	0.0107393	0.00310192	0.0030899	0.00001202
594345.63	2354558.25	0.00537824	0.00189534	0.0018877	0.00000764	0.0094846	0.00269286	0.00268194	0.00001092
594537.13	2354397.75	0.00480522	0.00165664	0.00164964	0.000007	0.0084125	0.00234709	0.00233706	0.00001003
594920.19	2354076.25	0.00392482	0.00130039	0.0012944	0.00000599	0.006731	0.00181356	0.0018051	0.00000846
595303.19	2353754.75	0.00328954	0.00105268	0.00104743	0.00000524	0.0055179	0.00143853	0.00143127	0.00000726
595686.19	2353433.50	0.00281613	0.00087405	0.00086939	0.00000466	0.0046252	0.00117037	0.00116402	0.00000635
596069.25	2353112.00	0.00245155	0.00074106	0.00073688	0.00000418	0.0039515	0.00097375	0.00096812	0.00000563
596835.25	2352469.25	0.00193441	0.00056038	0.00055691	0.00000347	0.0030292	0.00071269	0.00070813	0.00000456
597601.31	2351826.50	0.00159056	0.00044667	0.00044371	0.00000296	0.0024415	0.00055356	0.00054975	0.00000381
598367.38	2351183.75	0.00134903	0.00037047	0.00036789	0.00000258	0.0020393	0.00044959	0.00044634	0.00000326
599133.38	2350541.00	0.00117208	0.00031669	0.0003144	0.00000228	0.0017486	0.00037766	0.00037482	0.00000284
593138.88	2355253.50	0.00858944	0.00323227	0.00321524	0.00001703	0.0071553	0.00180888	0.00179638	0.0000125
593203.19	2355177.00	0.00817511	0.00302827	0.00301235	0.00001591	0.007445	0.00181117	0.0017992	0.00001198
593363.88	2354985.50	0.00720428	0.00257136	0.0025577	0.00001366	0.0078137	0.00176308	0.00175216	0.00001092
593524.56	2354794.00	0.00638594	0.00219999	0.00218802	0.00001197	0.0078107	0.0016687	0.00165859	0.00001012
593685.25	2354602.50	0.00570634	0.00190137	0.00189071	0.00001066	0.0075831	0.00155472	0.00154529	0.00000942
593846.00	2354411.00	0.00513864	0.00165958	0.00164996	0.00000961	0.0072454	0.00143757	0.00142878	0.00000879
594006.69	2354219.50	0.00465931	0.00146232	0.00145358	0.00000875	0.0068562	0.00132487	0.00131662	0.00000824
594167.38	2354027.75	0.00425186	0.00129904	0.00129102	0.00000802	0.0064532	0.001219	0.00121119	0.00000781
594488.75	2353644.75	0.00360595	0.00104928	0.0010424	0.00000689	0.0056892	0.00103595	0.00102909	0.00000687
594810.13	2353261.75	0.00311561	0.00086941	0.00086337	0.00000604	0.0050164	0.00088732	0.0008812	0.00000612
595131.56	2352878.75	0.00273278	0.00073563	0.00073025	0.00000538	0.0044417	0.00076741	0.0007619	0.00000552
595452.94	2352495.75	0.00242842	0.00063344	0.00062859	0.00000485	0.0039552	0.00067027	0.00066524	0.00000503
596095.75	2351729.75	0.00198082	0.00049008	0.00048603	0.00000404	0.0031999	0.00052602	0.00052177	0.00000424
596738.50	2350963.75	0.00166712	0.0003962	0.00039273	0.00000347	0.0026541	0.00042672	0.00042306	0.00000366
597381.31	2350197.75	0.00143389	0.00033058	0.00032755	0.00000304	0.0022484	0.00035577	0.00035256	0.00000321
592839.00	2355286.75	0.00457362	0.00154007	0.00152638	0.00001369	0.003293	0.00093014	0.00091764	0.00001251
592889.00	2355200.25	0.00437375	0.00145018	0.0014375	0.00001268	0.0032628	0.00087981	0.00086821	0.00001161
592939.00	2355113.50	0.00418507	0.00136327	0.00135146	0.00001181	0.0032859	0.00083754	0.00082669	0.00001085
592989.00	2355027.00	0.00400994	0.00128098	0.00126996	0.00001102	0.0033467	0.00080202	0.00079185	0.00001017

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593114.00	2354810.50	0.0036182	0.00109834	0.00108889	0.00000944	0.0035519	0.00073224	0.00072341	0.00000883
593239.00	2354594.00	0.00330967	0.00095095	0.00094269	0.00000826	0.0037156	0.00067656	0.00066868	0.00000788
593364.00	2354377.50	0.00305884	0.00083061	0.00082327	0.00000734	0.0037889	0.00062727	0.00062015	0.00000712
593489.00	2354161.00	0.00285039	0.00073249	0.00072587	0.00000662	0.003779	0.00058207	0.00057556	0.00000651
593614.00	2353944.50	0.00267002	0.00065193	0.00064592	0.00000601	0.0037161	0.0005409	0.00053487	0.00000603
593739.00	2353728.00	0.00251015	0.0005849	0.0005794	0.0000055	0.0036201	0.00050348	0.00049783	0.00000565
593989.00	2353295.00	0.00223698	0.00048145	0.00047674	0.00000472	0.0033791	0.00043877	0.00043389	0.00000488
594239.00	2352862.00	0.00200938	0.00040584	0.0004017	0.00000413	0.0031182	0.00038559	0.00038129	0.0000043
594489.00	2352429.00	0.00181843	0.00034898	0.0003453	0.00000367	0.0028668	0.00034186	0.00033801	0.00000385
594739.00	2351995.75	0.00165605	0.00030495	0.00030165	0.0000033	0.0026305	0.00030545	0.00030196	0.0000035
595239.00	2351129.75	0.00139907	0.00024251	0.00023976	0.00000274	0.0022254	0.00024947	0.00024654	0.00000292
595739.00	2350263.75	0.00120541	0.0002009	0.00019856	0.00000234	0.0019097	0.0002093	0.0002068	0.0000025
592615.25	2355292.25	0.00247911	0.00077684	0.00076545	0.00001139	0.0027286	0.00081517	0.00080241	0.00001276
592649.44	2355198.25	0.00233337	0.00072627	0.00071581	0.00001047	0.0024662	0.0007269	0.0007151	0.0000118
592683.63	2355104.50	0.00219553	0.00067659	0.00066692	0.00000967	0.0022579	0.00065332	0.00064233	0.00001099
592717.81	2355010.50	0.00206931	0.00062976	0.00062077	0.000009	0.0020944	0.00059101	0.00058074	0.00001027
592752.00	2354916.50	0.00195616	0.00058591	0.00057751	0.0000084	0.0019695	0.00053819	0.00052856	0.00000963
592837.56	2354681.50	0.00172777	0.00049281	0.0004856	0.00000721	0.001789	0.00043769	0.00042932	0.00000837
592923.06	2354446.50	0.00156414	0.00042062	0.00041432	0.00000631	0.001733	0.00036872	0.00036126	0.00000745
593008.56	2354211.75	0.00144626	0.00036434	0.00035873	0.00000561	0.0017347	0.00032029	0.00031361	0.00000669
593094.06	2353976.75	0.00135571	0.00031942	0.00031435	0.00000506	0.0017532	0.00028454	0.00027846	0.00000608
593179.56	2353741.75	0.00128101	0.00028309	0.00027849	0.0000046	0.0017719	0.00025725	0.00025165	0.0000056
593265.06	2353507.00	0.00121744	0.00025356	0.00024934	0.00000422	0.0017857	0.00023591	0.00023072	0.00000519
593436.06	2353037.00	0.0011115	0.0002088	0.00020518	0.00000362	0.0017862	0.00020438	0.00019996	0.00000442
593607.06	2352567.25	0.00102526	0.00017712	0.00017394	0.00000318	0.0017546	0.00018178	0.00017792	0.00000386
593778.06	2352097.50	0.00095285	0.00015383	0.000151	0.00000283	0.0016997	0.00016423	0.0001608	0.00000343
593949.13	2351627.50	0.00088959	0.00013602	0.00013348	0.00000254	0.0016288	0.00014973	0.00014665	0.00000308
594291.13	2350687.75	0.00078418	0.00011113	0.00010902	0.00000212	0.0014712	0.00012683	0.00012429	0.00000254
592412.63	2355341.25	0.00174241	0.00053559	0.0005235	0.00001209	0.0035615	0.00105727	0.00104408	0.00001319
592430.00	2355242.75	0.00163643	0.00050152	0.00049047	0.00001105	0.0030351	0.00088537	0.00087324	0.00001212
592447.38	2355144.25	0.00152807	0.00046624	0.00045609	0.00001015	0.0026433	0.00075719	0.00074594	0.00001125
592464.75	2355045.75	0.0014234	0.00043175	0.00042238	0.00000937	0.0023399	0.00065793	0.00064744	0.00001049
592482.13	2354947.25	0.00132458	0.000399	0.00039029	0.0000087	0.0020981	0.00057874	0.00056891	0.00000982
592499.50	2354848.75	0.00123345	0.00036863	0.00036051	0.00000813	0.0019021	0.00051416	0.00050492	0.00000924
592542.88	2354602.50	0.00104106	0.00030389	0.00029692	0.00000697	0.001543	0.00039498	0.0003869	0.00000808
592586.31	2354356.50	0.00089354	0.00025356	0.00024746	0.0000061	0.00131	0.00031485	0.00030763	0.00000721
592629.69	2354110.25	0.00078104	0.00021448	0.00020905	0.00000543	0.0011547	0.00025832	0.00025183	0.00000649
592673.13	2353864.00	0.00069458	0.00018393	0.00017903	0.00000489	0.0010517	0.00021734	0.00021143	0.00000592
592716.50	2353617.75	0.00062701	0.00015966	0.00015521	0.00000445	0.0009821	0.00018665	0.00018117	0.00000548
592759.94	2353371.50	0.00057349	0.00014022	0.00013615	0.00000408	0.0009358	0.00016314	0.00015809	0.00000505
592846.75	2352879.25	0.00049635	0.00011164	0.00010814	0.0000035	0.0008814	0.00013033	0.00012602	0.00000431
592933.56	2352386.75	0.00044399	0.00009218	0.00008911	0.00000307	0.0008514	0.00010905	0.00010528	0.00000376
593020.44	2351894.25	0.00040655	0.0000785	0.00007577	0.00000273	0.0008287	0.00009432	0.00009097	0.00000335
593107.25	2351402.00	0.00037962	0.00006861	0.00006615	0.00000246	0.0008073	0.00008345	0.00008043	0.00000302
593280.88	2350417.25	0.00034122	0.00005556	0.00005351	0.00000205	0.0007631	0.00006827	0.00006578	0.00000249
592239.00	2355426.00	0.00158555	0.00049001	0.00047654	0.00001347	0.0069418	0.00210713	0.00209096	0.00001618
592239.00	2355326.00	0.00150325	0.00046557	0.0004535	0.00001207	0.0056298	0.001667	0.00165307	0.00001393
592239.00	2355226.00	0.00141299	0.00043724	0.00042621	0.00001103	0.0046935	0.00134832	0.0013359	0.00001243
592239.00	2355126.00	0.00131897	0.0004071	0.00039697	0.00001013	0.0040174	0.00111341	0.00110209	0.00001132
592239.00	2355026.00	0.00122671	0.0003772	0.00036784	0.00000936	0.0035222	0.00093706	0.00092663	0.00001043
592239.00	2354926.00	0.00113902	0.00034864	0.00033995	0.00000869	0.0031542	0.00080241	0.00079271	0.0000097
592239.00	2354826.00	0.00105759	0.000322	0.00031389	0.00000811	0.0028735	0.00069745	0.00068835	0.0000091
592239.00	2354576.00	0.00088355	0.00026479	0.00025783	0.00000696	0.0023922	0.00051773	0.00050979	0.00000793
592239.00	2354326.00	0.00074728	0.00021993	0.00021384	0.00000609	0.0020721	0.00040583	0.00039876	0.00000707
592239.00	2354076.00	0.00064147	0.00018504	0.00017962	0.00000542	0.0018346	0.00032995	0.00032358	0.00000637
592239.00	2353826.00	0.00055892	0.00015777	0.00015289	0.00000488	0.0016483	0.00027547	0.00026965	0.00000582
592239.00	2353576.00	0.00049383	0.00013623	0.00013179	0.00000444	0.0014987	0.00023476	0.00022935	0.00000541
592239.00	2353326.00	0.00044211	0.00011904	0.00011497	0.00000407	0.0013753	0.00020323	0.00019827	0.00000495
592239.00	2352826.00	0.0003665	0.00009389	0.0000904	0.00000349	0.0011754	0.00015805	0.00015381	0.00000424
592239.00	2352326.00	0.00031604	0.00007695	0.00007388	0.00000307	0.001026	0.00012781	0.0001241	0.00000371
592239.00	2351826.00	0.00028144	0.00006515	0.00006243	0.00000273	0.0009083	0.00010648	0.00010318	0.0000033
592239.00	2351326.00	0.00025695	0.00005672	0.00005426	0.00000245	0.0008145	0.00009082	0.00008784	0.00000297
592239.00	2350326.00	0.00022189	0.00004525	0.00004321	0.00000204	0.0006763	0.00006966	0.00006721	0.00000246
592100.06	2355538.25	0.00181116	0.00056159	0.00054621	0.00001538	0.0151421	0.00476827	0.00473037	0.0000379
592082.75	2355439.75	0.00176743	0.0005516	0.00053808	0.00001352	0.0123227	0.00375488	0.00372648	0.00002841
592065.38	2355341.25	0.00168854	0.00052838	0.00051627	0.00001211	0.0102489	0.00301196	0.00298968	0.00002227
592048.00	2355242.75	0.00159599	0.00049916	0.0004881	0.00001106	0.0087067	0.00245771	0.0024395	0.00001821
592030.63	2355144.25	0.00149807	0.00046752	0.00045736	0.00001016	0.0075472	0.00203694	0.00202151	0.00001543
592013.25	2355045.75	0.00140004	0.0004353	0.00042592	0.00000938	0.0066669	0.00171256	0.00169911	0.00001345

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591995.88	2354947.25	0.00130631	0.00040422	0.00039551	0.00000872	0.0059907	0.00145895	0.00144695	0.000012
591978.50	2354848.75	0.00121902	0.000375	0.00036687	0.00000814	0.0054559	0.00125767	0.00124678	0.00001089
591935.13	2354602.50	0.00103286	0.00031171	0.00030474	0.00000698	0.0045377	0.00090901	0.00089999	0.00000902
591891.69	2354356.50	0.00088853	0.00026163	0.00025552	0.00000611	0.0039415	0.00069342	0.00068561	0.0000078
591848.31	2354110.25	0.00077855	0.00022248	0.00021705	0.00000543	0.0035247	0.00055169	0.00054475	0.00000694
591804.88	2353864.00	0.00069538	0.00019193	0.00018703	0.0000049	0.0032128	0.00045376	0.00044749	0.00000627
591761.50	2353617.75	0.00063226	0.00016785	0.0001634	0.00000445	0.0029673	0.00038281	0.00037709	0.00000573
591718.06	2353371.50	0.0005842	0.00014869	0.00014461	0.00000408	0.0027669	0.00032953	0.00032433	0.0000052
591631.25	2352879.25	0.00051852	0.00012071	0.00011721	0.0000035	0.0024413	0.00025523	0.00025083	0.0000044
591544.44	2352386.75	0.00047597	0.00010162	0.00009855	0.00000307	0.0021904	0.0002068	0.00020298	0.00000382
591457.56	2351894.25	0.0004451	0.00008806	0.00008532	0.00000274	0.0019802	0.00017302	0.00016963	0.00000338
591370.75	2351402.00	0.00042034	0.00007792	0.00007546	0.00000247	0.0018015	0.00014831	0.00014528	0.00000303
591197.13	2350417.25	0.00038042	0.00006352	0.00006146	0.00000206	0.0015169	0.00011516	0.00011267	0.00000249
591999.56	2355668.25	0.00273756	0.00086784	0.0008457	0.00002214	0.0329726	0.01105505	0.01098053	0.00007451
591965.38	2355574.25	0.00286595	0.00091614	0.00089743	0.00001871	0.0267601	0.00863077	0.0085659	0.00006487
591931.19	2355480.25	0.00287504	0.00092241	0.00090618	0.00001623	0.0224277	0.00690891	0.00685348	0.00005543
591897.00	2355386.25	0.00280618	0.00090073	0.00088634	0.00001438	0.0193046	0.00564103	0.00559405	0.00004698
591862.75	2355292.25	0.0027015	0.00086525	0.00085222	0.00001303	0.017008	0.00468461	0.00464476	0.00003985
591828.56	2355198.25	0.0025733	0.00082155	0.00080966	0.00001189	0.0152654	0.00394594	0.003912	0.00003395
591794.38	2355104.50	0.00243639	0.00077454	0.0007636	0.00001094	0.0139173	0.00336575	0.00333656	0.00002918
591760.19	2355010.50	0.00229793	0.00072682	0.00071669	0.00001013	0.0128181	0.00289996	0.00287464	0.00002532
591726.00	2354916.50	0.00216475	0.00068071	0.00067128	0.00000943	0.0119112	0.00252378	0.00250158	0.00002221
591640.44	2354681.50	0.00186498	0.00057586	0.0005678	0.00000805	0.0102082	0.00184966	0.00183292	0.00001674
591554.94	2354446.50	0.00161934	0.0004881	0.00048107	0.00000702	0.0090018	0.00141606	0.00140278	0.00001328
591469.44	2354211.75	0.00142826	0.00041735	0.00041112	0.00000623	0.0081013	0.00112423	0.00111322	0.00001102
591383.94	2353976.75	0.00128242	0.00036051	0.0003549	0.00000561	0.0073861	0.00091805	0.00090861	0.00000944
591298.44	2353741.75	0.00117348	0.00031488	0.00030978	0.0000051	0.0068127	0.00076799	0.00075972	0.00000827
591212.94	2353507.00	0.0010928	0.00027809	0.00027342	0.00000467	0.0063373	0.00065534	0.00064802	0.00000732
591041.94	2353037.00	0.00098441	0.00022331	0.0002193	0.00000401	0.0055699	0.00049927	0.00049332	0.00000595
590870.94	2352567.25	0.0009151	0.0001857	0.00018217	0.00000353	0.0049817	0.00039885	0.00039382	0.00000503
590699.94	2352097.50	0.00086602	0.00015893	0.00015577	0.00000316	0.0044918	0.00032967	0.0003253	0.00000437
590528.88	2351627.50	0.00082588	0.00013899	0.00013612	0.00000287	0.0040668	0.00027958	0.00027573	0.00000385
590186.88	2350687.75	0.00075676	0.00011137	0.00010897	0.00000241	0.0033802	0.00021269	0.0002096	0.00000309
591889.00	2355719.75	0.00513739	0.00173237	0.00167827	0.0000541	0.0597713	0.02101307	0.02093936	0.00007371
591839.00	2355633.25	0.00560274	0.00189537	0.00184885	0.00004652	0.0488088	0.01654686	0.01648123	0.00006562
591789.00	2355546.50	0.00579872	0.00196174	0.00192105	0.00004069	0.0411087	0.0133146	0.01325358	0.00006103
591739.00	2355460.00	0.00580566	0.00195987	0.00192368	0.00003619	0.0357048	0.01094152	0.01088418	0.00005734
591689.00	2355373.25	0.00569732	0.00191456	0.00188191	0.00003265	0.0318397	0.00914557	0.00909164	0.00005393
591639.00	2355286.75	0.00551749	0.00184374	0.00181401	0.00002973	0.0290624	0.00776948	0.0077188	0.00005067
591589.00	2355200.25	0.00529415	0.00175732	0.00173003	0.00002729	0.0269963	0.00668808	0.00664051	0.00004756
591539.00	2355113.50	0.00505077	0.00166382	0.00163861	0.0000252	0.0253958	0.00582046	0.00577585	0.00004461
591489.00	2355027.00	0.00480837	0.00157034	0.00154692	0.00002342	0.0241568	0.00511992	0.00507807	0.00004185
591364.00	2354810.50	0.00424497	0.00134912	0.00132925	0.00001987	0.0219303	0.00385003	0.00381425	0.00003578
591239.00	2354594.00	0.00378235	0.00115777	0.00114053	0.00001724	0.0203156	0.00301841	0.00298763	0.00003078
591114.00	2354377.50	0.00343291	0.00099986	0.00098465	0.00001521	0.0189526	0.00244312	0.00241638	0.00002674
590989.00	2354161.00	0.00318349	0.0008714	0.00085778	0.00001362	0.0177343	0.00202744	0.00200394	0.0000235
590864.00	2353944.50	0.00301003	0.00076704	0.00075472	0.00001231	0.0166344	0.00171823	0.00169743	0.0000208
590739.00	2353728.00	0.00288005	0.00068132	0.00067009	0.00001123	0.0156437	0.00148054	0.00146198	0.00001855
590489.00	2353295.00	0.00269984	0.00055191	0.00054237	0.00000954	0.0139513	0.00114512	0.00112999	0.00001513
590239.00	2352862.00	0.00257451	0.00046099	0.0004527	0.0000083	0.0125499	0.00092464	0.00091195	0.00001269
589989.00	2352429.00	0.00247552	0.00039479	0.00038747	0.00000732	0.0113661	0.00077056	0.00075967	0.00001089
589739.00	2351995.75	0.00238763	0.00034525	0.00033871	0.00000654	0.0103452	0.00065817	0.00064868	0.00000949
589239.00	2351129.75	0.00222466	0.00027701	0.00027163	0.00000538	0.0087031	0.00050694	0.0004995	0.00000744
588739.00	2350263.75	0.00207497	0.00023265	0.00022808	0.00000456	0.0074345	0.00041037	0.00040432	0.00000605
591853.31	2355866.25	0.00894656	0.00315372	0.0030447	0.00010901	0.1294802	0.04944638	0.04879832	0.00064806
591789.06	2355789.75	0.01097158	0.00389866	0.00380378	0.00009489	0.1076086	0.03997217	0.03962194	0.00035018
591724.75	2355713.25	0.01229181	0.00438594	0.00430166	0.00008427	0.0905469	0.03261973	0.03241634	0.00020339
591660.50	2355636.50	0.01294951	0.00462381	0.00454802	0.00007579	0.0773895	0.02689724	0.02676766	0.00012959
591596.19	2355560.00	0.01312669	0.00468067	0.00461173	0.00006894	0.0674932	0.02247979	0.02238811	0.00009168
591531.94	2355483.25	0.01298353	0.00461301	0.00454966	0.00006334	0.0600129	0.01899906	0.01892841	0.00007065
591467.63	2355406.75	0.01264491	0.00447162	0.00441304	0.00005858	0.0544816	0.01626182	0.01620338	0.00005844
591403.38	2355330.25	0.01217682	0.00428173	0.00422724	0.00005448	0.0503157	0.01406815	0.0140174	0.00005075
591339.13	2355253.50	0.01163855	0.00406477	0.00401385	0.00005092	0.0471544	0.01228327	0.01223769	0.00004558
591274.81	2355177.00	0.01108944	0.00384176	0.00379396	0.0000478	0.0447988	0.01083101	0.01078909	0.00004192
591114.13	2354985.50	0.00979968	0.00330184	0.00326042	0.00004142	0.040927	0.00817493	0.00813886	0.00003606
590953.44	2354794.00	0.0087468	0.00282978	0.00279324	0.00003654	0.038556	0.00642336	0.00639103	0.00003233
590792.75	2354602.50	0.00795474	0.00243935	0.00240666	0.0000327	0.0368175	0.00520926	0.00517986	0.0000294
590632.00	2354411.00	0.00738421	0.00212225	0.00209264	0.0000296	0.0353211	0.00433394	0.00430688	0.00002707
590471.31	2354219.50	0.00697228	0.00186442	0.00183738	0.00002705	0.0339385	0.00368063	0.00365557	0.00002506

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
590310.63	2354027.75	0.0066669	0.00165319	0.00162829	0.0000249	0.0326035	0.00317697	0.00315362	0.00002336
589989.25	2353644.75	0.00627498	0.00133525	0.00131373	0.00002152	0.0300571	0.00246388	0.00244329	0.0000206
589667.88	2353261.75	0.00603896	0.00111072	0.00109173	0.00001899	0.0276874	0.00198844	0.00197001	0.00001842
589346.44	2352878.75	0.00586734	0.00094747	0.00093046	0.000017	0.0255135	0.00165359	0.00163689	0.0000167
589025.06	2352495.75	0.0057222	0.00082523	0.00080981	0.00001542	0.0235309	0.00140719	0.00139192	0.00001527
588382.25	2351729.75	0.00543163	0.00065509	0.00064207	0.00001302	0.0201314	0.00107215	0.00105914	0.00001302
591779.38	2355940.25	0.02342901	0.00902417	0.00868389	0.00034027	0.1893833	0.07604968	0.0736599	0.00238978
591702.75	2355876.00	0.02922918	0.01124454	0.0109963	0.00024824	0.167465	0.06588224	0.06393202	0.00195023
591626.19	2355811.75	0.03292233	0.01265367	0.01246239	0.00019129	0.1484436	0.05690553	0.05532762	0.0015779
591549.56	2355747.50	0.03474044	0.0133243	0.01317	0.0001543	0.1325848	0.0492307	0.04795409	0.00127662
591472.94	2355683.25	0.0351492	0.01344033	0.01331147	0.00012886	0.1196688	0.04276429	0.04172634	0.00103794
591396.38	2355619.00	0.03466705	0.01319739	0.01308648	0.00011091	0.1093011	0.03734414	0.03649385	0.00085029
591319.75	2355554.75	0.03360168	0.01272882	0.01263093	0.00009789	0.1010644	0.03280702	0.03210352	0.00070348
591243.13	2355490.50	0.03219099	0.01213014	0.01204328	0.00008686	0.0945157	0.0289981	0.02840994	0.00058815
591166.56	2355426.00	0.03057771	0.01145659	0.01137869	0.0000779	0.0892599	0.02576809	0.02527228	0.00049582
591089.94	2355361.75	0.0289374	0.0107771	0.01070634	0.00007077	0.085074	0.02304822	0.02262454	0.00042368
590898.44	2355201.00	0.02501058	0.00915069	0.00909316	0.00005754	0.0776203	0.01784434	0.01754591	0.00029844
590706.94	2355040.50	0.02169019	0.0077552	0.00770666	0.00004854	0.0728104	0.0142368	0.01401778	0.00021902
590515.38	2354879.75	0.01903547	0.00660525	0.00656331	0.00004193	0.0692771	0.01164079	0.01147275	0.00016804
590323.88	2354719.00	0.01699491	0.00567554	0.00563863	0.0000369	0.0664283	0.00972483	0.00959072	0.00013411
590132.38	2354558.25	0.01545759	0.00492557	0.00489264	0.00003293	0.0639406	0.00827092	0.0081604	0.00011052
589940.88	2354397.75	0.01430175	0.00431979	0.00429003	0.00002975	0.0616947	0.00714596	0.00705217	0.00009379
589557.81	2354076.25	0.01275013	0.00341203	0.0033871	0.00002493	0.0575806	0.0055343	0.00546261	0.0000717
589174.81	2353754.75	0.01182043	0.00278309	0.0027616	0.00002148	0.053801	0.00445835	0.00439976	0.0000586
588791.81	2353433.50	0.01123236	0.00233301	0.00231404	0.00001896	0.0503068	0.00370127	0.00365081	0.00005046
588408.75	2353112.00	0.01081668	0.00199915	0.00198232	0.00001684	0.0470865	0.00314301	0.00309999	0.00004302
591719.38	2356026.00	0.05346342	0.02430659	0.0212823	0.0030243	0.2168762	0.08836637	0.08615913	0.00220722
591632.75	2355976.00	0.06682308	0.02958217	0.02691347	0.00266871	0.2000616	0.08051979	0.07842287	0.0020969
591546.19	2355926.00	0.0753447	0.03288556	0.03050176	0.00238378	0.184139	0.07287671	0.07089212	0.0019846
591459.56	2355876.00	0.07948625	0.03437174	0.03221996	0.0021518	0.1699159	0.06579857	0.06392411	0.00187453
591373.00	2355826.00	0.08036375	0.03450889	0.0325496	0.00195928	0.1576999	0.05942356	0.05765392	0.00176966
591286.38	2355776.00	0.07916502	0.03378992	0.0319776	0.00181233	0.1474131	0.05375623	0.05208549	0.00167077
591199.75	2355726.00	0.07660656	0.03251387	0.03083755	0.00167634	0.1388493	0.04876019	0.04718166	0.00157856
591113.19	2355676.00	0.07329105	0.03093587	0.02938628	0.00154961	0.1317596	0.04436924	0.04287614	0.00149311
591026.56	2355626.00	0.0696024	0.02922495	0.02778583	0.00143913	0.1258847	0.04050773	0.03909373	0.00141401
590939.94	2355576.00	0.0657949	0.0274814	0.02613949	0.00134192	0.1209574	0.0371083	0.0357673	0.00134101
590723.44	2355451.00	0.05676061	0.02336189	0.02221836	0.00114355	0.111624	0.03023918	0.02906005	0.00117914
590506.94	2355326.00	0.04912258	0.01984206	0.0188503	0.00099176	0.1050756	0.02512706	0.02408574	0.00104133
590290.44	2355201.00	0.04301761	0.01695734	0.01608516	0.0008722	0.1001101	0.02124374	0.02031789	0.00092584
590073.94	2355076.00	0.03826791	0.01462158	0.01384575	0.00077583	0.0960223	0.0182353	0.01740701	0.00082829
589857.44	2354951.00	0.03460719	0.01273005	0.01203334	0.00069671	0.0924649	0.01586016	0.01511501	0.00074515
589640.94	2354826.00	0.03177011	0.01118957	0.01055875	0.00063082	0.0892119	0.01395377	0.01327991	0.00067386
589207.94	2354576.00	0.02780416	0.00887716	0.00834944	0.00052774	0.0832789	0.01111922	0.01056027	0.00055896
588774.88	2354326.00	0.02522419	0.0072646	0.00681318	0.00045143	0.0778663	0.00913932	0.00866819	0.00047112
588341.88	2354076.00	0.02343023	0.00609811	0.00570666	0.00039145	0.072865	0.00769646	0.007294	0.00040246
591675.19	2356120.75	0.06414882	0.02869311	0.02612429	0.00256886	0.1881057	0.07630934	0.07530401	0.00100534
591581.25	2356086.50	0.07982007	0.0350619	0.03290536	0.00215653	0.1748412	0.07022485	0.06927936	0.0009455
591487.25	2356052.50	0.08966535	0.03903368	0.03718194	0.00185173	0.1619751	0.06418727	0.06329871	0.00088855
591393.25	2356018.25	0.09432003	0.04082185	0.03919587	0.00162598	0.1503063	0.05855906	0.05772087	0.00083818
591299.31	2355984.00	0.09512042	0.04098434	0.03953343	0.00145092	0.1400185	0.05342324	0.05263094	0.00079231
591205.31	2355949.75	0.09342565	0.04008463	0.03876699	0.00131766	0.1310565	0.04879198	0.04804172	0.00075027
591111.38	2355915.50	0.0901729	0.0385352	0.03733117	0.00120404	0.1233261	0.04465792	0.04394594	0.00071198
591017.38	2355881.25	0.08607125	0.03663849	0.03553392	0.00110457	0.1166641	0.04097696	0.04030012	0.00067681
590923.44	2355847.25	0.08154501	0.0345804	0.0335619	0.0010185	0.1108633	0.03769649	0.03705259	0.00064392
590829.44	2355813.00	0.07692889	0.03249833	0.031553	0.00094535	0.1058028	0.03478427	0.03416993	0.00061434
590594.56	2355727.50	0.06603469	0.02760002	0.02680053	0.00079949	0.0955353	0.02880736	0.02825771	0.00054966
590359.63	2355642.00	0.05681906	0.02343432	0.02274374	0.00069059	0.0877148	0.0242615	0.02376556	0.00049598
590124.69	2355556.50	0.04940514	0.02003023	0.01942402	0.00060622	0.0814876	0.02074253	0.02029153	0.00045099
589889.75	2355471.00	0.04354533	0.01727717	0.01673821	0.00053896	0.0763282	0.01797022	0.0175572	0.00041302
589654.88	2355385.50	0.03891428	0.01504669	0.01456258	0.00048411	0.0718926	0.01574994	0.0153694	0.00038054
589419.94	2355300.00	0.03522215	0.01322742	0.01278894	0.0004385	0.067927	0.01394342	0.01359094	0.00035249
588950.06	2355129.00	0.02983704	0.01049237	0.01012528	0.00036709	0.0610756	0.01121313	0.01090676	0.00030639
588480.25	2354958.00	0.02613421	0.00857888	0.00826501	0.00031387	0.0553253	0.00927567	0.00900505	0.00027062
591648.13	2356221.75	0.03744506	0.01501216	0.01470906	0.00030309	0.1267265	0.05037	0.05009443	0.00027557
591549.63	2356204.50	0.04564338	0.01849109	0.0182422	0.00024889	0.1145194	0.04500605	0.04476359	0.00024249
591451.13	2356187.00	0.05039628	0.02053173	0.02031995	0.00021178	0.1037143	0.0401653	0.03994767	0.00021764
591352.69	2356169.75	0.05210728	0.02127396	0.02109039	0.00018356	0.094233	0.0358393	0.03564173	0.00019757
591254.19	2356152.25	0.051842	0.02117505	0.02101268	0.00016237	0.0861925	0.03207959	0.03189768	0.0001819
591155.69	2356135.00	0.0502907	0.02051583	0.02036862	0.0001472	0.079258	0.02877834	0.02860953	0.0001688

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591057.25	2356117.50	0.04807236	0.01957178	0.01943583	0.00013596	0.0733902	0.02593683	0.02577838	0.00015844
590958.75	2356100.25	0.04544909	0.01845129	0.01832755	0.00012374	0.0682953	0.02344592	0.02329629	0.00014963
590860.25	2356083.00	0.04270016	0.0172797	0.0171661	0.0001136	0.063894	0.02128023	0.02113782	0.0001424
590761.81	2356065.50	0.04001807	0.01613562	0.01603038	0.00010525	0.0600895	0.01940578	0.01926902	0.00013675
590515.56	2356022.00	0.03384927	0.0134904	0.01340154	0.00008886	0.0523425	0.01563785	0.01551527	0.00012257
590269.38	2355978.75	0.02878535	0.01129188	0.01121495	0.00007693	0.0464568	0.01285468	0.01274796	0.00010674
590023.19	2355935.25	0.02482117	0.00953784	0.00946978	0.00006807	0.0418442	0.01076558	0.0106713	0.00009429
589777.00	2355892.00	0.02171907	0.00813558	0.00807447	0.00006111	0.0380788	0.00915147	0.00906734	0.00008413
589530.75	2355848.50	0.01928712	0.00701558	0.00695986	0.00005571	0.0349666	0.00788821	0.00781251	0.00007571
589284.56	2355805.00	0.01734665	0.00611148	0.00606002	0.00005146	0.0323051	0.00687962	0.00681095	0.00006867
588792.19	2355718.25	0.01448531	0.00476607	0.00472069	0.00004538	0.0279342	0.00538437	0.0053268	0.00005756
588299.75	2355631.50	0.01250529	0.00383995	0.00379828	0.00004167	0.0244986	0.00435222	0.00430297	0.00004924
591539.00	2356326.00	0.01937939	0.00713489	0.00703701	0.00009787	0.0624828	0.02351685	0.02344686	0.00006998
591439.00	2356326.00	0.02062369	0.00764661	0.00756246	0.00008415	0.0542823	0.02008937	0.02002741	0.00006195
591339.00	2356326.00	0.02077218	0.00772232	0.00764855	0.00007377	0.0475703	0.01726736	0.01721144	0.00005592
591239.00	2356326.00	0.02023204	0.00752507	0.00745938	0.0000657	0.042089	0.01494251	0.01489128	0.00005123
591139.00	2356326.00	0.01933042	0.00718022	0.00712079	0.00005943	0.0375851	0.01301782	0.01297035	0.00004746
591039.00	2356326.00	0.01824297	0.00676008	0.00670576	0.00005433	0.0338414	0.01141613	0.01137172	0.00004441
590939.00	2356326.00	0.01708255	0.00631061	0.00626055	0.00005005	0.0307048	0.01007621	0.01003432	0.00004189
590839.00	2356326.00	0.01592336	0.00586187	0.0058155	0.00004637	0.0280574	0.00894739	0.00890758	0.00003981
590739.00	2356326.00	0.01480966	0.00543081	0.00538761	0.00004319	0.0257859	0.00799161	0.00795352	0.00003809
590489.00	2356326.00	0.01233932	0.00447411	0.00443721	0.0000369	0.0213642	0.00616415	0.0061292	0.00003495
590239.00	2356326.00	0.01035772	0.00370518	0.00367295	0.00003223	0.0181864	0.00489049	0.00485943	0.00003106
589989.00	2356326.00	0.00881068	0.00309998	0.00307135	0.00002863	0.0158042	0.00397344	0.00394561	0.00002783
589739.00	2356326.00	0.00760682	0.00262412	0.00259833	0.00002579	0.0139524	0.00329467	0.00326946	0.00002522
589489.00	2356326.00	0.00665918	0.00224642	0.00222295	0.00002346	0.0124761	0.00278001	0.00275705	0.00002296
589239.00	2356326.00	0.00590355	0.00194372	0.00192218	0.00002154	0.0112668	0.0023808	0.00235974	0.00002106
588739.00	2356326.00	0.00479352	0.00149856	0.00147999	0.00001856	0.0094051	0.00181387	0.00179583	0.00001804
588239.00	2356326.00	0.00402827	0.00119537	0.00117898	0.00001639	0.0080395	0.00143964	0.00142387	0.00001577
591549.63	2356447.50	0.01245625	0.00442062	0.00428309	0.00013753	0.0349548	0.01240637	0.01234011	0.00006627
591451.13	2356465.00	0.01286783	0.00456886	0.00444852	0.00012034	0.0296862	0.01037203	0.01030947	0.00006256
591352.69	2356482.25	0.01271619	0.00450999	0.00440297	0.00010702	0.0255585	0.00878735	0.00872802	0.00005932
591254.19	2356499.75	0.01222438	0.004327	0.00423057	0.00009643	0.0222506	0.00752121	0.00746474	0.00005647
591155.69	2356517.00	0.01157411	0.00408537	0.00399746	0.00008791	0.0195997	0.00650727	0.00645341	0.00005385
591057.25	2356534.50	0.01085558	0.00381887	0.00373802	0.00008085	0.0174248	0.00567831	0.0056268	0.00005152
590958.75	2356551.75	0.01012692	0.00354958	0.00347473	0.00007484	0.0156399	0.00499923	0.00494986	0.00004937
590860.25	2356569.00	0.00941823	0.00328904	0.00321944	0.0000696	0.0141557	0.00443449	0.00438707	0.00004742
590761.81	2356586.50	0.00874683	0.00304312	0.00297806	0.00006506	0.0129052	0.00395903	0.00391337	0.00004566
590515.56	2356630.00	0.00728076	0.00250891	0.00245303	0.00005588	0.0105412	0.00306286	0.00302109	0.00004176
590269.38	2356673.25	0.00610853	0.00208489	0.00203593	0.00004896	0.0089093	0.00244658	0.00240833	0.00003825
590023.19	2356716.75	0.00518544	0.00175214	0.00170857	0.00004358	0.0077309	0.00200478	0.00196959	0.00003519
589777.00	2356760.00	0.00445992	0.00149089	0.00145162	0.00003927	0.0068485	0.0016792	0.00164657	0.00003264
589530.75	2356803.50	0.00388301	0.00128337	0.00124763	0.00003574	0.0061617	0.00143178	0.00140147	0.00003031
589284.56	2356847.00	0.00342032	0.00111701	0.00108419	0.00003282	0.0056159	0.00123989	0.00121164	0.00002825
588792.19	2356933.75	0.00273758	0.00087192	0.00084364	0.00002828	0.0047992	0.00096637	0.0009415	0.00002487
588299.75	2357020.50	0.00227178	0.00070465	0.00067971	0.00002494	0.0042069	0.00078443	0.00076221	0.00002222
591487.25	2356599.50	0.01271535	0.00475916	0.00464478	0.00011439	0.0214987	0.00726907	0.00718796	0.00008111
591393.25	2356633.75	0.01245167	0.0046462	0.00454508	0.00010113	0.0188355	0.00630227	0.00622613	0.00007614
591299.31	2356668.00	0.0118969	0.00442169	0.00433107	0.00009062	0.0166853	0.00551843	0.00544687	0.00007156
591205.31	2356702.25	0.01121245	0.00414723	0.004065	0.00008223	0.0149285	0.00487341	0.00480607	0.00006734
591111.38	2356736.50	0.01048566	0.00385801	0.00378269	0.00007532	0.0134795	0.0043363	0.00427278	0.00006353
591017.38	2356770.75	0.00976159	0.00357182	0.00350229	0.00006953	0.0122731	0.00388438	0.00382429	0.00006009
590923.44	2356804.75	0.00906972	0.00329961	0.00323498	0.00006463	0.0112671	0.00350183	0.00344483	0.00005701
590829.44	2356839.00	0.00842108	0.00304641	0.00298611	0.00006029	0.0104167	0.00317408	0.00311985	0.00005423
590594.56	2356924.50	0.0070189	0.00250351	0.00245197	0.00005154	0.0087962	0.002537	0.00248872	0.00004828
590359.63	2357010.00	0.00590994	0.00207831	0.00203329	0.00004502	0.0076432	0.00208108	0.00203768	0.0000434
590124.69	2357095.50	0.00504109	0.00174769	0.00170772	0.00003997	0.0067813	0.00174435	0.00170498	0.00003937
589889.75	2357181.00	0.00435821	0.00148922	0.00145326	0.00003596	0.0061113	0.001489	0.00145288	0.00003612
589654.88	2357266.50	0.00381526	0.0012846	0.00125194	0.00003266	0.005571	0.00129071	0.00125753	0.00003318
589419.94	2357352.00	0.00337838	0.00112049	0.00109054	0.00002995	0.0051244	0.00113368	0.00110303	0.00003065
588950.06	2357523.00	0.00273145	0.00087862	0.00085285	0.00002577	0.0044266	0.00090383	0.00087727	0.00002657
588480.25	2357694.00	0.00228628	0.00071325	0.00069052	0.00002272	0.0038994	0.00074662	0.00072318	0.00002344
591286.38	2356876.00	0.01264209	0.00516901	0.00507935	0.00008967	0.0149185	0.00502965	0.0049629	0.00006675
591199.75	2356926.00	0.01175757	0.00477812	0.0046958	0.00008232	0.013629	0.00455666	0.00449432	0.00006234
591113.19	2356976.00	0.01089721	0.00440107	0.00432497	0.0000761	0.0125145	0.00414512	0.00408651	0.0000586
591026.56	2357026.00	0.0100873	0.00404822	0.00397746	0.00007077	0.0115469	0.00378532	0.00372993	0.0000554
590939.94	2357076.00	0.0093379	0.00372386	0.00365776	0.0000661	0.0107045	0.00346967	0.00341703	0.00005263
590723.44	2357201.00	0.00774528	0.00303904	0.00298229	0.00005675	0.0090134	0.00283322	0.00278617	0.00004705
590506.94	2357326.00	0.00650404	0.00251122	0.00246149	0.00004972	0.0077407	0.00235889	0.00231621	0.00004268

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
590290.44	2357451.00	0.00554054	0.00210471	0.00206046	0.00004425	0.0067561	0.00199708	0.00195812	0.00003897
590073.94	2357576.00	0.00478625	0.00178886	0.00174898	0.00003988	0.0059776	0.0017159	0.00167995	0.00003595
589857.44	2357701.00	0.00418546	0.00153935	0.00150305	0.0000363	0.0053501	0.00149341	0.00146015	0.00003327
589640.94	2357826.00	0.00370186	0.00133996	0.00130664	0.00003332	0.0048354	0.00131465	0.00128369	0.00003096
589207.94	2358076.00	0.00298415	0.00104671	0.00101802	0.0000287	0.0040489	0.00104872	0.0010216	0.00002712
588774.88	2358326.00	0.00248644	0.00084635	0.00082107	0.00002528	0.0034809	0.00086396	0.00083982	0.00002414
588341.88	2358576.00	0.00212786	0.00070404	0.00068143	0.00002261	0.003054	0.00073052	0.00070881	0.00002171
591089.94	2357290.25	0.00955919	0.00426164	0.00419586	0.00006578	0.0116096	0.00413897	0.00408035	0.00005862
590898.44	2357451.00	0.00783402	0.0034334	0.00337685	0.00005656	0.0095892	0.00334236	0.0032892	0.00005316
590706.94	2357611.50	0.00652103	0.00280765	0.00275806	0.00004959	0.0080846	0.00274442	0.00269607	0.00004836
590515.38	2357772.25	0.00551575	0.00233179	0.00228761	0.00004417	0.0069401	0.00228996	0.00224571	0.00004425
590323.88	2357933.00	0.00473432	0.00196579	0.00192593	0.00003985	0.0060529	0.00193946	0.00189873	0.00004073
590132.38	2358093.75	0.00411655	0.00167899	0.00164269	0.0000363	0.0053508	0.00166487	0.00162727	0.0000376
589940.88	2358254.25	0.00362247	0.00145167	0.00141832	0.00003335	0.0047842	0.00144662	0.00141179	0.00003483
589557.81	2358575.75	0.00289005	0.00111977	0.00109105	0.00002873	0.0039333	0.00112684	0.00109651	0.00003033
589174.81	2358897.25	0.00238263	0.00089509	0.0008699	0.0000252	0.0033298	0.00090902	0.0008822	0.00002682
588791.81	2359218.50	0.00201828	0.00073702	0.00071454	0.00002248	0.0028825	0.00075463	0.00073062	0.00002401
588408.75	2359540.00	0.0017485	0.00062197	0.00060172	0.00002025	0.0025399	0.00064136	0.00061966	0.0000217
590953.44	2357858.00	0.00578251	0.00266626	0.00261314	0.00005311	0.0082626	0.00299745	0.0029501	0.00004735
590792.75	2358049.50	0.004842	0.00219959	0.00215354	0.00004606	0.0070057	0.00246616	0.0024242	0.00004196
590632.00	2358241.00	0.00412452	0.00184316	0.00180262	0.00004054	0.0060438	0.00206392	0.00202625	0.00003767
590471.31	2358432.50	0.00356388	0.00156634	0.00153024	0.0000361	0.0052903	0.00175374	0.00171954	0.0000342
590310.63	2358624.25	0.00311989	0.00134777	0.0013153	0.00003247	0.004688	0.00151003	0.00147884	0.0000312
589989.25	2359007.25	0.00246958	0.0010316	0.00100471	0.00002689	0.0037957	0.00115875	0.00113223	0.00002652
589667.88	2359390.25	0.00202489	0.00081937	0.00079655	0.00002282	0.0031726	0.00092338	0.00090033	0.00002305
589346.44	2359773.25	0.00170839	0.00067107	0.00065131	0.00001976	0.0027174	0.00075863	0.00073831	0.00002032
589025.06	2360156.25	0.00147506	0.00056385	0.00054647	0.00001738	0.0023737	0.00063919	0.00062112	0.00001807
588382.25	2360922.25	0.00115944	0.0004232	0.00040916	0.00001404	0.0018925	0.0004813	0.00046652	0.00001477
590489.00	2359357.00	0.00240536	0.00098959	0.00089513	0.00009445	0.0035335	0.00106073	0.00102459	0.00003614
590239.00	2359790.00	0.00198591	0.00079015	0.00071065	0.0000795	0.0029579	0.00084041	0.00080764	0.00003277
589989.00	2360223.00	0.00168436	0.00065041	0.00058246	0.00006796	0.0025359	0.00068917	0.00065943	0.00002974
589739.00	2360656.25	0.00146044	0.00054903	0.00049012	0.00005891	0.002219	0.0005811	0.00055395	0.00002715
589239.00	2361522.25	0.00115373	0.00041545	0.00036931	0.00004614	0.0017781	0.00044081	0.00041739	0.00002342
588739.00	2362388.25	0.0009564	0.00033333	0.00029606	0.00003727	0.0014879	0.00035549	0.00033508	0.0000204
588239.00	2363254.25	0.00082066	0.0002789	0.00024813	0.00003076	0.0012833	0.00029889	0.00028099	0.0000179
591373.00	2356826.00	0.01350245	0.00555272	0.0054542	0.00009852	0.0164195	0.00557488	0.0055029	0.00007198
591166.56	2357226.00	0.01038909	0.00466157	0.00459121	0.00007036	0.0126104	0.00452844	0.00446728	0.00006116
592239.00	2355526.00	0.00164017	0.00050393	0.00048862	0.0000153	0.0087791	0.00272202	0.00270212	0.00001991
598239.00	2356326.00	0.00176806	0.00007683	0.0000419	0.00003493	0.0026199	0.00009882	0.0000575	0.00004132
599239.00	2356326.00	0.00144057	0.00006172	0.0000342	0.00002752	0.0020757	0.00007778	0.00004549	0.00003229
595685.81	2355718.25	0.00386241	0.00020136	0.00018628	0.00001508	0.0064748	0.00036591	0.00034595	0.00001997
594118.38	2355642.00	0.00932303	0.00129235	0.00127975	0.0000126	0.0185799	0.00419729	0.0041845	0.00001278
594353.31	2355556.50	0.00800252	0.00107188	0.00106069	0.00001118	0.0154037	0.00314046	0.00312884	0.00001162
594588.25	2355471.00	0.00694691	0.00090297	0.0008929	0.00001007	0.0129554	0.00242026	0.00240961	0.00001065
593364.81	2355676.00	0.01370105	0.00468798	0.00467527	0.00001271	0.0281513	0.0105168	0.0104917	0.0000251
593451.44	2355626.00	0.01269145	0.004287	0.00427515	0.00001185	0.0261877	0.00970668	0.00968412	0.00002256
593538.06	2355576.00	0.01183368	0.00394089	0.00392983	0.00001106	0.0242859	0.00888077	0.00886042	0.00002035
593754.56	2355451.00	0.01000291	0.00321448	0.00320502	0.00000947	0.0198093	0.00691604	0.00689992	0.00001611
592698.63	2355940.25	0.01475904	0.00587708	0.00584202	0.00003505	0.0054473	0.00160133	0.0015709	0.00003043
592775.25	2355876.00	0.01592953	0.00649922	0.00646938	0.00002984	0.0068728	0.00208255	0.00205652	0.00002603
592851.81	2355811.75	0.01630072	0.00675242	0.00672642	0.000026	0.0086175	0.00268084	0.00265773	0.0000231
592928.44	2355747.50	0.01593882	0.00664639	0.00662332	0.00002307	0.0104429	0.00327841	0.00325657	0.00002184
593005.06	2355683.25	0.01512942	0.00630858	0.00628776	0.00002082	0.0121237	0.00378592	0.00376468	0.00002124
593081.63	2355619.00	0.01427118	0.00592983	0.00591083	0.000019	0.0135769	0.00420887	0.00418809	0.00002077
593158.25	2355554.75	0.01341362	0.00553364	0.00551618	0.00001746	0.0147287	0.00453358	0.00451332	0.00002026
593234.88	2355490.50	0.0125739	0.00513804	0.00512189	0.00001615	0.0154764	0.00473246	0.00471281	0.00001966
593311.44	2355426.00	0.01176661	0.00475863	0.00474361	0.00001502	0.015841	0.00481879	0.00479981	0.00001898
593388.06	2355361.75	0.01100633	0.00440316	0.00438914	0.00001402	0.0159134	0.00482087	0.00480259	0.00001828
592431.81	2356096.25	0.00286674	0.00095838	0.00087925	0.00007914	0.0098181	0.00303746	0.00292646	0.00011099
592496.13	2356019.50	0.00522855	0.00180736	0.00174813	0.00005922	0.0060855	0.00177942	0.00174026	0.00003916
592560.38	2355943.00	0.00742739	0.00271778	0.00267012	0.00004766	0.004891	0.00143356	0.00140274	0.00003082
592624.69	2355866.25	0.00905329	0.00345615	0.00341649	0.00003965	0.004799	0.00143309	0.00140674	0.00002634
592688.94	2355789.75	0.01024857	0.00403053	0.00399678	0.00003374	0.0050344	0.00151503	0.00149226	0.00002277
592753.25	2355713.25	0.01042591	0.00414572	0.00411637	0.00002935	0.0050968	0.00154	0.00151993	0.00002007
592817.50	2355636.50	0.01041099	0.00415131	0.00412535	0.00002596	0.0053125	0.00159294	0.001575	0.00001794
592881.81	2355560.00	0.0101827	0.0040417	0.00401835	0.00002334	0.0056146	0.0016527	0.00163643	0.00001626
592946.06	2355483.25	0.00983003	0.00386636	0.00384501	0.00002135	0.005982	0.00170932	0.00169438	0.00001494
593010.38	2355406.75	0.00943118	0.00366172	0.00364204	0.00001968	0.0063975	0.00175913	0.00174522	0.00001392
593074.63	2355330.25	0.00901637	0.00344681	0.00342854	0.00001827	0.0068022	0.00179259	0.00177947	0.00001312

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592339.00	2356152.75	0.00052812	0.00022218	0.00013839	0.00008379	0.0373753	0.01309088	0.01281188	0.000279
592389.00	2356066.25	0.00178909	0.0005732	0.00051819	0.00005501	0.0144075	0.00462864	0.00450609	0.00012255
592439.00	2355979.50	0.00310751	0.00099363	0.00095257	0.00004105	0.0089835	0.00275567	0.00271297	0.0000427
592489.00	2355893.00	0.004144	0.00135754	0.00132447	0.00003307	0.0061543	0.00185893	0.00183127	0.00002766
592539.00	2355806.50	0.00481919	0.0016126	0.00158506	0.00002755	0.0049233	0.0014898	0.0014664	0.00002341
592589.00	2355719.75	0.00517797	0.00176358	0.00174019	0.00002339	0.0043854	0.00133476	0.00131421	0.00002055
592639.00	2355633.25	0.00526177	0.00180846	0.00178811	0.00002035	0.0040498	0.00123317	0.00121489	0.00001829
592689.00	2355546.50	0.00516869	0.0017787	0.00176067	0.00001803	0.0037781	0.00114427	0.00112786	0.00001642
592739.00	2355460.00	0.00499149	0.00171159	0.0016953	0.00001629	0.003555	0.0010633	0.00104842	0.00001487
592789.00	2355373.25	0.00478403	0.00162908	0.0016142	0.00001488	0.0033887	0.00099114	0.00097755	0.00001358
592307.38	2356138.00	0.00032028	0.00014302	0.00007533	0.00006769	0.0516008	0.01856903	0.01824174	0.0003273
592341.63	2356044.00	0.00107009	0.0003297	0.00028573	0.00004396	0.0212236	0.00705683	0.00692327	0.00013356
592375.81	2355950.00	0.00180409	0.00054262	0.00050997	0.00003265	0.0130222	0.00414879	0.00409077	0.00005802
592410.00	2355856.25	0.00237282	0.00072547	0.00069922	0.00002625	0.0087794	0.00273211	0.00270313	0.00002898
592444.19	2355762.25	0.00272557	0.00084631	0.00082458	0.00002173	0.0062831	0.00193519	0.00191327	0.00002191
592478.44	2355668.25	0.00286709	0.00089937	0.00088106	0.00001831	0.0048847	0.00149543	0.00147648	0.00001894
592512.63	2355574.25	0.00285955	0.00090141	0.0008856	0.0000158	0.0040433	0.00123255	0.00121566	0.00001689
592546.81	2355480.25	0.00276465	0.00087208	0.00085817	0.00001391	0.0034772	0.00105524	0.00103998	0.00001526
592581.00	2355386.25	0.002626	0.00082653	0.00081406	0.00001246	0.0030572	0.00092196	0.00090806	0.0000139
592273.75	2356129.00	0.00021843	0.00010979	0.00004455	0.00006523	0.0715789	0.02654943	0.02606004	0.00048937
592291.06	2356030.50	0.00070823	0.00021414	0.00017168	0.00004246	0.0320593	0.01102038	0.01088381	0.00013658
592308.44	2355932.00	0.00120297	0.00034798	0.00031638	0.0000316	0.0192962	0.00637713	0.0062929	0.00008423
592325.81	2355833.50	0.00158929	0.00046796	0.00044253	0.00002543	0.0132799	0.00426521	0.0042239	0.00004132
592343.19	2355735.00	0.00182216	0.0005472	0.00052612	0.00002108	0.0094928	0.00298949	0.0029645	0.00002499
592360.56	2355636.75	0.00191488	0.00058296	0.00056518	0.00001777	0.0070067	0.00217385	0.00215471	0.00001914
592377.94	2355538.25	0.00190752	0.00058497	0.00056964	0.00001534	0.0053755	0.00164582	0.0016295	0.00001632
592395.25	2355439.75	0.00184011	0.0005659	0.0005524	0.0000135	0.0042984	0.001297	0.00128248	0.00001452
592239.00	2356126.00	0.00018577	0.00009954	0.00003446	0.00006507	0.098299	0.03767621	0.03675753	0.00091871
592239.00	2356026.00	0.00058355	0.0001749	0.00013261	0.00004229	0.0493661	0.01754318	0.01740843	0.00013474
592239.00	2355926.00	0.00101169	0.00028767	0.00025618	0.00003149	0.0297876	0.0102	0.01009346	0.00010654
592239.00	2355826.00	0.00134728	0.00039142	0.00036606	0.00002537	0.0205723	0.00683799	0.00676879	0.0000692
592239.00	2355726.00	0.00155336	0.00046322	0.00044219	0.00002103	0.0150844	0.00488066	0.00483921	0.00004144
592239.00	2355626.00	0.00164107	0.00049865	0.00048092	0.00001773	0.0113715	0.00359783	0.00357087	0.00002696
592204.25	2356129.00	0.00018366	0.00010158	0.00003323	0.00006835	0.130524	0.05172648	0.04990916	0.00181731
592186.94	2356030.50	0.00058729	0.00017557	0.00013233	0.00004324	0.0773195	0.02848857	0.02830453	0.00018405
592169.56	2355932.00	0.00104407	0.00029704	0.00026516	0.00003188	0.0482545	0.01710161	0.01699293	0.00010868
592152.19	2355833.50	0.00142102	0.00041463	0.00038905	0.00002558	0.0332716	0.01144322	0.01135052	0.0000927
592134.81	2355735.00	0.00166866	0.00050096	0.0004798	0.00002116	0.02462	0.00823275	0.00816122	0.00007152
592117.44	2355636.75	0.00178962	0.00054823	0.0005304	0.00001783	0.0190355	0.00618275	0.00613061	0.00005213
592170.63	2356138.00	0.00020175	0.00013787	0.0000377	0.00010017	0.1666236	0.06805494	0.06490215	0.00315284
592136.38	2356044.00	0.00071437	0.00023148	0.00017076	0.00006072	0.1176634	0.04511267	0.0445247	0.00058796
592102.19	2355950.00	0.00137427	0.00041382	0.0003709	0.00004292	0.0802658	0.02953853	0.02940463	0.0001339
592068.00	2355856.25	0.00197982	0.0006054	0.00057212	0.00003328	0.0568148	0.02026723	0.02017493	0.0000923
592033.81	2355762.25	0.0024451	0.00076343	0.00073656	0.00002687	0.0422539	0.01463655	0.01455335	0.0000832
592189.00	2356239.50	0.00000732	0.00044482	0.00000091	0.00044391	0.1997134	0.08224768	0.07784879	0.00439886
592139.00	2356152.75	0.00023895	0.00024767	0.00004792	0.00019975	0.2001137	0.08333025	0.07904839	0.0042819
592089.00	2356066.25	0.00099222	0.00038981	0.00025816	0.00013165	0.1675816	0.06707767	0.06513833	0.00193936
592039.00	2355979.50	0.00212011	0.00071607	0.00061829	0.00009778	0.129014	0.04961114	0.04902495	0.0005862
591989.00	2355893.00	0.00330913	0.0011023	0.00102443	0.00007787	0.0980524	0.03653312	0.03634522	0.00018791
591939.00	2355806.50	0.00436016	0.00146086	0.00139654	0.00006432	0.0755844	0.02738495	0.0272884	0.00009655
592174.75	2356249.50	0.00000782	0.001308	0.00000104	0.00130697	0.2009138	0.08243834	0.07891663	0.00352178
592110.44	2356172.75	0.00031883	0.00046431	0.00007049	0.00039382	0.225898	0.09460667	0.09022121	0.00438552
592046.19	2356096.25	0.00159236	0.00067722	0.0004495	0.00022771	0.2160152	0.08918629	0.08563551	0.00355076
591981.88	2356019.50	0.00381489	0.00135747	0.00119283	0.00016464	0.1875335	0.07558	0.07333376	0.00224622
591917.63	2355943.00	0.00642348	0.0022493	0.00211835	0.00013094	0.1566724	0.06146951	0.06023444	0.00123504
592085.81	2356197.50	0.00052558	0.0021708	0.00013272	0.00203809	0.234791	0.09793871	0.09446497	0.00347371
592009.19	2356133.25	0.00340029	0.00218516	0.00106895	0.00111622	0.2460133	0.10239865	0.09883051	0.00356821
591932.56	2356069.00	0.00918916	0.00387944	0.00316818	0.00071126	0.2344484	0.09680684	0.09349921	0.00330771
591856.00	2356004.50	0.01629253	0.00637339	0.00588128	0.00049212	0.2128499	0.08684469	0.0839771	0.00286759
592065.81	2356226.00	0.00088033	0.00816561	0.00024472	0.00792093	0.2236614	0.0925133	0.09027393	0.00223939
591979.19	2356176.00	0.00688903	0.00788248	0.00234884	0.00553364	0.2436421	0.10099945	0.09861549	0.00238402
592130.25	2356186.50	0.00016827	0.00041784	0.00003314	0.0003847	0.2200548	0.0923168	0.08779559	0.00452119
591806.00	2356076.00	0.03704726	0.01792727	0.01444219	0.00348508	0.232641	0.09560771	0.09330151	0.00230625
592051.06	2356257.50	0.00106843	0.00834001	0.00030251	0.00803753	0.1958123	0.080063	0.07884964	0.00121336
591957.06	2356223.50	0.00831459	0.00823911	0.00287124	0.00536788	0.2097221	0.08609701	0.08489608	0.00120096
591863.13	2356189.25	0.02445361	0.01330033	0.00930483	0.00399551	0.2092116	0.08578983	0.0846536	0.0011362
591769.13	2356155.00	0.04465192	0.02094641	0.01778974	0.00315666	0.2004165	0.08185788	0.08078853	0.00106938
592042.06	2356291.25	0.00092449	0.00171753	0.00025079	0.00146675	0.1589376	0.06395893	0.06339061	0.00056833
591943.56	2356274.00	0.00590061	0.00270733	0.0019277	0.00077963	0.1596608	0.0644177	0.06395332	0.00046441

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591845.06	2356256.50	0.01544065	0.0061014	0.00558169	0.00051971	0.1516234	0.06105038	0.06067127	0.00037911
591746.63	2356239.25	0.02667642	0.01056086	0.01017715	0.00038371	0.1394622	0.05587415	0.05555559	0.00031856
592039.00	2356326.00	0.00075155	0.00059563	0.00019318	0.00040246	0.121889	0.04799546	0.04773539	0.00026007
591939.00	2356326.00	0.00374647	0.00138679	0.00113513	0.00025166	0.1113289	0.04369749	0.04352697	0.00017052
591839.00	2356326.00	0.00818048	0.00287375	0.00269141	0.00018234	0.0977044	0.03808381	0.03795944	0.00012437
591739.00	2356326.00	0.01271235	0.00453232	0.00438966	0.00014266	0.0842555	0.03253913	0.03244137	0.00009777
591639.00	2356326.00	0.01666693	0.00605023	0.00593377	0.00011646	0.0724272	0.02764856	0.02756738	0.00008118
591943.56	2356378.00	0.00311059	0.00125177	0.00093216	0.00031962	0.0751288	0.02836883	0.02826656	0.00010227
591845.06	2356395.50	0.00619884	0.00222737	0.00198743	0.00023993	0.0613537	0.02281133	0.02272592	0.00008541
591746.63	2356412.75	0.00902536	0.00319065	0.00299821	0.00019245	0.050322	0.018423	0.01834641	0.00007658
591648.13	2356430.25	0.0111985	0.00396349	0.00380296	0.00016054	0.0416419	0.01500971	0.01493895	0.00007076
591863.13	2356462.75	0.00645103	0.00243728	0.00220153	0.00023576	0.0421268	0.01493429	0.01483332	0.00010096
591769.13	2356497.00	0.00932609	0.00348968	0.0033025	0.00018717	0.0346194	0.01209025	0.0119936	0.00009665
591675.19	2356531.25	0.01139791	0.00427182	0.00411703	0.00015479	0.0290645	0.01002944	0.00993774	0.00009169
591581.25	2356565.50	0.01246549	0.00467397	0.00454237	0.00013159	0.0248238	0.00847716	0.00839077	0.00008639
591719.38	2356626.00	0.01347661	0.00562705	0.0054619	0.00016515	0.0256473	0.00882759	0.00872332	0.00010426
591632.75	2356676.00	0.01455435	0.00606554	0.0059243	0.00014124	0.0227032	0.00780343	0.00770918	0.00009425
591546.19	2356726.00	0.01468655	0.00609831	0.00597496	0.00012335	0.0202491	0.00694251	0.00685699	0.00008551
591459.56	2356776.00	0.01424661	0.00588871	0.00577922	0.00010949	0.0181765	0.00620639	0.00612824	0.00007815
591549.56	2356904.50	0.01541001	0.00712586	0.00701711	0.00010875	0.019946	0.007258	0.00717857	0.00007943
591472.94	2356968.75	0.01441405	0.00662771	0.00653002	0.00009769	0.0181234	0.00660148	0.00652685	0.00007462
591396.38	2357033.00	0.01334573	0.00609996	0.00601103	0.00008893	0.0164898	0.00600028	0.0059297	0.00007058
591319.75	2357097.25	0.01229634	0.00558565	0.00550397	0.00008167	0.0150361	0.00545536	0.0053883	0.00006707
591243.13	2357161.50	0.01130432	0.0051035	0.00502793	0.00007557	0.0137473	0.00496558	0.00490163	0.00006395
591467.63	2357245.25	0.01146408	0.00548837	0.00539087	0.0000975	0.0162765	0.00636208	0.0062867	0.00007537
591403.38	2357321.75	0.01045605	0.00498352	0.00489479	0.00008873	0.0147524	0.00573439	0.00566378	0.00007061
591339.13	2357398.50	0.00953731	0.00452643	0.00444508	0.00008135	0.0134189	0.00517928	0.00511299	0.00006629
590438.50	2356953.50	0.00624858	0.00219748	0.0021497	0.00004778	0.0080445	0.00223454	0.00218941	0.00004513
591489.00	2357625.00	0.00839989	0.00393427	0.00367719	0.00025708	0.0119719	0.00492872	0.00486727	0.00006145
591364.00	2357841.50	0.00673735	0.00312462	0.00290854	0.00021608	0.0094544	0.00376015	0.00370492	0.00005523
591239.00	2358058.00	0.00552944	0.00253208	0.0023467	0.00018539	0.0077401	0.00294995	0.00289909	0.00005086
591114.00	2358274.50	0.00463837	0.00209006	0.00192845	0.00016161	0.0065204	0.00237475	0.00232724	0.00004751
590989.00	2358491.00	0.00396145	0.00175326	0.00161058	0.00014269	0.0056123	0.00195465	0.00190997	0.00004468
590864.00	2358707.50	0.003433	0.00149222	0.00136495	0.00012726	0.0049117	0.00164015	0.00159788	0.00004228
592204.81	2356232.00	0.00000674	0.00023548	0.00000082	0.00023466	0.1916434	0.07939779	0.07428656	0.00511115
592221.63	2356227.50	0.00000629	0.00015699	0.00000075	0.00015624	0.1791263	0.07451848	0.06895818	0.00556043
592162.38	2356261.75	0.00000869	0.00528869	0.00000127	0.00528744	0.1953432	0.07983934	0.07721915	0.00262023
592622.00	2356004.50	0.01242578	0.00477198	0.00472986	0.00004212	0.0044274	0.0012571	0.00122092	0.00003618
592239.00	2356226.00	0.00000618	0.00014015	0.00000075	0.0001394	0.1640551	0.06842008	0.06264823	0.00577184
592152.38	2356276.00	0.00000987	0.01421014	0.00000158	0.01420858	0.1820548	0.07455656	0.0727367	0.00181987
591806.00	2356576.00	0.01116545	0.00466262	0.00446433	0.00019829	0.0292595	0.01008388	0.0099692	0.00011468
592239.00	2356426.00	0.00002624	0.00215212	0.00000253	0.00214959	0.0351312	0.01190764	0.01171309	0.00019454
592273.19	2356420.00	0.00004374	0.00052279	0.00000447	0.00051831	0.0308457	0.01032816	0.01011663	0.00021154
592289.00	2356412.50	0.00005335	0.0004624	0.00000501	0.00045739	0.0300198	0.01004343	0.00982393	0.00021951
592303.25	2356402.50	0.00005598	0.0006058	0.00000384	0.00060196	0.0303016	0.01018711	0.00995083	0.00023628
592315.63	2356390.25	0.00005223	0.00118251	0.00000198	0.00118053	0.0320974	0.01094285	0.0106542	0.00028866
592325.63	2356376.00	0.0000448	0.00253245	0.00000089	0.00253157	0.0359469	0.01260484	0.01215154	0.0004533
592333.00	2356360.25	0.00003967	0.00427973	0.00000063	0.00427911	0.0420648	0.01545632	0.01454438	0.00091194
592337.50	2356343.25	0.00004053	0.0049027	0.00000075	0.00490197	0.0503243	0.01979686	0.01779857	0.00199831
592339.00	2356326.00	0.00004497	0.0037315	0.00000147	0.00373004	0.0602857	0.0256434	0.02178409	0.00385928
592439.00	2356326.00	0.00231548	0.00197313	0.00008336	0.00188978	0.0134832	0.01552267	0.00408385	0.01143884
592337.50	2356308.75	0.00004709	0.00188826	0.00000332	0.00188495	0.0708772	0.03162655	0.0256891	0.00593746
592435.94	2356291.25	0.00257206	0.0009642	0.00022049	0.00074371	0.0145998	0.0092583	0.00436584	0.00489249
592534.44	2356274.00	0.00789447	0.00112192	0.00069464	0.00042728	0.0010666	0.0004712	0.0002046	0.0002666
592333.00	2356291.75	0.00004377	0.00065613	0.00000558	0.00065056	0.0806441	0.03639462	0.02916005	0.00723461
592426.94	2356257.50	0.0025577	0.00062545	0.00041454	0.00021091	0.0154464	0.00598389	0.00462743	0.00135647
592520.94	2356223.50	0.00827912	0.00161925	0.00150221	0.00011705	0.0023224	0.00068424	0.00053362	0.00015062
592614.88	2356189.25	0.01334143	0.00255599	0.00247657	0.00007942	0.0017026	0.00043603	0.00036985	0.00006618
592708.88	2356155.00	0.01745293	0.00330055	0.00324046	0.00006008	0.0042821	0.00118144	0.00112548	0.00005596
592802.81	2356120.75	0.01967409	0.00366919	0.00362119	0.000048	0.0116234	0.00369105	0.00363241	0.00005864
592896.75	2356086.50	0.02043326	0.00373452	0.00369485	0.00003968	0.0243077	0.0089972	0.00893589	0.0000613
592990.75	2356052.50	0.02023198	0.0036118	0.00357803	0.00003378	0.0368131	0.01462649	0.01457517	0.00005132
593883.44	2355727.50	0.01106708	0.00159085	0.00157641	0.00001445	0.0229318	0.00582749	0.00581317	0.00001431
592325.63	2356276.00	0.00003622	0.00023532	0.00000654	0.00022878	0.0896633	0.03989885	0.03247706	0.00742176
592412.19	2356226.00	0.00199252	0.0005797	0.00048967	0.00009002	0.0175144	0.00595613	0.00542808	0.00052805
592498.81	2356176.00	0.00688435	0.00202656	0.00196994	0.00005662	0.0041472	0.00119348	0.00107904	0.00011443
592585.44	2356126.00	0.01167163	0.00365805	0.00361645	0.0000416	0.0028216	0.0007344	0.00068235	0.00005205
592672.00	2356076.00	0.01565691	0.00515696	0.00512375	0.00003321	0.0041527	0.00114121	0.00109722	0.00004398
592758.63	2356026.00	0.01798495	0.00614436	0.00611686	0.0000275	0.0074168	0.00220649	0.00216954	0.00003694

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592845.25	2355976.00	0.01876765	0.00655879	0.00653547	0.00002332	0.0123108	0.00396726	0.00393252	0.00003474
592931.81	2355926.00	0.01856207	0.00656342	0.00654316	0.00002026	0.0180088	0.0062281	0.00619271	0.00003539
593018.44	2355876.00	0.01781084	0.00631795	0.00630001	0.00001794	0.0236917	0.00855013	0.00851481	0.00003532
593105.00	2355826.00	0.01688252	0.0059651	0.00594892	0.00001619	0.0279895	0.01031192	0.01027822	0.0000337
593191.63	2355776.00	0.01580593	0.00553917	0.00552435	0.00001483	0.0296444	0.01105522	0.0110243	0.00003093
593278.25	2355726.00	0.01481361	0.0051284	0.00511471	0.00001369	0.0297256	0.01107456	0.01104661	0.00002794
592315.63	2356261.75	0.00002731	0.00022889	0.00000571	0.00022318	0.0982974	0.04293204	0.03592107	0.00701101
592392.19	2356197.50	0.00132039	0.00048144	0.00037394	0.0001075	0.02132	0.00723259	0.00689541	0.00033717
592468.81	2356133.25	0.00477985	0.00162972	0.00155935	0.00007036	0.0066261	0.00197012	0.00186386	0.00010626
592545.44	2356069.00	0.00884761	0.00322485	0.00317245	0.00005239	0.0042167	0.00116549	0.0011222	0.00004328
592303.25	2356249.50	0.00001906	0.00024481	0.00000387	0.00024094	0.1082929	0.04646102	0.03996021	0.00650087
592367.56	2356172.75	0.00084476	0.00035409	0.00023467	0.00011943	0.0278215	0.00954057	0.00925842	0.00028214
592289.00	2356239.50	0.00001239	0.0001765	0.0000022	0.0001743	0.1197651	0.05066374	0.04454556	0.00611824
592273.19	2356232.00	0.0000084	0.0001446	0.00000125	0.00014336	0.1332174	0.05589613	0.0499834	0.00591279
592256.38	2356227.50	0.0000067	0.00013893	0.00000086	0.00013807	0.1482686	0.06197643	0.05613149	0.005845
592145.00	2356291.75	0.0000114	0.0148395	0.00000193	0.01483761	0.1656621	0.06710675	0.06591325	0.00119355
592140.50	2356308.75	0.00001348	0.00449627	0.00000228	0.004494	0.1461369	0.05845884	0.0577095	0.00074935
592139.00	2356326.00	0.00001722	0.00104602	0.00000285	0.00104317	0.1255591	0.04949231	0.0490214	0.00047089
592140.50	2356343.25	0.00002267	0.00097723	0.00000373	0.0009735	0.1061436	0.04113402	0.04082641	0.0003076
592042.06	2356360.75	0.00071121	0.00066154	0.00018091	0.00048063	0.0908572	0.03477781	0.0346308	0.000147
592145.00	2356360.25	0.0000284	0.0010032	0.00000471	0.00099849	0.0890333	0.03385141	0.03363298	0.00021843
592051.06	2356394.50	0.00077559	0.0006932	0.00020781	0.00048539	0.0684323	0.02535332	0.02523293	0.0001204
591957.06	2356428.50	0.00326109	0.00135402	0.00103595	0.00031806	0.0526366	0.01902533	0.01891992	0.00010541
592152.38	2356376.00	0.00003221	0.00098603	0.0000055	0.00098053	0.0748414	0.02788078	0.0277046	0.00017618
592065.81	2356426.00	0.000909	0.00076793	0.00027446	0.00049347	0.0538158	0.01931101	0.01918328	0.00012772
591979.19	2356476.00	0.00390526	0.00173469	0.0014051	0.00032959	0.0411176	0.01437778	0.01425013	0.00012765
591892.56	2356526.00	0.00770571	0.00321992	0.00297248	0.00024744	0.0339265	0.01173435	0.01161075	0.0001236
592162.38	2356390.25	0.00003326	0.00104582	0.00000585	0.00103997	0.0634136	0.02313798	0.02297812	0.00015987
592085.81	2356454.50	0.00105113	0.00085776	0.0003636	0.00049416	0.0439708	0.01534145	0.01519389	0.00014755
592009.19	2356518.75	0.00484117	0.00234945	0.00202229	0.00032716	0.0362656	0.01248759	0.01233824	0.00014935
591932.56	2356583.00	0.00925294	0.00433863	0.00409318	0.00024545	0.0317331	0.01104926	0.01091394	0.00013532
591856.00	2356647.50	0.01313722	0.00617121	0.00597408	0.00019713	0.0288956	0.01019191	0.01007374	0.00011817
591779.38	2356711.75	0.0154712	0.00725883	0.00709357	0.00016526	0.0264456	0.00943919	0.00933521	0.00010398
591702.75	2356776.00	0.01631081	0.00762364	0.00748253	0.00014111	0.0241272	0.00869308	0.00859982	0.00009326
591626.19	2356840.25	0.01614193	0.00750604	0.00738322	0.00012283	0.0219533	0.00796108	0.00787567	0.0000854
592174.75	2356402.50	0.00003196	0.001835	0.00000559	0.0018294	0.0547868	0.01961169	0.01945372	0.00015796
592110.44	2356479.25	0.00123867	0.00120042	0.00046156	0.00073886	0.0384259	0.01306886	0.01289858	0.00017027
591596.19	2357092.00	0.01371017	0.00662553	0.00650413	0.0001214	0.0199942	0.00785094	0.0077649	0.00008605
591531.94	2357168.75	0.01255669	0.00603921	0.00593118	0.00010804	0.0180186	0.00706802	0.00698747	0.00008055
592189.00	2356412.50	0.00002989	0.00421894	0.00000488	0.00421406	0.0479884	0.01688107	0.01671742	0.00016364
591639.00	2357365.25	0.01114732	0.0052771	0.00494801	0.00032909	0.0165869	0.00702369	0.00695036	0.00007332
591589.00	2357451.75	0.01013401	0.00477995	0.00447865	0.0003013	0.0148105	0.0062262	0.00615765	0.00006855
591539.00	2357538.50	0.00919691	0.00432385	0.00404619	0.00027766	0.0132522	0.00552254	0.00545785	0.00006468
592204.81	2356420.00	0.00002837	0.0060011	0.000004	0.00599709	0.042725	0.01480807	0.0146349	0.00017317
591760.19	2357641.50	0.00996295	0.00450383	0.00398641	0.00051742	0.0128302	0.00535893	0.0052311	0.00012783
591726.00	2357735.50	0.00911976	0.0041071	0.00362379	0.00048331	0.0116357	0.004758	0.00462578	0.00013222
592221.63	2356424.50	0.00002658	0.00443007	0.00000303	0.00442704	0.0385661	0.01320603	0.01302206	0.00018397
592435.94	2356360.75	0.00222799	0.00277666	0.00004005	0.00273662	0.0108504	0.00828796	0.00315333	0.00513465
592632.94	2356256.50	0.01239672	0.00139885	0.00111335	0.0002855	0.0007374	0.00022686	0.00013197	0.00009489
592256.38	2356424.50	0.00003207	0.00095832	0.00000313	0.00095519	0.0325696	0.01095476	0.01075086	0.0002039
592239.00	2356526.00	0.00137827	0.00127015	0.00031106	0.0009591	0.0277887	0.00959471	0.00935367	0.00024104
592239.00	2356626.00	0.00471444	0.00182475	0.00120981	0.00061495	0.0356547	0.01423354	0.01400551	0.00022803
592239.00	2356726.00	0.00794272	0.00257414	0.00211733	0.00045681	0.0428213	0.01893903	0.0187293	0.00020972
592239.00	2356826.00	0.00966623	0.0030464	0.00267505	0.00037136	0.041965	0.01975385	0.01954378	0.00021007
592239.00	2356926.00	0.01041087	0.00320826	0.00289862	0.00030963	0.0383297	0.01794995	0.01765227	0.00029768
592239.00	2357026.00	0.01031044	0.00313264	0.00286984	0.0002628	0.0344808	0.01578855	0.01536343	0.00042511
592239.00	2357126.00	0.00978443	0.00293772	0.00271254	0.00022519	0.0311499	0.01389631	0.01336873	0.00052757
592239.00	2357226.00	0.00910214	0.00270506	0.00250859	0.00019648	0.0281562	0.01218809	0.01161146	0.00057663
592239.00	2357326.00	0.00832825	0.00245402	0.0022801	0.00017392	0.0252073	0.0105576	0.00997963	0.00057797
592239.00	2357426.00	0.00767011	0.00223511	0.00207887	0.00015624	0.0226474	0.00909283	0.00854425	0.00054857
592273.75	2356523.00	0.00167166	0.00078129	0.00035816	0.00042313	0.0248819	0.00856064	0.00829759	0.00026305
592291.06	2356621.50	0.00500924	0.00147911	0.00120746	0.00027165	0.0335533	0.01387114	0.01360624	0.0002649
592308.44	2356720.00	0.0080558	0.00219	0.00198825	0.00020175	0.0421212	0.01938236	0.0191332	0.00024915
592325.81	2356818.50	0.00958856	0.00260594	0.00244128	0.00016465	0.0426136	0.02011611	0.01968943	0.00042669
592343.19	2356917.00	0.01014599	0.0027313	0.00259482	0.00013647	0.0418414	0.01909071	0.01837592	0.00071478
592360.56	2357015.25	0.0099909	0.00267155	0.00255733	0.00011422	0.0395521	0.01730456	0.01645849	0.00084607
592377.94	2357113.75	0.0094563	0.00251221	0.00241455	0.00009766	0.0352751	0.01460744	0.01381825	0.00078919
592412.63	2357310.75	0.0080589	0.00211113	0.00203604	0.00007509	0.0252152	0.00909588	0.00857987	0.000516
592430.00	2357409.25	0.00745983	0.0019261	0.00185888	0.00006722	0.0211872	0.00708699	0.00668312	0.00040387

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592307.38	2356514.00	0.00238782	0.00074681	0.00050346	0.00024336	0.0213087	0.00722577	0.00693454	0.00029123
592341.63	2356608.00	0.00658101	0.00172235	0.00156185	0.0001605	0.028704	0.01212719	0.01182016	0.00030704
592375.81	2356702.00	0.01030643	0.00260066	0.00247975	0.00012091	0.0385073	0.01794608	0.01754775	0.00039834
592410.00	2356795.75	0.01202915	0.00307298	0.002975	0.00009798	0.0440207	0.02028993	0.01933526	0.00095467
592444.19	2356889.75	0.01247461	0.0031808	0.00309783	0.00008297	0.04518	0.01946127	0.01832453	0.00113674
592478.44	2356983.75	0.01225601	0.00311767	0.00304694	0.00007073	0.0395233	0.01529286	0.01444161	0.00085125
592512.63	2357077.75	0.01150414	0.00291493	0.00285332	0.0000616	0.0313934	0.01084122	0.01028984	0.00055137
592546.81	2357171.75	0.01063762	0.00268185	0.00262731	0.00005455	0.024901	0.00779707	0.00743549	0.00036159
592581.00	2357265.75	0.00975103	0.00244353	0.00239458	0.00004895	0.0201701	0.00585597	0.00560476	0.00025121
592615.25	2357359.75	0.008944	0.00222233	0.00217785	0.00004448	0.0168511	0.00459858	0.00441399	0.00018459
592649.44	2357453.75	0.00823467	0.00201825	0.00197752	0.00004073	0.0144631	0.00372679	0.00358555	0.00014124
592339.00	2356499.25	0.0028213	0.00076153	0.00053516	0.00022637	0.0172186	0.00569041	0.00536277	0.00032765
592389.00	2356585.75	0.0072251	0.00171382	0.00156278	0.00015104	0.0214902	0.00912483	0.00876443	0.0003604
592439.00	2356672.50	0.01100348	0.0025465	0.00243279	0.00011371	0.0315293	0.01458648	0.01381858	0.0007679
592489.00	2356759.00	0.01277722	0.00298157	0.00288999	0.00009159	0.0426938	0.01852223	0.01698764	0.00153458
592539.00	2356845.50	0.01282358	0.00303776	0.00296138	0.00007638	0.0381807	0.01408798	0.01313714	0.00095083
592589.00	2356932.25	0.01239772	0.00294837	0.00288298	0.00006539	0.030428	0.00944354	0.00897871	0.00046483
592639.00	2357018.75	0.01154412	0.00274956	0.00269238	0.00005718	0.024954	0.00699811	0.00674174	0.00025637
592689.00	2357105.50	0.01055367	0.00251448	0.00246365	0.00005083	0.021868	0.00574472	0.00558396	0.00016077
592739.00	2357192.00	0.00962518	0.00228895	0.00224312	0.00004583	0.0204556	0.00499188	0.00488039	0.0001115
592789.00	2357278.75	0.00872755	0.00206959	0.00202771	0.00004189	0.0193446	0.00441445	0.0043311	0.00008335
592839.00	2357365.25	0.00794857	0.00187042	0.00183194	0.00003848	0.0181944	0.00391741	0.00385126	0.00006614
592889.00	2357451.75	0.00721444	0.00168935	0.00165386	0.00003549	0.0168674	0.00347938	0.00342431	0.00005507
592939.00	2357538.50	0.00656171	0.00153161	0.00149862	0.00003299	0.0155871	0.00312305	0.00307495	0.0000481
592367.56	2356479.25	0.00285317	0.00066214	0.00039004	0.0002721	0.013058	0.00423116	0.00386044	0.00037071
592431.81	2356555.75	0.00708968	0.00127863	0.0011003	0.00017833	0.0131759	0.00549306	0.00505526	0.0004378
592496.13	2356632.50	0.01042939	0.00181508	0.00168199	0.00013308	0.0205961	0.01022323	0.00866514	0.00155808
592560.38	2356709.00	0.01228755	0.00210982	0.00200316	0.00010666	0.0289138	0.01103111	0.0096014	0.00142971
592624.69	2356785.75	0.01241445	0.00216351	0.00207471	0.0000888	0.026282	0.00752428	0.00704708	0.0004772
592688.94	2356862.25	0.0117578	0.00205786	0.00198179	0.00007607	0.0268671	0.00702291	0.00681651	0.0002064
592753.25	2356938.75	0.01103163	0.00193154	0.00186475	0.00006679	0.0293911	0.00727291	0.00715479	0.00011812
592817.50	2357015.50	0.01008798	0.00176173	0.00170235	0.00005938	0.0288654	0.00694506	0.00686083	0.00008423
592881.81	2357092.00	0.00918191	0.00159303	0.00153956	0.00005347	0.0263289	0.00623357	0.00616535	0.00006821
592946.06	2357168.75	0.00841202	0.00144416	0.00139543	0.00004873	0.0233149	0.00542453	0.00536574	0.00005879
593010.38	2357245.25	0.00774108	0.00130474	0.00126003	0.00004471	0.0202994	0.00463243	0.00458015	0.00005228
593074.63	2357321.75	0.00711103	0.00117966	0.0011384	0.00004126	0.0176135	0.0039393	0.00389194	0.00004736
592392.19	2356454.50	0.00273185	0.00064461	0.00019115	0.00045346	0.0095508	0.00313697	0.00273264	0.00040433
592468.81	2356518.75	0.00708899	0.00082886	0.00055894	0.00026992	0.0058436	0.00244957	0.0018893	0.00056028
592545.44	2356583.00	0.01030073	0.00105785	0.00086742	0.00019043	0.0085023	0.00611063	0.00315107	0.00295956
592622.00	2356647.50	0.01219213	0.00121334	0.00106681	0.00014653	0.0129139	0.00384204	0.00310845	0.00073358
592698.63	2356711.75	0.01262841	0.00124697	0.00112811	0.00011885	0.0254417	0.00615616	0.00595208	0.00020408
592775.25	2356776.00	0.01211315	0.00120935	0.00110965	0.0000997	0.0344065	0.00820935	0.00808671	0.00012263
592851.81	2356840.25	0.01126626	0.00112404	0.00103821	0.00008583	0.0335841	0.00781309	0.00771579	0.0000973
592928.44	2356904.50	0.01048207	0.00103738	0.00096201	0.00007537	0.0303106	0.00664716	0.00656283	0.00008433
593005.06	2356968.75	0.00974478	0.00095061	0.00088343	0.00006718	0.0269504	0.0054249	0.00534949	0.00007541
593081.63	2357033.00	0.00896988	0.00086325	0.00080262	0.00006062	0.0236785	0.00438184	0.00431364	0.0000682
592412.19	2356426.00	0.00254542	0.00115888	0.00007186	0.00108703	0.0076685	0.00249622	0.00211169	0.00038453
592498.81	2356476.00	0.00712385	0.0008981	0.00024546	0.00065264	0.0016977	0.00113858	0.00040766	0.00073092
592585.44	2356526.00	0.01062823	0.00087279	0.00042028	0.00045251	0.0012131	0.00485912	0.00022799	0.00463113
592672.00	2356576.00	0.0125473	0.00088199	0.00054214	0.00033985	0.0077808	0.00188933	0.00157841	0.00031093
592758.63	2356626.00	0.01312195	0.00087918	0.00061073	0.00026845	0.0220646	0.00445363	0.00426152	0.00019212
592845.25	2356676.00	0.01294433	0.00085303	0.00063338	0.00021965	0.0311913	0.00495545	0.00479187	0.00016358
592931.81	2356726.00	0.01230765	0.00080333	0.00061873	0.0001846	0.0331274	0.00433366	0.0041904	0.00014327
593018.44	2356776.00	0.0114087	0.00074192	0.00058389	0.00015803	0.0318889	0.00359219	0.00346487	0.00012733
592426.94	2356394.50	0.00234366	0.00228666	0.0000377	0.00224898	0.0081061	0.00284052	0.00224475	0.00059577
592520.94	2356428.50	0.00672664	0.00166047	0.00014523	0.00151525	0.0004071	0.00100279	0.00007702	0.00092577
592614.88	2356462.75	0.01042354	0.00141077	0.00027817	0.0011326	0.000017	0.00580246	0.00000077	0.00580169
592708.88	2356497.00	0.01258861	0.00128718	0.00038736	0.00089982	0.0024656	0.00084547	0.00017025	0.00067523
592802.81	2356531.25	0.01315645	0.00119962	0.00045661	0.00074301	0.0156498	0.00146977	0.00068639	0.00078339
592896.75	2356565.50	0.01287801	0.00111746	0.00048714	0.00063032	0.0293914	0.00193459	0.00118871	0.00074588
592990.75	2356599.50	0.01218045	0.00103266	0.00048616	0.0005465	0.0351157	0.00215105	0.00147999	0.00067106
593883.44	2356924.50	0.00584113	0.00047403	0.00024141	0.00023262	0.013584	0.00085321	0.00057378	0.00027944
594118.38	2357010.00	0.00490895	0.00039752	0.00019789	0.00019963	0.0106428	0.00066264	0.00042398	0.00023867
594353.31	2357095.50	0.00419016	0.00033934	0.00016539	0.00017395	0.0087127	0.00053846	0.00033072	0.00020774
592534.44	2356378.00	0.00656369	0.00204998	0.00014622	0.00190377	0.0002129	0.022108	0.00004046	0.0220676
592632.94	2356395.50	0.01012014	0.00173054	0.00027067	0.00145987	0.0000001	0.00102311	0.00000001	0.0010231
592731.38	2356412.75	0.01243677	0.00156055	0.00037755	0.001183	0.0014341	0.00343662	0.00005677	0.00337986
592829.88	2356430.25	0.01338909	0.0014438	0.0004505	0.00099331	0.0136139	0.00281902	0.00040276	0.00241628
592928.38	2356447.50	0.0133	0.00133575	0.00048107	0.00085468	0.0283065	0.0027012	0.00091313	0.00178808

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593026.88	2356465.00	0.01276558	0.00123077	0.00048134	0.00074942	0.0360582	0.00268705	0.00128082	0.00140624
592539.00	2356326.00	0.00686565	0.001505	0.0002619	0.0012431	0.0003941	0.00086407	0.00006863	0.00079545
592639.00	2356326.00	0.01071248	0.00135404	0.00043817	0.00091588	9.492E-05	0.00018533	0.00001395	0.00017138
592739.00	2356326.00	0.01341665	0.00128896	0.0005696	0.00071936	0.0037727	0.0010794	0.00094105	0.00013834
592839.00	2356326.00	0.01460505	0.0012267	0.00063845	0.00058825	0.0220883	0.00442781	0.00429238	0.00013543
592939.00	2356326.00	0.01477705	0.0011503	0.00065553	0.00049477	0.0397718	0.00539766	0.00522577	0.00017189
593039.00	2356326.00	0.01438191	0.00106346	0.00063839	0.00042508	0.047108	0.00490795	0.00470429	0.00020367
593139.00	2356326.00	0.01378517	0.0009773	0.00060577	0.00037153	0.0477244	0.00407356	0.00385538	0.00021818
596739.00	2356326.00	0.00259141	0.00011692	0.00006394	0.00005298	0.004133	0.00015842	0.00009513	0.0000633
592731.38	2356239.25	0.01578344	0.00160925	0.0013998	0.00020945	0.0046358	0.00132099	0.00122273	0.00009826
592829.88	2356221.75	0.0172956	0.00167751	0.00151617	0.00016134	0.0194911	0.00658903	0.00649667	0.00009236
592928.38	2356204.50	0.01747741	0.00163615	0.00150671	0.00012944	0.0395157	0.01373738	0.01368593	0.00005145
593026.88	2356187.00	0.01697467	0.00153408	0.00142762	0.00010646	0.0510823	0.01606407	0.0160216	0.00004247
593125.31	2356169.75	0.01611228	0.00140813	0.00131835	0.00008978	0.0549386	0.01426403	0.01422358	0.00004045
593223.81	2356152.25	0.01512559	0.00127875	0.00120189	0.00007686	0.0533335	0.01132958	0.01129144	0.00003815
593322.31	2356135.00	0.01420228	0.00116091	0.00109364	0.00006727	0.0491399	0.00878146	0.00874568	0.00003579
593420.75	2356117.50	0.01328454	0.00105169	0.00099208	0.00005961	0.0439131	0.00680163	0.00676809	0.00003354
593519.25	2356100.25	0.01242461	0.000953	0.00089946	0.00005355	0.0388864	0.00534141	0.00530974	0.00003167
594208.63	2355978.75	0.00793917	0.0005101	0.00047945	0.00003066	0.0179495	0.00150684	0.00148228	0.00002456
594454.81	2355935.25	0.00690343	0.00042208	0.00039567	0.00002641	0.0144426	0.00109305	0.00106991	0.00002314
594701.00	2355892.00	0.00606806	0.00035464	0.00033147	0.00002317	0.0118809	0.00082409	0.00080213	0.00002196
594947.25	2355848.50	0.00535556	0.00030237	0.00028183	0.00002053	0.0100059	0.00064916	0.00062811	0.00002105
593084.75	2356018.25	0.01948057	0.00339591	0.00336649	0.00002942	0.0422948	0.01689987	0.01686096	0.00003892
593178.69	2355984.00	0.01847465	0.00313295	0.0031068	0.00002615	0.0424117	0.01645698	0.0164263	0.00003067
593272.69	2355949.75	0.0173819	0.00287177	0.00284821	0.00002356	0.0400865	0.01485008	0.01482473	0.00002535
593366.63	2355915.50	0.01626133	0.00261793	0.00259649	0.00002143	0.036996	0.01297614	0.01295434	0.0000218
593460.63	2355881.25	0.01516002	0.00238321	0.00236353	0.00001968	0.0338577	0.01119726	0.01117786	0.0000194
593554.56	2355847.25	0.01412772	0.002171	0.00215279	0.00001821	0.0310114	0.009645	0.00962729	0.00001772
593648.56	2355813.00	0.0131876	0.00198408	0.00196713	0.00001694	0.0284747	0.00832783	0.00831137	0.00001646
592046.19	2356555.75	0.00543749	0.00286144	0.00240989	0.00045155	0.0342318	0.01193108	0.01176913	0.00016196
591981.88	2356632.50	0.01021903	0.00508552	0.00475655	0.00032896	0.0326792	0.01175362	0.01161618	0.00013744
591917.63	2356709.00	0.0140717	0.0069596	0.0066926	0.000267	0.0313468	0.01161616	0.0114957	0.00012046
591853.31	2356785.75	0.01600802	0.00789219	0.00766465	0.00022754	0.0294423	0.01116412	0.01105345	0.00011067
591789.06	2356862.25	0.01631983	0.00800826	0.00781688	0.00019139	0.0270301	0.01041917	0.01031544	0.00010374
591724.75	2356938.75	0.01581218	0.00771805	0.00755672	0.00016133	0.0245772	0.00957755	0.00947987	0.00009768
591660.50	2357015.50	0.01484745	0.00721012	0.00707123	0.00013889	0.0221931	0.00869874	0.00860693	0.00009181
591114.13	2357666.50	0.00703584	0.00328646	0.00322407	0.0000624	0.0099413	0.00371259	0.00365865	0.00005395
592139.00	2356499.25	0.00152365	0.00266946	0.00057653	0.00209294	0.0348745	0.01179011	0.01159932	0.00019078
592089.00	2356585.75	0.00636442	0.00412045	0.0027421	0.00137835	0.0340619	0.01216572	0.0119976	0.00016812
592039.00	2356672.50	0.01146061	0.00612397	0.00509134	0.00103263	0.0352821	0.01331999	0.01317454	0.00014545
591989.00	2356759.00	0.01507702	0.00763083	0.00679533	0.0008355	0.0347342	0.013698	0.01356176	0.00013624
591939.00	2356845.50	0.01666258	0.00824326	0.00753802	0.00070524	0.0327692	0.01332672	0.01319869	0.00012803
591889.00	2356932.25	0.01689727	0.00823733	0.00764081	0.00059652	0.030191	0.01250606	0.0123886	0.00011747
591839.00	2357018.75	0.01599512	0.0077266	0.00721176	0.00051483	0.0269377	0.01133431	0.01122818	0.00010612
591789.00	2357105.50	0.01482819	0.00711375	0.0066619	0.00045186	0.0239219	0.01014057	0.01004503	0.00009554
591739.00	2357192.00	0.01358483	0.00648171	0.00608024	0.00040147	0.0212074	0.00900228	0.00891572	0.00008656
591689.00	2357278.75	0.01229145	0.00584079	0.00547878	0.00036201	0.0186949	0.00794615	0.00786692	0.00007923
592170.63	2356514.00	0.0017737	0.00396932	0.00062525	0.00334407	0.0323078	0.01100468	0.01079674	0.00020794
592136.38	2356608.00	0.00730308	0.00521319	0.0028895	0.00232369	0.0349445	0.01291876	0.0127412	0.00017756
592102.19	2356702.00	0.01292716	0.0070125	0.00524462	0.00176788	0.0387994	0.01537729	0.01521066	0.00016663
592068.00	2356795.75	0.01643291	0.00817993	0.00676664	0.00141329	0.0382252	0.01614351	0.01598832	0.0001552
592033.81	2356889.75	0.01791191	0.00856884	0.00739922	0.00116962	0.0355788	0.01558816	0.01545174	0.00013642
591999.56	2356983.75	0.0179385	0.00841737	0.00740662	0.00101075	0.0318957	0.01427549	0.01415534	0.00012016
591965.38	2357077.75	0.01702106	0.00789969	0.00700948	0.0008902	0.0277959	0.01255841	0.01244742	0.00011099
591931.19	2357171.75	0.01577573	0.00727074	0.00647521	0.00079554	0.0240387	0.01086361	0.01075559	0.00010802
591897.00	2357265.75	0.01441187	0.00661223	0.00589319	0.00071905	0.0207845	0.00932707	0.00921775	0.00010932
591862.75	2357359.75	0.01312283	0.00599712	0.00534187	0.00065526	0.0181246	0.00802943	0.00791641	0.00011302
591828.56	2357453.75	0.01194658	0.00544039	0.00483853	0.00060186	0.0159836	0.00695767	0.00683977	0.00011789
591794.38	2357547.50	0.01089001	0.0049417	0.0043851	0.00055661	0.0142357	0.00607753	0.00595459	0.00012294
591640.44	2357970.50	0.007422	0.00330416	0.00288947	0.00041469	0.0093926	0.00365279	0.00351266	0.00014013
591554.94	2358205.50	0.00617211	0.0027089	0.00234608	0.00036282	0.0078359	0.00291374	0.00276986	0.00014388
592204.25	2356523.00	0.00160766	0.00266126	0.00045821	0.00220305	0.0300397	0.01035674	0.01013314	0.0002236
592186.94	2356621.50	0.00619402	0.00346052	0.00201029	0.00145023	0.0357403	0.01373254	0.01353491	0.00019763
592169.56	2356720.00	0.01083198	0.00468877	0.0036036	0.00108516	0.0415412	0.01738887	0.01719791	0.00019096
592152.19	2356818.50	0.01345679	0.0054999	0.00462428	0.00087562	0.0408976	0.01846155	0.01829641	0.00016515
592134.81	2356917.00	0.01458777	0.00577152	0.00502493	0.00074658	0.0372456	0.01727976	0.01712581	0.00015396
592117.44	2357015.25	0.01448653	0.00561105	0.00497616	0.00063488	0.0324638	0.01509413	0.0149227	0.00017143
592100.06	2357113.75	0.01374378	0.00524355	0.0046938	0.00054975	0.0280427	0.01288925	0.01268265	0.00020659
592082.75	2357212.25	0.01273844	0.00480333	0.00431963	0.0004837	0.0244434	0.01103331	0.01078654	0.00024677

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592065.38	2357310.75	0.01163182	0.00434517	0.00391391	0.00043126	0.0215315	0.00952049	0.00923737	0.00028311
592048.00	2357409.25	0.01065814	0.00394424	0.00355455	0.0003897	0.0193221	0.00834563	0.00803405	0.00031158
592030.63	2357507.75	0.00969522	0.00355833	0.00320313	0.0003552	0.0174106	0.00735131	0.00702033	0.00033099
592013.25	2357606.25	0.00887642	0.00322818	0.00290216	0.00032602	0.0158766	0.00654417	0.00620219	0.00034198
591995.88	2357704.75	0.00811566	0.00292729	0.00262623	0.00030106	0.0145094	0.00584885	0.00550291	0.00034594
591978.50	2357803.25	0.00744352	0.00266141	0.00238197	0.00027944	0.0133164	0.00525236	0.0049079	0.00034447
593158.25	2357097.25	0.0083234	0.0007839	0.00072864	0.00005527	0.0210279	0.00355484	0.00349258	0.00006226
594947.25	2356803.50	0.00358862	0.00032111	0.00011866	0.00020246	0.0071834	0.00044807	0.0002102	0.00023787
593617.75	2356083.00	0.01159544	0.00086418	0.00081562	0.00004856	0.0343431	0.00426283	0.00423272	0.00003011
592239.00	2357526.00	0.00696921	0.00201927	0.00187747	0.0001418	0.0200306	0.00776472	0.00726066	0.00050406
592239.00	2357626.00	0.00637304	0.00183132	0.00170164	0.00012967	0.0178025	0.00661934	0.00616454	0.0004548
592395.25	2357212.25	0.00880341	0.00232282	0.00223779	0.00008503	0.0302354	0.01168464	0.01103141	0.00065323
592447.38	2357507.75	0.00681927	0.00174852	0.00168754	0.00006098	0.0178303	0.00559955	0.00527973	0.00031982
592464.75	2357606.25	0.00625575	0.00158455	0.0015288	0.00005575	0.0151413	0.00449115	0.00423363	0.00025751
592683.63	2357547.50	0.0075116	0.00182849	0.00179092	0.00003757	0.0127273	0.00313716	0.00302436	0.00011279
593138.88	2357398.50	0.00654774	0.00106892	0.00103063	0.00003829	0.0154091	0.00335813	0.00331462	0.0000435
593234.88	2357161.50	0.00769644	0.00071151	0.00066072	0.00005079	0.0186587	0.00290652	0.00284929	0.00005723
593311.44	2357226.00	0.00712031	0.00064692	0.00059993	0.00004699	0.0166995	0.0024122	0.00235917	0.00005303
593105.00	2356826.00	0.01056451	0.00067951	0.00054194	0.00013758	0.0295436	0.00292646	0.00281212	0.00011434
593191.63	2356876.00	0.00978668	0.00062319	0.00050133	0.00012186	0.0267998	0.00240552	0.0023014	0.00010413
593278.25	2356926.00	0.00908279	0.00057116	0.00046189	0.00010927	0.0240649	0.00199072	0.00189455	0.00009617
593364.81	2356976.00	0.00839754	0.00052183	0.00042287	0.00009896	0.0212367	0.00165173	0.00156201	0.00008973
593451.44	2357026.00	0.00773523	0.00047502	0.00038466	0.00009035	0.0187594	0.00138565	0.00130133	0.00008432
593754.56	2357201.00	0.00593427	0.0003543	0.00028513	0.00006918	0.0127675	0.0008391	0.00076849	0.0000706
593084.75	2356633.75	0.01137997	0.00094972	0.00046862	0.0004811	0.035315	0.00215283	0.00155792	0.00059491
593178.69	2356668.00	0.01055459	0.00087203	0.00044183	0.0004302	0.0329212	0.00201499	0.00148561	0.00052938
593272.69	2356702.25	0.00970898	0.00079894	0.00041034	0.00038861	0.0293273	0.00181508	0.00134082	0.00047426
593366.63	2356736.50	0.0089435	0.00073349	0.00037983	0.00035366	0.0259056	0.00161769	0.00118709	0.00043061
593460.63	2356770.75	0.00826027	0.00067496	0.00035095	0.00032401	0.0228819	0.00143609	0.00104223	0.00039386
593648.56	2356839.00	0.00703755	0.00057343	0.00029671	0.00027672	0.0178808	0.00112748	0.00079309	0.00033438
593125.31	2356482.25	0.01201828	0.00113221	0.00046396	0.00066825	0.0373223	0.00256928	0.00141615	0.00115314
593223.81	2356499.75	0.01121695	0.00104173	0.00043743	0.0006043	0.03567	0.0023632	0.00138767	0.00097553
593322.31	2356517.00	0.01042836	0.0009585	0.0004081	0.0005504	0.0324981	0.00211649	0.00127145	0.00084505
593420.75	2356534.50	0.00967069	0.00088225	0.0003777	0.00050455	0.0290865	0.00188241	0.00113646	0.00074594
593962.44	2356630.00	0.0064551	0.00057872	0.00023958	0.00033914	0.0157164	0.0010011	0.00056067	0.00044044
594208.63	2356673.25	0.00545836	0.00048853	0.00019585	0.00029268	0.0123676	0.00078395	0.00041707	0.00036688
602087.06	2358062.50	0.00072291	0.00005268	0.00002053	0.00003214	0.0011473	0.00006022	0.00002644	0.00003378
593239.00	2356326.00	0.01304538	0.00089243	0.00056218	0.00033025	0.0450052	0.00331659	0.00309657	0.00022002
593339.00	2356326.00	0.0123166	0.0008148	0.00051801	0.00029679	0.0412154	0.00271118	0.00249573	0.00021545
593439.00	2356326.00	0.01151883	0.00074344	0.00047442	0.00026903	0.0369764	0.00224157	0.0020319	0.00020967
593539.00	2356326.00	0.01082712	0.00067977	0.00043412	0.00024565	0.0332325	0.00187576	0.00167327	0.00020249
593639.00	2356326.00	0.01016422	0.00062267	0.00039694	0.00022572	0.0298951	0.00158898	0.00139434	0.00019464
594239.00	2356326.00	0.00715098	0.00038873	0.00023964	0.00014909	0.0167551	0.00072472	0.00057502	0.0001497
594739.00	2356326.00	0.00553716	0.0002816	0.00016769	0.00011391	0.0113234	0.00045745	0.00033495	0.0001225
594989.00	2356326.00	0.00492176	0.0002445	0.00014328	0.00010122	0.009585	0.00038119	0.00026911	0.00011208
597239.00	2356326.00	0.00225196	0.00010008	0.00005442	0.00004566	0.003481	0.0001323	0.00007805	0.00005426
593716.19	2356065.50	0.0108255	0.0007856	0.00074129	0.00004431	0.0303796	0.00346126	0.00343246	0.0000288
593962.44	2356022.00	0.0092102	0.00062703	0.00059073	0.0000363	0.0229278	0.00219803	0.00217166	0.00002638
595193.44	2355805.00	0.00474757	0.00026064	0.00024226	0.00001837	0.0085016	0.00052331	0.00050297	0.00002035
590739.00	2358924.00	0.00301518	0.00128669	0.00117222	0.00011447	0.0043566	0.00139923	0.00135916	0.00004007
591469.44	2358440.25	0.00524314	0.00226294	0.00194067	0.00032226	0.0067021	0.00239469	0.00225036	0.00014433
591383.94	2358675.25	0.00450934	0.00191682	0.0016272	0.00028962	0.0057938	0.00201093	0.00186829	0.00014264
593538.06	2357076.00	0.00713597	0.00043313	0.00035005	0.00008308	0.0166299	0.00117503	0.00109538	0.00007965
589160.81	2364783.25	0.00085637	0.00030755	0.00023816	0.00006939	0.0012117	0.00032613	0.00026864	0.00005749
592239.00	2357726.00	0.00583255	0.00166304	0.00154381	0.00011922	0.0158405	0.00564682	0.00524022	0.0004066
592482.13	2357704.75	0.00577967	0.00144177	0.00139051	0.00005126	0.0130849	0.00367104	0.00345962	0.00021143
592717.81	2357641.50	0.00692067	0.00166359	0.00162874	0.00003484	0.0114446	0.00268616	0.00259398	0.00009218
593203.19	2357475.00	0.00604444	0.00097088	0.00093516	0.00003572	0.0136678	0.00288453	0.00284409	0.00004044
593388.06	2357290.25	0.00657879	0.00058607	0.00054235	0.00004372	0.0149515	0.00201443	0.0019651	0.00004933
593971.06	2357326.00	0.00498306	0.00028955	0.00023045	0.0000591	0.0099767	0.00060883	0.00054565	0.00006317
593554.56	2356804.75	0.00763028	0.00062205	0.00032323	0.00029883	0.0202298	0.00127103	0.00090884	0.00036219
593519.25	2356551.75	0.0089605	0.00081302	0.00034813	0.0004649	0.0260129	0.00167668	0.00101052	0.00066618
593617.75	2356569.00	0.00829517	0.00075065	0.00032021	0.00043044	0.0231434	0.00148584	0.00088586	0.00059999
593716.19	2356586.50	0.00769868	0.00069469	0.00029438	0.00040031	0.0206263	0.00132094	0.00077598	0.00054496
594454.81	2356716.75	0.00468224	0.00041897	0.00016293	0.00025604	0.010063	0.00063441	0.0003218	0.00031262
601102.25	2357888.75	0.00081191	0.00006127	0.00002272	0.00003855	0.0013081	0.00007044	0.0000297	0.00004075
593739.00	2356326.00	0.00954802	0.00057169	0.00036317	0.00020853	0.0269166	0.00136131	0.00117479	0.00018652
593989.00	2356326.00	0.00822993	0.00046749	0.00029309	0.0001744	0.021015	0.00096706	0.00080003	0.00016703
594489.00	2356326.00	0.00626321	0.00032848	0.00019898	0.0001295	0.013642	0.00056675	0.0004318	0.00013495

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
595239.00	2356326.00	0.00441235	0.00021468	0.00012397	0.00009071	0.0082307	0.00032429	0.00022088	0.00010341
596239.00	2356326.00	0.00303517	0.00013937	0.00007711	0.00006226	0.0050189	0.00019338	0.00011918	0.0000742
591298.44	2358910.25	0.00395009	0.00165106	0.00138828	0.00026278	0.0051123	0.00172251	0.00158291	0.0001396
591935.13	2358049.50	0.00608919	0.00212506	0.0018888	0.00023626	0.0108936	0.00408169	0.00375581	0.00032588
591891.69	2358295.50	0.00510163	0.00173212	0.00152806	0.00020406	0.00908	0.00323883	0.0029411	0.00029773
591848.31	2358541.75	0.0043493	0.0014352	0.0012562	0.000179	0.0076682	0.00261578	0.00234771	0.00026807
592989.00	2357625.00	0.0060145	0.0013937	0.0013629	0.0000308	0.0143646	0.00279206	0.00274926	0.0000428
592239.00	2357826.00	0.00535408	0.00151379	0.00140358	0.00011021	0.0141405	0.00483227	0.00447019	0.00036209
592499.50	2357803.25	0.00536352	0.0013148	0.00126745	0.00004735	0.0114465	0.00305295	0.00287612	0.00017684
594701.00	2356760.00	0.00406096	0.00036362	0.00013707	0.00022655	0.0083831	0.00052524	0.00025445	0.0002708
598147.88	2357368.00	0.00129086	0.00010867	0.00003592	0.00007274	0.0021965	0.00012869	0.00004998	0.00007871
600117.44	2357715.25	0.00092383	0.00007241	0.00002559	0.00004682	0.0015072	0.00008371	0.00003392	0.00004979
595739.00	2356326.00	0.00361375	0.00016978	0.00009545	0.00007433	0.0062845	0.00024416	0.00015605	0.00008811
591212.94	2359145.00	0.00348988	0.00143838	0.00119809	0.00024029	0.0045372	0.00149636	0.00136075	0.00013561
590699.94	2360554.50	0.00199627	0.00077038	0.00061374	0.00015664	0.0026572	0.00079964	0.00069105	0.00010859
591631.25	2359772.75	0.00239001	0.00069194	0.00058452	0.00010742	0.003968	0.00112137	0.00096335	0.00015802
593579.56	2357451.00	0.00550763	0.00047187	0.00043451	0.00003736	0.0117487	0.00137361	0.00133139	0.00004222
594187.56	2357451.00	0.00425414	0.00024259	0.00019124	0.00005136	0.0081101	0.00046988	0.00041241	0.00005747
599132.63	2357541.50	0.00107697	0.00008752	0.00002975	0.00005777	0.0017896	0.00010221	0.0000403	0.00006191
591041.94	2359615.00	0.00281548	0.00112949	0.0009248	0.00020468	0.0036918	0.00117145	0.00104487	0.00012658
592752.00	2357735.50	0.0064034	0.00151711	0.00148463	0.00003248	0.0104546	0.00233802	0.00226093	0.00007709
591804.88	2358788.00	0.00377509	0.00120901	0.00104996	0.00015905	0.0065691	0.00214781	0.00190754	0.00024027
592239.00	2358076.00	0.00439264	0.00121161	0.00111931	0.0000923	0.0108795	0.00334929	0.00307736	0.00027193
601635.94	2359746.25	0.00066775	0.00004198	0.0000205	0.00002149	0.0011105	0.00005005	0.00002634	0.00002371
595193.44	2356847.00	0.00318846	0.00028524	0.00010294	0.0001823	0.006228	0.00038617	0.00017513	0.00021104
595685.81	2356933.75	0.0025711	0.00022973	0.00007915	0.00015058	0.0048412	0.00029699	0.00012632	0.00017068
596670.63	2357107.50	0.00184124	0.00016205	0.00005338	0.00010867	0.0032986	0.00019909	0.00007895	0.00012014
597163.06	2357194.25	0.00160816	0.00013984	0.00004569	0.00009415	0.0028261	0.00016909	0.00006587	0.00010322
590870.94	2360084.75	0.00234686	0.00091957	0.00074185	0.00017772	0.0030937	0.0009524	0.00083515	0.00011725
594588.25	2357181.00	0.00362865	0.00029307	0.00013962	0.00015345	0.0072748	0.00044378	0.00026054	0.00018324
592239.00	2358326.00	0.0036867	0.00098901	0.00091002	0.00007899	0.0086774	0.00241449	0.0022057	0.00020879
592542.88	2358049.50	0.00452538	0.00105682	0.00101722	0.00003961	0.0086239	0.00205632	0.00193518	0.00012114
593114.00	2357841.50	0.00489868	0.00111164	0.00108517	0.00002647	0.0115525	0.00212683	0.00209264	0.00003419
593239.00	2358058.00	0.00408957	0.00090544	0.00088224	0.0000232	0.0094177	0.00165375	0.00162501	0.00002874
593363.88	2357666.50	0.00503573	0.00077369	0.00074307	0.00003062	0.0104219	0.00201623	0.00198195	0.00003428
594404.06	2357576.00	0.0036854	0.00020678	0.00016148	0.0000453	0.0067793	0.00037647	0.0003236	0.00005287
596178.25	2357020.50	0.00214644	0.0001907	0.00006378	0.00012693	0.0039316	0.00023921	0.00009736	0.00014185
592837.56	2357970.50	0.00536347	0.00122006	0.00119229	0.00002776	0.0087279	0.00173895	0.00168567	0.00005328
592923.06	2358205.50	0.00459551	0.00099938	0.00097512	0.00002426	0.0075595	0.00135246	0.00131282	0.00003964
593364.00	2358274.50	0.00346981	0.00074774	0.00072709	0.00002064	0.0077542	0.00130635	0.0012815	0.00002485
593524.56	2357858.00	0.00426877	0.00062864	0.00060181	0.00002683	0.0083136	0.00147175	0.00144196	0.00002979
593771.06	2357611.50	0.00465276	0.00038466	0.00035201	0.00003265	0.0094243	0.00098758	0.00095076	0.00003682
593962.63	2357772.25	0.00397368	0.00031641	0.00028741	0.000029	0.0076649	0.00073331	0.00070078	0.00003253
600899.25	2361326.00	0.00064622	0.00002964	0.00002214	0.0000075	0.001074	0.00003779	0.00002866	0.00000913
599756.56	2359062.25	0.00083774	0.00005641	0.00002529	0.00003113	0.0014213	0.00006845	0.00003348	0.00003498
600696.25	2359404.25	0.00074114	0.00004813	0.00002246	0.00002568	0.0012428	0.00005775	0.00002923	0.00002852
591761.50	2359034.25	0.00330373	0.00103276	0.00089003	0.00014273	0.0056816	0.0017908	0.00157539	0.00021541
592239.00	2358576.00	0.00315519	0.00082084	0.00075211	0.00006873	0.0071471	0.00180781	0.00164301	0.0001648
592586.31	2358295.50	0.00388413	0.00086235	0.00082865	0.00003369	0.0068472	0.00147553	0.00138711	0.00008842
594823.13	2357266.50	0.00316873	0.00025515	0.00011846	0.00013669	0.006205	0.0003734	0.00020986	0.00016354
592239.00	2359826.00	0.00172894	0.00038871	0.00034975	0.00003896	0.0036042	0.00062704	0.00055897	0.00006807
593685.25	2358049.50	0.00366407	0.00051736	0.00049351	0.00002385	0.0067738	0.00110767	0.00108143	0.00002624
591718.06	2359280.50	0.00293686	0.00089461	0.00076546	0.00012915	0.0049893	0.00151427	0.00132066	0.00019361
592239.00	2358826.00	0.00274054	0.00069233	0.00063173	0.0000606	0.0060383	0.00140064	0.00126707	0.00013357
593008.56	2358440.25	0.00394419	0.00082714	0.00080565	0.00002149	0.0066262	0.00108081	0.00104981	0.000031
594620.56	2357701.00	0.00321166	0.00017614	0.00013585	0.00004029	0.0057488	0.00030486	0.00025596	0.0000489
594837.06	2357826.00	0.0028522	0.0001545	0.00011821	0.00003629	0.0050134	0.00025855	0.00021257	0.00004598
595058.06	2357352.00	0.00280029	0.00022457	0.00010182	0.00012275	0.0053872	0.00032034	0.00017274	0.0001476
595527.94	2357523.00	0.00226126	0.0001794	0.00007839	0.00010101	0.0042419	0.00024539	0.00012467	0.00012072
595997.75	2357694.00	0.00189392	0.00014824	0.00006332	0.00008492	0.0034898	0.00019677	0.00009639	0.00010038
598816.88	2358720.25	0.00096571	0.00006751	0.00002915	0.00003836	0.00166	0.00008277	0.00003933	0.00004344
590186.88	2361964.25	0.00137453	0.00051171	0.00039823	0.00011348	0.0018743	0.00053461	0.00044836	0.00008625
592629.69	2358541.75	0.00334459	0.00071301	0.0006839	0.00002911	0.0056452	0.00111761	0.00104986	0.00006775
593846.00	2358241.00	0.00321013	0.00043623	0.00041468	0.00002155	0.0057349	0.00087094	0.00084734	0.0000236
594154.13	2357933.00	0.0034444	0.00026608	0.00023995	0.00002613	0.00641	0.0005708	0.00054159	0.00002921
594345.63	2358093.75	0.00302227	0.00022753	0.00020379	0.00002374	0.00547	0.00045928	0.00043273	0.00002655
600033.25	2360826.00	0.00071995	0.00003303	0.00002437	0.00000866	0.0011941	0.00004259	0.00003198	0.00001061
596467.63	2357865.00	0.00162756	0.00012537	0.00005283	0.00007254	0.0029553	0.00016286	0.00007787	0.000085
596937.44	2358036.00	0.00142515	0.00010781	0.00004507	0.00006274	0.0025538	0.00013752	0.00006473	0.0000728

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
597877.19	2358378.00	0.00114897	0.00008358	0.00003522	0.00004836	0.0020114	0.0001042	0.00004878	0.00005542
594537.13	2358254.25	0.00268269	0.00019756	0.0001758	0.00002176	0.0047489	0.00037946	0.00035505	0.00002442
593094.06	2358675.25	0.00346767	0.00070101	0.00068161	0.0000194	0.0059612	0.00089987	0.00087408	0.00002579
593489.00	2358491.00	0.00299802	0.00062947	0.00061082	0.00001865	0.0065281	0.00105958	0.00103755	0.00002202
594006.69	2358432.50	0.00283146	0.00037137	0.00035182	0.00001955	0.0049167	0.00070021	0.00067886	0.00002135
595703.13	2358326.00	0.00190601	0.000097	0.00007173	0.00002528	0.0032202	0.00014646	0.00011312	0.00003334
596569.13	2358826.00	0.00142043	0.0000694	0.00005042	0.00001898	0.0023686	0.00009878	0.00007416	0.00002462
599167.19	2360326.00	0.00081563	0.0000376	0.00002744	0.00001016	0.001351	0.00004918	0.00003662	0.00001256
596136.13	2358576.00	0.00163043	0.0000813	0.00005953	0.00002177	0.0027335	0.00011901	0.00009034	0.00002866
592239.00	2359076.00	0.00241767	0.00059252	0.00053853	0.00005399	0.0052046	0.0011147	0.00100414	0.00011057
592673.13	2358788.00	0.00294992	0.00060571	0.00057987	0.00002584	0.0048734	0.0008957	0.00084124	0.00005446
594920.19	2358575.75	0.00215375	0.00015166	0.00013306	0.00001859	0.0036905	0.00026953	0.00024873	0.0000208
595270.06	2358076.00	0.00229518	0.00012034	0.00009039	0.00002994	0.0039334	0.0001909	0.00015066	0.00004023
598301.19	2359826.00	0.00094782	0.00004432	0.00003212	0.0000122	0.0015725	0.00005938	0.00004392	0.00001546
597435.13	2359326.00	0.00113769	0.00005439	0.00003937	0.00001502	0.001892	0.00007522	0.00005563	0.00001959
592239.00	2359326.00	0.00213615	0.00050814	0.00046014	0.000048	0.0045337	0.00090078	0.00080829	0.0000925
592716.50	2359034.25	0.00258395	0.00051288	0.00049021	0.00002267	0.0042021	0.00072159	0.00067767	0.00004393
593614.00	2358707.50	0.00263436	0.00053889	0.00052189	0.000017	0.005601	0.00087842	0.00085855	0.00001987
594167.38	2358624.25	0.00253103	0.00032174	0.00030382	0.00001792	0.0043009	0.00057854	0.00055895	0.00001959
595686.19	2359218.50	0.00153574	0.00010306	0.00008857	0.00001448	0.0025372	0.00016637	0.00015034	0.00001603
591544.44	2360265.25	0.00200407	0.00055651	0.000465	0.00009151	0.0032737	0.00086765	0.0007365	0.00013116
592846.75	2359772.75	0.00191722	0.00034989	0.0003331	0.00001679	0.0031461	0.00045685	0.00042987	0.00002698
593179.56	2358910.25	0.00310368	0.00060568	0.00058796	0.00001772	0.0054414	0.000771	0.00074861	0.00002238
593739.00	2358924.00	0.00231377	0.00046256	0.00044711	0.00001545	0.0047863	0.00073136	0.0007135	0.00001786
594810.13	2359390.25	0.00173257	0.00019988	0.00018659	0.00001329	0.0027721	0.0003154	0.00030116	0.00001424
595303.19	2358897.25	0.00179604	0.00012298	0.00010669	0.00001628	0.0030116	0.00020689	0.0001888	0.0000181
596069.25	2359540.00	0.00133912	0.00008859	0.00007554	0.00001305	0.0021889	0.00013834	0.00012397	0.00001437
592759.94	2359280.50	0.00232173	0.00044676	0.00042638	0.00002038	0.0037694	0.0006091	0.0005723	0.0000368
596835.25	2360182.75	0.001065	0.00006929	0.0000584	0.00001089	0.0017163	0.00010271	0.00009085	0.00001186
593265.06	2359145.00	0.00277672	0.00052538	0.00050924	0.00001614	0.0049557	0.00066078	0.00064136	0.00001942
594488.75	2359007.25	0.00206108	0.00024793	0.00023267	0.00001526	0.0033773	0.00041321	0.00039673	0.00001647
590528.88	2361024.50	0.00173514	0.00066049	0.00052089	0.0001396	0.0023282	0.00068694	0.00058639	0.00010055
599899.44	2362754.00	0.00059306	0.00003877	0.00003223	0.00000654	0.0009311	0.00005109	0.00004422	0.00000688
593436.06	2359615.00	0.00229733	0.00041119	0.00039749	0.0000137	0.0042215	0.00051033	0.00049491	0.00001542
593989.00	2359357.00	0.00187222	0.00035775	0.00034457	0.00001318	0.0037098	0.00053895	0.00052402	0.00001493
595131.56	2359773.25	0.00149921	0.0001682	0.00015636	0.00001185	0.0023626	0.00025517	0.00024248	0.00001269
597601.31	2360825.50	0.00088365	0.00005708	0.00004775	0.00000933	0.0014094	0.00008119	0.00007117	0.00001003
598367.38	2361468.25	0.00075754	0.00004893	0.00004077	0.00000816	0.0011993	0.00006749	0.0000588	0.0000087
599133.38	2362111.00	0.00066415	0.00004309	0.00003583	0.00000726	0.0010461	0.00005796	0.00005029	0.00000767
593607.06	2360084.75	0.00197519	0.00033739	0.00032543	0.00001196	0.0036794	0.00041764	0.0004046	0.00001304
591457.56	2360757.75	0.00171022	0.00045714	0.0003787	0.00007844	0.0027639	0.00069166	0.00058144	0.00011022
589844.88	2362903.75	0.0011361	0.00041738	0.00032277	0.00009462	0.0015728	0.00043905	0.00036434	0.00007471
595452.94	2360156.25	0.0013173	0.00014482	0.00013416	0.00001067	0.002052	0.0002129	0.00020149	0.00001141
592933.56	2360265.25	0.00163224	0.00028545	0.00027123	0.00001421	0.0027323	0.00036304	0.0003422	0.00002084
592239.00	2360326.00	0.00147404	0.00031515	0.00028225	0.0000329	0.0030398	0.00047722	0.0004235	0.00005372
596095.75	2360922.25	0.00105001	0.00011254	0.00010375	0.00000879	0.0016066	0.00015749	0.00014822	0.00000927
597381.31	2362454.25	0.00075544	0.00008055	0.00007398	0.00000657	0.0011367	0.00010651	0.00009963	0.00000688
594239.00	2359790.00	0.00157334	0.00028909	0.00027757	0.00001152	0.0030208	0.00041998	0.00040708	0.0000129
596738.50	2361688.25	0.00087409	0.00009286	0.00008539	0.00000748	0.0013284	0.00012578	0.00011798	0.0000078
598024.06	2363220.50	0.00066204	0.00007105	0.00006525	0.0000058	0.0009929	0.00009197	0.00008594	0.00000603
598666.88	2363986.50	0.00059101	0.00006405	0.00005885	0.0000052	0.0008833	0.00008155	0.00007614	0.00000541
588818.81	2365723.00	0.00075839	0.00027236	0.00021147	0.00006089	0.0010701	0.00028811	0.00023697	0.00005114
591370.75	2361250.00	0.00146725	0.00037574	0.00030948	0.00006626	0.0024046	0.00055861	0.00046641	0.00009221
592239.00	2360826.00	0.00125813	0.00025624	0.00022876	0.00002747	0.0026132	0.00036732	0.00032484	0.00004248
594489.00	2360223.00	0.00134083	0.00023876	0.00022865	0.00001011	0.0025042	0.0003364	0.00032529	0.0000111
593020.44	2360757.75	0.00139341	0.00023478	0.00022297	0.00001181	0.0024703	0.00029102	0.00027517	0.00001586
594739.00	2360656.25	0.001164	0.00020045	0.00019151	0.00000893	0.0022546	0.00027574	0.00026622	0.00000952
590502.50	2366174.00	0.00069597	0.00015071	0.00012362	0.00002708	0.0010919	0.0001889	0.00015746	0.00003145
593778.06	2360554.50	0.00172341	0.00028342	0.00027292	0.0000105	0.0032738	0.00034926	0.00033821	0.00001105
596239.00	2363254.25	0.00118965	0.00011278	0.0001073	0.00000548	0.0025695	0.00014282	0.00013714	0.00000568
597239.00	2364986.25	0.00057733	0.00008715	0.00008272	0.00000442	0.0012263	0.00010774	0.00010317	0.00000457
595239.00	2361522.25	0.00095592	0.00015582	0.0001484	0.00000743	0.0019794	0.00020734	0.00019954	0.0000078
593949.13	2361024.50	0.00153762	0.00024417	0.00023483	0.00000934	0.0030893	0.00030057	0.00029103	0.00000953
592239.00	2361326.00	0.0011555	0.00021417	0.00019105	0.00002312	0.0030096	0.0002956	0.00026121	0.0000344
596739.00	2364120.25	0.00066359	0.00009708	0.00009217	0.00000492	0.0015718	0.00012221	0.00011712	0.00000509
593107.25	2361250.00	0.00123443	0.00020093	0.00019082	0.00001011	0.0025041	0.0002454	0.00023282	0.00001257
591197.13	2362234.75	0.00118565	0.0002843	0.00023211	0.00005219	0.0019828	0.00040211	0.00033322	0.00006889
589502.81	2363843.50	0.00097693	0.00035365	0.00027321	0.00008045	0.0013704	0.00037358	0.00030834	0.00006524
590676.19	2365189.25	0.00262509	0.00017181	0.00014213	0.00002968	0.0017373	0.0002087	0.00017341	0.00003529

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
594975.19	2363843.50	0.00275842	0.00015439	0.00014878	0.00000562	0.0018004	0.00016117	0.00015571	0.00000545
594291.13	2361964.25	0.00214629	0.00019882	0.00019118	0.00000764	0.0054617	0.00024701	0.00023948	0.00000753
595739.00	2362388.25	0.00092822	0.00012871	0.00012239	0.00000632	0.0025727	0.00016947	0.0001629	0.00000657
593280.88	2362234.75	0.00229005	0.00016677	0.00015911	0.00000766	0.0060401	0.00020037	0.00019194	0.00000842
592239.00	2362326.00	0.00120597	0.00016724	0.0001494	0.00001784	0.004551	0.00022501	0.0002	0.00002501
594633.13	2362903.75	0.00324564	0.00017568	0.0001692	0.00000647	0.0030312	0.00019558	0.00018926	0.00000632
595659.19	2365723.00	0.0020846	0.00012286	0.00011841	0.00000446	0.0013418	0.00012744	0.00012313	0.00000431
591023.44	2363219.75	0.00223085	0.00023202	0.00019033	0.00004169	0.0033745	0.00031253	0.00025962	0.00005291
593454.56	2363219.75	0.00352433	0.00014646	0.00014039	0.00000607	0.0015678	0.00014252	0.00013639	0.00000613
590849.81	2364204.50	0.00297733	0.0001985	0.00016378	0.00003472	0.0019233	0.00024725	0.00020473	0.00004253
595317.19	2364783.25	0.00243469	0.00013667	0.00013169	0.00000498	0.0015844	0.0001426	0.00013778	0.00000482
592239.00	2363326.00	0.0028382	0.00014251	0.00012896	0.00001354	0.0013684	0.0001594	0.00014097	0.00001843
593628.19	2364204.50	0.00100274	0.00010575	0.00010078	0.00000497	0.0006916	0.00010903	0.00010432	0.00000471
592239.00	2364326.00	0.00107212	0.00011115	0.00010028	0.00001086	0.0007894	0.00012575	0.0001114	0.00001435
593975.50	2366174.00	0.00039218	0.00007317	0.00006951	0.00000367	0.0004515	0.00007904	0.00007582	0.00000322
592239.00	2366326.00	0.0009811	0.00008763	0.00007983	0.0000078	0.0006544	0.00009565	0.00008597	0.00000969
593801.81	2365189.25	0.0010759	0.00009653	0.00009218	0.00000435	0.0006512	0.00009687	0.00009287	0.00000401
592239.00	2365326.00	0.00045677	0.00008886	0.00008004	0.00000881	0.0005668	0.00010227	0.0000909	0.00001137
596202.50	2360140.75	0.0012049	0.00009395	0.00008294	0.00001102	0.0019071	0.00014262	0.00013095	0.00001167
596702.50	2360140.75	0.00109516	0.00007291	0.00006188	0.00001103	0.0017621	0.0001089	0.00009695	0.00001195
597202.50	2360140.75	0.00100751	0.00005898	0.00004821	0.00001077	0.001637	0.00008507	0.00007295	0.00001212
597702.50	2360140.75	0.00094689	0.0000499	0.00003945	0.00001045	0.0015508	0.00006944	0.00005713	0.00001231
598202.50	2360140.75	0.00090419	0.00004411	0.00003374	0.00001037	0.001491	0.00005969	0.000047	0.00001269
598702.50	2360140.75	0.00086985	0.0000406	0.00002991	0.00001069	0.001441	0.00005388	0.00004052	0.00001336
599202.50	2360140.75	0.00083555	0.00003851	0.0000271	0.00001141	0.0013867	0.0000502	0.00003602	0.00001419
599702.50	2360140.75	0.00079972	0.00003749	0.00002504	0.00001245	0.0013285	0.00004808	0.00003285	0.00001522
600202.50	2360140.75	0.00076234	0.00003709	0.00002344	0.00001365	0.0012668	0.00004681	0.00003049	0.00001633
600702.50	2360140.75	0.00072473	0.00003697	0.00002212	0.00001485	0.0012035	0.00004589	0.00002857	0.00001732
596202.50	2360640.75	0.00111005	0.00010351	0.00009396	0.00000955	0.0017096	0.00015016	0.00014008	0.00001008
596702.50	2360640.75	0.00104179	0.00008123	0.00007148	0.00000975	0.00163	0.00011929	0.00010898	0.00001031
597202.50	2360640.75	0.00095998	0.00006513	0.00005532	0.00000981	0.0015304	0.00009462	0.00008407	0.00001055
597702.50	2360640.75	0.00088749	0.00005336	0.00004377	0.00000959	0.0014304	0.00007534	0.00006478	0.00001056
598202.50	2360640.75	0.00083639	0.00004542	0.00003616	0.00000926	0.0013604	0.00006214	0.00005163	0.00001052
598702.50	2360640.75	0.0008023	0.00004022	0.00003122	0.000009	0.0013168	0.00005371	0.00004311	0.0000106
599202.50	2360640.75	0.00077812	0.00003697	0.000028	0.00000896	0.0012867	0.00004869	0.00003773	0.00001096
599702.50	2360640.75	0.0007529	0.0000346	0.00002544	0.00000917	0.0012481	0.00004486	0.00003359	0.00001127
600202.50	2360640.75	0.00072815	0.00003325	0.0000236	0.00000965	0.0012082	0.00004257	0.00003075	0.00001182
600702.50	2360640.75	0.00070171	0.00003251	0.00002219	0.00001033	0.001164	0.00004113	0.00002865	0.00001248
596202.50	2361140.75	0.00099333	0.00010921	0.00010088	0.00000833	0.0015198	0.00015051	0.00014178	0.00000873
596702.50	2361140.75	0.00097224	0.00008893	0.00008036	0.00000857	0.0014858	0.00012581	0.00011678	0.00000903
597202.50	2361140.75	0.00091714	0.00007168	0.00006295	0.00000873	0.0014221	0.00010238	0.00009319	0.00000919
597702.50	2361140.75	0.0008483	0.00005814	0.00004938	0.00000875	0.0013371	0.00008226	0.000073	0.00000926
598202.50	2361140.75	0.00079144	0.00004865	0.00004002	0.00000863	0.0012634	0.00006731	0.00005802	0.00000929
598702.50	2361140.75	0.0007519	0.0000421	0.00003373	0.00000837	0.0012156	0.00005684	0.00004755	0.00000928
599202.50	2361140.75	0.00072358	0.00003744	0.00002937	0.00000807	0.001183	0.00004948	0.00004024	0.00000924
599702.50	2361140.75	0.00070095	0.00003403	0.00002619	0.00000784	0.0011545	0.00004419	0.000035	0.00000919
600202.50	2361140.75	0.00068275	0.00003176	0.00002398	0.00000778	0.0011301	0.00004074	0.00003145	0.0000093
600702.50	2361140.75	0.00066671	0.00003045	0.0000225	0.00000795	0.0011074	0.00003887	0.00002918	0.00000969
596202.50	2361640.75	0.00088934	0.00011219	0.00010478	0.00000741	0.0013805	0.00014845	0.0001407	0.00000775
596702.50	2361640.75	0.00088219	0.00009358	0.00008604	0.00000754	0.0013429	0.00012697	0.00011911	0.00000786
597202.50	2361640.75	0.00086469	0.00007815	0.00007039	0.00000777	0.0013138	0.00010831	0.00010015	0.00000816
597702.50	2361640.75	0.00081903	0.00006424	0.00005635	0.00000789	0.0012607	0.00008967	0.00008141	0.00000826
598202.50	2361640.75	0.0007656	0.00005341	0.00004547	0.00000794	0.0011979	0.00007404	0.00006567	0.00000836
598702.50	2361640.75	0.00071807	0.00004523	0.00003737	0.00000786	0.0011385	0.0000616	0.00005322	0.00000838
599202.50	2361640.75	0.00068333	0.00003936	0.00003172	0.00000765	0.0010976	0.00005247	0.00004415	0.00000831
599702.50	2361640.75	0.00065859	0.00003512	0.00002776	0.00000736	0.0010708	0.0000459	0.0000377	0.0000082
600202.50	2361640.75	0.00064095	0.00003209	0.000025	0.00000709	0.001053	0.00004135	0.00003323	0.00000812
600702.50	2361640.75	0.00062629	0.00002987	0.00002296	0.00000691	0.0010358	0.00003808	0.00002999	0.00000809
596202.50	2362140.75	0.00084055	0.00011173	0.00010512	0.00000661	0.0018214	0.00014574	0.00013892	0.00000682
596702.50	2362140.75	0.00080033	0.0000961	0.00008936	0.00000675	0.0012939	0.00012572	0.00011875	0.00000697
597202.50	2362140.75	0.0007992	0.00008293	0.00007597	0.00000695	0.0012046	0.00011107	0.00010378	0.00000729
597702.50	2362140.75	0.00077744	0.00006969	0.00006263	0.00000707	0.0011752	0.00009486	0.00008748	0.00000738
598202.50	2362140.75	0.00074044	0.00005841	0.00005123	0.00000719	0.0011331	0.00007996	0.00007247	0.00000749
598702.50	2362140.75	0.00069564	0.00004918	0.00004194	0.00000724	0.0010816	0.00006693	0.00005937	0.00000756
599202.50	2362140.75	0.00065811	0.00004245	0.00003524	0.00000721	0.0010374	0.00005698	0.00004935	0.00000763
599702.50	2362140.75	0.00062931	0.00003735	0.00003029	0.00000706	0.0010066	0.00004928	0.00004168	0.0000076
600202.50	2362140.75	0.00060856	0.00003356	0.00002674	0.00000682	0.000987	0.00004359	0.00003608	0.00000751
600702.50	2362140.75	0.00059275	0.00003069	0.00002414	0.00000655	0.0009721	0.00003933	0.00003195	0.00000739
596202.50	2362640.75	0.00116939	0.00011402	0.00010802	0.000006	0.0027127	0.00014677	0.00014057	0.0000062

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
596702.50	2362640.75	0.00077264	0.00009738	0.00009127	0.0000061	0.0016785	0.00012591	0.00011963	0.00000628
597202.50	2362640.75	0.00073363	0.00008588	0.0000796	0.00000629	0.0011118	0.00011146	0.00010489	0.00000657
597702.50	2362640.75	0.00072673	0.00007415	0.00006775	0.0000064	0.0010907	0.00009806	0.00009137	0.00000669
598202.50	2362640.75	0.00070695	0.00006316	0.00005667	0.00000649	0.0010651	0.00008459	0.00007784	0.00000675
598702.50	2362640.75	0.00067642	0.00005381	0.00004721	0.0000066	0.0010306	0.00007239	0.00006553	0.00000686
599202.50	2362640.75	0.00064024	0.00004609	0.00003942	0.00000667	0.0009886	0.00006173	0.00005478	0.00000695
599702.50	2362640.75	0.00060886	0.00004021	0.00003354	0.00000667	0.0009554	0.00005329	0.00004626	0.00000702
600202.50	2362640.75	0.00058293	0.00003552	0.00002897	0.00000655	0.0009276	0.00004638	0.0000394	0.00000698
600702.50	2362640.75	0.00057098	0.00003279	0.0000264	0.0000064	0.0009312	0.00004265	0.00003556	0.00000709
596202.50	2363140.75	0.00155104	0.00011613	0.00011058	0.00000555	0.002298	0.00014236	0.00013662	0.00000574
596702.50	2363140.75	0.00069485	0.00009789	0.00009226	0.00000563	0.0013422	0.00012369	0.00011787	0.00000582
597202.50	2363140.75	0.00067648	0.00008743	0.00008169	0.00000574	0.0010429	0.00011072	0.00010474	0.00000598
597702.50	2363140.75	0.00067387	0.00007704	0.00007121	0.00000583	0.0010154	0.00009912	0.00009305	0.00000607
598202.50	2363140.75	0.00066556	0.00006709	0.00006118	0.00000591	0.000997	0.00008763	0.00008149	0.00000614
598702.50	2363140.75	0.00064924	0.00005805	0.00005204	0.00000601	0.0009753	0.00007662	0.00007038	0.00000624
599202.50	2363140.75	0.00062343	0.00005011	0.00004399	0.00000611	0.0009464	0.00006638	0.00006003	0.00000635
599702.50	2363140.75	0.00059297	0.00004339	0.00003721	0.00000618	0.0009131	0.00005729	0.00005086	0.00000643
600202.50	2363140.75	0.00057201	0.00003889	0.00003264	0.00000624	0.0009	0.00005104	0.00004442	0.00000662
600702.50	2363140.75	0.00055084	0.0000349	0.00002873	0.00000617	0.0008822	0.0000455	0.00003885	0.00000665
596202.50	2363640.75	0.00086221	0.00011154	0.00010628	0.00000527	0.0024129	0.00014377	0.00013832	0.00000545
596702.50	2363640.75	0.00065584	0.000098	0.00009275	0.00000524	0.0012883	0.00012285	0.00011741	0.00000543
597202.50	2363640.75	0.00062979	0.00008776	0.00008247	0.00000529	0.0010199	0.00010934	0.00010386	0.00000548
597702.50	2363640.75	0.00062808	0.00007901	0.00007363	0.00000538	0.0009537	0.00009954	0.00009393	0.00000562
598202.50	2363640.75	0.00062546	0.0000703	0.00006484	0.00000546	0.0009358	0.00008983	0.00008412	0.00000571
598702.50	2363640.75	0.00061555	0.00006161	0.0000561	0.00000551	0.0009189	0.00007963	0.0000739	0.00000573
599202.50	2363640.75	0.0006002	0.00005377	0.00004817	0.00000559	0.0008996	0.00007005	0.00006426	0.0000058
599702.50	2363640.75	0.00057772	0.00004683	0.00004115	0.00000568	0.0008747	0.00006119	0.00005532	0.00000588
600202.50	2363640.75	0.00056131	0.0000423	0.00003645	0.00000585	0.0008701	0.00005528	0.0000491	0.00000618
600702.50	2363640.75	0.00053752	0.00003748	0.00003163	0.00000585	0.0008474	0.00004882	0.0000426	0.00000622
596202.50	2364140.75	0.00103525	0.00011209	0.00010711	0.00000498	0.0025951	0.00014309	0.00013796	0.00000513
596702.50	2364140.75	0.00068569	0.00009797	0.00009307	0.0000049	0.001718	0.00012375	0.00011868	0.00000507
597202.50	2364140.75	0.00059521	0.00008814	0.00008321	0.00000493	0.0009817	0.00010886	0.00010373	0.00000512
597702.50	2364140.75	0.000586	0.00007948	0.00007452	0.00000497	0.0009208	0.00009845	0.0000933	0.00000515
598202.50	2364140.75	0.00058333	0.00007177	0.00006675	0.00000503	0.0008842	0.00008984	0.00008462	0.00000522
598702.50	2364140.75	0.00057909	0.00006414	0.00005906	0.00000508	0.0008681	0.00008122	0.00007596	0.00000527
599202.50	2364140.75	0.00057185	0.00005694	0.00005179	0.00000515	0.0008525	0.00007285	0.0000675	0.00000534
599702.50	2364140.75	0.0005593	0.00005036	0.00004511	0.00000525	0.0008361	0.00006488	0.00005943	0.00000545
600202.50	2364140.75	0.00054225	0.00004472	0.00003936	0.00000536	0.000821	0.00005781	0.00005221	0.0000056
600702.50	2364140.75	0.00052658	0.00004029	0.00003481	0.00000548	0.0008151	0.00005208	0.0000463	0.00000578
596202.50	2364640.75	0.001888	0.00011722	0.00011253	0.00000468	0.0013092	0.00013052	0.00012575	0.00000477
596702.50	2364640.75	0.00126298	0.00010127	0.00009668	0.0000046	0.00205	0.00012305	0.00011832	0.00000473
597202.50	2364640.75	0.00057892	0.00008781	0.0000832	0.00000461	0.0011131	0.0001084	0.00010362	0.00000477
597702.50	2364640.75	0.00055577	0.00007965	0.00007503	0.00000462	0.00093	0.00009772	0.00009293	0.00000479
598202.50	2364640.75	0.00054843	0.00007271	0.00006804	0.00000468	0.0008475	0.00008965	0.0000848	0.00000485
598702.50	2364640.75	0.00054668	0.00006614	0.00006141	0.00000474	0.000821	0.0000824	0.00007747	0.00000493
599202.50	2364640.75	0.00054245	0.00005951	0.00005472	0.00000479	0.0008078	0.00007485	0.00006987	0.00000498
599702.50	2364640.75	0.00053888	0.00005369	0.00004879	0.0000049	0.0008023	0.00006821	0.00006307	0.00000514
600202.50	2364640.75	0.00052267	0.00004721	0.0000423	0.00000492	0.0007801	0.00006018	0.00005508	0.0000051
600702.50	2364640.75	0.00050762	0.0000422	0.00003718	0.00000502	0.0007664	0.00005395	0.00004872	0.00000523
590370.00	2357440.00	0.00581974	0.0022399	0.00219343	0.00004647	0.0070345	0.00212504	0.00208477	0.00004028
590870.00	2357440.00	0.00776609	0.00336713	0.00331007	0.00005706	0.0094403	0.00326443	0.00321218	0.00005225
591370.00	2357440.00	0.00919228	0.00435225	0.00425409	0.00009816	0.0133228	0.00522309	0.00515802	0.00006507
591870.00	2357440.00	0.01211781	0.00540085	0.00479759	0.00060326	0.0165165	0.00720675	0.00706935	0.0001374
592370.00	2357440.00	0.00700989	0.00187242	0.00178729	0.00008513	0.02162	0.00767479	0.00720848	0.00046631
592870.00	2357440.00	0.00736717	0.00174043	0.00170451	0.00003592	0.0168308	0.00350843	0.00345036	0.00005807
593370.00	2357440.00	0.00595295	0.00068515	0.00064747	0.00003768	0.0128305	0.00214473	0.00210304	0.0000417
593870.00	2357440.00	0.00489845	0.00031332	0.00027292	0.0000404	0.0098678	0.00075076	0.00070562	0.00004515
594370.00	2357440.00	0.00394687	0.00022812	0.00016398	0.00006415	0.0074891	0.00040248	0.00032874	0.00007374
594870.00	2357440.00	0.00304848	0.00020709	0.0001124	0.00009469	0.0057838	0.00031046	0.00019596	0.0001145
595370.00	2357440.00	0.00242079	0.00019728	0.00008513	0.00011215	0.0045887	0.00027221	0.00013804	0.00013418
595870.00	2357440.00	0.00202077	0.00018326	0.00006816	0.00011511	0.0038035	0.00023874	0.00010555	0.00013319
596370.00	2357440.00	0.00175623	0.0001659	0.00005662	0.00010928	0.0032625	0.00020818	0.00008485	0.00012333
596870.00	2357440.00	0.00156588	0.00014781	0.00004823	0.00009958	0.0028543	0.00018077	0.00007038	0.00011039
597370.00	2357440.00	0.00142537	0.0001311	0.00004222	0.00008888	0.0025394	0.00015763	0.00006032	0.00009731
597870.00	2357440.00	0.0013182	0.00011644	0.00003787	0.00007857	0.0022926	0.00013848	0.00005321	0.00008527
598370.00	2357440.00	0.00122562	0.00010345	0.00003429	0.00006917	0.0020818	0.00012207	0.00004744	0.00007463
598870.00	2357440.00	0.00114317	0.00009216	0.00003132	0.00006084	0.0019041	0.00010828	0.00004286	0.00006542
599370.00	2357440.00	0.00107177	0.00008242	0.00002885	0.00005357	0.0017438	0.00009623	0.00003879	0.00005744
599870.00	2357440.00	0.00100992	0.00007423	0.00002693	0.0000473	0.0016143	0.00008644	0.0000358	0.00005064

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
600370.00	2357440.00	0.00095289	0.00006715	0.00002527	0.00004188	0.0015016	0.00007816	0.00003336	0.0000448
600870.00	2357440.00	0.00090257	0.00006105	0.00002385	0.0000372	0.0013998	0.00007093	0.00003118	0.00003975
601370.00	2357440.00	0.00085819	0.00005581	0.00002266	0.00003315	0.0013133	0.00006473	0.00002934	0.00003539
601870.00	2357440.00	0.00081648	0.00005123	0.00002159	0.00002964	0.0012335	0.00005932	0.00002772	0.0000316
602370.00	2357440.00	0.00077925	0.00004726	0.00002067	0.00002659	0.0011647	0.00005465	0.00002634	0.00002831
602870.00	2357440.00	0.00074503	0.00004377	0.00001985	0.00002392	0.0011028	0.00005055	0.00002513	0.00002543
603370.00	2357440.00	0.00071349	0.00004071	0.00001913	0.00002159	0.0010472	0.00004696	0.00002405	0.0000229
603870.00	2357440.00	0.00068379	0.00003799	0.00001846	0.00001953	0.0009954	0.00004376	0.00002308	0.00002068
604370.00	2357440.00	0.0006568	0.00003559	0.00001787	0.00001772	0.0009496	0.00004094	0.00002222	0.00001872
604870.00	2357440.00	0.00063173	0.00003345	0.00001733	0.00001612	0.0009076	0.00003842	0.00002144	0.00001699
605370.00	2357440.00	0.00060839	0.00003154	0.00001683	0.0000147	0.0008691	0.00003618	0.00002073	0.00001544
605870.00	2357440.00	0.00058663	0.00002982	0.00001638	0.00001344	0.0008337	0.00003416	0.00002008	0.00001407
606370.00	2357440.00	0.00056629	0.00002828	0.00001596	0.00001232	0.000801	0.00003234	0.00001949	0.00001285
606870.00	2357440.00	0.00054724	0.00002688	0.00001557	0.00001131	0.0007708	0.00003069	0.00001894	0.00001175
607370.00	2357440.00	0.00052938	0.00002562	0.00001521	0.00001041	0.0007428	0.0000292	0.00001843	0.00001077
607870.00	2357440.00	0.0005126	0.00002447	0.00001488	0.0000096	0.0007168	0.00002784	0.00001796	0.00000988
608370.00	2357440.00	0.00049682	0.00002343	0.00001456	0.00000887	0.0006926	0.00002661	0.00001752	0.00000909
608870.00	2357440.00	0.00048194	0.00002247	0.00001426	0.00000821	0.00067	0.00002548	0.00001711	0.00000837
609370.00	2357440.00	0.0004679	0.0000216	0.00001398	0.00000762	0.0006488	0.00002444	0.00001673	0.00000772
609870.00	2357440.00	0.00045461	0.00002081	0.00001372	0.00000709	0.000629	0.00002349	0.00001636	0.00000713
610370.00	2357440.00	0.00044206	0.00002005	0.00001347	0.00000658	0.0006105	0.00002262	0.00001602	0.00000659
610870.00	2357440.00	0.00043017	0.00001935	0.00001323	0.00000611	0.000593	0.00002181	0.0000157	0.00000611
611370.00	2357440.00	0.00041889	0.00001869	0.00001301	0.00000569	0.0005766	0.00002106	0.0000154	0.00000567
611870.00	2357440.00	0.00040817	0.00001809	0.00001279	0.00000529	0.0005611	0.00002037	0.00001511	0.00000526
612370.00	2357440.00	0.00039796	0.00001752	0.00001259	0.00000494	0.0005465	0.00001973	0.00001483	0.00000489
612870.00	2357440.00	0.00038826	0.000017	0.00001239	0.00000461	0.0005327	0.00001913	0.00001457	0.00000456
613370.00	2357440.00	0.00037901	0.00001651	0.00001221	0.00000431	0.0005197	0.00001858	0.00001433	0.00000425
613870.00	2357440.00	0.00037019	0.00001606	0.00001203	0.00000403	0.0005073	0.00001806	0.00001409	0.00000397
614370.00	2357440.00	0.00036176	0.00001563	0.00001186	0.00000377	0.0004955	0.00001757	0.00001386	0.00000371
614870.00	2357440.00	0.00035369	0.00001523	0.00001169	0.00000354	0.0004844	0.00001712	0.00001365	0.00000347
615370.00	2357440.00	0.00034621	0.00001486	0.00001154	0.00000332	0.0004745	0.00001671	0.00001345	0.00000326
615870.00	2357440.00	0.00033883	0.00001451	0.00001139	0.00000312	0.0004644	0.00001631	0.00001325	0.00000306
616370.00	2357440.00	0.00033157	0.00001418	0.00001124	0.00000294	0.0004542	0.00001593	0.00001305	0.00000287
616870.00	2357440.00	0.00032476	0.00001387	0.0000111	0.00000277	0.000445	0.00001557	0.00001287	0.0000027
617370.00	2357440.00	0.00031826	0.00001357	0.00001096	0.00000261	0.0004363	0.00001524	0.0000127	0.00000254
617870.00	2357440.00	0.00031266	0.00001332	0.00001085	0.00000246	0.0004299	0.00001495	0.00001255	0.0000024
618370.00	2357440.00	0.00030701	0.00001306	0.00001073	0.00000233	0.0004222	0.00001463	0.00001237	0.00000226
618870.00	2357440.00	0.00030007	0.00001269	0.00001051	0.00000218	0.0004116	0.00001418	0.00001207	0.0000021
619370.00	2357440.00	0.00029092	0.00001165	0.00000973	0.00000192	0.0004353	0.00001299	0.00001121	0.00000178
619870.00	2357440.00	0.00028507	0.00001151	0.00000968	0.00000183	0.0004146	0.0000128	0.0000111	0.00000171
590370.00	2357940.00	0.00479434	0.00201412	0.00197454	0.00003958	0.0061658	0.00199029	0.00194901	0.00004129
590870.00	2357940.00	0.00533835	0.00244473	0.00239615	0.00004858	0.0076413	0.00272647	0.0026816	0.00004487
591370.00	2357940.00	0.00643003	0.00297379	0.00272333	0.00025046	0.0087458	0.00342045	0.00336151	0.00005894
591870.00	2357940.00	0.00717429	0.00274967	0.00242817	0.0003215	0.0111798	0.00434261	0.00405954	0.00028307
592370.00	2357940.00	0.00456711	0.00119681	0.00113015	0.00006666	0.0113745	0.00325334	0.00302436	0.00022898
592870.00	2357940.00	0.00538422	0.00124714	0.0012196	0.00002754	0.0092507	0.00179898	0.00174952	0.00004946
593370.00	2357940.00	0.00416366	0.00078859	0.00076374	0.00002485	0.008712	0.00168069	0.00165191	0.00002878
593870.00	2357940.00	0.00377432	0.00038653	0.0003605	0.00002603	0.0070591	0.00087188	0.00084343	0.00002845
594370.00	2357940.00	0.0031666	0.00021102	0.00018503	0.00002599	0.0057521	0.00042228	0.00039242	0.00002986
594870.00	2357940.00	0.00269446	0.00014652	0.00011648	0.00003004	0.0046814	0.00024841	0.00021014	0.00003827
595370.00	2357940.00	0.00232024	0.00012614	0.00008485	0.00004129	0.0040521	0.00019262	0.00013778	0.00005485
595870.00	2357940.00	0.0019641	0.00012071	0.00006627	0.00005444	0.0034947	0.00016959	0.00010147	0.00006812
596370.00	2357940.00	0.00167247	0.00011882	0.00005446	0.00006436	0.0030114	0.00015737	0.00008056	0.00007681
596870.00	2357940.00	0.00145592	0.00011568	0.00004631	0.00006936	0.0026278	0.00014687	0.00006688	0.00008
597370.00	2357940.00	0.00130215	0.00011072	0.00004061	0.00007012	0.0023382	0.0001366	0.00005762	0.00007898
597870.00	2357940.00	0.00118488	0.00010401	0.00003609	0.00006792	0.002104	0.00012545	0.00005038	0.00007507
598370.00	2357940.00	0.0010962	0.00009678	0.00003274	0.00006404	0.0019205	0.00011495	0.00004512	0.00006983
598870.00	2357940.00	0.00102339	0.00008934	0.00003002	0.00005932	0.0017658	0.00010491	0.00004088	0.00006403
599370.00	2357940.00	0.00096132	0.0000821	0.00002775	0.00005435	0.001632	0.00009557	0.00003735	0.00005822
599870.00	2357940.00	0.00090872	0.0000754	0.00002594	0.00004946	0.001519	0.00008723	0.00003454	0.00005269
600370.00	2357940.00	0.00086258	0.00006924	0.00002441	0.00004483	0.0014205	0.00007975	0.0000322	0.00004756
600870.00	2357940.00	0.00082349	0.00006378	0.00002322	0.00004057	0.0013377	0.00007327	0.00003038	0.0000429
601370.00	2357940.00	0.00078612	0.00005874	0.00002207	0.00003666	0.0012618	0.00006742	0.00002873	0.00003869
601870.00	2357940.00	0.00075167	0.00005416	0.00002103	0.00003313	0.0011873	0.00006191	0.00002703	0.00003488
602370.00	2357940.00	0.00071864	0.00005013	0.00002016	0.00002997	0.0011226	0.00005735	0.00002583	0.00003151
602870.00	2357940.00	0.00069014	0.00004652	0.00001939	0.00002714	0.0010661	0.00005316	0.00002467	0.00002849
603370.00	2357940.00	0.00066335	0.00004329	0.00001869	0.0000246	0.001014	0.00004942	0.00002362	0.00002579
603870.00	2357940.00	0.00063906	0.00004041	0.00001807	0.00002234	0.000968	0.00004609	0.00002271	0.00002338
604370.00	2357940.00	0.00061636	0.00003783	0.00001751	0.00002032	0.0009259	0.00004312	0.00002189	0.00002123

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
604870.00	2357940.00	0.00059476	0.00003551	0.000017	0.00001851	0.0008861	0.00004044	0.00002114	0.00001931
605370.00	2357940.00	0.00057427	0.00003341	0.00001652	0.00001689	0.0008488	0.00003802	0.00002044	0.00001758
605870.00	2357940.00	0.00055544	0.00003153	0.00001609	0.00001544	0.0008155	0.00003585	0.00001981	0.00001604
606370.00	2357940.00	0.0005376	0.00002983	0.00001569	0.00001414	0.0007844	0.00003389	0.00001924	0.00001465
606870.00	2357940.00	0.00052085	0.00002829	0.00001532	0.00001297	0.0007556	0.00003211	0.0000187	0.00001341
607370.00	2357940.00	0.00050506	0.00002689	0.00001497	0.00001192	0.0007288	0.00003049	0.00001821	0.00001228
607870.00	2357940.00	0.00049014	0.00002562	0.00001465	0.00001098	0.0007039	0.00002902	0.00001775	0.00001127
608370.00	2357940.00	0.00047603	0.00002447	0.00001435	0.00001012	0.0006806	0.00002768	0.00001733	0.00001036
608870.00	2357940.00	0.00046266	0.00002341	0.00001406	0.00000935	0.0006589	0.00002646	0.00001693	0.00000953
609370.00	2357940.00	0.00044998	0.00002245	0.00001379	0.00000866	0.0006385	0.00002533	0.00001655	0.00000878
609870.00	2357940.00	0.00043793	0.00002157	0.00001354	0.00000803	0.0006194	0.0000243	0.0000162	0.0000081
610370.00	2357940.00	0.00042651	0.00002074	0.0000133	0.00000744	0.0006014	0.00002335	0.00001587	0.00000748
610870.00	2357940.00	0.00041595	0.00001998	0.00001308	0.0000069	0.0005852	0.00002249	0.00001556	0.00000692
611370.00	2357940.00	0.0004056	0.00001927	0.00001286	0.00000641	0.0005693	0.00002168	0.00001527	0.00000641
611870.00	2357940.00	0.00039573	0.00001861	0.00001265	0.00000596	0.0005542	0.00002093	0.00001498	0.00000595
612370.00	2357940.00	0.00038604	0.00001799	0.00001245	0.00000554	0.0005392	0.00002023	0.00001471	0.00000552
612870.00	2357940.00	0.00037705	0.00001743	0.00001226	0.00000517	0.0005258	0.00001958	0.00001445	0.00000513
613370.00	2357940.00	0.00036847	0.0000169	0.00001208	0.00000482	0.0005131	0.00001899	0.00001421	0.00000478
613870.00	2357940.00	0.00036025	0.00001641	0.00001191	0.0000045	0.000501	0.00001843	0.00001398	0.00000445
614370.00	2357940.00	0.00035237	0.00001595	0.00001174	0.00000421	0.0004895	0.00001791	0.00001376	0.00000415
614870.00	2357940.00	0.00034482	0.00001552	0.00001158	0.00000394	0.0004786	0.00001742	0.00001354	0.00000388
615370.00	2357940.00	0.00033759	0.00001512	0.00001143	0.00000369	0.0004683	0.00001697	0.00001334	0.00000363
615870.00	2357940.00	0.00033067	0.00001475	0.00001129	0.00000346	0.0004584	0.00001655	0.00001315	0.0000034
616370.00	2357940.00	0.00032401	0.00001439	0.00001114	0.00000325	0.000449	0.00001615	0.00001296	0.00000318
616870.00	2357940.00	0.00031799	0.00001407	0.00001102	0.00000305	0.0004411	0.00001579	0.0000128	0.00000299
617370.00	2357940.00	0.00031201	0.00001377	0.00001089	0.00000287	0.0004331	0.00001545	0.00001264	0.00000281
617870.00	2357940.00	0.00030587	0.00001347	0.00001076	0.00000271	0.0004241	0.0000151	0.00001246	0.00000264
618370.00	2357940.00	0.00030031	0.00001319	0.00001064	0.00000255	0.0004167	0.0000148	0.00001231	0.00000249
618870.00	2357940.00	0.00029265	0.00001267	0.0000103	0.00000236	0.0004045	0.00001409	0.00001183	0.00000227
619370.00	2357940.00	0.000286	0.00001172	0.00000962	0.0000021	0.0004466	0.00001311	0.00001115	0.00000196
619870.00	2357940.00	0.00029947	0.00001138	0.00000945	0.00000193	0.0005637	0.00001307	0.00001129	0.00000178
590370.00	2358440.00	0.00352168	0.00153837	0.00150571	0.00003266	0.0051542	0.00167326	0.00163919	0.00003407
590870.00	2358440.00	0.00382294	0.00168583	0.00159299	0.00009284	0.005661	0.00198345	0.00194557	0.00003788
591370.00	2358440.00	0.00505794	0.00224062	0.00193442	0.0003062	0.0064127	0.00227255	0.00216396	0.00010859
591870.00	2358440.00	0.00462982	0.00153872	0.00135179	0.00018693	0.008227	0.00285102	0.00257052	0.0002805
592370.00	2358440.00	0.00326031	0.00081553	0.00076219	0.00005334	0.0072946	0.00172349	0.00158627	0.00013722
592870.00	2358440.00	0.00406471	0.0008191	0.000796	0.00002311	0.0059871	0.00107729	0.0010368	0.00004048
593370.00	2358440.00	0.00323175	0.00070696	0.00068764	0.00001931	0.007293	0.00114634	0.00112298	0.00002336
593870.00	2358440.00	0.00286895	0.00043409	0.00041477	0.00001932	0.0050941	0.00080716	0.00078579	0.00002137
594370.00	2358440.00	0.00266142	0.00025029	0.00023034	0.00001995	0.0046222	0.00047717	0.00045543	0.00002174
594870.00	2358440.00	0.00227077	0.00015337	0.00013365	0.00001973	0.0039186	0.00027516	0.0002526	0.00002256
595370.00	2358440.00	0.0019768	0.00010907	0.000089	0.00002007	0.0033291	0.00017645	0.00015117	0.00002527
595870.00	2358440.00	0.00178118	0.00008994	0.00006667	0.00002327	0.0029961	0.00013432	0.00010362	0.0000307
596370.00	2358440.00	0.00161109	0.00008393	0.00005461	0.00002931	0.0027469	0.00011962	0.00008086	0.00003877
596870.00	2358440.00	0.00143223	0.00008154	0.00004559	0.00003595	0.0024717	0.00011004	0.0000653	0.00004474
597370.00	2358440.00	0.00127412	0.00008102	0.00003941	0.00004162	0.0022177	0.00010464	0.00005526	0.00004939
597870.00	2358440.00	0.00115074	0.00008078	0.00003534	0.00004545	0.0020082	0.00010156	0.00004895	0.00005261
598370.00	2358440.00	0.00105723	0.0000797	0.00003243	0.00004727	0.001844	0.00009826	0.00004452	0.00005374
598870.00	2358440.00	0.0009698	0.00007655	0.00002925	0.0000473	0.0016793	0.00009194	0.00003961	0.00005234
599370.00	2358440.00	0.00090494	0.00007319	0.00002705	0.00004614	0.001554	0.00008654	0.00003626	0.00005028
599870.00	2358440.00	0.00085138	0.00006939	0.00002524	0.00004415	0.0014478	0.00008109	0.00003352	0.00004757
600370.00	2358440.00	0.00080851	0.00006556	0.00002388	0.00004168	0.001362	0.00007602	0.00003148	0.00004454
600870.00	2358440.00	0.00077149	0.00006174	0.00002276	0.00003898	0.0012907	0.0000713	0.00002991	0.00004139
601370.00	2358440.00	0.00073629	0.00005783	0.00002165	0.00003619	0.0012169	0.00006643	0.00002822	0.00003821
601870.00	2358440.00	0.00070441	0.0000541	0.00002066	0.00003343	0.0011499	0.00006189	0.00002674	0.00003515
602370.00	2358440.00	0.00067542	0.00005059	0.0000198	0.00003079	0.0010895	0.0000577	0.00002543	0.00003226
602870.00	2358440.00	0.00064998	0.00004735	0.00001906	0.0000283	0.0010378	0.00005389	0.00002432	0.00002957
603370.00	2358440.00	0.00062828	0.00004439	0.00001842	0.00002597	0.0009926	0.00005035	0.00002328	0.00002707
603870.00	2358440.00	0.00060559	0.00004164	0.00001782	0.00002382	0.0009504	0.00004725	0.00002247	0.00002478
604370.00	2358440.00	0.00058349	0.00003909	0.00001724	0.00002185	0.000906	0.00004432	0.00002163	0.00002269
604870.00	2358440.00	0.00056506	0.00003681	0.00001677	0.00002004	0.0008709	0.0000417	0.00002093	0.00002077
605370.00	2358440.00	0.00054571	0.00003467	0.00001628	0.00001839	0.0008331	0.00003925	0.00002022	0.00001903
605870.00	2358440.00	0.0005285	0.00003275	0.00001586	0.00001689	0.0008006	0.00003705	0.00001961	0.00001744
606370.00	2358440.00	0.00051248	0.000031	0.00001548	0.00001552	0.000771	0.00003505	0.00001905	0.000016
606870.00	2358440.00	0.00049726	0.00002939	0.00001512	0.00001428	0.0007431	0.00003321	0.00001853	0.00001469
607370.00	2358440.00	0.00048294	0.00002793	0.00001478	0.00001315	0.0007174	0.00003154	0.00001804	0.0000135
607870.00	2358440.00	0.0004694	0.00002659	0.00001447	0.00001212	0.0006933	0.00003001	0.0000176	0.00001242
608370.00	2358440.00	0.00045666	0.00002537	0.00001418	0.00001119	0.000671	0.00002861	0.00001718	0.00001143
608870.00	2358440.00	0.00044437	0.00002424	0.0000139	0.00001034	0.0006496	0.00002732	0.00001679	0.00001053

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
609370.00	2358440.00	0.00043278	0.00002321	0.00001364	0.00000957	0.0006298	0.00002614	0.00001642	0.00000972
609870.00	2358440.00	0.00042206	0.00002227	0.0000134	0.00000887	0.0006121	0.00002506	0.00001609	0.00000897
610370.00	2358440.00	0.00041133	0.00002138	0.00001316	0.00000822	0.0005939	0.00002404	0.00001575	0.00000829
610870.00	2358440.00	0.00040158	0.00002057	0.00001295	0.00000763	0.000578	0.00002313	0.00001545	0.00000768
611370.00	2358440.00	0.00039204	0.00001982	0.00001274	0.00000708	0.0005624	0.00002227	0.00001516	0.00000711
611870.00	2358440.00	0.00038265	0.00001911	0.00001253	0.00000658	0.0005469	0.00002146	0.00001487	0.00000659
612370.00	2358440.00	0.00037394	0.00001846	0.00001234	0.00000613	0.0005329	0.00002073	0.00001461	0.00000612
612870.00	2358440.00	0.00036561	0.00001786	0.00001215	0.00000571	0.0005198	0.00002004	0.00001436	0.00000569
613370.00	2358440.00	0.00035763	0.0000173	0.00001198	0.00000532	0.0005073	0.00001941	0.00001412	0.00000529
613870.00	2358440.00	0.00034998	0.00001678	0.00001181	0.00000496	0.0004954	0.00001882	0.00001389	0.00000493
614370.00	2358440.00	0.00034263	0.00001629	0.00001165	0.00000464	0.0004841	0.00001827	0.00001367	0.00000459
614870.00	2358440.00	0.00033563	0.00001583	0.0000115	0.00000434	0.0004736	0.00001775	0.00001347	0.00000429
615370.00	2358440.00	0.00032927	0.00001542	0.00001136	0.00000406	0.0004646	0.00001729	0.00001329	0.000004
615870.00	2358440.00	0.00032251	0.00001501	0.00001121	0.0000038	0.0004541	0.00001683	0.00001308	0.00000374
616370.00	2358440.00	0.00031616	0.00001463	0.00001107	0.00000357	0.0004445	0.0000164	0.0000129	0.0000035
616870.00	2358440.00	0.00031026	0.00001429	0.00001094	0.00000335	0.000436	0.00001601	0.00001273	0.00000328
617370.00	2358440.00	0.0003045	0.00001396	0.00001081	0.00000315	0.0004276	0.00001564	0.00001256	0.00000308
617870.00	2358440.00	0.00029959	0.00001366	0.0000107	0.00000296	0.0004216	0.00001531	0.00001241	0.00000289
618370.00	2358440.00	0.00029434	0.00001337	0.00001058	0.00000279	0.0004133	0.00001494	0.00001222	0.00000271
618870.00	2358440.00	0.0002856	0.00001275	0.00001018	0.00000257	0.0003993	0.00001417	0.00001169	0.00000247
619370.00	2358440.00	0.00027915	0.00001233	0.00000993	0.0000024	0.0003923	0.00001366	0.00001138	0.00000229
619870.00	2358440.00	0.0002735	0.00001196	0.00000972	0.00000224	0.0003893	0.00001324	0.00001112	0.00000212
590370.00	2358940.00	0.00264674	0.00111201	0.0010662	0.00004581	0.0041107	0.00130882	0.00128025	0.00002857
590870.00	2358940.00	0.0032112	0.00138417	0.00122622	0.00015796	0.0044219	0.00142306	0.00137092	0.00005214
591370.00	2358940.00	0.00393473	0.00159498	0.00133839	0.00025659	0.0052001	0.00176423	0.00160104	0.00016319
591870.00	2358940.00	0.00326487	0.00096926	0.00084622	0.00012304	0.006041	0.0018395	0.00162613	0.00021337
592370.00	2358940.00	0.00246299	0.00058781	0.00054416	0.00004365	0.0052787	0.0010657	0.00097205	0.00009365
592870.00	2358940.00	0.00303031	0.00056569	0.00054552	0.00002017	0.0044237	0.00073332	0.00069934	0.00003398
593370.00	2358940.00	0.00276293	0.00057173	0.0005552	0.00001653	0.0057854	0.00078191	0.0007622	0.0000197
593870.00	2358940.00	0.00222887	0.00041712	0.00040184	0.00001528	0.0042764	0.00067201	0.00065464	0.00001737
594370.00	2358940.00	0.00214564	0.00027411	0.00025848	0.00001563	0.0035496	0.00046023	0.00044324	0.000017
594870.00	2358940.00	0.00200002	0.00017597	0.0001599	0.00001606	0.0033195	0.00030341	0.00028614	0.00001727
595370.00	2358940.00	0.0017512	0.00011889	0.00010287	0.00001602	0.0029297	0.00019851	0.00018066	0.00001786
595870.00	2358940.00	0.0015545	0.00008829	0.00007256	0.00001573	0.002581	0.00013762	0.00011869	0.00001893
596370.00	2358940.00	0.00142645	0.00007225	0.00005589	0.00001637	0.0023666	0.00010608	0.00008499	0.00002109
596870.00	2358940.00	0.00133463	0.00006578	0.00004707	0.00001871	0.0022395	0.00009453	0.00006876	0.00002577
597370.00	2358940.00	0.0012249	0.00006093	0.00003907	0.00002187	0.002061	0.0000822	0.00005461	0.00002758
597870.00	2358940.00	0.00112431	0.00006	0.00003436	0.00002563	0.0019056	0.00007808	0.00004709	0.00003099
598370.00	2358940.00	0.0010312	0.00006013	0.00003104	0.00002908	0.0017555	0.00007613	0.00004201	0.00003412
598870.00	2358940.00	0.00095168	0.00006034	0.00002862	0.00003173	0.0016223	0.00007487	0.00003841	0.00003646
599370.00	2358940.00	0.00088302	0.00005986	0.00002652	0.00003334	0.0015034	0.00007278	0.0000353	0.00003748
599870.00	2358940.00	0.00082689	0.00005889	0.00002488	0.00003401	0.0014039	0.0000705	0.00003289	0.00003761
600370.00	2358940.00	0.00078177	0.00005751	0.00002361	0.0000339	0.0013227	0.00006808	0.00003104	0.00003704
600870.00	2358940.00	0.00074232	0.00005558	0.00002243	0.00003315	0.0012486	0.00006509	0.00002929	0.0000358
601370.00	2358940.00	0.00070694	0.00005331	0.00002134	0.00003197	0.0011827	0.00006195	0.00002777	0.00003418
601870.00	2358940.00	0.00067431	0.00005073	0.00002025	0.00003048	0.0011137	0.0000583	0.00002603	0.00003226
602370.00	2358940.00	0.00064907	0.00004842	0.00001957	0.00002885	0.001065	0.00005542	0.00002504	0.00003037
602870.00	2358940.00	0.00062328	0.00004595	0.00001883	0.00002713	0.0010163	0.00005247	0.00002405	0.00002842
603370.00	2358940.00	0.00060064	0.00004356	0.00001818	0.00002538	0.0009713	0.00004956	0.00002308	0.00002648
603870.00	2358940.00	0.00057971	0.00004126	0.00001759	0.00002367	0.0009299	0.00004682	0.00002222	0.00002461
604370.00	2358940.00	0.00056005	0.00003906	0.00001705	0.00002202	0.000891	0.00004425	0.00002143	0.00002282
604870.00	2358940.00	0.00054189	0.000037	0.00001656	0.00002044	0.0008553	0.00004185	0.00002072	0.00002113
605370.00	2358940.00	0.00052532	0.00003508	0.00001613	0.00001895	0.0008236	0.00003962	0.00002007	0.00001955
605870.00	2358940.00	0.00050814	0.00003325	0.00001569	0.00001755	0.0007896	0.00003752	0.00001945	0.00001807
606370.00	2358940.00	0.00049267	0.00003156	0.00001531	0.00001625	0.0007599	0.00003559	0.00001888	0.0000167
606870.00	2358940.00	0.00047849	0.00003	0.00001496	0.00001505	0.0007333	0.00003381	0.00001838	0.00001543
607370.00	2358940.00	0.00046508	0.00002856	0.00001463	0.00001393	0.0007084	0.00003217	0.00001791	0.00001426
607870.00	2358940.00	0.00045275	0.00002724	0.00001434	0.0000129	0.0006861	0.00003067	0.00001748	0.00001318
608370.00	2358940.00	0.00044034	0.00002599	0.00001404	0.00001195	0.0006632	0.00002925	0.00001706	0.00001219
608870.00	2358940.00	0.00042891	0.00002485	0.00001377	0.00001108	0.0006427	0.00002795	0.00001667	0.00001128
609370.00	2358940.00	0.00041804	0.00002379	0.00001352	0.00001028	0.0006233	0.00002675	0.00001631	0.00001044
609870.00	2358940.00	0.00040769	0.00002282	0.00001328	0.00000954	0.0006051	0.00002564	0.00001597	0.00000967
610370.00	2358940.00	0.00039835	0.00002193	0.00001306	0.00000886	0.0005893	0.00002463	0.00001567	0.00000896
610870.00	2358940.00	0.00038848	0.00002107	0.00001283	0.00000824	0.0005717	0.00002366	0.00001535	0.00000831
611370.00	2358940.00	0.00037953	0.00002029	0.00001263	0.00000766	0.0005564	0.00002277	0.00001506	0.00000771
611870.00	2358940.00	0.00037098	0.00001956	0.00001243	0.00000713	0.0005419	0.00002195	0.00001479	0.00000716
612370.00	2358940.00	0.00036281	0.00001889	0.00001224	0.00000664	0.0005282	0.00002118	0.00001453	0.00000665
612870.00	2358940.00	0.00035512	0.00001826	0.00001207	0.00000619	0.0005156	0.00002048	0.00001429	0.00000619
613370.00	2358940.00	0.00034797	0.00001769	0.00001191	0.00000578	0.0005042	0.00001983	0.00001407	0.00000576

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613870.00	2358940.00	0.00034025	0.00001712	0.00001173	0.0000054	0.0004911	0.00001919	0.00001382	0.00000537
614370.00	2358940.00	0.00033332	0.00001661	0.00001157	0.00000504	0.0004799	0.00001861	0.00001361	0.000005
614870.00	2358940.00	0.00032737	0.00001616	0.00001144	0.00000472	0.0004714	0.0000181	0.00001343	0.00000467
615370.00	2358940.00	0.00032133	0.00001571	0.0000113	0.00000441	0.0004619	0.00001759	0.00001323	0.00000436
615870.00	2358940.00	0.00031475	0.00001529	0.00001115	0.00000413	0.0004513	0.00001712	0.00001304	0.00000408
616370.00	2358940.00	0.00030928	0.0000149	0.00001102	0.00000388	0.000443	0.00001668	0.00001286	0.00000382
616870.00	2358940.00	0.00030283	0.00001451	0.00001088	0.00000364	0.0004322	0.00001625	0.00001267	0.00000358
617370.00	2358940.00	0.00029802	0.00001418	0.00001077	0.00000342	0.000426	0.00001588	0.00001252	0.00000335
617870.00	2358940.00	0.00029146	0.00001374	0.00001054	0.00000319	0.0004142	0.0000153	0.00001219	0.00000311
618370.00	2358940.00	0.00028368	0.00001319	0.00001022	0.00000297	0.0004021	0.00001463	0.00001177	0.00000286
618870.00	2358940.00	0.00027787	0.00001281	0.00001003	0.00000278	0.0003945	0.00001419	0.00001152	0.00000267
619370.00	2358940.00	0.00027129	0.00001228	0.0000097	0.00000257	0.0003951	0.00001359	0.00001114	0.00000245
619870.00	2358940.00	0.00027751	0.00001171	0.00000936	0.00000235	0.0005202	0.00001336	0.00001116	0.0000022
590370.00	2359440.00	0.00224714	0.0009129	0.00083511	0.00007778	0.0033787	0.00100074	0.00096875	0.00003199
590870.00	2359440.00	0.00280477	0.00117728	0.00098724	0.00019004	0.0036839	0.00114496	0.00106196	0.000083
591370.00	2359440.00	0.00306768	0.00111597	0.0009245	0.00019147	0.0043263	0.00140683	0.00122874	0.0001781
591870.00	2359440.00	0.00248077	0.00067025	0.00058182	0.00008843	0.004619	0.0012158	0.00106214	0.00015366
592370.00	2359440.00	0.00193155	0.00043915	0.00040327	0.00003588	0.0040624	0.00071664	0.00064854	0.00006811
592870.00	2359440.00	0.00229842	0.00041755	0.00039974	0.0000178	0.0035508	0.00054141	0.00051249	0.00002892
593370.00	2359440.00	0.0024566	0.00044802	0.0004335	0.00001452	0.0044613	0.00055787	0.00054117	0.00001669
593870.00	2359440.00	0.00189697	0.00037727	0.00036427	0.000013	0.00405	0.00054998	0.00053517	0.00001481
594370.00	2359440.00	0.0017358	0.0002756	0.00026278	0.00001283	0.00295	0.00041976	0.00040566	0.0000141
594870.00	2359440.00	0.00169839	0.00019289	0.00017978	0.00001311	0.0027113	0.00030319	0.00028914	0.00001405
595370.00	2359440.00	0.00159644	0.00013526	0.00012176	0.0000135	0.0025786	0.00021867	0.00020421	0.00001446
595870.00	2359440.00	0.00142068	0.00009703	0.00008353	0.0000135	0.0023268	0.00015399	0.00013922	0.00001478
596370.00	2359440.00	0.00127756	0.00007443	0.00006126	0.00001317	0.0020972	0.00011241	0.0000972	0.0000152
596870.00	2359440.00	0.00118759	0.00006169	0.00004862	0.00001307	0.0019588	0.00008904	0.00007283	0.00001621
597370.00	2359440.00	0.00111625	0.00005378	0.00004017	0.00001361	0.001848	0.00007455	0.00005723	0.00001732
597870.00	2359440.00	0.00105797	0.00005003	0.00003499	0.00001504	0.0017613	0.00006761	0.00004833	0.00001928
598370.00	2359440.00	0.00099585	0.00004822	0.00003115	0.00001707	0.0016644	0.0000634	0.00004214	0.00002126
598870.00	2359440.00	0.00093303	0.00004776	0.00002841	0.00001935	0.0015641	0.00006135	0.00003794	0.00002341
599370.00	2359440.00	0.00087118	0.00004767	0.00002618	0.00002149	0.0014624	0.00005976	0.00003461	0.00002515
599870.00	2359440.00	0.00081621	0.0000478	0.00002453	0.00002327	0.0013703	0.00005885	0.00003221	0.00002665
600370.00	2359440.00	0.00076777	0.00004769	0.00002316	0.00002453	0.0012878	0.00005778	0.00003022	0.00002756
600870.00	2359440.00	0.00072667	0.00004732	0.00002206	0.00002526	0.0012169	0.00005662	0.00002865	0.00002797
601370.00	2359440.00	0.00068932	0.00004645	0.00002098	0.00002547	0.0011494	0.00005481	0.00002707	0.00002774
601870.00	2359440.00	0.00065827	0.00004545	0.00002018	0.00002528	0.0010965	0.00005331	0.00002601	0.0000273
602370.00	2359440.00	0.00063053	0.0000441	0.00001936	0.00002474	0.0010429	0.00005118	0.00002478	0.0000264
602870.00	2359440.00	0.00060421	0.00004258	0.00001862	0.00002396	0.0009938	0.00004911	0.00002376	0.00002535
603370.00	2359440.00	0.00058177	0.00004099	0.00001798	0.000023	0.000951	0.00004698	0.00002282	0.00002416
603870.00	2359440.00	0.0005622	0.00003934	0.00001741	0.00002193	0.0009112	0.00004479	0.0000219	0.00002288
604370.00	2359440.00	0.00054229	0.00003762	0.00001683	0.00002079	0.0008723	0.00004263	0.00002105	0.00002158
604870.00	2359440.00	0.00052572	0.00003605	0.00001641	0.00001963	0.0008409	0.00004076	0.00002046	0.00002031
605370.00	2359440.00	0.0005086	0.00003444	0.00001597	0.00001847	0.0008101	0.00003895	0.00001989	0.00001905
605870.00	2359440.00	0.00049284	0.00003289	0.00001556	0.00001733	0.0007796	0.00003713	0.0000193	0.00001783
606370.00	2359440.00	0.00047761	0.0000314	0.00001517	0.00001623	0.0007499	0.00003539	0.00001874	0.00001665
606870.00	2359440.00	0.00046406	0.00003	0.00001483	0.00001517	0.0007245	0.00003377	0.00001824	0.00001553
607370.00	2359440.00	0.00045126	0.00002867	0.00001451	0.00001417	0.0007006	0.00003226	0.00001778	0.00001448
607870.00	2359440.00	0.00043949	0.00002744	0.00001422	0.00001322	0.0006792	0.00003085	0.00001737	0.00001348
608370.00	2359440.00	0.00042761	0.00002625	0.00001393	0.00001233	0.000657	0.0000295	0.00001695	0.00001255
608870.00	2359440.00	0.00041667	0.00002515	0.00001366	0.00001149	0.0006371	0.00002825	0.00001657	0.00001168
609370.00	2359440.00	0.00040664	0.00002413	0.00001343	0.00001071	0.0006193	0.0000271	0.00001624	0.00001087
609870.00	2359440.00	0.0003965	0.00002317	0.00001318	0.00000998	0.0006009	0.000026	0.00001589	0.00001011
610370.00	2359440.00	0.00038723	0.00002227	0.00001296	0.00000931	0.0005846	0.00002499	0.00001558	0.00000941
610870.00	2359440.00	0.00037812	0.00002143	0.00001275	0.00000868	0.0005683	0.00002404	0.00001528	0.00000876
611370.00	2359440.00	0.00036965	0.00002065	0.00001255	0.0000081	0.0005535	0.00002316	0.000015	0.00000815
611870.00	2359440.00	0.00036145	0.00001992	0.00001236	0.00000756	0.0005392	0.00002233	0.00001473	0.0000076
612370.00	2359440.00	0.0003536	0.00001924	0.00001217	0.00000706	0.0005257	0.00002156	0.00001448	0.00000708
612870.00	2359440.00	0.00034609	0.00001859	0.000012	0.0000066	0.0005128	0.00002083	0.00001423	0.0000066
613370.00	2359440.00	0.00033864	0.00001799	0.00001182	0.00000617	0.0004998	0.00002015	0.00001399	0.00000616
613870.00	2359440.00	0.00033247	0.00001745	0.00001168	0.00000577	0.0004904	0.00001954	0.0000138	0.00000575
614370.00	2359440.00	0.00032508	0.0000169	0.0000115	0.0000054	0.0004771	0.00001892	0.00001356	0.00000537
614870.00	2359440.00	0.00031876	0.00001641	0.00001136	0.00000505	0.0004667	0.00001837	0.00001335	0.00000501
615370.00	2359440.00	0.00031279	0.00001595	0.00001122	0.00000474	0.0004569	0.00001785	0.00001316	0.00000469
615870.00	2359440.00	0.00030769	0.00001554	0.0000111	0.00000444	0.0004496	0.00001739	0.000013	0.00000439
616370.00	2359440.00	0.00030219	0.00001513	0.00001097	0.00000417	0.0004396	0.00001688	0.00001278	0.0000041
616870.00	2359440.00	0.0002953	0.00001463	0.00001074	0.00000389	0.0004277	0.0000163	0.00001248	0.00000382
617370.00	2359440.00	0.00029132	0.00001439	0.00001071	0.00000367	0.0004233	0.00001609	0.00001248	0.00000361
617870.00	2359440.00	0.00028335	0.0000138	0.00001038	0.00000342	0.0004083	0.00001533	0.000012	0.00000333

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2359440.00	0.00027496	0.00001315	0.00000998	0.00000317	0.0003987	0.00001455	0.00001149	0.00000306
618870.00	2359440.00	0.00026923	0.00001268	0.00000972	0.00000295	0.0004011	0.00001403	0.0000112	0.00000283
619370.00	2359440.00	0.00026493	0.00001232	0.00000955	0.00000276	0.0004066	0.00001367	0.00001103	0.00000264
619870.00	2359440.00	0.00026106	0.00001203	0.00000943	0.0000026	0.0004084	0.00001337	0.0000109	0.00000247
590370.00	2359940.00	0.00203935	0.00082113	0.00070907	0.00011207	0.0028704	0.00081901	0.00077336	0.00004564
590870.00	2359940.00	0.00244043	0.00097569	0.00079185	0.00018384	0.0032057	0.00099034	0.00087877	0.00011157
591370.00	2359940.00	0.00244139	0.00079662	0.00065614	0.00014048	0.003618	0.00110296	0.00094074	0.00016222
591870.00	2359940.00	0.00197174	0.00048956	0.00042299	0.00006657	0.0036759	0.00083487	0.00072404	0.00011083
592370.00	2359940.00	0.00161183	0.00034915	0.00031853	0.00003062	0.0033566	0.0005326	0.00047925	0.00005334
592870.00	2359940.00	0.00180532	0.00032533	0.0003094	0.00001593	0.0029915	0.00042147	0.0003966	0.00002487
593370.00	2359940.00	0.00215727	0.00035564	0.0003427	0.00001294	0.0035462	0.00042593	0.0004113	0.00001463
593870.00	2359940.00	0.00176363	0.0003347	0.00032302	0.00001168	0.0038023	0.00045269	0.00043963	0.00001306
594370.00	2359940.00	0.00146777	0.00026252	0.00025158	0.00001094	0.0027288	0.00037722	0.00036511	0.00001211
594870.00	2359940.00	0.00143077	0.00019938	0.00018829	0.00001109	0.002303	0.00029029	0.00027828	0.00001201
595370.00	2359940.00	0.00140274	0.00014756	0.00013623	0.00001133	0.0021953	0.00022208	0.00021001	0.00001207
595870.00	2359940.00	0.00131724	0.00010846	0.00009689	0.00001157	0.0020861	0.0001671	0.00015486	0.00001224
596370.00	2359940.00	0.00119371	0.00008215	0.0000705	0.00001166	0.0019238	0.00012525	0.00011268	0.00001257
596870.00	2359940.00	0.00108739	0.00006499	0.00005357	0.00001142	0.0017682	0.00009557	0.00008277	0.00001281
597370.00	2359940.00	0.00101133	0.00005382	0.00004274	0.00001108	0.0016536	0.00007582	0.00006286	0.00001296
597870.00	2359940.00	0.00096314	0.00004725	0.00003621	0.00001104	0.0015874	0.00006461	0.00005106	0.00001355
598370.00	2359940.00	0.00092326	0.00004324	0.00003176	0.00001148	0.0015295	0.00005782	0.00004341	0.00001441
598870.00	2359940.00	0.00088317	0.00004088	0.00002849	0.00001239	0.0014665	0.00005351	0.00003812	0.00001539
599370.00	2359940.00	0.00084188	0.00003984	0.00002616	0.00001367	0.0013998	0.0000512	0.00003453	0.00001667
599870.00	2359940.00	0.00079877	0.00003946	0.00002435	0.00001511	0.0013292	0.00004979	0.00003182	0.00001797
600370.00	2359940.00	0.00075705	0.0000395	0.00002297	0.00001653	0.0012601	0.00004911	0.00002983	0.00001927
600870.00	2359940.00	0.00071695	0.00003949	0.00002176	0.00001773	0.0011921	0.0000483	0.00002809	0.00002021
601370.00	2359940.00	0.0006802	0.00003938	0.00002072	0.00001866	0.0011289	0.00004744	0.0000266	0.00002084
601870.00	2359940.00	0.00064802	0.00003916	0.00001988	0.00001928	0.0010732	0.00004663	0.00002541	0.00002122
602370.00	2359940.00	0.00061807	0.00003862	0.00001904	0.00001958	0.0010195	0.00004539	0.0000242	0.00002119
602870.00	2359940.00	0.00059407	0.0000381	0.00001848	0.00001962	0.0009777	0.0000445	0.00002342	0.00002107
603370.00	2359940.00	0.00057063	0.00003725	0.00001784	0.00001941	0.0009354	0.00004315	0.00002253	0.00002062
603870.00	2359940.00	0.00054924	0.00003627	0.00001727	0.000019	0.0008978	0.00004179	0.00002176	0.00002003
604370.00	2359940.00	0.00052962	0.00003519	0.00001674	0.00001845	0.0008607	0.00004031	0.00002102	0.0000193
604870.00	2359940.00	0.00051257	0.00003406	0.00001628	0.00001779	0.0008291	0.00003883	0.00002034	0.00001849
605370.00	2359940.00	0.00049675	0.0000329	0.00001585	0.00001705	0.0007971	0.00003727	0.00001966	0.00001762
605870.00	2359940.00	0.00048103	0.00003171	0.00001545	0.00001626	0.0007695	0.0000359	0.00001916	0.00001674
606370.00	2359940.00	0.00046613	0.00003051	0.00001506	0.00001545	0.0007408	0.00003446	0.0000186	0.00001585
606870.00	2359940.00	0.00045266	0.00002935	0.00001471	0.00001463	0.0007153	0.00003308	0.00001811	0.00001497
607370.00	2359940.00	0.00044151	0.00002826	0.00001443	0.00001382	0.0006959	0.0000318	0.0000177	0.0000141
607870.00	2359940.00	0.00042932	0.00002716	0.00001413	0.00001303	0.000673	0.00003053	0.00001727	0.00001326
608370.00	2359940.00	0.00041783	0.0000261	0.00001384	0.00001226	0.0006516	0.00002932	0.00001686	0.00001246
608870.00	2359940.00	0.00040722	0.0000251	0.00001358	0.00001152	0.0006322	0.00002818	0.00001649	0.00001169
609370.00	2359940.00	0.00039718	0.00002415	0.00001334	0.00001082	0.0006142	0.0000271	0.00001614	0.00001095
609870.00	2359940.00	0.00038745	0.00002325	0.0000131	0.00001015	0.0005965	0.00002607	0.00001581	0.00001026
610370.00	2359940.00	0.00037848	0.0000224	0.00001288	0.00000952	0.0005807	0.00002511	0.00001551	0.0000096
610870.00	2359940.00	0.00036975	0.0000216	0.00001267	0.00000892	0.0005651	0.0000242	0.00001521	0.00000899
611370.00	2359940.00	0.00036146	0.00002084	0.00001248	0.00000836	0.0005505	0.00002334	0.00001494	0.00000841
611870.00	2359940.00	0.00035381	0.00002013	0.0000123	0.00000784	0.0005374	0.00002255	0.00001468	0.00000787
612370.00	2359940.00	0.00034563	0.00001945	0.0000121	0.00000735	0.0005225	0.00002177	0.00001441	0.00000736
612870.00	2359940.00	0.00033869	0.00001882	0.00001193	0.00000689	0.0005108	0.00002107	0.00001418	0.00000689
613370.00	2359940.00	0.00033192	0.00001823	0.00001178	0.00000646	0.0004994	0.00002041	0.00001396	0.00000645
613870.00	2359940.00	0.00032518	0.00001767	0.00001162	0.00000606	0.0004879	0.00001978	0.00001374	0.00000603
614370.00	2359940.00	0.00031865	0.00001714	0.00001146	0.00000568	0.0004768	0.00001918	0.00001353	0.00000565
614870.00	2359940.00	0.00031208	0.00001663	0.0000113	0.00000533	0.000465	0.0000186	0.00001331	0.00000529
615370.00	2359940.00	0.00030614	0.00001616	0.00001116	0.00000501	0.0004549	0.00001808	0.00001312	0.00000496
615870.00	2359940.00	0.00030086	0.00001574	0.00001104	0.0000047	0.0004465	0.0000176	0.00001295	0.00000465
616370.00	2359940.00	0.00029241	0.00001506	0.00001067	0.00000438	0.0004304	0.00001672	0.00001242	0.0000043
616870.00	2359940.00	0.00028602	0.00001458	0.00001047	0.00000411	0.0004199	0.00001616	0.00001214	0.00000402
617370.00	2359940.00	0.00028133	0.00001424	0.00001037	0.00000387	0.0004124	0.00001579	0.00001201	0.00000377
617870.00	2359940.00	0.00027461	0.00001373	0.00001011	0.00000362	0.000403	0.00001519	0.00001167	0.00000351
618370.00	2359940.00	0.00027467	0.0000129	0.00000958	0.00000332	0.0005069	0.00001457	0.00001139	0.00000318
618870.00	2359940.00	0.00028019	0.00001258	0.00000947	0.0000031	0.0005788	0.00001446	0.0000115	0.00000296
619370.00	2359940.00	0.00026132	0.00001238	0.00000943	0.00000295	0.0004386	0.00001384	0.00001102	0.00000282
619870.00	2359940.00	0.00025855	0.00001209	0.00000932	0.00000277	0.0004456	0.00001356	0.00001092	0.00000264
590370.00	2360440.00	0.00186918	0.0007471	0.00061467	0.00013242	0.0025318	0.00072342	0.0006583	0.00006512
590870.00	2360440.00	0.00211216	0.00078949	0.00063043	0.00015906	0.002837	0.00086521	0.00074024	0.00012497
591370.00	2360440.00	0.00198748	0.00058886	0.000484	0.00010486	0.0030535	0.00085514	0.00071984	0.0001353
591870.00	2360440.00	0.0016464	0.00038256	0.00032941	0.00005315	0.0030788	0.00061313	0.00052949	0.00008364
592370.00	2360440.00	0.00136851	0.00028359	0.00025745	0.00002613	0.0028435	0.00041068	0.00036795	0.00004273

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592870.00	2360440.00	0.00147201	0.00026402	0.00024969	0.00001433	0.0026017	0.00034071	0.00031916	0.00002155
593370.00	2360440.00	0.00183492	0.00028665	0.00027515	0.0000115	0.0029431	0.00033825	0.00032543	0.00001282
593870.00	2360440.00	0.00168046	0.00029083	0.00028025	0.00001058	0.0033901	0.00037058	0.00035922	0.00001136
594370.00	2360440.00	0.0013126	0.00024159	0.000232	0.00000958	0.0028088	0.00033502	0.00032467	0.00001034
594870.00	2360440.00	0.00120808	0.00019298	0.00018355	0.00000943	0.0020639	0.00026721	0.00025715	0.00001006
595370.00	2360440.00	0.00121381	0.00015377	0.00014402	0.00000975	0.0018992	0.00021685	0.00020644	0.00001041
595870.00	2360440.00	0.00118584	0.00011827	0.00010837	0.0000099	0.0018302	0.00017211	0.00016169	0.00001042
596370.00	2360440.00	0.00112468	0.00009167	0.0000815	0.00001017	0.0017581	0.0001362	0.00012545	0.00001074
596870.00	2360440.00	0.00103433	0.00007225	0.00006196	0.00001029	0.0016486	0.00010673	0.00009568	0.00001105
597370.00	2360440.00	0.00095013	0.00005828	0.00004817	0.00001011	0.0015326	0.00008374	0.00007262	0.00001113
597870.00	2360440.00	0.00089096	0.00004908	0.00003929	0.00000979	0.0014513	0.00006823	0.00005704	0.00001119
598370.00	2360440.00	0.00084909	0.00004288	0.00003336	0.00000952	0.0013939	0.00005791	0.00004663	0.00001128
598870.00	2360440.00	0.00081784	0.00003884	0.00002936	0.00000948	0.0013503	0.00005136	0.00003982	0.00001154
599370.00	2360440.00	0.00079041	0.00003633	0.00002655	0.00000978	0.0013092	0.00004726	0.00003525	0.00001201
599870.00	2360440.00	0.00076269	0.0000349	0.00002452	0.00001039	0.0012651	0.0000448	0.0000321	0.00001271
600370.00	2360440.00	0.00073363	0.00003427	0.00002303	0.00001124	0.0012176	0.0000435	0.00002988	0.00001362
600870.00	2360440.00	0.0007017	0.00003385	0.00002169	0.00001216	0.0011632	0.00004227	0.00002792	0.00001435
601370.00	2360440.00	0.00067053	0.00003374	0.00002065	0.00001309	0.0011101	0.00004156	0.00002643	0.00001513
601870.00	2360440.00	0.00064058	0.00003369	0.00001977	0.00001393	0.0010586	0.00004096	0.00002518	0.00001578
602370.00	2360440.00	0.00061286	0.00003364	0.00001903	0.00001461	0.0010108	0.00004043	0.00002414	0.00001629
602870.00	2360440.00	0.00058709	0.00003348	0.00001837	0.0000151	0.0009682	0.00003994	0.0000233	0.00001664
603370.00	2360440.00	0.00056314	0.00003312	0.00001773	0.0000154	0.0009257	0.00003907	0.00002238	0.00001669
603870.00	2360440.00	0.0005408	0.00003259	0.00001709	0.0000155	0.0008827	0.00003789	0.0000214	0.00001649
604370.00	2360440.00	0.00052199	0.00003208	0.00001664	0.00001545	0.0008502	0.00003712	0.0000208	0.00001632
604870.00	2360440.00	0.00050404	0.00003141	0.00001617	0.00001525	0.0008166	0.00003605	0.0000201	0.00001595
605370.00	2360440.00	0.00048734	0.00003067	0.00001574	0.00001493	0.0007882	0.00003509	0.00001956	0.00001552
605870.00	2360440.00	0.00047154	0.00002986	0.00001534	0.00001452	0.0007586	0.000034	0.000019	0.000015
606370.00	2360440.00	0.00045657	0.00002899	0.00001495	0.00001404	0.0007301	0.00003288	0.00001845	0.00001443
606870.00	2360440.00	0.00044358	0.00002812	0.00001462	0.00001351	0.0007063	0.0000318	0.00001798	0.00001382
607370.00	2360440.00	0.00043316	0.00002728	0.00001434	0.00001294	0.0006877	0.00003074	0.00001755	0.00001319
607870.00	2360440.00	0.00042068	0.00002639	0.00001404	0.00001235	0.0006653	0.00002971	0.00001715	0.00001256
608370.00	2360440.00	0.00040934	0.00002551	0.00001375	0.00001176	0.0006442	0.00002867	0.00001675	0.00001192
608870.00	2360440.00	0.00039907	0.00002466	0.0000135	0.00001117	0.0006257	0.00002768	0.00001639	0.0000113
609370.00	2360440.00	0.00038961	0.00002385	0.00001326	0.00001058	0.0006092	0.00002675	0.00001606	0.00001068
609870.00	2360440.00	0.00038013	0.00002304	0.00001303	0.00001001	0.000592	0.00002582	0.00001573	0.00001009
610370.00	2360440.00	0.00037177	0.00002228	0.00001283	0.00000946	0.0005777	0.00002497	0.00001545	0.00000952
610870.00	2360440.00	0.0003631	0.00002154	0.00001261	0.00000893	0.0005621	0.00002412	0.00001515	0.00000897
611370.00	2360440.00	0.00035491	0.00002083	0.00001241	0.00000842	0.0005476	0.00002332	0.00001487	0.00000845
611870.00	2360440.00	0.0003474	0.00002017	0.00001223	0.00000793	0.0005347	0.00002257	0.00001462	0.00000795
612370.00	2360440.00	0.00034033	0.00001954	0.00001206	0.00000747	0.0005229	0.00002185	0.00001438	0.00000748
612870.00	2360440.00	0.00033071	0.00001874	0.00001172	0.00000702	0.0005034	0.00002086	0.00001386	0.000007
613370.00	2360440.00	0.00032484	0.00001824	0.00001162	0.00000662	0.0004939	0.00002031	0.00001372	0.00000658
613870.00	2360440.00	0.00031998	0.00001781	0.00001157	0.00000624	0.000487	0.00001988	0.00001368	0.00000621
614370.00	2360440.00	0.00031266	0.00001727	0.0000114	0.00000587	0.0004743	0.00001931	0.00001347	0.00000584
614870.00	2360440.00	0.00030651	0.00001678	0.00001125	0.00000553	0.0004634	0.00001875	0.00001327	0.00000549
615370.00	2360440.00	0.00030157	0.00001632	0.00001112	0.00000521	0.000455	0.00001819	0.00001304	0.00000515
615870.00	2360440.00	0.00029284	0.00001565	0.00001077	0.00000488	0.0004387	0.00001738	0.00001257	0.0000048
616370.00	2360440.00	0.00028569	0.00001509	0.00001051	0.00000458	0.0004265	0.00001672	0.00001223	0.00000449
616870.00	2360440.00	0.00027854	0.00001452	0.00001023	0.00000429	0.0004172	0.00001605	0.00001186	0.00000419
617370.00	2360440.00	0.00027311	0.0000141	0.00001006	0.00000404	0.0004108	0.00001558	0.00001165	0.00000393
617870.00	2360440.00	0.00027121	0.00001342	0.00000967	0.00000376	0.0004812	0.00001505	0.00001143	0.00000362
618370.00	2360440.00	0.00028206	0.00001305	0.00000954	0.00000351	0.0006095	0.00001505	0.00001168	0.00000337
618870.00	2360440.00	0.00040339	0.00001314	0.00000987	0.00000327	0.0010623	0.0000161	0.00001298	0.00000311
619370.00	2360440.00	0.00029555	0.0000125	0.0000094	0.0000031	0.0007361	0.00001484	0.00001189	0.00000295
619870.00	2360440.00	0.00025707	0.00001222	0.00000927	0.00000295	0.0004727	0.00001378	0.00001096	0.00000282
590370.00	2360940.00	0.00170885	0.00066844	0.00053268	0.00013576	0.0022958	0.00066295	0.00058003	0.00008292
590870.00	2360940.00	0.00182019	0.00063253	0.00050187	0.00013066	0.0025146	0.00074695	0.00062381	0.00012314
591370.00	2360940.00	0.00165046	0.00044819	0.00036853	0.00007965	0.0026088	0.00066156	0.0005532	0.00010836
591870.00	2360940.00	0.00137834	0.00029998	0.00025768	0.0000423	0.0026074	0.0004553	0.00039236	0.00006294
592370.00	2360940.00	0.00117863	0.00023214	0.00021019	0.00002195	0.002615	0.00032137	0.00028717	0.0000342
592870.00	2360940.00	0.00121405	0.00021604	0.00020366	0.00001239	0.0025408	0.00027559	0.00025777	0.00001782
593370.00	2360940.00	0.00154622	0.0002357	0.00022552	0.00001018	0.0026132	0.00027677	0.00026563	0.00001114
593870.00	2360940.00	0.00159016	0.00025085	0.00024126	0.00000959	0.0030755	0.00030558	0.00029578	0.0000098
594370.00	2360940.00	0.00144537	0.00022517	0.00021642	0.00000875	0.0047415	0.00030922	0.00030002	0.0000092
594870.00	2360940.00	0.00108824	0.00018591	0.00017751	0.00000839	0.0021323	0.00025259	0.00024367	0.00000892
595370.00	2360940.00	0.00104747	0.00015218	0.00014375	0.00000843	0.0017111	0.00020508	0.00019621	0.00000887
595870.00	2360940.00	0.00105255	0.0001246	0.00011592	0.00000868	0.0016205	0.00017172	0.00016254	0.00000918
596370.00	2360940.00	0.00103251	0.00009982	0.00009095	0.00000887	0.0015789	0.00014167	0.00013233	0.00000934
596870.00	2360940.00	0.00098179	0.00007978	0.0000707	0.00000908	0.0015205	0.00011508	0.00010551	0.00000957

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
597370.00	2360940.00	0.00090802	0.000064	0.00005485	0.00000915	0.0014305	0.00009182	0.00008213	0.00000969
597870.00	2360940.00	0.00084011	0.00005257	0.00004353	0.00000904	0.0013407	0.00007377	0.00006405	0.00000972
598370.00	2360940.00	0.00079284	0.00004489	0.00003611	0.00000878	0.0012806	0.00006132	0.00005159	0.00000973
598870.00	2360940.00	0.00075983	0.00003955	0.00003107	0.00000848	0.0012408	0.00005275	0.00004303	0.00000971
599370.00	2360940.00	0.00073502	0.00003581	0.00002755	0.00000826	0.0012102	0.00004688	0.00003714	0.00000975
599870.00	2360940.00	0.00071436	0.00003327	0.00002504	0.00000823	0.001182	0.00004297	0.00003306	0.0000099
600370.00	2360940.00	0.00069554	0.00003175	0.00002331	0.00000844	0.0011543	0.00004068	0.00003036	0.00001032
600870.00	2360940.00	0.00067373	0.00003066	0.00002183	0.00000883	0.0011177	0.0000388	0.00002812	0.00001068
601370.00	2360940.00	0.00065048	0.00002999	0.00002063	0.00000936	0.0010772	0.00003747	0.00002636	0.00001111
601870.00	2360940.00	0.00062884	0.00002995	0.00001991	0.00001003	0.0010414	0.00003727	0.00002536	0.00001191
602370.00	2360940.00	0.00060402	0.0000297	0.00001905	0.00001065	0.0009994	0.0000366	0.00002421	0.00001238
602870.00	2360940.00	0.0005796	0.00002952	0.0000183	0.00001122	0.0009556	0.00003589	0.00002315	0.00001273
603370.00	2360940.00	0.00055633	0.00002934	0.00001764	0.0000117	0.0009137	0.00003522	0.00002222	0.000013
603870.00	2360940.00	0.00053502	0.00002913	0.00001705	0.00001207	0.0008759	0.00003457	0.0000214	0.00001317
604370.00	2360940.00	0.00051543	0.00002886	0.00001654	0.00001233	0.0008411	0.00003391	0.00002067	0.00001324
604870.00	2360940.00	0.00049693	0.00002843	0.00001599	0.00001245	0.0008059	0.00003292	0.00001982	0.0000131
605370.00	2360940.00	0.00048102	0.00002813	0.00001565	0.00001247	0.0007801	0.0000325	0.00001942	0.00001308
605870.00	2360940.00	0.00046409	0.00002761	0.00001523	0.00001238	0.0007479	0.0000317	0.00001882	0.00001287
606370.00	2360940.00	0.00044989	0.00002707	0.00001487	0.00001221	0.0007224	0.00003091	0.00001832	0.00001259
606870.00	2360940.00	0.00043674	0.00002649	0.00001454	0.00001195	0.0006987	0.00003011	0.00001785	0.00001226
607370.00	2360940.00	0.0004245	0.00002587	0.00001423	0.00001164	0.0006767	0.00002929	0.00001742	0.00001187
607870.00	2360940.00	0.00041437	0.00002525	0.00001397	0.00001128	0.0006599	0.00002851	0.00001705	0.00001145
608370.00	2360940.00	0.00040321	0.00002458	0.00001369	0.00001088	0.0006394	0.00002768	0.00001667	0.00001101
608870.00	2360940.00	0.00039305	0.0000239	0.00001344	0.00001046	0.0006213	0.00002687	0.00001632	0.00001055
609370.00	2360940.00	0.0003832	0.00002323	0.00001319	0.00001003	0.0006035	0.00002606	0.00001597	0.00001009
609870.00	2360940.00	0.00037425	0.00002255	0.00001297	0.00000958	0.0005878	0.00002528	0.00001566	0.00000962
610370.00	2360940.00	0.00036586	0.0000219	0.00001277	0.00000913	0.0005733	0.00002452	0.00001537	0.00000916
610870.00	2360940.00	0.00035576	0.0000211	0.00001242	0.00000867	0.0005527	0.00002351	0.00001484	0.00000867
611370.00	2360940.00	0.00034852	0.00002052	0.00001227	0.00000825	0.0005406	0.00002287	0.00001464	0.00000823
611870.00	2360940.00	0.00034067	0.00001989	0.00001207	0.00000782	0.0005269	0.00002216	0.00001436	0.0000078
612370.00	2360940.00	0.00032901	0.00001898	0.00001159	0.00000739	0.0005031	0.00002102	0.00001368	0.00000734
612870.00	2360940.00	0.00032162	0.00001838	0.00001138	0.000007	0.0004905	0.00002034	0.0000134	0.00000694
613370.00	2360940.00	0.00031583	0.00001791	0.00001129	0.00000663	0.0004813	0.00001984	0.00001327	0.00000656
613870.00	2360940.00	0.00031132	0.00001755	0.00001127	0.00000628	0.0004751	0.00001947	0.00001325	0.00000622
614370.00	2360940.00	0.00030853	0.00001733	0.00001137	0.00000596	0.0004742	0.00001936	0.00001345	0.00000591
614870.00	2360940.00	0.00030265	0.00001686	0.00001123	0.00000563	0.0004642	0.00001883	0.00001325	0.00000558
615370.00	2360940.00	0.00029637	0.00001639	0.00001107	0.00000533	0.0004525	0.00001831	0.00001304	0.00000527
615870.00	2360940.00	0.00028636	0.00001557	0.00001057	0.000005	0.000433	0.00001723	0.00001232	0.00000491
616370.00	2360940.00	0.00027933	0.000015	0.00001029	0.00000471	0.0004239	0.00001657	0.00001196	0.00000461
616870.00	2360940.00	0.00027403	0.00001459	0.00001015	0.00000444	0.0004168	0.00001611	0.00001177	0.00000434
617370.00	2360940.00	0.00026866	0.00001415	0.00000996	0.00000419	0.0004134	0.00001562	0.00001154	0.00000408
617870.00	2360940.00	0.0002674	0.00001356	0.00000964	0.00000393	0.0004782	0.0000152	0.0000114	0.0000038
618370.00	2360940.00	0.00044766	0.00001375	0.0000101	0.00000365	0.0011377	0.00001677	0.00001327	0.0000035
618870.00	2360940.00	0.0007942	0.00001469	0.00001128	0.00000341	0.0007215	0.00001455	0.0000113	0.00000325
619370.00	2360940.00	0.00082083	0.00001426	0.00001107	0.0000032	0.000434	0.00001296	0.00000993	0.00000303
619870.00	2360940.00	0.00037011	0.00001265	0.00000958	0.00000307	0.0010108	0.00001555	0.00001263	0.00000292
590370.00	2361440.00	0.00154524	0.00058458	0.0004574	0.00012718	0.002082	0.00060632	0.00051319	0.00009313
590870.00	2361440.00	0.00155238	0.00049997	0.00039591	0.00010406	0.0021977	0.00062994	0.00051728	0.00011265
591370.00	2361440.00	0.00138639	0.00034286	0.00028254	0.00006032	0.0023288	0.00050765	0.00042384	0.00008381
591870.00	2361440.00	0.00121386	0.00024454	0.00020976	0.00003479	0.0024467	0.00035307	0.00030387	0.0000492
592370.00	2361440.00	0.00111761	0.00019923	0.00018022	0.00001901	0.0033225	0.00026998	0.00024148	0.0000285
592870.00	2361440.00	0.00117508	0.00018667	0.00017571	0.00001096	0.0044761	0.00024168	0.00022647	0.00001521
593370.00	2361440.00	0.00140742	0.0001996	0.00019065	0.00000896	0.0039946	0.00023879	0.00022929	0.0000095
593870.00	2361440.00	0.00150898	0.00021805	0.00020931	0.00000874	0.0033883	0.00025983	0.00025126	0.00000857
594370.00	2361440.00	0.0013824	0.00020956	0.00020139	0.00000817	0.0041504	0.00027576	0.00026733	0.00000842
594870.00	2361440.00	0.00111507	0.00017895	0.00017128	0.00000767	0.003163	0.00024376	0.0002357	0.00000806
595370.00	2361440.00	0.000944	0.00015031	0.00014275	0.00000757	0.0016364	0.00019869	0.0001907	0.00000799
595870.00	2361440.00	0.00092658	0.00012498	0.00011737	0.00000762	0.0014919	0.00016522	0.00015728	0.00000794
596370.00	2361440.00	0.00092941	0.00010487	0.00009704	0.00000783	0.0014177	0.00014216	0.00013394	0.00000822
596870.00	2361440.00	0.00091386	0.00008659	0.00007856	0.00000803	0.0013887	0.00012037	0.00011192	0.00000845
597370.00	2361440.00	0.00087028	0.00007064	0.00006246	0.00000818	0.0013376	0.00009943	0.00009085	0.00000858
597870.00	2361440.00	0.00081294	0.00005812	0.00004986	0.00000826	0.0012707	0.0000815	0.00007279	0.00000871
598370.00	2361440.00	0.00075868	0.00004864	0.00004044	0.0000082	0.0012026	0.00006706	0.00005831	0.00000875
598870.00	2361440.00	0.00071793	0.00004185	0.00003385	0.00000799	0.0011525	0.0000564	0.0000477	0.0000087
599370.00	2361440.00	0.0006889	0.00003698	0.00002928	0.0000077	0.001119	0.00004878	0.00004018	0.0000086
599870.00	2361440.00	0.00066893	0.00003361	0.00002618	0.00000743	0.0010984	0.00004364	0.00003509	0.00000855
600370.00	2361440.00	0.00065214	0.00003112	0.00002388	0.00000725	0.0010781	0.00003992	0.00003138	0.00000854
600870.00	2361440.00	0.00063723	0.00002941	0.0000222	0.00000721	0.0010572	0.0000374	0.00002876	0.00000864
601370.00	2361440.00	0.00062244	0.00002832	0.00002097	0.00000735	0.0010342	0.00003579	0.0000269	0.00000889

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
601870.00	2361440.00	0.00060381	0.00002729	0.00001972	0.00000757	0.0010002	0.00003399	0.00002505	0.00000894
602370.00	2361440.00	0.00058514	0.0000267	0.00001879	0.00000791	0.0009664	0.00003286	0.0000237	0.00000916
602870.00	2361440.00	0.00056863	0.00002668	0.0000183	0.00000838	0.0009388	0.00003278	0.00002303	0.00000974
603370.00	2361440.00	0.00054908	0.00002642	0.00001762	0.0000088	0.0009033	0.00003207	0.00002207	0.00001
603870.00	2361440.00	0.00052798	0.00002619	0.00001699	0.0000092	0.0008651	0.00003155	0.00002127	0.00001028
604370.00	2361440.00	0.00051005	0.00002603	0.00001648	0.00000955	0.0008336	0.00003102	0.00002055	0.00001047
604870.00	2361440.00	0.00049251	0.00002584	0.000016	0.00000983	0.0008023	0.00003049	0.00001989	0.0000106
605370.00	2361440.00	0.00047593	0.00002561	0.00001557	0.00001004	0.0007727	0.00002995	0.00001929	0.00001066
605870.00	2361440.00	0.0004596	0.00002532	0.00001516	0.00001017	0.0007425	0.00002937	0.0000187	0.00001067
606370.00	2361440.00	0.00044532	0.00002501	0.0000148	0.00001021	0.0007172	0.00002881	0.00001821	0.0000106
606870.00	2361440.00	0.00043188	0.00002465	0.00001447	0.00001019	0.0006931	0.00002822	0.00001774	0.00001048
607370.00	2361440.00	0.00042064	0.00002428	0.00001419	0.00001009	0.0006745	0.00002766	0.00001735	0.00001031
607870.00	2361440.00	0.00040894	0.00002383	0.0000139	0.00000994	0.0006535	0.00002703	0.00001695	0.00001009
608370.00	2361440.00	0.00039852	0.00002337	0.00001363	0.00000973	0.000635	0.0000264	0.00001657	0.00000983
608870.00	2361440.00	0.00038748	0.00002281	0.00001332	0.00000949	0.0006134	0.00002559	0.00001609	0.0000095
609370.00	2361440.00	0.00037872	0.00002235	0.00001314	0.00000921	0.0005985	0.00002506	0.00001584	0.00000921
609870.00	2361440.00	0.00036957	0.00002181	0.00001291	0.00000889	0.0005822	0.0000244	0.00001552	0.00000888
610370.00	2361440.00	0.00035971	0.00002117	0.00001262	0.00000855	0.0005642	0.00002364	0.00001512	0.00000852
610870.00	2361440.00	0.00034862	0.00002042	0.00001223	0.00000819	0.0005425	0.0000227	0.00001457	0.00000814
611370.00	2361440.00	0.00034079	0.00001988	0.00001203	0.00000785	0.0005288	0.00002209	0.0000143	0.00000779
611870.00	2361440.00	0.00033121	0.00001919	0.00001169	0.0000075	0.0005103	0.00002125	0.00001383	0.00000742
612370.00	2361440.00	0.00032356	0.00001863	0.00001147	0.00000716	0.0004968	0.0000206	0.00001352	0.00000707
612870.00	2361440.00	0.00032338	0.00001866	0.00001179	0.00000687	0.0005035	0.00002085	0.00001402	0.00000682
613370.00	2361440.00	0.00031607	0.00001815	0.00001161	0.00000655	0.0004902	0.00002028	0.00001378	0.0000065
613870.00	2361440.00	0.00030717	0.00001743	0.00001122	0.00000621	0.000472	0.00001934	0.0000132	0.00000613
614370.00	2361440.00	0.00030416	0.00001724	0.00001132	0.00000593	0.0004705	0.00001925	0.00001339	0.00000587
614870.00	2361440.00	0.00029889	0.0000168	0.00001117	0.00000563	0.000461	0.00001871	0.00001314	0.00000556
615370.00	2361440.00	0.0002869	0.00001588	0.00001057	0.00000531	0.0004375	0.00001753	0.00001232	0.00000521
615870.00	2361440.00	0.00028135	0.00001545	0.00001041	0.00000504	0.0004291	0.00001706	0.00001212	0.00000494
616370.00	2361440.00	0.00027475	0.0000148	0.00001004	0.00000476	0.000439	0.00001636	0.00001172	0.00000464
616870.00	2361440.00	0.00028682	0.00001427	0.00000978	0.00000449	0.0006237	0.00001636	0.00001201	0.00000435
617370.00	2361440.00	0.00026535	0.0000141	0.00000982	0.00000428	0.0004257	0.00001559	0.00001143	0.00000416
617870.00	2361440.00	0.00026079	0.00001381	0.00000975	0.00000406	0.0004123	0.00001526	0.00001132	0.00000394
618370.00	2361440.00	0.00026486	0.0000133	0.00000948	0.00000382	0.0005158	0.00001504	0.00001135	0.00000369
618870.00	2361440.00	0.00077943	0.00001477	0.00001121	0.00000356	0.0007694	0.00001487	0.00001147	0.0000034
619370.00	2361440.00	0.00068132	0.00001418	0.00001081	0.00000337	0.0008998	0.00001517	0.00001195	0.00000321
619870.00	2361440.00	0.00048164	0.00001242	0.00000928	0.00000314	0.0002998	0.00001189	0.00000892	0.00000297
590370.00	2361940.00	0.00137926	0.00050215	0.00038883	0.00011332	0.0018842	0.00054887	0.00045281	0.00009606
590870.00	2361940.00	0.00135371	0.00039765	0.00031589	0.00008176	0.0020789	0.00052511	0.00042815	0.00009696
591370.00	2361940.00	0.00127781	0.00027783	0.00022924	0.00004859	0.0026392	0.00040361	0.00033759	0.00006603
591870.00	2361940.00	0.00123495	0.00020871	0.0001793	0.0000294	0.0035288	0.00029299	0.00025271	0.00004028
592370.00	2361940.00	0.00119499	0.00017633	0.00015954	0.00001679	0.0046651	0.00023816	0.0002138	0.00002435
592870.00	2361940.00	0.00195993	0.00017026	0.00016042	0.00000984	0.0069861	0.00022074	0.00020744	0.0000133
593370.00	2361940.00	0.00214248	0.00018019	0.00017222	0.00000797	0.0063812	0.00021676	0.00020839	0.00000837
593870.00	2361940.00	0.00199399	0.00019539	0.00018749	0.0000079	0.0058277	0.00023283	0.00022534	0.00000749
594370.00	2361940.00	0.00227942	0.00019921	0.00019163	0.00000758	0.0052584	0.00024903	0.00024148	0.00000756
594870.00	2361940.00	0.0010991	0.00017279	0.00016562	0.00000717	0.0031521	0.00023135	0.00022387	0.00000748
595370.00	2361940.00	0.00093064	0.0001463	0.00013942	0.00000688	0.002306	0.00019431	0.00018712	0.00000719
595870.00	2361940.00	0.0008421	0.0001246	0.00011773	0.00000687	0.0014633	0.00016138	0.00015422	0.00000716
596370.00	2361940.00	0.00083992	0.00010575	0.00009882	0.00000693	0.0014957	0.00013863	0.00013148	0.00000715
596870.00	2361940.00	0.00083214	0.00009072	0.0000836	0.00000713	0.0012621	0.00012136	0.00011392	0.00000744
597370.00	2361940.00	0.00081856	0.00007652	0.00006921	0.00000731	0.0012374	0.00010449	0.00009682	0.00000767
597870.00	2361940.00	0.00078246	0.00006369	0.00005626	0.00000743	0.0011954	0.00008781	0.00008003	0.00000777
598370.00	2361940.00	0.00073475	0.00005314	0.00004564	0.0000075	0.0011401	0.00007304	0.00006519	0.00000785
598870.00	2361940.00	0.00069016	0.00004515	0.00003767	0.00000748	0.0010858	0.00006121	0.00005332	0.0000079
599370.00	2361940.00	0.00065643	0.00003932	0.00003198	0.00000734	0.0010474	0.00005232	0.00004445	0.00000788
599870.00	2361940.00	0.00063214	0.00003502	0.00002793	0.00000709	0.0010222	0.00004577	0.00003799	0.00000778
600370.00	2361940.00	0.00061448	0.00003185	0.00002504	0.00000681	0.0010054	0.00004102	0.00003335	0.00000767
600870.00	2361940.00	0.00060237	0.00002968	0.00002309	0.00000659	0.0009958	0.00003792	0.00003026	0.00000766
601370.00	2361940.00	0.0005913	0.00002812	0.00002166	0.00000646	0.0009859	0.00003594	0.00002815	0.00000779
601870.00	2361940.00	0.00057719	0.00002656	0.00002018	0.00000638	0.0009597	0.0000334	0.00002579	0.00000761
602370.00	2361940.00	0.00056232	0.0000254	0.00001899	0.0000064	0.0009324	0.00003152	0.00002401	0.00000751
602870.00	2361940.00	0.00054996	0.00002492	0.00001833	0.00000659	0.0009114	0.00003083	0.00002306	0.00000777
603370.00	2361940.00	0.00053419	0.00002446	0.00001764	0.00000683	0.0008833	0.00003015	0.00002216	0.00000799
603870.00	2361940.00	0.00051949	0.00002412	0.00001702	0.0000071	0.000855	0.00002929	0.00002121	0.00000809
604370.00	2361940.00	0.00050206	0.00002383	0.00001645	0.00000739	0.000823	0.00002876	0.00002048	0.00000829
604870.00	2361940.00	0.00048568	0.00002361	0.00001594	0.00000767	0.0007925	0.0000282	0.00001977	0.00000843
605370.00	2361940.00	0.00047028	0.00002343	0.0000155	0.00000793	0.0007646	0.00002772	0.00001916	0.00000856
605870.00	2361940.00	0.00045589	0.00002326	0.00001512	0.00000814	0.0007392	0.00002728	0.00001862	0.00000865

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
606370.00	2361940.00	0.00044299	0.00002309	0.00001478	0.00000831	0.0007173	0.00002685	0.00001815	0.00000871
606870.00	2361940.00	0.0004282	0.00002283	0.00001441	0.00000842	0.0006892	0.00002636	0.00001764	0.00000872
607370.00	2361940.00	0.0004161	0.00002259	0.00001411	0.00000848	0.0006681	0.00002592	0.00001723	0.00000869
607870.00	2361940.00	0.00040406	0.0000223	0.00001381	0.00000848	0.0006463	0.00002544	0.00001682	0.00000862
608370.00	2361940.00	0.00039466	0.00002201	0.00001358	0.00000844	0.0006303	0.00002497	0.00001646	0.00000851
608870.00	2361940.00	0.00038345	0.00002166	0.00001331	0.00000835	0.0006107	0.00002449	0.00001612	0.00000837
609370.00	2361940.00	0.0003733	0.00002127	0.00001306	0.00000821	0.0005923	0.00002397	0.00001578	0.00000819
609870.00	2361940.00	0.00036463	0.00002087	0.00001285	0.00000802	0.0005776	0.00002348	0.00001549	0.00000799
610370.00	2361940.00	0.00035428	0.00002026	0.00001249	0.00000777	0.0005569	0.00002263	0.00001493	0.0000077
610870.00	2361940.00	0.00034291	0.00001958	0.00001207	0.00000751	0.0005343	0.00002175	0.00001434	0.00000741
611370.00	2361940.00	0.0003328	0.00001894	0.0000117	0.00000724	0.0005148	0.00002095	0.00001383	0.00000712
611870.00	2361940.00	0.00032281	0.00001818	0.00001122	0.00000695	0.0005045	0.00002002	0.00001322	0.0000068
612370.00	2361940.00	0.00031977	0.0000182	0.00001144	0.00000676	0.0004933	0.00002014	0.00001349	0.00000665
612870.00	2361940.00	0.00031915	0.00001829	0.00001173	0.00000656	0.0004989	0.00002045	0.00001396	0.00000649
613370.00	2361940.00	0.00031254	0.00001786	0.00001157	0.00000629	0.0004875	0.00001996	0.00001374	0.00000622
613870.00	2361940.00	0.00030635	0.00001745	0.00001142	0.00000603	0.0004771	0.00001949	0.00001353	0.00000596
614370.00	2361940.00	0.00029376	0.00001645	0.00001073	0.00000573	0.0004505	0.00001814	0.00001254	0.00000561
614870.00	2361940.00	0.00029162	0.00001637	0.00001087	0.0000055	0.0004484	0.00001813	0.00001273	0.0000054
615370.00	2361940.00	0.00028194	0.00001558	0.00001036	0.00000522	0.0004354	0.00001717	0.00001207	0.0000051
615870.00	2361940.00	0.00027694	0.00001524	0.00001025	0.00000499	0.0004273	0.00001679	0.00001193	0.00000486
616370.00	2361940.00	0.00027639	0.00001461	0.00000988	0.00000473	0.0005023	0.00001633	0.00001174	0.00000459
616870.00	2361940.00	0.00038278	0.00001454	0.00001005	0.00000449	0.0010979	0.00001783	0.00001349	0.00000433
617370.00	2361940.00	0.00038874	0.00001426	0.00000999	0.00000427	0.0011055	0.00001752	0.0000134	0.00000412
617870.00	2361940.00	0.00026241	0.00001366	0.00000957	0.00000409	0.0004756	0.00001528	0.00001133	0.00000395
618370.00	2361940.00	0.0002581	0.00001336	0.00000948	0.00000389	0.0004675	0.00001495	0.0000112	0.00000375
618870.00	2361940.00	0.0004703	0.00001374	0.00001008	0.00000366	0.0011159	0.00001653	0.00001302	0.00000351
619370.00	2361940.00	0.00062037	0.00001405	0.00001058	0.00000347	0.0009944	0.00001565	0.00001234	0.00000332
619870.00	2361940.00	0.0004175	0.00001221	0.00000896	0.00000325	0.0002875	0.00001187	0.00000879	0.00000309
590370.00	2362440.00	0.00127202	0.00043253	0.00033611	0.00009641	0.0017669	0.000497	0.00040601	0.000091
590870.00	2362440.00	0.00120535	0.00033321	0.00026613	0.00006707	0.0018081	0.00044546	0.00036398	0.00008148
591370.00	2362440.00	0.00113817	0.00023533	0.00019461	0.00004072	0.0023328	0.00033213	0.00027838	0.00005376
591870.00	2362440.00	0.00237432	0.00018832	0.00016318	0.00002514	0.0050494	0.00025286	0.00021917	0.0000337
592370.00	2362440.00	0.00134167	0.00015902	0.00014401	0.00001501	0.0053552	0.00021304	0.00019189	0.00002115
592870.00	2362440.00	0.00311529	0.00015908	0.0001501	0.00000898	0.0053498	0.00019143	0.00017956	0.00001187
593370.00	2362440.00	0.00303053	0.00016571	0.00015849	0.00000722	0.0050697	0.00018821	0.00018061	0.0000076
593870.00	2362440.00	0.00289634	0.00017971	0.00017254	0.00000717	0.0048797	0.00020089	0.00019421	0.00000668
594370.00	2362440.00	0.00244617	0.00018443	0.00017735	0.00000708	0.0047637	0.00022034	0.00021347	0.00000687
594870.00	2362440.00	0.00252912	0.00017429	0.00016763	0.00000666	0.0035338	0.00021441	0.00020761	0.0000068
595370.00	2362440.00	0.00105831	0.00014452	0.00013812	0.00000639	0.0031878	0.00019283	0.00018617	0.00000665
595870.00	2362440.00	0.00093791	0.00012376	0.00011751	0.00000624	0.0025985	0.00016243	0.00015595	0.00000648
596370.00	2362440.00	0.000854	0.0001068	0.00010054	0.00000626	0.0021352	0.00013934	0.00013288	0.00000645
596870.00	2362440.00	0.00075919	0.00009248	0.00008608	0.0000064	0.0012608	0.00011982	0.00011322	0.0000066
597370.00	2362440.00	0.00075718	0.0000807	0.00007412	0.00000658	0.0011395	0.00010675	0.00009986	0.00000689
597870.00	2362440.00	0.0007405	0.0000686	0.00006191	0.00000669	0.0011148	0.0000922	0.00008523	0.00000697
598370.00	2362440.00	0.00071043	0.00005803	0.00005123	0.0000068	0.0010802	0.00007858	0.00007151	0.00000707
598870.00	2362440.00	0.0006715	0.00004924	0.00004236	0.00000688	0.0010364	0.00006649	0.00005933	0.00000716
599370.00	2362440.00	0.00063439	0.00004237	0.00003548	0.00000688	0.0009922	0.00005659	0.00004938	0.00000721
599870.00	2362440.00	0.000606	0.00003726	0.00003048	0.00000678	0.0009619	0.00004903	0.00004182	0.00000721
600370.00	2362440.00	0.00058928	0.00003383	0.00002722	0.00000661	0.0009534	0.00004401	0.00003677	0.00000724
600870.00	2362440.00	0.00057258	0.00003077	0.00002441	0.00000635	0.0009369	0.00003949	0.00003239	0.0000071
601370.00	2362440.00	0.00056035	0.00002864	0.00002252	0.00000612	0.0009272	0.00003663	0.00002956	0.00000707
601870.00	2362440.00	0.00054856	0.00002677	0.00002088	0.00000589	0.0009117	0.00003394	0.00002701	0.00000693
602370.00	2362440.00	0.00053903	0.00002537	0.00001963	0.00000574	0.0008977	0.00003182	0.00002503	0.00000679
602870.00	2362440.00	0.00052642	0.00002425	0.00001858	0.00000567	0.0008754	0.00003028	0.00002354	0.00000674
603370.00	2362440.00	0.00051467	0.00002342	0.00001774	0.00000568	0.0008533	0.00002902	0.00002231	0.00000671
603870.00	2362440.00	0.00050258	0.00002282	0.00001705	0.00000577	0.0008302	0.00002804	0.00002131	0.00000672
604370.00	2362440.00	0.00048987	0.00002237	0.00001646	0.00000591	0.0008064	0.00002724	0.00002047	0.00000677
604870.00	2362440.00	0.00047796	0.00002207	0.00001598	0.00000609	0.0007857	0.00002663	0.00001979	0.00000684
605370.00	2362440.00	0.00046457	0.00002181	0.00001552	0.00000629	0.0007607	0.00002608	0.00001916	0.00000692
605870.00	2362440.00	0.00045149	0.00002161	0.00001511	0.00000649	0.0007367	0.0000256	0.00001859	0.00000701
606370.00	2362440.00	0.00043724	0.00002139	0.00001471	0.00000668	0.000709	0.00002513	0.00001804	0.00000709
606870.00	2362440.00	0.00042449	0.00002121	0.00001437	0.00000685	0.0006857	0.00002472	0.00001756	0.00000716
607370.00	2362440.00	0.00041312	0.00002105	0.00001407	0.00000698	0.000666	0.00002436	0.00001716	0.0000072
607870.00	2362440.00	0.00040093	0.00002084	0.00001376	0.00000708	0.0006433	0.00002395	0.00001673	0.00000722
608370.00	2362440.00	0.00039003	0.00002063	0.00001349	0.00000714	0.000624	0.00002357	0.00001636	0.0000072
608870.00	2362440.00	0.00037971	0.00002041	0.00001324	0.00000717	0.0006058	0.00002318	0.00001602	0.00000716
609370.00	2362440.00	0.00036999	0.00002013	0.00001301	0.00000713	0.0005886	0.00002279	0.00001569	0.00000709
609870.00	2362440.00	0.00036129	0.00001984	0.0000128	0.00000705	0.0005739	0.00002241	0.00001541	0.000007
610370.00	2362440.00	0.00035023	0.00001926	0.00001239	0.00000687	0.0005517	0.00002155	0.00001478	0.00000677

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
610870.00	2362440.00	0.0003426	0.00001899	0.00001223	0.00000676	0.0005388	0.00002123	0.00001457	0.00000666
611370.00	2362440.00	0.00033175	0.00001839	0.00001183	0.00000657	0.0005175	0.00002045	0.00001401	0.00000644
611870.00	2362440.00	0.00031938	0.00001739	0.00001111	0.00000629	0.000508	0.00001919	0.00001309	0.0000061
612370.00	2362440.00	0.00031352	0.00001701	0.00001089	0.00000612	0.0005118	0.00001879	0.00001286	0.00000593
612870.00	2362440.00	0.00030692	0.00001697	0.00001097	0.000006	0.0004758	0.00001871	0.00001287	0.00000584
613370.00	2362440.00	0.00030914	0.00001744	0.00001153	0.00000592	0.000484	0.00001951	0.00001368	0.00000583
613870.00	2362440.00	0.00029863	0.00001669	0.00001102	0.00000567	0.0004609	0.00001848	0.00001293	0.00000555
614370.00	2362440.00	0.00029384	0.00001643	0.00001096	0.00000548	0.0004538	0.00001821	0.00001285	0.00000536
614870.00	2362440.00	0.00028364	0.00001555	0.00001032	0.00000523	0.0004481	0.00001713	0.00001205	0.00000507
615370.00	2362440.00	0.00027852	0.00001523	0.0000102	0.00000503	0.0004404	0.00001678	0.0000119	0.00000488
615870.00	2362440.00	0.00027377	0.00001489	0.00001006	0.00000483	0.0004385	0.00001642	0.00001174	0.00000468
616370.00	2362440.00	0.00027657	0.00001445	0.00000982	0.00000462	0.0005191	0.0000162	0.00001174	0.00000447
616870.00	2362440.00	0.00035029	0.00001433	0.00000991	0.00000442	0.0009723	0.00001731	0.00001306	0.00000425
617370.00	2362440.00	0.000878	0.00001591	0.00001169	0.00000421	0.0006224	0.00001509	0.00001105	0.00000403
617870.00	2362440.00	0.00087323	0.00001569	0.00001166	0.00000403	0.0006962	0.00001513	0.00001127	0.00000386
618370.00	2362440.00	0.00026251	0.0000133	0.00000942	0.00000388	0.0005216	0.00001504	0.00001131	0.00000374
618870.00	2362440.00	0.00032669	0.0000132	0.00000951	0.00000369	0.0009194	0.00001602	0.00001248	0.00000354
619370.00	2362440.00	0.00078177	0.0000143	0.0000108	0.0000035	0.0004097	0.00001305	0.00000972	0.00000333
619870.00	2362440.00	0.00086848	0.00001459	0.00001125	0.00000334	0.0005393	0.00001347	0.00001029	0.00000318
590370.00	2362940.00	0.00114842	0.00036867	0.00028719	0.00008148	0.001618	0.00044066	0.00035736	0.0000833
590870.00	2362940.00	0.00108276	0.00027516	0.00022108	0.00005408	0.001748	0.00037073	0.00030347	0.00006726
591370.00	2362940.00	0.00339246	0.00021134	0.00017748	0.00003386	0.0029493	0.00027447	0.00023092	0.00004355
591870.00	2362940.00	0.00397608	0.00017402	0.00015235	0.00002166	0.0022205	0.00020528	0.00017667	0.00002861
592370.00	2362940.00	0.00431792	0.00015682	0.00014378	0.00001305	0.0028925	0.00017753	0.00015944	0.00001809
592870.00	2362940.00	0.00447337	0.00015104	0.0001429	0.00000814	0.0027404	0.00016161	0.00015106	0.00001055
593370.00	2362940.00	0.00385954	0.00015413	0.00014771	0.00000642	0.0017433	0.00015085	0.00014416	0.00000669
593870.00	2362940.00	0.00398763	0.00016847	0.000162	0.00000648	0.0026781	0.00016723	0.00016128	0.00000595
594370.00	2362940.00	0.00366856	0.00017772	0.00017117	0.00000655	0.0026732	0.00018432	0.00017816	0.00000616
594870.00	2362940.00	0.00308882	0.00017155	0.00016529	0.00000626	0.0023791	0.00019117	0.00018491	0.00000626
595370.00	2362940.00	0.00167835	0.0001455	0.00013951	0.00000599	0.003278	0.00018652	0.00018035	0.00000617
595870.00	2362940.00	0.00218151	0.0001311	0.00012537	0.00000573	0.0016692	0.00015123	0.0001453	0.00000592
596370.00	2362940.00	0.00108414	0.00010858	0.00010285	0.00000573	0.0025777	0.00013903	0.0001331	0.00000592
596870.00	2362940.00	0.00071532	0.00009361	0.00008778	0.00000583	0.0013926	0.00011939	0.00011338	0.00000601
597370.00	2362940.00	0.00069854	0.00008338	0.00007738	0.00000599	0.0010578	0.0001072	0.00010094	0.00000626
597870.00	2362940.00	0.00069121	0.0000724	0.00006633	0.00000606	0.0010374	0.00009462	0.00008831	0.00000631
598370.00	2362940.00	0.00067637	0.00006235	0.00005619	0.00000616	0.0010161	0.00008255	0.00007616	0.00000639
598870.00	2362940.00	0.00065138	0.00005355	0.00004728	0.00000627	0.0009871	0.00007133	0.00006483	0.0000065
599370.00	2362940.00	0.00061985	0.00004619	0.00003983	0.00000636	0.0009509	0.00006143	0.00005481	0.00000661
599870.00	2362940.00	0.00058861	0.00004016	0.00003378	0.00000638	0.0009165	0.00005295	0.00004629	0.00000666
600370.00	2362940.00	0.00057108	0.00003636	0.00003	0.00000636	0.0009106	0.00004756	0.00004074	0.00000682
600870.00	2362940.00	0.00055171	0.00003282	0.00002661	0.0000062	0.0008935	0.00004259	0.0000358	0.00000679
601370.00	2362940.00	0.00053513	0.00002982	0.00002385	0.00000597	0.0008747	0.00003824	0.0000316	0.00000664
601870.00	2362940.00	0.00052253	0.0000275	0.00002179	0.00000571	0.0008609	0.00003491	0.00002844	0.00000647
602370.00	2362940.00	0.00051203	0.00002568	0.00002021	0.00000547	0.0008482	0.00003232	0.00002603	0.00000629
602870.00	2362940.00	0.00050263	0.00002426	0.00001899	0.00000527	0.0008349	0.00003031	0.00002418	0.00000613
603370.00	2362940.00	0.00049356	0.00002314	0.00001801	0.00000513	0.0008199	0.00002872	0.00002272	0.000006
603870.00	2362940.00	0.00048569	0.00002226	0.00001722	0.00000504	0.0008065	0.00002731	0.00002147	0.00000583
604370.00	2362940.00	0.00047492	0.00002161	0.00001657	0.00000504	0.0007866	0.00002645	0.00002063	0.00000583
604870.00	2362940.00	0.00046422	0.00002108	0.00001599	0.00000508	0.0007657	0.0000256	0.00001981	0.00000579
605370.00	2362940.00	0.00045454	0.00002071	0.00001554	0.00000517	0.0007487	0.00002496	0.00001917	0.00000579
605870.00	2362940.00	0.00044373	0.0000204	0.00001511	0.00000529	0.0007283	0.00002438	0.00001856	0.00000582
606370.00	2362940.00	0.0004309	0.00002012	0.00001469	0.00000543	0.0007022	0.00002384	0.00001799	0.00000585
606870.00	2362940.00	0.00041958	0.00001991	0.00001434	0.00000557	0.000681	0.00002341	0.00001751	0.0000059
607370.00	2362940.00	0.00040991	0.00001976	0.00001405	0.00000571	0.000663	0.00002295	0.00001703	0.00000591
607870.00	2362940.00	0.00039791	0.00001958	0.00001374	0.00000584	0.0006416	0.00002267	0.00001668	0.00000599
608370.00	2362940.00	0.00038705	0.0000194	0.00001345	0.00000595	0.0006215	0.00002232	0.00001629	0.00000602
608870.00	2362940.00	0.00037698	0.00001925	0.0000132	0.00000605	0.0006035	0.00002198	0.00001595	0.00000604
609370.00	2362940.00	0.00036787	0.00001904	0.00001298	0.00000607	0.0005878	0.00002167	0.00001564	0.00000603
609870.00	2362940.00	0.00035925	0.00001883	0.00001277	0.00000606	0.0005732	0.00002136	0.00001535	0.00000601
610370.00	2362940.00	0.00034606	0.00001813	0.00001222	0.00000591	0.0005455	0.00002032	0.00001454	0.00000578
610870.00	2362940.00	0.00033957	0.00001806	0.00001215	0.00000591	0.0005353	0.00002024	0.00001445	0.00000579
611370.00	2362940.00	0.00032712	0.00001737	0.00001163	0.00000574	0.0005106	0.0000193	0.00001373	0.00000558
611870.00	2362940.00	0.00031845	0.00001698	0.00001134	0.00000564	0.0004957	0.0000188	0.00001334	0.00000546
612370.00	2362940.00	0.00031602	0.00001716	0.00001153	0.00000564	0.0004936	0.00001911	0.00001361	0.0000055
612870.00	2362940.00	0.00030995	0.00001694	0.00001141	0.00000553	0.0004836	0.00001886	0.00001346	0.0000054
613370.00	2362940.00	0.00030386	0.00001668	0.00001127	0.00000541	0.0004735	0.00001856	0.00001328	0.00000528
613870.00	2362940.00	0.00029282	0.00001593	0.00001073	0.0000052	0.0004524	0.00001757	0.00001253	0.00000504
614370.00	2362940.00	0.00028619	0.00001543	0.0000104	0.00000503	0.0004519	0.00001701	0.00001215	0.00000486
614870.00	2362940.00	0.00028831	0.00001498	0.00001012	0.00000486	0.0005238	0.00001674	0.00001207	0.00000467

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
615370.00	2362940.00	0.00031132	0.00001473	0.00001003	0.0000047	0.0007146	0.00001704	0.00001253	0.00000451
615870.00	2362940.00	0.00032271	0.00001452	0.00000997	0.00000455	0.0007963	0.00001704	0.00001268	0.00000436
616370.00	2362940.00	0.00027055	0.00001424	0.00000981	0.00000443	0.0004739	0.00001584	0.00001158	0.00000426
616870.00	2362940.00	0.00057641	0.00001501	0.00001077	0.00000424	0.000998	0.00001686	0.00001282	0.00000405
617370.00	2362940.00	0.00083033	0.00001566	0.00001157	0.00000408	0.0007004	0.00001528	0.00001139	0.00000389
617870.00	2362940.00	0.00067342	0.00001436	0.00001043	0.00000393	0.0003625	0.00001336	0.00000962	0.00000374
618370.00	2362940.00	0.00058174	0.00001433	0.00001055	0.00000379	0.0009679	0.00001602	0.0000124	0.00000361
618870.00	2362940.00	0.00027045	0.00001297	0.00000931	0.00000365	0.0006092	0.00001495	0.00001145	0.0000035
619370.00	2362940.00	0.00043557	0.00001333	0.00000984	0.00000349	0.0010198	0.0000159	0.00001256	0.00000333
619870.00	2362940.00	0.00084488	0.00001444	0.00001111	0.00000334	0.0004771	0.00001318	0.00001001	0.00000317
590370.00	2363440.00	0.00103572	0.00031046	0.00024322	0.00006724	0.0015351	0.00038374	0.00030968	0.00007406
590870.00	2363440.00	0.00206022	0.00023725	0.00019322	0.00004404	0.0032153	0.0003165	0.00026146	0.00005504
591370.00	2363440.00	0.00265951	0.00018156	0.00015254	0.00002902	0.0014751	0.00022475	0.00018825	0.0000365
591870.00	2363440.00	0.00362518	0.00015689	0.00013775	0.00001914	0.0019367	0.00018088	0.000156	0.00002489
592370.00	2363440.00	0.0019299	0.00013155	0.00012009	0.00001146	0.0010822	0.00014713	0.00013147	0.00001566
592870.00	2363440.00	0.00176651	0.00012414	0.0001169	0.00000723	0.0009765	0.00013345	0.00012421	0.00000923
593370.00	2363440.00	0.00239322	0.0001328	0.00012693	0.00000587	0.0011367	0.00013241	0.00012629	0.00000612
593870.00	2363440.00	0.00340266	0.00015071	0.00014483	0.00000589	0.0016788	0.00014392	0.00013855	0.00000537
594370.00	2363440.00	0.00327569	0.00016267	0.00015661	0.00000606	0.0018657	0.00015919	0.00015362	0.00000557
594870.00	2363440.00	0.00296905	0.00016319	0.00015726	0.00000592	0.0020075	0.00017276	0.00016697	0.00000579
595370.00	2363440.00	0.00242568	0.00014678	0.00014112	0.00000565	0.0024218	0.00017326	0.0001675	0.00000575
595870.00	2363440.00	0.00132651	0.00012439	0.00011894	0.00000546	0.0028108	0.00015863	0.000153	0.00000564
596370.00	2363440.00	0.00081607	0.00010681	0.00010144	0.00000537	0.0022193	0.00013707	0.00013151	0.00000556
596870.00	2363440.00	0.00066536	0.00009411	0.00008871	0.00000539	0.0012839	0.00011821	0.00011264	0.00000557
597370.00	2363440.00	0.00064586	0.00008449	0.000079	0.00000549	0.0010003	0.00010622	0.00010052	0.0000057
597870.00	2363440.00	0.00064438	0.00007517	0.0000696	0.00000557	0.0009702	0.0000959	0.00009009	0.00000581
598370.00	2363440.00	0.00063783	0.00006605	0.00006041	0.00000565	0.0009532	0.00008546	0.00007958	0.00000588
598870.00	2363440.00	0.00062443	0.00005758	0.00005185	0.00000574	0.0009347	0.00007528	0.00006932	0.00000596
599370.00	2363440.00	0.00060167	0.00004981	0.000044	0.00000582	0.0009094	0.00006542	0.0000594	0.00000602
599870.00	2363440.00	0.00057466	0.00004337	0.00003747	0.0000059	0.0008797	0.00005688	0.00005077	0.00000611
600370.00	2363440.00	0.00055744	0.00003941	0.00003339	0.00000602	0.0008754	0.00005166	0.00004526	0.00000641
600870.00	2363440.00	0.00053488	0.00003502	0.00002907	0.00000596	0.0008516	0.00004552	0.00003914	0.00000638
601370.00	2363440.00	0.00051638	0.00003152	0.0000257	0.00000582	0.0008322	0.00004054	0.00003424	0.0000063
601870.00	2363440.00	0.00050215	0.00002876	0.00002314	0.00000562	0.0008181	0.00003661	0.00003045	0.00000616
602370.00	2363440.00	0.00049035	0.00002655	0.00002117	0.00000538	0.0008051	0.00003347	0.00002748	0.00000599
602870.00	2363440.00	0.00048087	0.0000248	0.00001966	0.00000514	0.0007943	0.000031	0.0000252	0.0000058
603370.00	2363440.00	0.00047315	0.00002332	0.00001841	0.00000491	0.0007844	0.00002879	0.00002324	0.00000555
603870.00	2363440.00	0.00046629	0.00002231	0.00001757	0.00000474	0.000777	0.00002752	0.00002208	0.00000545
604370.00	2363440.00	0.00045839	0.0000214	0.0000168	0.00000461	0.0007637	0.00002625	0.00002095	0.0000053
604870.00	2363440.00	0.00044937	0.00002066	0.00001613	0.00000453	0.0007455	0.00002519	0.00002001	0.00000518
605370.00	2363440.00	0.00044148	0.00002011	0.00001561	0.0000045	0.0007313	0.00002436	0.00001926	0.00000509
605870.00	2363440.00	0.00043232	0.00001956	0.00001507	0.0000045	0.000712	0.00002337	0.00001842	0.00000494
606370.00	2363440.00	0.00042227	0.00001927	0.0000147	0.00000456	0.0006925	0.000023	0.00001799	0.000005
606870.00	2363440.00	0.00041265	0.00001898	0.00001434	0.00000464	0.0006738	0.00002248	0.00001749	0.000005
607370.00	2363440.00	0.00040321	0.00001876	0.00001402	0.00000474	0.0006562	0.00002205	0.00001705	0.00000501
607870.00	2363440.00	0.00039407	0.00001858	0.00001373	0.00000485	0.0006397	0.00002168	0.00001665	0.00000503
608370.00	2363440.00	0.00038422	0.0000184	0.00001345	0.00000495	0.0006211	0.00002132	0.00001627	0.00000505
608870.00	2363440.00	0.00037391	0.00001823	0.00001317	0.00000506	0.0006011	0.00002096	0.00001589	0.00000507
609370.00	2363440.00	0.0003647	0.00001804	0.00001293	0.00000511	0.0005844	0.00002065	0.00001556	0.00000509
609870.00	2363440.00	0.00035598	0.00001785	0.00001271	0.00000514	0.0005688	0.00002037	0.00001526	0.0000051
610370.00	2363440.00	0.0003486	0.00001767	0.00001252	0.00000516	0.0005565	0.0000201	0.000015	0.0000051
610870.00	2363440.00	0.00033998	0.00001747	0.00001231	0.00000515	0.0005412	0.00001982	0.00001473	0.00000509
611370.00	2363440.00	0.00032744	0.00001678	0.00001177	0.00000501	0.0005149	0.00001878	0.00001392	0.00000487
611870.00	2363440.00	0.00031723	0.00001628	0.00001137	0.00000492	0.0004961	0.00001811	0.00001337	0.00000474
612370.00	2363440.00	0.00030864	0.00001587	0.00001104	0.00000484	0.0004835	0.00001758	0.00001295	0.00000464
612870.00	2363440.00	0.00030181	0.00001546	0.00001072	0.00000474	0.0004849	0.00001712	0.00001259	0.00000452
613370.00	2363440.00	0.0003023	0.00001509	0.00001045	0.00000464	0.0005435	0.00001688	0.00001248	0.0000044
613870.00	2363440.00	0.00028963	0.00001512	0.00001048	0.00000464	0.0004598	0.00001669	0.00001225	0.00000444
614370.00	2363440.00	0.00028507	0.00001519	0.00001057	0.00000462	0.000441	0.00001677	0.00001233	0.00000445
614870.00	2363440.00	0.0002814	0.00001458	0.00001013	0.00000445	0.0004735	0.00001617	0.00001191	0.00000425
615370.00	2363440.00	0.00036039	0.00001447	0.00001017	0.0000043	0.0008693	0.00001704	0.00001296	0.00000408
615870.00	2363440.00	0.00055667	0.00001504	0.00001085	0.00000419	0.000932	0.00001673	0.00001277	0.00000396
616370.00	2363440.00	0.00059632	0.000015	0.00001092	0.00000409	0.0009051	0.0000164	0.00001253	0.00000387
616870.00	2363440.00	0.0002914	0.00001369	0.00000967	0.00000402	0.0006469	0.00001576	0.00001193	0.00000383
617370.00	2363440.00	0.00082752	0.0000152	0.00001134	0.00000386	0.0004747	0.00001398	0.00001033	0.00000365
617870.00	2363440.00	0.0007613	0.00001499	0.00001124	0.00000375	0.0006988	0.00001487	0.00001131	0.00000356
618370.00	2363440.00	0.00062667	0.00001375	0.00001012	0.00000363	0.0003453	0.00001283	0.00000939	0.00000343
618870.00	2363440.00	0.00081156	0.00001457	0.00001105	0.00000352	0.0004521	0.00001333	0.00001	0.00000333
619370.00	2363440.00	0.00039849	0.00001308	0.00000968	0.00000341	0.000951	0.00001558	0.00001233	0.00000324

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
619870.00	2363440.00	0.00035637	0.00001273	0.00000944	0.00000329	0.0009134	0.0000153	0.00001217	0.00000313
590370.00	2363940.00	0.00230594	0.00027209	0.00021705	0.00005504	0.0023857	0.00033843	0.00027473	0.0000637
590870.00	2363940.00	0.0027574	0.00020963	0.00017242	0.00003721	0.0024748	0.00026796	0.00022202	0.00004594
591370.00	2363940.00	0.00213993	0.0001592	0.00013393	0.00002528	0.0011132	0.00019162	0.00016038	0.00003125
591870.00	2363940.00	0.00201357	0.00013469	0.0001179	0.00001678	0.0010218	0.00015357	0.00013194	0.00002163
592370.00	2363940.00	0.00129771	0.0001166	0.00010629	0.00001031	0.0008407	0.00013099	0.00011715	0.00001384
592870.00	2363940.00	0.00115234	0.00010886	0.00010226	0.00000661	0.000758	0.00011922	0.00011091	0.00000831
593370.00	2363940.00	0.00145857	0.00011327	0.00010793	0.00000534	0.0007778	0.00011574	0.00011019	0.00000555
593870.00	2363940.00	0.00222357	0.00013027	0.00012491	0.00000536	0.0010483	0.00012347	0.00011861	0.00000486
594370.00	2363940.00	0.00312852	0.00014853	0.0001429	0.00000563	0.0017353	0.00014409	0.000139	0.0000051
594870.00	2363940.00	0.00266951	0.00015303	0.00014744	0.00000559	0.0016535	0.00015522	0.00014988	0.00000534
595370.00	2363940.00	0.00139371	0.00013642	0.00013097	0.00000545	0.0034689	0.00017314	0.00016766	0.00000548
595870.00	2363940.00	0.00105557	0.00012164	0.00011643	0.00000521	0.0028803	0.00015739	0.00015204	0.00000535
596370.00	2363940.00	0.00073408	0.00010622	0.00010115	0.00000507	0.001922	0.0001357	0.00013045	0.00000525
596870.00	2363940.00	0.00061948	0.00009463	0.00008958	0.00000506	0.0010746	0.00011756	0.0001123	0.00000526
597370.00	2363940.00	0.00060477	0.00008505	0.00007997	0.00000508	0.0009623	0.00010542	0.00010014	0.00000528
597870.00	2363940.00	0.00060096	0.00007664	0.00007149	0.00000515	0.000917	0.00009586	0.00009051	0.00000535
598370.00	2363940.00	0.00059762	0.0000685	0.0000633	0.0000052	0.0008972	0.00008674	0.00008133	0.00000541
598870.00	2363940.00	0.00059135	0.00006073	0.00005545	0.00000527	0.000882	0.0000778	0.00007233	0.00000548
599370.00	2363940.00	0.00057896	0.0000534	0.00004805	0.00000535	0.0008652	0.00006898	0.00006344	0.00000555
599870.00	2363940.00	0.00056585	0.0000478	0.00004227	0.00000552	0.0008586	0.00006213	0.00005632	0.00000581
600370.00	2363940.00	0.00054504	0.00004231	0.00003671	0.0000056	0.0008401	0.00005496	0.00004905	0.00000591
600870.00	2363940.00	0.00051811	0.00003692	0.00003134	0.00000559	0.0008047	0.00004766	0.00004181	0.00000585
601370.00	2363940.00	0.0004919	0.00003098	0.00002555	0.00000544	0.0008771	0.00003965	0.00003408	0.00000557
601870.00	2363940.00	0.00047101	0.00002842	0.00002307	0.00000536	0.0007671	0.0000357	0.00003017	0.00000553
602370.00	2363940.00	0.00046311	0.00002549	0.00002034	0.00000515	0.000852	0.00003177	0.00002644	0.00000534
602870.00	2363940.00	0.00045186	0.0000236	0.00001868	0.00000492	0.0008208	0.00002901	0.00002388	0.00000513
603370.00	2363940.00	0.00044062	0.0000224	0.00001768	0.00000472	0.0007423	0.00002714	0.00002219	0.00000495
603870.00	2363940.00	0.00044187	0.00002063	0.00001627	0.00000436	0.0008572	0.00002504	0.00002045	0.00000458
604370.00	2363940.00	0.00043375	0.00001962	0.00001549	0.00000412	0.0008191	0.00002358	0.00001925	0.00000433
604870.00	2363940.00	0.00042285	0.00001907	0.00001506	0.00000401	0.0007289	0.00002262	0.00001842	0.0000042
605370.00	2363940.00	0.00042459	0.00001799	0.00001427	0.00000372	0.0008091	0.00002143	0.00001757	0.00000386
605870.00	2363940.00	0.00041683	0.00001743	0.00001383	0.0000036	0.0007701	0.0000206	0.0000169	0.0000037
606370.00	2363940.00	0.00040421	0.00001729	0.00001363	0.00000366	0.0006861	0.00002016	0.00001644	0.00000373
606870.00	2363940.00	0.00040472	0.00001652	0.00001306	0.00000346	0.000748	0.00001936	0.00001591	0.00000345
607370.00	2363940.00	0.00039491	0.00001623	0.00001277	0.00000347	0.0007116	0.00001888	0.00001547	0.00000341
607870.00	2363940.00	0.00038043	0.00001631	0.00001267	0.00000364	0.0006336	0.00001871	0.00001514	0.00000357
608370.00	2363940.00	0.00037942	0.00001572	0.00001221	0.00000351	0.0006851	0.00001814	0.00001477	0.00000337
608870.00	2363940.00	0.00036879	0.00001559	0.00001199	0.0000036	0.0006584	0.00001788	0.00001446	0.00000342
609370.00	2363940.00	0.00035419	0.00001574	0.00001194	0.0000038	0.0005816	0.00001782	0.00001418	0.00000364
609870.00	2363940.00	0.00035289	0.00001527	0.00001155	0.00000372	0.0006365	0.00001742	0.00001392	0.0000035
610370.00	2363940.00	0.00034805	0.00001511	0.00001135	0.00000376	0.0006458	0.00001725	0.00001373	0.00000352
610870.00	2363940.00	0.00032912	0.00001533	0.00001135	0.00000399	0.0005343	0.00001717	0.0000134	0.00000378
611370.00	2363940.00	0.0003293	0.00001492	0.00001101	0.00000391	0.0005941	0.00001687	0.00001322	0.00000366
611870.00	2363940.00	0.00032503	0.00001478	0.00001084	0.00000394	0.0006019	0.00001674	0.00001306	0.00000368
612370.00	2363940.00	0.00030755	0.00001488	0.00001081	0.00000407	0.0005021	0.00001657	0.00001273	0.00000385
612870.00	2363940.00	0.00031503	0.00001452	0.00001054	0.00000398	0.0006004	0.00001646	0.00001273	0.00000373
613370.00	2363940.00	0.00032598	0.00001438	0.00001042	0.00000396	0.000674	0.00001649	0.00001279	0.0000037
613870.00	2363940.00	0.00034331	0.00001429	0.00001036	0.00000393	0.0007373	0.0000165	0.00001282	0.00000368
614370.00	2363940.00	0.00030988	0.00001414	0.00001018	0.00000396	0.0006308	0.00001613	0.00001241	0.00000372
614870.00	2363940.00	0.00027681	0.00001424	0.00001022	0.00000403	0.000437	0.00001573	0.0000119	0.00000383
615370.00	2363940.00	0.00027183	0.00001404	0.00001007	0.00000397	0.0004322	0.0000155	0.00001172	0.00000378
615870.00	2363940.00	0.0004419	0.00001417	0.00001038	0.00000379	0.0009014	0.00001634	0.00001278	0.00000356
616370.00	2363940.00	0.00077258	0.0000149	0.00001122	0.00000368	0.0004588	0.00001383	0.0000104	0.00000343
616870.00	2363940.00	0.00076123	0.00001467	0.00001105	0.00000362	0.0004376	0.00001355	0.00001016	0.00000339
617370.00	2363940.00	0.00081757	0.00001485	0.00001128	0.00000356	0.0004732	0.00001365	0.0000103	0.00000334
617870.00	2363940.00	0.00082739	0.00001486	0.00001136	0.0000035	0.000532	0.00001382	0.00001053	0.00000329
618370.00	2363940.00	0.00035599	0.00001215	0.00000873	0.00000342	0.0002805	0.00001194	0.00000874	0.0000032
618870.00	2363940.00	0.00061503	0.0000133	0.00000997	0.00000333	0.0003442	0.00001241	0.00000928	0.00000313
619370.00	2363940.00	0.00051056	0.00001264	0.0000094	0.00000324	0.0003119	0.00001202	0.00000897	0.00000305
619870.00	2363940.00	0.0008012	0.00001399	0.00001084	0.00000315	0.0004287	0.0000127	0.00000973	0.00000297
590370.00	2364440.00	0.00239491	0.00023566	0.00018977	0.00004589	0.0013688	0.0002866	0.00023235	0.00005425
590870.00	2364440.00	0.00224274	0.00018024	0.00014853	0.00003171	0.0011952	0.00022178	0.00018323	0.00003856
591370.00	2364440.00	0.0019599	0.00014382	0.00012152	0.00002231	0.0010211	0.00016953	0.00014232	0.00002721
591870.00	2364440.00	0.00086233	0.00011626	0.00010145	0.00001481	0.0007691	0.00013502	0.00011606	0.00001896
592370.00	2364440.00	0.00103261	0.00010674	0.00009733	0.00000941	0.0007611	0.00011995	0.00010754	0.0000124
592870.00	2364440.00	0.00064329	0.00009602	0.00008998	0.00000604	0.0006415	0.00010842	0.00010093	0.00000749
593370.00	2364440.00	0.00062152	0.0000946	0.00008977	0.00000483	0.0006053	0.00010338	0.00009839	0.00000499
593870.00	2364440.00	0.00145567	0.00011283	0.00010793	0.0000049	0.0007794	0.00010976	0.00010533	0.00000444

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
594370.00	2364440.00	0.00240701	0.00013316	0.00012796	0.0000052	0.001231	0.00012659	0.00012195	0.00000464
594870.00	2364440.00	0.00293779	0.00014329	0.00013799	0.0000053	0.0018998	0.00014634	0.00014137	0.00000497
595370.00	2364440.00	0.00218054	0.00013955	0.00013445	0.00000511	0.0014377	0.00014662	0.0001416	0.00000503
595870.00	2364440.00	0.00207334	0.00012586	0.00012094	0.00000492	0.0020372	0.00014706	0.00014207	0.00000499
596370.00	2364440.00	0.00148793	0.00011008	0.00010532	0.00000476	0.0021072	0.00013278	0.00012789	0.00000489
596870.00	2364440.00	0.00067966	0.00009438	0.00008967	0.00000472	0.0017464	0.0001188	0.00011392	0.00000487
597370.00	2364440.00	0.00057345	0.00008526	0.00008052	0.00000475	0.0009409	0.00010486	0.00009992	0.00000493
597870.00	2364440.00	0.00056398	0.00007709	0.00007232	0.00000477	0.0008965	0.00009502	0.00009008	0.00000494
598370.00	2364440.00	0.0005612	0.00007009	0.00006526	0.00000483	0.0008507	0.00008722	0.0000822	0.00000502
598870.00	2364440.00	0.00055759	0.00006305	0.00005817	0.00000488	0.0008347	0.00007929	0.00007422	0.00000507
599370.00	2364440.00	0.00055168	0.00005634	0.00005139	0.00000495	0.0008208	0.00007154	0.0000664	0.00000514
599870.00	2364440.00	0.00054115	0.00005009	0.00004506	0.00000503	0.0008067	0.00006405	0.00005882	0.00000523
600370.00	2364440.00	0.00052523	0.00004445	0.00003933	0.00000512	0.0007905	0.00005704	0.00005171	0.00000533
600870.00	2364440.00	0.00050647	0.00003954	0.00003434	0.0000052	0.000773	0.00005073	0.0000453	0.00000543
601370.00	2364440.00	0.00065594	0.00003347	0.00002838	0.00000509	0.0012938	0.00004281	0.00003764	0.00000517
601870.00	2364440.00	0.00058686	0.00002974	0.00002466	0.00000508	0.0012734	0.00003816	0.00003298	0.00000518
602370.00	2364440.00	0.00058004	0.00002694	0.00002194	0.000005	0.0012541	0.00003413	0.00002901	0.00000512
602870.00	2364440.00	0.00060784	0.00002481	0.00001996	0.00000484	0.0012203	0.00003072	0.00002574	0.00000499
603370.00	2364440.00	0.00056692	0.0000229	0.00001828	0.00000463	0.0012335	0.00002841	0.00002362	0.00000479
603870.00	2364440.00	0.00055894	0.00002141	0.00001705	0.00000436	0.0012158	0.00002636	0.00002181	0.00000454
604370.00	2364440.00	0.00059544	0.00002029	0.00001622	0.00000407	0.0012026	0.00002452	0.00002026	0.00000426
604870.00	2364440.00	0.00055553	0.00001915	0.00001534	0.0000038	0.0011961	0.0000233	0.00001932	0.00000398
605370.00	2364440.00	0.00054599	0.00001825	0.00001471	0.00000355	0.0011771	0.00002215	0.00001845	0.00000371
605870.00	2364440.00	0.00057949	0.00001762	0.00001432	0.0000033	0.0011507	0.00002102	0.00001759	0.00000343
606370.00	2364440.00	0.00053351	0.00001689	0.00001375	0.00000314	0.001121	0.00002033	0.00001709	0.00000323
606870.00	2364440.00	0.00052583	0.00001637	0.00001337	0.000003	0.0010865	0.0000196	0.00001656	0.00000304
607370.00	2364440.00	0.00055254	0.00001603	0.00001316	0.00000287	0.001045	0.00001883	0.00001596	0.00000287
607870.00	2364440.00	0.00050733	0.00001557	0.00001274	0.00000283	0.0010134	0.00001844	0.00001566	0.00000278
608370.00	2364440.00	0.00049729	0.00001527	0.00001247	0.0000028	0.0009775	0.00001798	0.00001527	0.00000271
608870.00	2364440.00	0.00051949	0.00001512	0.00001235	0.00000277	0.0009392	0.00001745	0.00001482	0.00000264
609370.00	2364440.00	0.00047684	0.00001483	0.00001201	0.00000282	0.0009168	0.00001727	0.00001462	0.00000265
609870.00	2364440.00	0.00046574	0.00001467	0.0000118	0.00000287	0.0009416	0.00001718	0.00001452	0.00000267
610370.00	2364440.00	0.00048902	0.00001462	0.00001173	0.00000289	0.0008925	0.00001672	0.00001406	0.00000266
610870.00	2364440.00	0.00045562	0.00001443	0.00001146	0.00000297	0.0008727	0.00001663	0.0000139	0.00000273
611370.00	2364440.00	0.00040498	0.00001422	0.00001114	0.00000308	0.0008385	0.00001659	0.00001376	0.00000283
611870.00	2364440.00	0.00047697	0.00001434	0.00001127	0.00000307	0.0007851	0.00001598	0.00001318	0.0000028
612370.00	2364440.00	0.00046483	0.00001424	0.0000111	0.00000314	0.0007783	0.00001589	0.00001302	0.00000287
612870.00	2364440.00	0.00040099	0.00001399	0.00001075	0.00000324	0.0007973	0.00001609	0.00001312	0.00000297
613370.00	2364440.00	0.00050998	0.00001426	0.00001104	0.00000322	0.0007226	0.00001538	0.00001244	0.00000294
613870.00	2364440.00	0.0003694	0.0000138	0.00001045	0.00000335	0.0008018	0.0000161	0.00001301	0.00000309
614370.00	2364440.00	0.00028353	0.00001371	0.0000102	0.00000351	0.0004718	0.00001526	0.00001197	0.0000033
614870.00	2364440.00	0.00034197	0.00001355	0.00001015	0.0000034	0.0007452	0.00001575	0.00001259	0.00000315
615370.00	2364440.00	0.00033865	0.00001344	0.00001005	0.00000339	0.0007431	0.00001563	0.00001247	0.00000316
615870.00	2364440.00	0.00026757	0.00001333	0.00000985	0.00000347	0.0004428	0.00001479	0.00001151	0.00000328
616370.00	2364440.00	0.00032009	0.00001317	0.0000098	0.00000337	0.0007079	0.00001529	0.00001214	0.00000315
616870.00	2364440.00	0.00074377	0.00001454	0.00001128	0.00000326	0.0006209	0.00001416	0.00001113	0.00000303
617370.00	2364440.00	0.00078473	0.00001434	0.00001113	0.00000321	0.0004615	0.00001321	0.00001023	0.00000298
617870.00	2364440.00	0.0005615	0.00001302	0.00000985	0.00000316	0.000346	0.00001231	0.00000937	0.00000293
618370.00	2364440.00	0.0007089	0.00001409	0.00001093	0.00000315	0.0006331	0.00001389	0.00001094	0.00000295
618870.00	2364440.00	0.00031842	0.0000115	0.00000842	0.00000308	0.0002653	0.00001136	0.0000085	0.00000286
619370.00	2364440.00	0.00027182	0.00001107	0.00000803	0.00000304	0.0002465	0.00001107	0.00000825	0.00000282
619870.00	2364440.00	0.00029852	0.00001118	0.0000082	0.00000298	0.000254	0.00001107	0.0000083	0.00000277
590370.00	2364940.00	0.00203122	0.00020807	0.00016859	0.00003948	0.0022453	0.00025991	0.00021338	0.00004653
590870.00	2364940.00	0.00140478	0.00015575	0.00012821	0.00002754	0.000868	0.00018953	0.00015658	0.00003295
591370.00	2364940.00	0.00092499	0.00012471	0.00010504	0.00001967	0.0007617	0.00014778	0.000124	0.00002379
591870.00	2364940.00	0.00072757	0.00010655	0.00009324	0.00001331	0.0007059	0.00012322	0.00010636	0.00001686
592370.00	2364940.00	0.00052749	0.00009436	0.00008594	0.00000842	0.0006254	0.00010859	0.0000976	0.00001099
592870.00	2364940.00	0.00051721	0.00008862	0.00008301	0.00000561	0.0005824	0.00010052	0.00009366	0.00000686
593370.00	2364940.00	0.00065821	0.00008973	0.00008518	0.00000456	0.0005851	0.00009717	0.00009244	0.00000472
593870.00	2364940.00	0.00135153	0.00010406	0.00009951	0.00000455	0.0007244	0.00010209	0.00009795	0.00000414
594370.00	2364940.00	0.00103458	0.00010728	0.00010252	0.00000476	0.0007324	0.00010591	0.00010175	0.00000417
594870.00	2364940.00	0.00171671	0.00012786	0.00012291	0.00000495	0.001021	0.00012173	0.0001172	0.00000453
595370.00	2364940.00	0.00212558	0.00013353	0.00012866	0.00000487	0.0013533	0.0001371	0.00013239	0.00000472
595870.00	2364940.00	0.00214135	0.00012539	0.0001207	0.00000469	0.0015258	0.00013832	0.00013362	0.0000047
596370.00	2364940.00	0.00149941	0.00010971	0.00010516	0.00000455	0.0021091	0.00013284	0.00012819	0.00000464
596870.00	2364940.00	0.00087337	0.00009555	0.0000911	0.00000445	0.002151	0.00011949	0.00011491	0.00000459
597370.00	2364940.00	0.0005602	0.00008492	0.00008047	0.00000445	0.0010806	0.00010442	0.00009982	0.0000046
597870.00	2364940.00	0.00053908	0.00007722	0.00007277	0.00000445	0.0009371	0.00009446	0.00008986	0.0000046
598370.00	2364940.00	0.00052896	0.00007064	0.00006615	0.0000045	0.0008389	0.00008669	0.00008205	0.00000465

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598870.00	2364940.00	0.0005275	0.00006482	0.00006025	0.00000457	0.0007919	0.00008031	0.00007556	0.00000475
599370.00	2364940.00	0.00052287	0.0000585	0.0000539	0.0000046	0.0007801	0.00007309	0.00006831	0.00000477
599870.00	2364940.00	0.00051692	0.00005258	0.00004792	0.00000466	0.0007677	0.0000662	0.00006137	0.00000483
600370.00	2364940.00	0.00050893	0.00004733	0.00004257	0.00000476	0.0007588	0.00006	0.00005503	0.00000497
600870.00	2364940.00	0.00049474	0.00004231	0.00003747	0.00000484	0.0007453	0.00005378	0.00004873	0.00000506
601370.00	2364940.00	0.0006147	0.00003608	0.00003133	0.00000475	0.0012388	0.00004621	0.00004139	0.00000483
601870.00	2364940.00	0.00059396	0.00003204	0.00002725	0.00000479	0.0012741	0.00004105	0.00003618	0.00000487
602370.00	2364940.00	0.00060028	0.00002883	0.00002403	0.00000479	0.0012421	0.00003644	0.00003156	0.00000488
602870.00	2364940.00	0.00057846	0.00002618	0.00002144	0.00000474	0.0011751	0.00003273	0.00002789	0.00000484
603370.00	2364940.00	0.00057681	0.0000241	0.00001949	0.00000461	0.0011479	0.00002973	0.000025	0.00000473
603870.00	2364940.00	0.00058732	0.00002244	0.00001802	0.00000442	0.0011428	0.00002729	0.00002273	0.00000456
604370.00	2364940.00	0.00056883	0.00002099	0.0000168	0.00000419	0.0011353	0.00002543	0.00002109	0.00000435
604870.00	2364940.00	0.00056586	0.00001981	0.00001587	0.00000393	0.0011301	0.00002385	0.00001976	0.0000041
605370.00	2364940.00	0.00056258	0.0000188	0.00001513	0.00000367	0.001122	0.00002254	0.0000187	0.00000383
605870.00	2364940.00	0.00055851	0.00001794	0.00001452	0.00000341	0.0011091	0.00002142	0.00001785	0.00000357
606370.00	2364940.00	0.00055336	0.0000172	0.00001402	0.00000318	0.0010906	0.00002047	0.00001715	0.00000332
606870.00	2364940.00	0.00054706	0.00001657	0.00001359	0.00000298	0.0010669	0.00001964	0.00001655	0.00000309
607370.00	2364940.00	0.00053965	0.00001603	0.00001322	0.00000281	0.001039	0.00001893	0.00001604	0.00000288
607870.00	2364940.00	0.00053128	0.00001557	0.00001289	0.00000268	0.0010083	0.0000183	0.00001559	0.00000271
608370.00	2364940.00	0.00052216	0.00001518	0.0000126	0.00000258	0.0009762	0.00001776	0.00001519	0.00000257
608870.00	2364940.00	0.0005125	0.00001485	0.00001234	0.00000251	0.0009438	0.00001729	0.00001482	0.00000246
609370.00	2364940.00	0.00049267	0.00001455	0.00001207	0.00000248	0.0009148	0.00001692	0.00001453	0.00000239
609870.00	2364940.00	0.00052186	0.00001444	0.000012	0.00000244	0.0009316	0.00001657	0.00001426	0.00000232
610370.00	2364940.00	0.00045032	0.00001407	0.00001158	0.00000249	0.0009156	0.00001656	0.00001421	0.00000234
610870.00	2364940.00	0.00045021	0.00001394	0.00001143	0.00000251	0.0008871	0.00001625	0.00001392	0.00000233
611370.00	2364940.00	0.00052221	0.00001403	0.00001155	0.00000249	0.0008125	0.00001556	0.00001329	0.00000228
611870.00	2364940.00	0.00049647	0.00001387	0.00001132	0.00000254	0.0008029	0.00001545	0.00001313	0.00000232
612370.00	2364940.00	0.00038439	0.00001347	0.00001079	0.00000268	0.0007918	0.00001572	0.00001326	0.00000245
612870.00	2364940.00	0.00037354	0.00001337	0.00001063	0.00000273	0.0007691	0.00001556	0.00001306	0.0000025
613370.00	2364940.00	0.00042429	0.00001344	0.00001071	0.00000273	0.0007718	0.00001524	0.00001276	0.00000248
613870.00	2364940.00	0.00051189	0.00001372	0.00001097	0.00000274	0.0008087	0.00001516	0.00001267	0.00000249
614370.00	2364940.00	0.0003173	0.00001307	0.00001015	0.00000292	0.0006462	0.00001506	0.00001237	0.00000269
614870.00	2364940.00	0.00033247	0.00001302	0.0000101	0.00000292	0.0007035	0.00001511	0.00001242	0.00000269
615370.00	2364940.00	0.00028211	0.00001289	0.00000988	0.00000301	0.0005153	0.00001454	0.00001174	0.0000028
615870.00	2364940.00	0.00040227	0.0000131	0.00001018	0.00000292	0.0008022	0.00001509	0.0000124	0.00000268
616370.00	2364940.00	0.00076819	0.00001416	0.00001133	0.00000283	0.0005269	0.00001331	0.00001073	0.00000259
616870.00	2364940.00	0.00029612	0.00001259	0.00000962	0.00000297	0.0006192	0.00001448	0.00001171	0.00000276
617370.00	2364940.00	0.00028506	0.00001247	0.0000095	0.00000296	0.000587	0.00001428	0.00001151	0.00000277
617870.00	2364940.00	0.00073134	0.00001388	0.00001103	0.00000285	0.0005551	0.00001327	0.00001064	0.00000263
618370.00	2364940.00	0.00047117	0.00001209	0.0000093	0.00000279	0.0003103	0.00001153	0.00000897	0.00000256
618870.00	2364940.00	0.00066925	0.00001309	0.0000103	0.00000279	0.0003794	0.00001207	0.00000949	0.00000258
619370.00	2364940.00	0.00058204	0.00001252	0.00000976	0.00000276	0.0003384	0.0000117	0.00000914	0.00000256
619870.00	2364940.00	0.0005071	0.00001205	0.00000932	0.00000273	0.00031	0.0000114	0.00000887	0.00000253
590370.00	2365440.00	0.00076661	0.00018472	0.00014922	0.0000355	0.0011686	0.00023314	0.00019183	0.00004131
590870.00	2365440.00	0.0021986	0.00015013	0.00012536	0.00002477	0.0023142	0.00018427	0.00015504	0.00002923
591370.00	2365440.00	0.0024631	0.00012549	0.00010764	0.00001785	0.0011667	0.00014197	0.00012062	0.00002135
591870.00	2365440.00	0.00119146	0.00010414	0.00009192	0.00001222	0.0007568	0.00011623	0.00010099	0.00001524
592370.00	2365440.00	0.00041978	0.00008514	0.00007747	0.00000766	0.0005244	0.00009763	0.00008777	0.00000987
592870.00	2365440.00	0.0003808	0.00007896	0.00007389	0.00000508	0.0004815	0.00008965	0.00008349	0.00000616
593370.00	2365440.00	0.000462	0.00008096	0.00007676	0.0000042	0.0005164	0.00008982	0.00008547	0.00000435
593870.00	2365440.00	0.00054737	0.00008511	0.000081	0.00000411	0.0005368	0.00009039	0.0000867	0.0000037
594370.00	2365440.00	0.00069509	0.00009332	0.00008893	0.00000439	0.0006149	0.00009542	0.00009162	0.0000038
594870.00	2365440.00	0.00101493	0.00010827	0.00010364	0.00000463	0.0007604	0.00010698	0.00010283	0.00000415
595370.00	2365440.00	0.00151559	0.00012283	0.0001182	0.00000463	0.0009801	0.00012051	0.00011611	0.00000439
595870.00	2365440.00	0.00218518	0.00012154	0.00011702	0.00000452	0.0018979	0.0001364	0.00013192	0.00000448
596370.00	2365440.00	0.00110581	0.00010671	0.00010232	0.00000439	0.0024708	0.00013371	0.00012926	0.00000445
596870.00	2365440.00	0.00077668	0.00009499	0.00009073	0.00000426	0.0020737	0.00011954	0.00011516	0.00000437
597370.00	2365440.00	0.00057832	0.000085	0.0000808	0.0000042	0.0013495	0.00010512	0.00010078	0.00000433
597870.00	2365440.00	0.00051431	0.00007764	0.00007343	0.00000421	0.0008673	0.00009437	0.00009001	0.00000436
598370.00	2365440.00	0.00051116	0.00007085	0.00006665	0.0000042	0.0009266	0.00008642	0.00008209	0.00000433
598870.00	2365440.00	0.00049832	0.00006554	0.00006128	0.00000426	0.0007639	0.00008012	0.00007571	0.00000442
599370.00	2365440.00	0.00049498	0.0000597	0.00005542	0.00000428	0.0007657	0.00007353	0.0000691	0.00000442
599870.00	2365440.00	0.00049095	0.00005434	0.00005001	0.00000433	0.0007403	0.00006741	0.00006294	0.00000447
600370.00	2365440.00	0.00048571	0.00004922	0.00004483	0.00000439	0.0007217	0.00006147	0.00005692	0.00000454
600870.00	2365440.00	0.00047759	0.00004446	0.00003998	0.00000447	0.0007102	0.0000558	0.00005116	0.00000465
601370.00	2365440.00	0.0005646	0.0000387	0.00003428	0.00000442	0.0012612	0.00004962	0.00004512	0.00000451
601870.00	2365440.00	0.00052637	0.00003433	0.00002985	0.00000448	0.00121	0.00004426	0.0000397	0.00000456
602370.00	2365440.00	0.0005551	0.0000308	0.00002627	0.00000452	0.0012014	0.00003925	0.00003465	0.00000459
602870.00	2365440.00	0.00054513	0.00002779	0.00002326	0.00000453	0.0011198	0.00003502	0.00003042	0.00000461

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2365440.00	0.00055588	0.00002541	0.00002092	0.00000449	0.0011069	0.00003156	0.00002699	0.00000458
603870.00	2365440.00	0.00053468	0.00002341	0.00001901	0.0000044	0.0011146	0.00002895	0.00002445	0.0000045
604370.00	2365440.00	0.0005448	0.00002184	0.0000176	0.00000424	0.0010761	0.00002658	0.00002222	0.00000436
604870.00	2365440.00	0.00054177	0.0000205	0.00001646	0.00000404	0.0010717	0.00002476	0.00002059	0.00000418
605370.00	2365440.00	0.00053948	0.00001937	0.00001556	0.00000381	0.0010783	0.00002328	0.00001932	0.00000396
605870.00	2365440.00	0.00053689	0.0000184	0.00001484	0.00000356	0.0010725	0.00002201	0.00001829	0.00000371
606370.00	2365440.00	0.0005263	0.00001754	0.00001422	0.00000332	0.0010565	0.00002094	0.00001748	0.00000347
606870.00	2365440.00	0.00052949	0.00001683	0.00001374	0.00000309	0.0010399	0.00001998	0.00001676	0.00000323
607370.00	2365440.00	0.00052445	0.0000162	0.00001332	0.00000288	0.0010215	0.00001918	0.00001618	0.000003
607870.00	2365440.00	0.00051564	0.00001565	0.00001295	0.0000027	0.0009991	0.00001849	0.00001569	0.00000279
608370.00	2365440.00	0.00051929	0.00001521	0.00001267	0.00000254	0.0009772	0.00001784	0.00001524	0.0000026
608870.00	2365440.00	0.00052664	0.00001486	0.00001245	0.00000241	0.0010103	0.00001742	0.00001498	0.00000244
609370.00	2365440.00	0.00047107	0.00001438	0.00001204	0.00000234	0.0009908	0.00001716	0.00001482	0.00000234
609870.00	2365440.00	0.00048326	0.00001414	0.00001188	0.00000226	0.0009555	0.00001663	0.00001441	0.00000222
610370.00	2365440.00	0.00054587	0.0000141	0.00001192	0.00000218	0.0008689	0.00001586	0.00001376	0.0000021
610870.00	2365440.00	0.00039251	0.00001349	0.00001123	0.00000226	0.0008497	0.00001611	0.00001394	0.00000216
611370.00	2365440.00	0.00053819	0.00001373	0.00001158	0.00000215	0.0007991	0.00001517	0.00001317	0.000002
611870.00	2365440.00	0.0003251	0.00001316	0.00001078	0.00000238	0.0006207	0.00001524	0.00001299	0.00000224
612370.00	2365440.00	0.00062062	0.00001363	0.00001152	0.00000211	0.0006118	0.00001391	0.000012	0.00000192
612870.00	2365440.00	0.00040254	0.00001306	0.00001076	0.0000023	0.0008496	0.00001541	0.00001329	0.00000211
613370.00	2365440.00	0.00054721	0.00001332	0.0000111	0.00000222	0.0006489	0.000014	0.00001199	0.000002
613870.00	2365440.00	0.00034935	0.00001275	0.00001034	0.00000241	0.0007355	0.00001494	0.00001273	0.00000221
614370.00	2365440.00	0.00048428	0.00001314	0.00001077	0.00000237	0.0008204	0.00001478	0.00001263	0.00000214
614870.00	2365440.00	0.00042774	0.00001288	0.00001045	0.00000243	0.0008071	0.00001477	0.00001256	0.00000221
615370.00	2365440.00	0.00074772	0.0000136	0.00001128	0.00000232	0.0005012	0.00001277	0.0000107	0.00000207
615870.00	2365440.00	0.00075268	0.0000137	0.00001132	0.00000238	0.0005256	0.00001292	0.00001078	0.00000214
616370.00	2365440.00	0.00037847	0.00001252	0.00000999	0.00000254	0.0007588	0.00001446	0.00001214	0.00000232
616870.00	2365440.00	0.00052753	0.00001212	0.00000976	0.00000237	0.0003469	0.00001148	0.00000936	0.00000212
617370.00	2365440.00	0.000614	0.00001259	0.00001018	0.00000242	0.000378	0.00001178	0.00000959	0.00000218
617870.00	2365440.00	0.00040297	0.00001241	0.00000985	0.00000256	0.0007526	0.00001412	0.00001176	0.00000236
618370.00	2365440.00	0.0004846	0.00001265	0.0000101	0.00000255	0.0007249	0.00001379	0.00001145	0.00000235
618870.00	2365440.00	0.00064378	0.00001266	0.00001018	0.00000247	0.0003786	0.00001173	0.00000946	0.00000226
619370.00	2365440.00	0.0004221	0.00001138	0.00000892	0.00000246	0.0002876	0.0000109	0.00000866	0.00000224
619870.00	2365440.00	0.00028388	0.00001045	0.000008	0.00000245	0.0002387	0.00001035	0.00000811	0.00000223
590370.00	2365940.00	0.00072085	0.00016614	0.00013514	0.00003099	0.0011107	0.00020852	0.00017259	0.00003594
590870.00	2365940.00	0.00070739	0.00013327	0.00011069	0.00002257	0.001347	0.00016767	0.0001413	0.00002637
591370.00	2365940.00	0.00130042	0.00011494	0.00009849	0.00001645	0.0030463	0.00014321	0.00012375	0.00001947
591870.00	2365940.00	0.00271003	0.00010679	0.00009544	0.00001136	0.0012202	0.00011455	0.00010059	0.00001396
592370.00	2365940.00	0.0008005	0.00008797	0.00008057	0.0000074	0.0006339	0.00009725	0.00008796	0.00000929
592870.00	2365940.00	0.00035277	0.00007354	0.00006883	0.00000471	0.0004498	0.00008299	0.00007734	0.00000565
593370.00	2365940.00	0.00036767	0.0000733	0.00006941	0.00000389	0.0004371	0.00008086	0.00007685	0.00000401
593870.00	2365940.00	0.00038394	0.00007391	0.00007019	0.00000371	0.000443	0.00007987	0.00007656	0.0000033
594370.00	2365940.00	0.00058253	0.00008542	0.00008135	0.00000407	0.0005546	0.00008857	0.00008506	0.0000035
594870.00	2365940.00	0.00103184	0.00010341	0.00009907	0.00000434	0.0007235	0.00009986	0.00009601	0.00000385
595370.00	2365940.00	0.001779	0.00011863	0.00011421	0.00000442	0.0010713	0.00011573	0.0001116	0.00000413
595870.00	2365940.00	0.0021799	0.00011909	0.00011477	0.00000433	0.0014917	0.0001272	0.00012298	0.00000422
596370.00	2365940.00	0.00142946	0.00010728	0.00010307	0.00000421	0.0022347	0.00012977	0.00012555	0.00000422
596870.00	2365940.00	0.00088493	0.00009542	0.00009134	0.00000408	0.0021586	0.00011927	0.00011511	0.00000416
597370.00	2365940.00	0.00063119	0.0000854	0.0000814	0.000004	0.0016508	0.00010609	0.00010197	0.00000411
597870.00	2365940.00	0.00050627	0.00007754	0.00007356	0.00000398	0.0009685	0.00009426	0.00009016	0.00000411
598370.00	2365940.00	0.00049693	0.00007109	0.00006713	0.00000396	0.0009637	0.00008629	0.00008221	0.00000408
598870.00	2365940.00	0.00048327	0.00006558	0.0000616	0.00000398	0.0008725	0.00007971	0.00007561	0.0000041
599370.00	2365940.00	0.00047506	0.00006052	0.0000565	0.00000402	0.0008029	0.00007386	0.00006972	0.00000414
599870.00	2365940.00	0.00046938	0.00005562	0.00005157	0.00000405	0.0007502	0.00006823	0.00006405	0.00000418
600370.00	2365940.00	0.00046374	0.00005084	0.00004675	0.00000409	0.0007082	0.00006269	0.00005847	0.00000422
600870.00	2365940.00	0.00045902	0.00004646	0.0000423	0.00000416	0.0006803	0.0000576	0.00005329	0.00000431
601370.00	2365940.00	0.00058851	0.00004143	0.00003731	0.00000412	0.0012372	0.00005209	0.00004787	0.00000422
601870.00	2365940.00	0.00056109	0.00003696	0.00003278	0.00000418	0.0012265	0.00004688	0.00004262	0.00000426
602370.00	2365940.00	0.00055591	0.00003307	0.00002883	0.00000423	0.0011005	0.00004165	0.00003734	0.0000043
602870.00	2365940.00	0.00051662	0.00002965	0.00002536	0.00000428	0.0010774	0.00003747	0.00003313	0.00000435
603370.00	2365940.00	0.00053931	0.00002696	0.00002267	0.0000043	0.0010549	0.00003359	0.00002923	0.00000436
603870.00	2365940.00	0.00053814	0.00002471	0.00002044	0.00000427	0.0010409	0.00003046	0.00002612	0.00000434
604370.00	2365940.00	0.00053219	0.00002287	0.00001867	0.0000042	0.0010359	0.00002793	0.00002365	0.00000428
604870.00	2365940.00	0.0004711	0.00002118	0.00001711	0.00000407	0.0010289	0.00002613	0.00002195	0.00000418
605370.00	2365940.00	0.00040984	0.00001979	0.00001587	0.00000391	0.0009358	0.00002444	0.00002041	0.00000404
605870.00	2365940.00	0.00051521	0.00001896	0.00001527	0.00000369	0.0010118	0.0000227	0.00001888	0.00000382
606370.00	2365940.00	0.00051313	0.00001803	0.00001456	0.00000347	0.0010081	0.00002148	0.00001788	0.0000036
606870.00	2365940.00	0.00051068	0.00001722	0.00001398	0.00000324	0.001002	0.00002045	0.00001707	0.00000338
607370.00	2365940.00	0.00050753	0.00001651	0.00001349	0.00000301	0.0009922	0.00001955	0.0000164	0.00000315

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
607870.00	2365940.00	0.00050379	0.00001589	0.00001308	0.0000028	0.0009892	0.00001879	0.00001586	0.00000293
608370.00	2365940.00	0.00046728	0.00001526	0.00001263	0.00000263	0.0010469	0.00001845	0.00001571	0.00000274
608870.00	2365940.00	0.0004969	0.00001489	0.00001244	0.00000245	0.0010166	0.00001767	0.00001514	0.00000253
609370.00	2365940.00	0.00045861	0.00001439	0.00001206	0.00000233	0.0009921	0.00001726	0.00001488	0.00000238
609870.00	2365940.00	0.00043235	0.00001398	0.00001175	0.00000223	0.0009535	0.00001683	0.00001457	0.00000226
610370.00	2365940.00	0.00036614	0.00001356	0.00001136	0.0000022	0.0008065	0.00001628	0.00001408	0.0000022
610870.00	2365940.00	0.00053917	0.00001375	0.00001174	0.00000201	0.0008359	0.00001541	0.00001345	0.00000197
611370.00	2365940.00	0.00065043	0.00001374	0.00001185	0.00000189	0.0006373	0.00001418	0.00001236	0.00000182
611870.00	2365940.00	0.00034224	0.00001287	0.00001079	0.00000208	0.0007144	0.00001522	0.00001322	0.000002
612370.00	2365940.00	0.00048204	0.00001306	0.00001112	0.00000194	0.0007903	0.00001468	0.00001287	0.00000182
612870.00	2365940.00	0.00045606	0.00001294	0.00001096	0.00000198	0.0008836	0.0000151	0.00001326	0.00000184
613370.00	2365940.00	0.00037604	0.00001257	0.00001053	0.00000204	0.0007979	0.00001488	0.00001299	0.00000188
613870.00	2365940.00	0.00032413	0.00001235	0.00001024	0.0000021	0.0006615	0.00001442	0.00001248	0.00000195
614370.00	2365940.00	0.00027819	0.00001259	0.00001027	0.00000232	0.0004458	0.00001413	0.00001194	0.00000219
614870.00	2365940.00	0.00074347	0.00001344	0.00001149	0.00000195	0.0005823	0.00001297	0.00001123	0.00000174
615370.00	2365940.00	0.00066746	0.00001266	0.00001075	0.00000191	0.0004453	0.00001196	0.00001027	0.00000169
615870.00	2365940.00	0.00063228	0.00001236	0.00001043	0.00000193	0.0004094	0.00001165	0.00000994	0.00000171
616370.00	2365940.00	0.00070554	0.00001286	0.00001085	0.00000201	0.0004588	0.00001203	0.00001024	0.00000179
616870.00	2365940.00	0.00046367	0.0000124	0.00001023	0.00000217	0.0007357	0.00001373	0.00001176	0.00000197
617370.00	2365940.00	0.00050862	0.00001161	0.00000958	0.00000203	0.0003386	0.00001103	0.00000922	0.0000018
617870.00	2365940.00	0.00036708	0.00001074	0.0000087	0.00000204	0.0002787	0.00001042	0.00000862	0.0000018
618370.00	2365940.00	0.00069207	0.00001289	0.00001072	0.00000217	0.0004918	0.0000122	0.00001023	0.00000197
618870.00	2365940.00	0.00050011	0.00001231	0.00001007	0.00000224	0.0006749	0.00001317	0.00001112	0.00000205
619370.00	2365940.00	0.00066689	0.00001274	0.00001053	0.00000221	0.0005111	0.00001222	0.00001019	0.00000202
619870.00	2365940.00	0.00063749	0.00001226	0.00001007	0.00000219	0.0003832	0.00001136	0.00000936	0.000002
590370.00	2366440.00	0.0006804	0.00014881	0.00012188	0.00002692	0.0011084	0.00018566	0.00015461	0.00003105
590870.00	2366440.00	0.00066364	0.000123	0.00010272	0.00002027	0.0012149	0.00015281	0.00012934	0.00002346
591370.00	2366440.00	0.00142	0.00010806	0.00009319	0.00001487	0.0028625	0.00013198	0.00011449	0.00001749
591870.00	2366440.00	0.00171588	0.00009604	0.00008576	0.00001027	0.0008259	0.00010354	0.00009099	0.00001254
592370.00	2366440.00	0.00054815	0.00008081	0.00007403	0.00000678	0.0005621	0.00009044	0.00008202	0.00000842
592870.00	2366440.00	0.00033453	0.00006965	0.00006524	0.00000441	0.0004211	0.00007823	0.00007299	0.00000524
593370.00	2366440.00	0.00033365	0.00006893	0.00006532	0.00000361	0.0003993	0.00007586	0.00007213	0.00000372
593870.00	2366440.00	0.00036944	0.00007045	0.00006693	0.00000352	0.000415	0.00007573	0.00007256	0.00000317
594370.00	2366440.00	0.0005749	0.00008085	0.00007705	0.0000038	0.0005284	0.00008354	0.00008027	0.00000327
594870.00	2366440.00	0.00087064	0.00009336	0.00008929	0.00000407	0.0006527	0.00009238	0.00008882	0.00000356
595370.00	2366440.00	0.00120165	0.00010649	0.00010231	0.00000418	0.0007929	0.00010295	0.00009912	0.00000384
595870.00	2366440.00	0.00125728	0.00010984	0.00010572	0.00000412	0.0008648	0.00010977	0.00010581	0.00000395
596370.00	2366440.00	0.00184921	0.00010778	0.00010375	0.00000403	0.0017509	0.0001221	0.0001181	0.000004
596870.00	2366440.00	0.00100617	0.00009569	0.00009177	0.00000392	0.0021487	0.00011825	0.00011427	0.00000397
597370.00	2366440.00	0.00055261	0.00008528	0.00008143	0.00000386	0.0012322	0.00010543	0.00010147	0.00000396
597870.00	2366440.00	0.00056664	0.00007782	0.00007404	0.00000377	0.0014224	0.00009545	0.00009157	0.00000388
598370.00	2366440.00	0.00050187	0.00007129	0.00006754	0.00000375	0.0011062	0.00008654	0.00008267	0.00000386
598870.00	2366440.00	0.00047971	0.00006588	0.00006213	0.00000376	0.0009818	0.00007984	0.00007597	0.00000387
599370.00	2366440.00	0.00046212	0.00006108	0.00005729	0.00000378	0.0008579	0.00007408	0.00007019	0.00000389
599870.00	2366440.00	0.00045462	0.00005655	0.00005274	0.00000381	0.0007986	0.00006887	0.00006494	0.00000392
600370.00	2366440.00	0.00044395	0.00005226	0.00004841	0.00000385	0.0006912	0.00006376	0.00005979	0.00000397
600870.00	2366440.00	0.00043911	0.00004794	0.00004406	0.00000389	0.0006582	0.00005874	0.00005473	0.00000401
601370.00	2366440.00	0.00043828	0.00004326	0.00003936	0.0000039	0.0007379	0.00005347	0.00004947	0.000004
601870.00	2366440.00	0.00053536	0.00003926	0.00003534	0.00000392	0.0011681	0.00004926	0.00004525	0.00000401
602370.00	2366440.00	0.00046462	0.00003509	0.00003112	0.00000397	0.001038	0.00004448	0.00004043	0.00000405
602870.00	2366440.00	0.0005088	0.0000317	0.00002768	0.00000402	0.0010386	0.00003982	0.00003573	0.00000408
603370.00	2366440.00	0.00051483	0.00002868	0.00002462	0.00000406	0.0010234	0.00003583	0.00003171	0.00000412
603870.00	2366440.00	0.00051029	0.00002613	0.00002204	0.00000408	0.0010034	0.00003241	0.00002827	0.00000414
604370.00	2366440.00	0.00051151	0.00002403	0.00001996	0.00000407	0.0009969	0.00002953	0.0000254	0.00000413
604870.00	2366440.00	0.00050629	0.0000223	0.00001828	0.00000401	0.0010758	0.00002741	0.00002332	0.00000408
605370.00	2366440.00	0.00051044	0.00002087	0.00001696	0.00000391	0.0009916	0.00002518	0.00002119	0.00000399
605870.00	2366440.00	0.0005104	0.00001967	0.0000159	0.00000376	0.0009677	0.0000235	0.00001964	0.00000386
606370.00	2366440.00	0.00048769	0.00001857	0.00001499	0.00000358	0.0009693	0.00002222	0.00001853	0.00000369
606870.00	2366440.00	0.00046655	0.00001762	0.00001423	0.00000338	0.0010083	0.00002125	0.00001774	0.0000035
607370.00	2366440.00	0.00049087	0.00001691	0.00001375	0.00000316	0.0009931	0.0000201	0.00001681	0.00000329
607870.00	2366440.00	0.00042155	0.00001603	0.00001306	0.00000297	0.0009592	0.00001944	0.00001634	0.0000031
608370.00	2366440.00	0.00048645	0.00001562	0.00001287	0.00000275	0.0010091	0.00001857	0.00001571	0.00000287
608870.00	2366440.00	0.00041242	0.00001489	0.0000123	0.00000258	0.0009765	0.00001815	0.00001545	0.00000269
609370.00	2366440.00	0.00047936	0.00001461	0.00001223	0.00000239	0.0009813	0.00001732	0.00001484	0.00000248
609870.00	2366440.00	0.00061078	0.00001457	0.00001238	0.00000219	0.0007997	0.00001599	0.00001373	0.00000226
610370.00	2366440.00	0.000449	0.00001378	0.00001166	0.00000212	0.0009358	0.00001639	0.00001422	0.00000217
610870.00	2366440.00	0.00037845	0.0000133	0.00001124	0.00000206	0.0008522	0.00001605	0.00001396	0.00000209
611370.00	2366440.00	0.00053553	0.00001347	0.00001158	0.00000189	0.0008012	0.00001501	0.00001313	0.00000188
611870.00	2366440.00	0.00053328	0.00001324	0.00001142	0.00000182	0.0007695	0.00001463	0.00001285	0.00000178

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
612370.00	2366440.00	0.00047728	0.00001297	0.00001115	0.00000182	0.000913	0.00001515	0.00001339	0.00000175
612870.00	2366440.00	0.00042679	0.00001265	0.00001084	0.00000181	0.0008797	0.000015	0.00001327	0.00000173
613370.00	2366440.00	0.00036581	0.00001232	0.00001049	0.00000183	0.0007861	0.00001467	0.00001294	0.00000173
613870.00	2366440.00	0.00030092	0.00001209	0.00001019	0.0000019	0.0005711	0.00001399	0.00001219	0.0000018
614370.00	2366440.00	0.00042401	0.00001228	0.0000105	0.00000179	0.0008152	0.00001428	0.00001263	0.00000165
614870.00	2366440.00	0.00031016	0.00001186	0.00000998	0.00000188	0.0006259	0.00001382	0.00001208	0.00000174
615370.00	2366440.00	0.000735	0.00001283	0.00001117	0.00000166	0.0005053	0.00001214	0.00001066	0.00000149
615870.00	2366440.00	0.00061081	0.00001192	0.00001029	0.00000163	0.0004063	0.00001132	0.00000988	0.00000144
616370.00	2366440.00	0.00050404	0.00001128	0.00000965	0.00000163	0.0003499	0.00001079	0.00000936	0.00000143
616870.00	2366440.00	0.00042481	0.00001078	0.00000913	0.00000165	0.0003092	0.00001037	0.00000894	0.00000144
617370.00	2366440.00	0.00064352	0.00001259	0.00001075	0.00000184	0.0005741	0.00001243	0.00001079	0.00000164
617870.00	2366440.00	0.00066505	0.00001227	0.00001046	0.00000181	0.0004305	0.00001147	0.00000986	0.00000161
618370.00	2366440.00	0.00038791	0.00001053	0.00000877	0.00000176	0.0002842	0.00001016	0.00000861	0.00000155
618870.00	2366440.00	0.00056696	0.0000116	0.00000976	0.00000184	0.0003574	0.00001089	0.00000925	0.00000165
619370.00	2366440.00	0.00066528	0.00001235	0.00001043	0.00000192	0.0004575	0.00001163	0.0000099	0.00000173
619870.00	2366440.00	0.00064061	0.00001204	0.00001012	0.00000192	0.0003997	0.0000112	0.00000946	0.00000173
590370.00	2366940.00	0.00098949	0.00013539	0.00011198	0.00002341	0.0022881	0.00016951	0.00014273	0.00002678
590870.00	2366940.00	0.0006952	0.00011336	0.00009524	0.00001812	0.0016722	0.00014065	0.00011987	0.00002078
591370.00	2366940.00	0.00124913	0.00010103	0.00008749	0.00001354	0.0027888	0.00012323	0.0001074	0.00001583
591870.00	2366940.00	0.00157898	0.00009057	0.00008115	0.00000942	0.0007669	0.00009712	0.00008571	0.00001141
592370.00	2366940.00	0.0008448	0.00008035	0.00007391	0.00000644	0.0005955	0.00008727	0.0000794	0.00000786
592870.00	2366940.00	0.00036312	0.00006863	0.00006425	0.00000437	0.0004422	0.00007665	0.00007155	0.0000051
593370.00	2366940.00	0.0003118	0.00006479	0.00006144	0.00000335	0.0003719	0.00007101	0.00006756	0.00000345
593870.00	2366940.00	0.00035452	0.00006702	0.0000637	0.00000332	0.0004001	0.00007215	0.00006915	0.00000301
594370.00	2366940.00	0.00059652	0.00007707	0.0000735	0.00000356	0.0005113	0.00007946	0.00007639	0.00000307
594870.00	2366940.00	0.00079978	0.00008696	0.00008315	0.00000381	0.0006069	0.00008639	0.00008307	0.00000331
595370.00	2366940.00	0.00137046	0.00010276	0.00009879	0.00000397	0.0008289	0.00009846	0.00009486	0.0000036
595870.00	2366940.00	0.00188561	0.00010978	0.00010581	0.00000397	0.0011656	0.00011149	0.00010773	0.00000376
596370.00	2366940.00	0.00168605	0.00010448	0.00010058	0.0000039	0.0019582	0.00011933	0.0001155	0.00000383
596870.00	2366940.00	0.00098601	0.00009492	0.00009113	0.00000379	0.002172	0.00011715	0.00011335	0.00000381
597370.00	2366940.00	0.00066585	0.00008571	0.00008202	0.00000369	0.0017567	0.00010664	0.00010288	0.00000376
597870.00	2366940.00	0.00061769	0.00007827	0.00007466	0.00000361	0.0015947	0.00009602	0.00009232	0.0000037
598370.00	2366940.00	0.00054642	0.00007171	0.00006814	0.00000357	0.0013659	0.00008719	0.00008352	0.00000367
598870.00	2366940.00	0.00048721	0.00006616	0.00006259	0.00000356	0.0011074	0.00008003	0.00007637	0.00000367
599370.00	2366940.00	0.00044438	0.00006144	0.00005786	0.00000358	0.000834	0.00007396	0.00007027	0.00000369
599870.00	2366940.00	0.0004396	0.0000572	0.00005359	0.0000036	0.00081	0.00006915	0.00006544	0.00000371
600370.00	2366940.00	0.00043029	0.00005315	0.00004951	0.00000363	0.0007334	0.0000644	0.00006066	0.00000374
600870.00	2366940.00	0.00042461	0.0000491	0.00004544	0.00000366	0.0006833	0.00005966	0.00005589	0.00000377
601370.00	2366940.00	0.00051776	0.00004531	0.00004166	0.00000365	0.0011132	0.00005582	0.00005206	0.00000376
601870.00	2366940.00	0.00056686	0.00004152	0.00003784	0.00000368	0.0011021	0.00005089	0.00004711	0.00000378
602370.00	2366940.00	0.00056184	0.00003761	0.00003389	0.00000372	0.001094	0.00004634	0.00004254	0.00000381
602870.00	2366940.00	0.00050313	0.00003378	0.00003001	0.00000377	0.0010062	0.00004202	0.00003818	0.00000384
603370.00	2366940.00	0.0004745	0.00003048	0.00002666	0.00000382	0.0009989	0.00003816	0.00003428	0.00000388
603870.00	2366940.00	0.00048279	0.00002771	0.00002385	0.00000386	0.0010146	0.00003459	0.00003068	0.00000392
604370.00	2366940.00	0.00056668	0.00002558	0.00002169	0.00000388	0.000923	0.00003085	0.00002692	0.00000393
604870.00	2366940.00	0.00047901	0.00002338	0.00001949	0.00000388	0.0010383	0.00002895	0.00002501	0.00000394
605370.00	2366940.00	0.00046233	0.0000217	0.00001786	0.00000384	0.0010279	0.00002679	0.00002289	0.0000039
605870.00	2366940.00	0.00049963	0.00002044	0.00001669	0.00000376	0.0009986	0.00002466	0.00002083	0.00000383
606370.00	2366940.00	0.00047079	0.00001921	0.00001557	0.00000363	0.0009174	0.00002303	0.00001931	0.00000372
606870.00	2366940.00	0.00047085	0.00001822	0.00001475	0.00000347	0.0009185	0.00002172	0.00001814	0.00000357
607370.00	2366940.00	0.00042184	0.00001723	0.00001393	0.0000033	0.0009553	0.00002091	0.0000175	0.00000341
607870.00	2366940.00	0.00044898	0.00001655	0.00001345	0.0000031	0.0009887	0.00001992	0.0000167	0.00000321
608370.00	2366940.00	0.00045395	0.0000159	0.00001301	0.0000029	0.0009825	0.00001904	0.00001603	0.00000301
608870.00	2366940.00	0.00042646	0.00001524	0.00001253	0.00000271	0.0009756	0.00001842	0.0000156	0.00000282
609370.00	2366940.00	0.00044989	0.00001479	0.00001227	0.00000252	0.0009655	0.00001766	0.00001503	0.00000262
609870.00	2366940.00	0.00041939	0.00001425	0.00001189	0.00000236	0.0009476	0.00001718	0.00001472	0.00000245
610370.00	2366940.00	0.00033783	0.00001369	0.00001143	0.00000226	0.0007435	0.00001641	0.00001406	0.00000235
610870.00	2366940.00	0.00057318	0.00001392	0.00001191	0.00000201	0.0007722	0.0000153	0.00001323	0.00000207
611370.00	2366940.00	0.00057689	0.00001362	0.00001172	0.00000189	0.0007374	0.00001481	0.00001288	0.00000193
611870.00	2366940.00	0.00060034	0.00001338	0.0000116	0.00000178	0.0006733	0.00001421	0.00001242	0.00000179
612370.00	2366940.00	0.00029154	0.00001293	0.0000109	0.00000203	0.0004796	0.0000148	0.00001273	0.00000206
612870.00	2366940.00	0.00059373	0.00001314	0.00001147	0.00000167	0.0008375	0.00001446	0.00001282	0.00000164
613370.00	2366940.00	0.00072136	0.0000133	0.00001172	0.00000158	0.0006779	0.00001348	0.00001195	0.00000152
613870.00	2366940.00	0.0004488	0.00001232	0.00001069	0.00000163	0.0008475	0.00001434	0.00001278	0.00000156
614370.00	2366940.00	0.00071584	0.00001265	0.00001119	0.00000147	0.0005082	0.00001216	0.0000108	0.00000137
614870.00	2366940.00	0.00068577	0.00001282	0.0000113	0.00000152	0.0006408	0.00001287	0.00001147	0.0000014
615370.00	2366940.00	0.00030746	0.00001154	0.00000985	0.00000168	0.000625	0.00001349	0.00001193	0.00000157
615870.00	2366940.00	0.00040457	0.00001174	0.00001012	0.00000162	0.0007591	0.00001356	0.00001208	0.00000148
616370.00	2366940.00	0.00060128	0.0000116	0.00001017	0.00000143	0.0004019	0.00001103	0.00000976	0.00000127

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
616870.00	2366940.00	0.00038872	0.00001023	0.00000885	0.00000139	0.0002933	0.00000997	0.00000877	0.00000121
617370.00	2366940.00	0.0003231	0.00000974	0.00000835	0.00000139	0.0002666	0.00000965	0.00000844	0.0000012
617870.00	2366940.00	0.00044478	0.00001061	0.00000914	0.00000147	0.0003133	0.00001019	0.0000089	0.00000129
618370.00	2366940.00	0.00053352	0.00001114	0.00000961	0.00000154	0.0003527	0.00001057	0.00000922	0.00000135
618870.00	2366940.00	0.00027359	0.0000094	0.00000791	0.00000149	0.000241	0.00000938	0.00000809	0.00000129
619370.00	2366940.00	0.00043299	0.00001053	0.00000895	0.00000158	0.0002998	0.00001009	0.00000871	0.00000139
619870.00	2366940.00	0.00041244	0.0000104	0.00000879	0.00000161	0.000288	0.00000997	0.00000855	0.00000142
590370.00	2367440.00	0.00207046	0.0001273	0.00010669	0.00002061	0.0011768	0.00014675	0.00012338	0.00002337
590870.00	2367440.00	0.0007688	0.00010586	0.00008952	0.00001635	0.0020923	0.00013111	0.00011249	0.00001862
591370.00	2367440.00	0.00206928	0.00009841	0.00008615	0.00001226	0.0020807	0.00011182	0.00009754	0.00001427
591870.00	2367440.00	0.00255427	0.00009146	0.00008264	0.00000882	0.001204	0.00009616	0.0000856	0.00001056
592370.00	2367440.00	0.00139884	0.00008058	0.00007447	0.00000612	0.0006809	0.00008506	0.0000777	0.00000736
592870.00	2367440.00	0.0005104	0.00007015	0.00006589	0.00000427	0.0004874	0.00007708	0.00007217	0.00000491
593370.00	2367440.00	0.00029616	0.00006191	0.00005872	0.0000032	0.0003504	0.00006755	0.00006426	0.00000329
593870.00	2367440.00	0.00032898	0.00006353	0.00006042	0.00000311	0.0003758	0.00006843	0.00006561	0.00000283
594370.00	2367440.00	0.00047732	0.0000713	0.00006798	0.00000332	0.0004617	0.00007446	0.0000716	0.00000286
594870.00	2367440.00	0.00084794	0.0000841	0.00008052	0.00000358	0.0005878	0.00008202	0.00007892	0.0000031
595370.00	2367440.00	0.00128986	0.00009633	0.00009257	0.00000376	0.0007649	0.00009213	0.00008877	0.00000337
595870.00	2367440.00	0.00210265	0.00010526	0.00010144	0.00000382	0.0013225	0.00010736	0.00010379	0.00000357
596370.00	2367440.00	0.00155115	0.00010139	0.00009762	0.00000377	0.002071	0.00011718	0.00011352	0.00000366
596870.00	2367440.00	0.00098592	0.00009388	0.00009022	0.00000366	0.0021767	0.00011524	0.00011159	0.00000365
597370.00	2367440.00	0.00080262	0.00008626	0.00008271	0.00000355	0.0019217	0.00010647	0.00010287	0.00000359
597870.00	2367440.00	0.00070231	0.00007885	0.00007538	0.00000347	0.0017005	0.00009631	0.00009278	0.00000354
598370.00	2367440.00	0.00056811	0.00007201	0.0000686	0.00000342	0.0014384	0.00008741	0.00008391	0.00000351
598870.00	2367440.00	0.00046767	0.00006626	0.00006286	0.0000034	0.0010465	0.00007974	0.00007624	0.0000035
599370.00	2367440.00	0.0004679	0.00006176	0.00005836	0.0000034	0.001065	0.00007446	0.00007096	0.00000349
599870.00	2367440.00	0.0004316	0.00005759	0.00005417	0.00000342	0.0008546	0.00006929	0.00006577	0.00000351
600370.00	2367440.00	0.00041991	0.00005379	0.00005035	0.00000344	0.0007724	0.00006483	0.00006129	0.00000354
600870.00	2367440.00	0.00041225	0.00005007	0.00004661	0.00000346	0.0007001	0.00006041	0.00005685	0.00000357
601370.00	2367440.00	0.00048278	0.00004662	0.00004316	0.00000346	0.0010446	0.00005693	0.00005337	0.00000357
601870.00	2367440.00	0.00049412	0.00004296	0.00003947	0.00000348	0.0010584	0.00005265	0.00004906	0.00000359
602370.00	2367440.00	0.0004849	0.00003925	0.00003574	0.00000351	0.0010524	0.00004843	0.00004483	0.00000361
602870.00	2367440.00	0.00050009	0.00003578	0.00003223	0.00000355	0.0010207	0.0000441	0.00004047	0.00000363
603370.00	2367440.00	0.00048986	0.00003246	0.00002886	0.00000359	0.0010055	0.00004017	0.00003651	0.00000366
603870.00	2367440.00	0.00048317	0.00002947	0.00002583	0.00000364	0.0009432	0.0000364	0.0000327	0.0000037
604370.00	2367440.00	0.00044613	0.0000268	0.00002311	0.00000368	0.0010059	0.00003354	0.0000298	0.00000373
604870.00	2367440.00	0.00043816	0.00002458	0.00002087	0.00000371	0.0009931	0.00003069	0.00002693	0.00000376
605370.00	2367440.00	0.00048586	0.00002285	0.00001914	0.00000371	0.0009789	0.00002792	0.00002416	0.00000376
605870.00	2367440.00	0.00043576	0.00002118	0.0000175	0.00000368	0.0009779	0.00002612	0.00002238	0.00000374
606370.00	2367440.00	0.00044102	0.0000199	0.00001628	0.00000361	0.0009744	0.00002433	0.00002065	0.00000368
606870.00	2367440.00	0.00042913	0.00001876	0.00001525	0.00000351	0.000925	0.00002275	0.00001917	0.00000358
607370.00	2367440.00	0.00045827	0.0000179	0.00001453	0.00000337	0.000946	0.00002141	0.00001796	0.00000346
607870.00	2367440.00	0.00053959	0.00001732	0.00001412	0.0000032	0.000848	0.00001983	0.00001653	0.00000329
608370.00	2367440.00	0.00043376	0.00001629	0.00001326	0.00000303	0.0009567	0.00001957	0.00001643	0.00000313
608870.00	2367440.00	0.00042917	0.00001563	0.00001278	0.00000284	0.000951	0.00001876	0.00001581	0.00000295
609370.00	2367440.00	0.00048495	0.00001522	0.00001258	0.00000265	0.0009151	0.00001774	0.00001499	0.00000275
609870.00	2367440.00	0.00053068	0.00001484	0.00001239	0.00000246	0.0008364	0.0000168	0.00001425	0.00000256
610370.00	2367440.00	0.00044102	0.00001413	0.00001183	0.00000231	0.0009172	0.00001674	0.00001434	0.0000024
610870.00	2367440.00	0.00032874	0.00001347	0.00001127	0.00000221	0.0007291	0.00001614	0.00001384	0.0000023
611370.00	2367440.00	0.00030254	0.00001318	0.00001106	0.00000212	0.0005748	0.0000154	0.00001319	0.00000221
611870.00	2367440.00	0.00061838	0.00001347	0.00001165	0.00000183	0.000616	0.00001411	0.00001223	0.00000188
612370.00	2367440.00	0.00049035	0.00001301	0.00001124	0.00000178	0.0009158	0.00001516	0.00001334	0.00000181
612870.00	2367440.00	0.00055752	0.00001303	0.00001135	0.00000168	0.0008672	0.00001464	0.00001295	0.00000169
613370.00	2367440.00	0.00028075	0.00001225	0.00001044	0.00000181	0.0004751	0.00001402	0.00001219	0.00000183
613870.00	2367440.00	0.00056493	0.00001266	0.00001112	0.00000154	0.0008035	0.00001394	0.00001243	0.00000151
614370.00	2367440.00	0.00053843	0.00001146	0.00001012	0.00000134	0.0004015	0.0000113	0.00001001	0.00000129
614870.00	2367440.00	0.00045508	0.00001088	0.00000959	0.00000129	0.0003612	0.0000108	0.00000958	0.00000121
615370.00	2367440.00	0.00058443	0.00001143	0.00001015	0.00000128	0.0004023	0.000011	0.00000981	0.00000119
615870.00	2367440.00	0.00068834	0.00001243	0.00001106	0.00000137	0.00058	0.00001224	0.00001097	0.00000127
616370.00	2367440.00	0.00032246	0.00001121	0.0000097	0.0000015	0.0006676	0.00001318	0.00001178	0.0000014
616870.00	2367440.00	0.00068974	0.00001208	0.00001075	0.00000134	0.0004858	0.00001149	0.00001028	0.00000121
617370.00	2367440.00	0.00041548	0.00001019	0.00000895	0.00000124	0.0003041	0.00000988	0.00000879	0.00000109
617870.00	2367440.00	0.00029896	0.00000933	0.00000812	0.00000121	0.0002563	0.00000933	0.00000827	0.00000105
618370.00	2367440.00	0.00034225	0.00000964	0.00000838	0.00000126	0.0002672	0.00000946	0.00000837	0.00000109
618870.00	2367440.00	0.00027505	0.00000915	0.00000789	0.00000126	0.0002426	0.00000916	0.00000807	0.00000109
619370.00	2367440.00	0.00029242	0.00000926	0.00000796	0.0000013	0.0002432	0.0000092	0.00000807	0.00000112
619870.00	2367440.00	0.00019526	0.00000845	0.00000717	0.00000128	0.000211	0.00000865	0.00000756	0.0000011
590370.00	2367940.00	0.00186783	0.00011696	0.00009842	0.00001854	0.0009987	0.00013328	0.00011242	0.00002085
590870.00	2367940.00	0.00223612	0.00010381	0.00008922	0.00001459	0.0013516	0.00011558	0.00009903	0.00001654

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591370.00	2367940.00	0.00227728	0.000093	0.00008191	0.00001109	0.0011057	0.00009963	0.00008675	0.00001288
591870.00	2367940.00	0.0020279	0.00008485	0.00007676	0.00000809	0.0008927	0.0000891	0.00007948	0.00000962
592370.00	2367940.00	0.0007589	0.00007305	0.00006743	0.00000562	0.0005456	0.00007883	0.00007212	0.00000671
592870.00	2367940.00	0.00044262	0.00006668	0.00006266	0.00000402	0.0004603	0.00007336	0.00006877	0.00000459
593370.00	2367940.00	0.00028367	0.00005923	0.0000562	0.00000303	0.0003345	0.00006448	0.00006137	0.00000311
593870.00	2367940.00	0.00031425	0.00006072	0.00005777	0.00000295	0.0003618	0.00006544	0.00006275	0.00000269
594370.00	2367940.00	0.00047179	0.00006808	0.00006496	0.00000313	0.0004445	0.00007107	0.00006838	0.0000027
594870.00	2367940.00	0.00094824	0.00008099	0.00007761	0.00000338	0.000585	0.0000786	0.00007568	0.00000292
595370.00	2367940.00	0.00158657	0.00009326	0.00008969	0.00000357	0.0008704	0.00009011	0.00008693	0.00000317
595870.00	2367940.00	0.00210067	0.0001001	0.00009644	0.00000366	0.0014508	0.00010257	0.00009919	0.00000338
596370.00	2367940.00	0.0016631	0.00009858	0.00009495	0.00000363	0.0018963	0.00010965	0.00010617	0.00000348
596870.00	2367940.00	0.00127063	0.00009395	0.00009042	0.00000353	0.0019763	0.00011125	0.00010777	0.00000348
597370.00	2367940.00	0.00094483	0.00008662	0.00008319	0.00000343	0.0019037	0.00010532	0.00010188	0.00000344
597870.00	2367940.00	0.0007454	0.00007914	0.00007579	0.00000335	0.001718	0.00009642	0.00009303	0.00000339
598370.00	2367940.00	0.00058642	0.00007228	0.00006899	0.00000329	0.0014764	0.00008766	0.0000843	0.00000336
598870.00	2367940.00	0.00052387	0.00006672	0.00006347	0.00000325	0.0013019	0.00008034	0.00007701	0.00000334
599370.00	2367940.00	0.00048702	0.00006206	0.00005882	0.00000324	0.0011742	0.00007457	0.00007124	0.00000333
599870.00	2367940.00	0.00045433	0.00005797	0.00005473	0.00000324	0.0010425	0.00006973	0.00006639	0.00000334
600370.00	2367940.00	0.00041898	0.00005424	0.00005097	0.00000327	0.0008559	0.00006517	0.00006181	0.00000336
600870.00	2367940.00	0.00040117	0.00005075	0.00004747	0.00000329	0.0007127	0.00006085	0.00005747	0.00000338
601370.00	2367940.00	0.0004725	0.00004767	0.00004438	0.00000329	0.0010086	0.00005763	0.00005424	0.00000339
601870.00	2367940.00	0.00049206	0.00004435	0.00004105	0.00000331	0.0010173	0.00005366	0.00005025	0.00000341
602370.00	2367940.00	0.00048261	0.00004089	0.00003756	0.00000333	0.001014	0.00004978	0.00004636	0.00000343
602870.00	2367940.00	0.00049727	0.00003758	0.00003423	0.00000335	0.0009778	0.0000457	0.00004225	0.00000344
603370.00	2367940.00	0.00048855	0.0000343	0.00003091	0.00000339	0.0009674	0.00004193	0.00003846	0.00000347
603870.00	2367940.00	0.00045469	0.00003116	0.00002773	0.00000343	0.0009876	0.00003859	0.00003509	0.0000035
604370.00	2367940.00	0.00045753	0.00002845	0.00002498	0.00000347	0.0009808	0.00003523	0.0000317	0.00000353
604870.00	2367940.00	0.00045634	0.00002605	0.00002254	0.00000351	0.000968	0.00003219	0.00002863	0.00000356
605370.00	2367940.00	0.00038777	0.00002385	0.0000203	0.00000355	0.0008887	0.00002974	0.00002615	0.00000359
605870.00	2367940.00	0.00052973	0.00002245	0.00001891	0.00000355	0.0008531	0.00002665	0.00002306	0.00000359
606370.00	2367940.00	0.00042906	0.00002073	0.0000172	0.00000353	0.0009377	0.00002539	0.00002182	0.00000358
606870.00	2367940.00	0.00039096	0.0000194	0.00001593	0.00000348	0.0009083	0.00002388	0.00002034	0.00000354
607370.00	2367940.00	0.00040645	0.00001839	0.000015	0.00000339	0.0009215	0.00002242	0.00001896	0.00000346
607870.00	2367940.00	0.0004675	0.00001766	0.00001439	0.00000327	0.0008862	0.00002081	0.00001747	0.00000334
608370.00	2367940.00	0.00032796	0.00001654	0.0000134	0.00000314	0.000724	0.00001997	0.00001674	0.00000323
608870.00	2367940.00	0.00031489	0.00001585	0.00001286	0.00000299	0.000656	0.00001892	0.00001582	0.00000309
609370.00	2367940.00	0.00055297	0.00001578	0.00001301	0.00000277	0.0007642	0.00001759	0.00001473	0.00000287
609870.00	2367940.00	0.00040869	0.00001482	0.0000122	0.00000262	0.0009056	0.00001774	0.00001502	0.00000272
610370.00	2367940.00	0.00037857	0.00001424	0.00001179	0.00000245	0.0008802	0.00001719	0.00001463	0.00000255
610870.00	2367940.00	0.00054777	0.00001427	0.00001202	0.00000225	0.0007465	0.00001575	0.00001341	0.00000234
611370.00	2367940.00	0.00054703	0.00001387	0.00001177	0.00000209	0.0007327	0.00001524	0.00001306	0.00000218
611870.00	2367940.00	0.00032676	0.00001296	0.00001093	0.00000203	0.0007374	0.00001556	0.00001345	0.00000212
612370.00	2367940.00	0.00027976	0.00001303	0.00001098	0.00000204	0.0004661	0.00001497	0.00001283	0.00000214
612870.00	2367940.00	0.00060901	0.00001295	0.00001127	0.00000168	0.0005505	0.00001334	0.00001161	0.00000172
613370.00	2367940.00	0.00027424	0.00001239	0.00001055	0.00000184	0.0004566	0.00001419	0.00001228	0.0000019
613870.00	2367940.00	0.00052255	0.00001253	0.00001098	0.00000155	0.0008345	0.00001413	0.00001257	0.00000157
614370.00	2367940.00	0.00072359	0.00001289	0.00001146	0.00000143	0.0006282	0.00001291	0.00001148	0.00000143
614870.00	2367940.00	0.00073956	0.00001269	0.00001132	0.00000136	0.0005694	0.0000124	0.00001106	0.00000133
615370.00	2367940.00	0.00051959	0.00001098	0.00000976	0.00000122	0.0003637	0.00001067	0.00000949	0.00000118
615870.00	2367940.00	0.000309	0.00000964	0.0000085	0.00000114	0.0002965	0.00000989	0.00000882	0.00000108
616370.00	2367940.00	0.0006956	0.00001217	0.00001091	0.00000126	0.0005333	0.0000118	0.00001062	0.00000118
616870.00	2367940.00	0.00049115	0.00001157	0.00001026	0.00000131	0.0007026	0.00001266	0.00001145	0.00000122
617370.00	2367940.00	0.00054783	0.00001166	0.00001037	0.00000128	0.0006431	0.00001224	0.00001106	0.00000118
617870.00	2367940.00	0.00058594	0.00001168	0.00001041	0.00000127	0.0005904	0.00001188	0.00001072	0.00000115
618370.00	2367940.00	0.00065138	0.00001166	0.00001043	0.00000123	0.0004742	0.00001114	0.00001003	0.00000111
618870.00	2367940.00	0.00060003	0.00001114	0.00000993	0.00000121	0.0003977	0.00001051	0.00000943	0.00000107
619370.00	2367940.00	0.0004405	0.00001012	0.00000895	0.00000117	0.0003071	0.00000973	0.0000087	0.00000103
619870.00	2367940.00	0.00022576	0.00000849	0.00000738	0.00000111	0.0002232	0.00000864	0.00000769	0.00000095
590370.00	2368440.00	0.00131665	0.00010566	0.00008894	0.00001672	0.0007056	0.00011943	0.00010075	0.00001868
590870.00	2368440.00	0.00061806	0.00008728	0.00007421	0.00001306	0.0005408	0.00009853	0.00008374	0.00001479
591370.00	2368440.00	0.00047925	0.00007703	0.00006714	0.00000989	0.0005105	0.00008616	0.00007464	0.00001151
591870.00	2368440.00	0.00068626	0.0000736	0.0000663	0.0000073	0.0005408	0.00007998	0.00007131	0.00000866
592370.00	2368440.00	0.00047148	0.0000673	0.00006212	0.00000518	0.0004763	0.00007393	0.00006779	0.00000614
592870.00	2368440.00	0.00029263	0.00005947	0.00005583	0.00000364	0.0003566	0.00006579	0.00006166	0.00000413
593370.00	2368440.00	0.00026165	0.00005447	0.00005166	0.00000281	0.000305	0.00005913	0.00005625	0.00000288
593870.00	2368440.00	0.00029681	0.00005801	0.00005523	0.00000278	0.0003437	0.00006252	0.00005998	0.00000254
594370.00	2368440.00	0.00043665	0.00006468	0.00006174	0.00000294	0.0004221	0.00006776	0.00006521	0.00000254
594870.00	2368440.00	0.00075316	0.00007467	0.0000715	0.00000317	0.0005216	0.00007347	0.00007075	0.00000272
595370.00	2368440.00	0.00158898	0.00008831	0.00008493	0.00000338	0.0008496	0.00008526	0.00008228	0.00000298

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
595870.00	2368440.00	0.00182119	0.00009478	0.0000913	0.00000348	0.0010446	0.00009366	0.00009049	0.00000317
596370.00	2368440.00	0.00190354	0.00009675	0.00009327	0.00000348	0.0014766	0.00010234	0.00009904	0.00000329
596870.00	2368440.00	0.00147133	0.00009321	0.0000898	0.00000341	0.0017612	0.00010519	0.00010186	0.00000332
597370.00	2368440.00	0.00095192	0.00008601	0.00008269	0.00000332	0.0019105	0.0001042	0.00010089	0.00000331
597870.00	2368440.00	0.00069809	0.00007886	0.00007562	0.00000324	0.0017058	0.00009659	0.00009332	0.00000327
598370.00	2368440.00	0.00059308	0.00007245	0.00006928	0.00000317	0.0014866	0.00008794	0.00008471	0.00000323
598870.00	2368440.00	0.00056359	0.00006708	0.00006396	0.00000312	0.0013786	0.0000805	0.00007731	0.0000032
599370.00	2368440.00	0.00050253	0.0000623	0.0000592	0.0000031	0.001228	0.00007454	0.00007136	0.00000318
599870.00	2368440.00	0.00045996	0.0000582	0.00005511	0.0000031	0.0010891	0.00006967	0.00006648	0.00000319
600370.00	2368440.00	0.00042387	0.00005456	0.00005145	0.00000311	0.0009366	0.00006536	0.00006216	0.0000032
600870.00	2368440.00	0.00039872	0.00005122	0.00004809	0.00000313	0.0007609	0.00006112	0.0000579	0.00000322
601370.00	2368440.00	0.00050934	0.00004866	0.00004554	0.00000312	0.0009574	0.0000577	0.00005448	0.00000323
601870.00	2368440.00	0.00044024	0.00004517	0.00004202	0.00000315	0.0009446	0.00005448	0.00005123	0.00000325
602370.00	2368440.00	0.00047101	0.00004217	0.000039	0.00000316	0.0009718	0.00005081	0.00004755	0.00000326
602870.00	2368440.00	0.00047153	0.00003901	0.00003583	0.00000318	0.0009667	0.00004719	0.00004391	0.00000328
603370.00	2368440.00	0.00047772	0.00003593	0.00003272	0.00000321	0.00089	0.00004334	0.00004005	0.0000033
603870.00	2368440.00	0.00045333	0.00003286	0.00002961	0.00000324	0.0009565	0.00004022	0.0000369	0.00000332
604370.00	2368440.00	0.00037261	0.00002988	0.00002659	0.00000329	0.0007656	0.00003675	0.0000334	0.00000335
604870.00	2368440.00	0.00043969	0.00002751	0.00002419	0.00000332	0.0009372	0.00003388	0.00003051	0.00000338
605370.00	2368440.00	0.00044427	0.00002529	0.00002194	0.00000336	0.000872	0.00003088	0.00002748	0.0000034
605870.00	2368440.00	0.00039831	0.00002326	0.00001987	0.00000339	0.0008996	0.00002881	0.00002537	0.00000343
606370.00	2368440.00	0.00044345	0.00002174	0.00001834	0.0000034	0.0009016	0.00002642	0.00002298	0.00000344
606870.00	2368440.00	0.00056221	0.00002065	0.00001726	0.00000339	0.0007121	0.00002363	0.0000202	0.00000342
607370.00	2368440.00	0.00044349	0.00001919	0.00001584	0.00000335	0.000881	0.00002299	0.00001959	0.00000339
607870.00	2368440.00	0.00044706	0.0000182	0.00001493	0.00000327	0.0008717	0.00002162	0.00001829	0.00000333
608370.00	2368440.00	0.000412	0.00001724	0.00001406	0.00000317	0.0008836	0.00002068	0.00001744	0.00000324
608870.00	2368440.00	0.00044874	0.00001658	0.00001354	0.00000304	0.0008624	0.00001947	0.00001636	0.00000311
609370.00	2368440.00	0.00054994	0.00001618	0.0000133	0.00000289	0.0007091	0.00001793	0.00001496	0.00000296
609870.00	2368440.00	0.00046965	0.00001537	0.00001264	0.00000273	0.0008312	0.00001771	0.0000149	0.00000282
610370.00	2368440.00	0.00050693	0.00001493	0.00001237	0.00000256	0.0007717	0.00001681	0.00001416	0.00000265
610870.00	2368440.00	0.00028771	0.00001402	0.00001155	0.00000247	0.0005408	0.00001637	0.0000138	0.00000257
611370.00	2368440.00	0.00052516	0.00001406	0.00001183	0.00000223	0.0007281	0.00001554	0.00001323	0.00000232
611870.00	2368440.00	0.00036652	0.00001327	0.00001115	0.00000212	0.0008721	0.0000161	0.00001389	0.00000221
612370.00	2368440.00	0.00027983	0.00001284	0.00001079	0.00000205	0.0005143	0.00001489	0.00001275	0.00000214
612870.00	2368440.00	0.00027361	0.00001329	0.00001121	0.00000207	0.0004503	0.00001532	0.00001312	0.0000022
613370.00	2368440.00	0.00067689	0.00001332	0.00001164	0.00000168	0.000726	0.00001397	0.00001224	0.00000174
613870.00	2368440.00	0.00064276	0.00001297	0.00001139	0.00000158	0.000736	0.00001375	0.00001213	0.00000162
614370.00	2368440.00	0.00073766	0.0000126	0.00001117	0.00000143	0.0005045	0.00001222	0.00001076	0.00000146
614870.00	2368440.00	0.00062973	0.00001178	0.00001045	0.00000133	0.0004294	0.00001146	0.00001012	0.00000134
615370.00	2368440.00	0.00072818	0.00001246	0.00001115	0.00000131	0.0005459	0.00001215	0.00001084	0.00000131
615870.00	2368440.00	0.00070015	0.00001201	0.00001077	0.00000124	0.0004874	0.00001156	0.00001035	0.00000121
616370.00	2368440.00	0.00049658	0.00001063	0.0000095	0.00000113	0.0003475	0.00001033	0.00000923	0.00000109
616870.00	2368440.00	0.00032711	0.00000939	0.00000834	0.00000105	0.0002714	0.00000946	0.00000847	0.00000099
617370.00	2368440.00	0.00067201	0.00001167	0.00001053	0.00000114	0.0004743	0.00001118	0.0000101	0.00000107
617870.00	2368440.00	0.00055368	0.00001077	0.00000969	0.00000108	0.0003761	0.00001033	0.00000933	0.000001
618370.00	2368440.00	0.00063627	0.0000113	0.00001019	0.00000111	0.0004364	0.00001074	0.00000972	0.00000101
618870.00	2368440.00	0.00040024	0.00000971	0.00000869	0.00000102	0.0002909	0.00000943	0.00000851	0.00000092
619370.00	2368440.00	0.00045766	0.00001006	0.00000902	0.00000105	0.0003172	0.00000967	0.00000874	0.00000093
619870.00	2368440.00	0.00019184	0.00000801	0.00000706	0.00000095	0.0002114	0.00000827	0.00000745	0.00000082
590370.00	2368940.00	0.00069134	0.00010013	0.00008448	0.00001564	0.0017759	0.00012204	0.00010465	0.00001739
590870.00	2368940.00	0.00161604	0.0000893	0.00007718	0.00001212	0.0007813	0.00009736	0.00008371	0.00001365
591370.00	2368940.00	0.00039319	0.00007236	0.00006331	0.00000905	0.000459	0.00008082	0.00007031	0.00001051
591870.00	2368940.00	0.0004922	0.00006855	0.00006183	0.00000672	0.0004854	0.00007524	0.00006732	0.00000792
592370.00	2368940.00	0.00034531	0.00006116	0.00005639	0.00000477	0.0004175	0.00006761	0.000062	0.00000562
592870.00	2368940.00	0.00028078	0.00005661	0.00005315	0.00000346	0.0003406	0.00006222	0.00005832	0.00000389
593370.00	2368940.00	0.00025238	0.00005219	0.00004954	0.00000265	0.0002968	0.00005676	0.00005404	0.00000272
593870.00	2368940.00	0.00027795	0.00005545	0.00005283	0.00000262	0.0003225	0.00005967	0.00005728	0.0000024
594370.00	2368940.00	0.00036645	0.00005988	0.00005712	0.00000276	0.0003873	0.00006371	0.00006133	0.00000238
594870.00	2368940.00	0.00062608	0.00006883	0.00006585	0.00000298	0.0004773	0.00006925	0.00006669	0.00000255
595370.00	2368940.00	0.00116324	0.00008097	0.00007778	0.00000319	0.0006647	0.0000777	0.00007492	0.00000279
595870.00	2368940.00	0.0017639	0.00009001	0.00008669	0.00000332	0.0009935	0.00008834	0.00008534	0.000003
596370.00	2368940.00	0.00188704	0.00009318	0.00008984	0.00000335	0.001379	0.00009691	0.00009378	0.00000313
596870.00	2368940.00	0.00150733	0.00009086	0.00008756	0.0000033	0.0016798	0.00010127	0.00009809	0.00000318
597370.00	2368940.00	0.00095058	0.00008506	0.00008184	0.00000322	0.0019131	0.00010254	0.00009935	0.00000319
597870.00	2368940.00	0.00075311	0.00007894	0.0000758	0.00000314	0.001735	0.00009621	0.00009306	0.00000315
598370.00	2368940.00	0.00072911	0.00007323	0.00007017	0.00000306	0.0015564	0.0000879	0.0000848	0.0000031
598870.00	2368940.00	0.00061158	0.00006747	0.00006446	0.00000301	0.0014158	0.00008061	0.00007754	0.00000307
599370.00	2368940.00	0.00053829	0.00006262	0.00005964	0.00000298	0.0012868	0.00007455	0.0000715	0.00000305
599870.00	2368940.00	0.00048391	0.00005848	0.00005552	0.00000297	0.0011628	0.00006965	0.0000666	0.00000305

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
600370.00	2368940.00	0.00042804	0.00005478	0.00005181	0.00000297	0.000893	0.0000648	0.00006174	0.00000305
600870.00	2368940.00	0.00038132	0.00005148	0.00004849	0.00000299	0.0007162	0.00006103	0.00005795	0.00000308
601370.00	2368940.00	0.0004737	0.00004902	0.00004604	0.00000298	0.0008959	0.00005786	0.00005478	0.00000308
601870.00	2368940.00	0.00044577	0.00004598	0.00004297	0.000003	0.0009319	0.0000549	0.0000518	0.0000031
602370.00	2368940.00	0.00047052	0.0000432	0.00004018	0.00000302	0.0009309	0.00005147	0.00004836	0.00000311
602870.00	2368940.00	0.00044123	0.00004014	0.00003711	0.00000304	0.0009245	0.00004828	0.00004515	0.00000313
603370.00	2368940.00	0.0004621	0.00003731	0.00003426	0.00000305	0.0008579	0.00004462	0.00004148	0.00000314
603870.00	2368940.00	0.0004386	0.00003435	0.00003127	0.00000308	0.0009087	0.00004162	0.00003846	0.00000316
604370.00	2368940.00	0.00043683	0.00003159	0.00002849	0.00000311	0.0009157	0.00003847	0.00003529	0.00000318
604870.00	2368940.00	0.00049905	0.00002922	0.00002608	0.00000314	0.0008549	0.00003499	0.00003179	0.0000032
605370.00	2368940.00	0.00042344	0.00002664	0.00002346	0.00000318	0.0008934	0.00003263	0.0000294	0.00000323
605870.00	2368940.00	0.00041416	0.00002454	0.00002132	0.00000322	0.0008361	0.00002994	0.00002668	0.00000326
606370.00	2368940.00	0.00046387	0.00002287	0.00001963	0.00000325	0.0008494	0.00002748	0.00002419	0.00000328
606870.00	2368940.00	0.00040434	0.00002118	0.00001791	0.00000326	0.0008688	0.00002586	0.00002256	0.0000033
607370.00	2368940.00	0.00029685	0.00002	0.00001673	0.00000327	0.0004945	0.00002384	0.00002052	0.00000333
607870.00	2368940.00	0.00033894	0.00001861	0.00001538	0.00000323	0.0007748	0.00002277	0.00001949	0.00000327
608370.00	2368940.00	0.00058242	0.0000182	0.00001504	0.00000316	0.0005934	0.00001999	0.00001679	0.0000032
608870.00	2368940.00	0.00038211	0.0000169	0.00001382	0.00000308	0.0008451	0.00002035	0.00001722	0.00000313
609370.00	2368940.00	0.00032832	0.00001604	0.00001307	0.00000297	0.0007589	0.00001942	0.00001638	0.00000304
609870.00	2368940.00	0.00035966	0.00001546	0.00001262	0.00000284	0.0008274	0.00001863	0.00001572	0.00000291
610370.00	2368940.00	0.00054127	0.00001537	0.0000127	0.00000268	0.0006676	0.00001685	0.0000141	0.00000275
610870.00	2368940.00	0.00037575	0.0000144	0.00001186	0.00000254	0.0008356	0.00001718	0.00001456	0.00000262
611370.00	2368940.00	0.00059496	0.00001444	0.00001209	0.00000235	0.000554	0.00001517	0.00001274	0.00000243
611870.00	2368940.00	0.00026887	0.00001365	0.00001133	0.00000232	0.0004543	0.00001572	0.00001329	0.00000243
612370.00	2368940.00	0.00034001	0.00001306	0.00001095	0.0000021	0.0008065	0.00001579	0.0000136	0.00000219
612870.00	2368940.00	0.00037531	0.00001282	0.00001086	0.00000196	0.0008659	0.00001546	0.00001342	0.00000204
613370.00	2368940.00	0.00026303	0.00001256	0.00001062	0.00000194	0.0004446	0.00001441	0.00001237	0.00000204
613870.00	2368940.00	0.00026193	0.00001219	0.00001037	0.00000182	0.0004494	0.00001398	0.00001207	0.00000191
614370.00	2368940.00	0.00063123	0.0000128	0.00001124	0.00000156	0.0007144	0.00001354	0.00001193	0.00000161
614870.00	2368940.00	0.00065753	0.00001203	0.00001062	0.0000014	0.0004423	0.00001171	0.00001027	0.00000144
615370.00	2368940.00	0.0005365	0.00001116	0.00000987	0.00000129	0.0003689	0.00001093	0.00000961	0.00000132
615870.00	2368940.00	0.00036519	0.0000099	0.00000872	0.00000118	0.0002865	0.00000997	0.00000878	0.00000119
616370.00	2368940.00	0.00042501	0.00001018	0.00000905	0.00000113	0.0003085	0.00001003	0.00000891	0.00000113
616870.00	2368940.00	0.0004728	0.00001037	0.00000928	0.00000109	0.0003308	0.00001012	0.00000905	0.00000107
617370.00	2368940.00	0.0003268	0.00000929	0.00000828	0.00000101	0.0002672	0.00000936	0.00000838	0.00000098
617870.00	2368940.00	0.00027959	0.00000889	0.00000792	0.00000097	0.0002526	0.00000906	0.00000815	0.00000091
618370.00	2368940.00	0.00023224	0.00000844	0.00000752	0.00000092	0.0002374	0.00000873	0.00000787	0.00000085
618870.00	2368940.00	0.00029577	0.00000888	0.00000795	0.00000093	0.0002502	0.00000893	0.00000808	0.00000085
619370.00	2368940.00	0.00025837	0.00000855	0.00000765	0.0000009	0.0002378	0.00000869	0.00000787	0.00000081
619870.00	2368940.00	0.00017571	0.00000756	0.00000673	0.00000083	0.0002016	0.00000786	0.00000713	0.00000073
590370.00	2369440.00	0.00052009	0.00009496	0.00008042	0.00001454	0.00089	0.00011312	0.000097	0.00001612
590870.00	2369440.00	0.00083868	0.00008427	0.00007285	0.00001142	0.0021192	0.00010127	0.00008847	0.0000128
591370.00	2369440.00	0.00211556	0.00008139	0.00007265	0.00000875	0.0013964	0.00008706	0.00007704	0.00001002
591870.00	2369440.00	0.0020187	0.00007543	0.00006892	0.00000651	0.0009152	0.00007796	0.00007038	0.00000758
592370.00	2369440.00	0.00114172	0.00006781	0.00006307	0.00000474	0.0005753	0.00007079	0.0000653	0.0000055
592870.00	2369440.00	0.00049367	0.00006081	0.00005732	0.00000349	0.000435	0.00006548	0.0000616	0.00000388
593370.00	2369440.00	0.00025039	0.00005157	0.00004899	0.00000259	0.0002917	0.00005577	0.00005313	0.00000264
593870.00	2369440.00	0.00026249	0.00005289	0.00005042	0.00000247	0.0003026	0.0000567	0.00005444	0.00000227
594370.00	2369440.00	0.00031287	0.0000554	0.00005281	0.00000259	0.0003479	0.00005881	0.00005658	0.00000224
594870.00	2369440.00	0.00041861	0.00006181	0.00005902	0.00000279	0.0004075	0.00006411	0.00006175	0.00000237
595370.00	2369440.00	0.00100611	0.00007568	0.00007266	0.00000302	0.0005907	0.00007293	0.00007031	0.00000262
595870.00	2369440.00	0.00160236	0.00008501	0.00008185	0.00000316	0.0008878	0.00008286	0.00008004	0.00000283
596370.00	2369440.00	0.0018238	0.0000892	0.00008598	0.00000322	0.0013817	0.00009233	0.00008935	0.00000298
596870.00	2369440.00	0.00147205	0.0000886	0.0000854	0.00000319	0.001678	0.00009746	0.00009442	0.00000305
597370.00	2369440.00	0.00125953	0.00008541	0.00008229	0.00000311	0.0016561	0.00009874	0.0000957	0.00000305
597870.00	2369440.00	0.00094463	0.0000795	0.00007646	0.00000304	0.0016704	0.00009477	0.00009175	0.00000302
598370.00	2369440.00	0.00081354	0.00007366	0.0000707	0.00000296	0.0015298	0.00008767	0.00008469	0.00000298
598870.00	2369440.00	0.00064803	0.00006778	0.00006486	0.00000291	0.0014233	0.00008074	0.00007779	0.00000295
599370.00	2369440.00	0.00055958	0.00006284	0.00005997	0.00000287	0.0013011	0.00007456	0.00007163	0.00000293
599870.00	2369440.00	0.00047654	0.00005855	0.00005569	0.00000286	0.0011495	0.00006948	0.00006655	0.00000293
600370.00	2369440.00	0.00042347	0.00005489	0.00005204	0.00000285	0.0008893	0.00006459	0.00006166	0.00000293
600870.00	2369440.00	0.00035223	0.00005186	0.00004898	0.00000288	0.0005673	0.00006103	0.00005806	0.00000298
601370.00	2369440.00	0.00045152	0.00004927	0.00004641	0.00000286	0.0008759	0.00005793	0.00005498	0.00000294
601870.00	2369440.00	0.00042881	0.00004645	0.00004358	0.00000287	0.0009011	0.00005515	0.00005219	0.00000296
602370.00	2369440.00	0.00060119	0.00004463	0.00004175	0.00000287	0.0007175	0.00005071	0.00004774	0.00000297
602870.00	2369440.00	0.00045354	0.0000412	0.0000383	0.0000029	0.0008937	0.00004891	0.00004592	0.00000299
603370.00	2369440.00	0.00042555	0.00003836	0.00003544	0.00000291	0.0008873	0.00004595	0.00004295	0.00000301
603870.00	2369440.00	0.00044386	0.00003573	0.0000328	0.00000293	0.0008902	0.00004279	0.00003977	0.00000302
604370.00	2369440.00	0.00045323	0.0000331	0.00003015	0.00000295	0.0008825	0.00003968	0.00003665	0.00000303

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
604870.00	2369440.00	0.00040859	0.00003038	0.0000274	0.00000298	0.0008678	0.00003691	0.00003386	0.00000305
605370.00	2369440.00	0.00043837	0.0000281	0.00002508	0.00000301	0.0008645	0.00003395	0.00003088	0.00000307
605870.00	2369440.00	0.0004167	0.00002585	0.0000228	0.00000305	0.0008579	0.00003144	0.00002834	0.0000031
606370.00	2369440.00	0.00041535	0.00002391	0.00002083	0.00000309	0.0008531	0.00002907	0.00002594	0.00000313
606870.00	2369440.00	0.00030641	0.00002215	0.00001902	0.00000313	0.0005611	0.00002672	0.00002355	0.00000317
607370.00	2369440.00	0.00042478	0.00002079	0.00001765	0.00000313	0.0008247	0.00002496	0.0000218	0.00000316
607870.00	2369440.00	0.00042406	0.00001954	0.00001641	0.00000313	0.0008138	0.00002332	0.00002016	0.00000316
608370.00	2369440.00	0.00036473	0.00001832	0.00001521	0.00000311	0.0008126	0.00002225	0.0000191	0.00000315
608870.00	2369440.00	0.00041857	0.00001755	0.00001449	0.00000306	0.0008033	0.00002073	0.00001763	0.0000031
609370.00	2369440.00	0.00053166	0.00001703	0.00001405	0.00000298	0.0006282	0.00001886	0.00001583	0.00000302
609870.00	2369440.00	0.00036517	0.0000159	0.00001301	0.00000289	0.0008084	0.00001906	0.00001612	0.00000294
610370.00	2369440.00	0.00051256	0.00001568	0.00001292	0.00000276	0.0006579	0.00001734	0.00001451	0.00000282
610870.00	2369440.00	0.00035475	0.00001474	0.00001209	0.00000264	0.0008473	0.00001786	0.00001515	0.00000271
611370.00	2369440.00	0.00026901	0.00001417	0.00001163	0.00000253	0.0004843	0.00001645	0.00001383	0.00000262
611870.00	2369440.00	0.00033022	0.0000137	0.00001133	0.00000236	0.0007855	0.00001654	0.00001409	0.00000244
612370.00	2369440.00	0.00059054	0.00001414	0.00001195	0.00000219	0.0007889	0.00001552	0.00001325	0.00000227
612870.00	2369440.00	0.00046487	0.00001335	0.00001129	0.00000206	0.0008779	0.00001551	0.00001337	0.00000214
613370.00	2369440.00	0.00027019	0.00001248	0.00001049	0.00000198	0.0005248	0.00001453	0.00001246	0.00000207
613870.00	2369440.00	0.00055216	0.00001298	0.0000112	0.00000179	0.0007869	0.00001435	0.00001249	0.00000186
614370.00	2369440.00	0.00065667	0.000013	0.00001134	0.00000165	0.0006753	0.00001354	0.00001183	0.00000172
614870.00	2369440.00	0.0004624	0.00001216	0.00001059	0.00000157	0.000816	0.00001395	0.00001232	0.00000163
615370.00	2369440.00	0.00069836	0.00001223	0.00001082	0.00000141	0.0004713	0.00001188	0.00001043	0.00000145
615870.00	2369440.00	0.00049205	0.00001083	0.00000955	0.00000128	0.0003402	0.00001064	0.00000932	0.00000131
616370.00	2369440.00	0.00045253	0.00001043	0.00000924	0.00000119	0.0003219	0.00001026	0.00000904	0.00000122
616870.00	2369440.00	0.00042999	0.00001015	0.00000903	0.00000112	0.0003109	0.00001	0.00000887	0.00000113
617370.00	2369440.00	0.00041288	0.00000992	0.00000886	0.00000106	0.0003023	0.00000978	0.00000872	0.00000106
617870.00	2369440.00	0.00038258	0.00000962	0.00000861	0.00000101	0.0002837	0.0000095	0.00000851	0.00000099
618370.00	2369440.00	0.00022675	0.00000841	0.00000749	0.00000092	0.0002323	0.00000874	0.00000786	0.00000088
618870.00	2369440.00	0.00018978	0.00000791	0.00000705	0.00000086	0.0002162	0.00000829	0.00000747	0.00000081
619370.00	2369440.00	0.00018295	0.00000774	0.00000691	0.00000082	0.0002095	0.00000809	0.00000732	0.00000077
619870.00	2369440.00	0.00016966	0.00000725	0.00000648	0.00000077	0.0001948	0.00000757	0.00000687	0.0000007
590370.00	2369940.00	0.00049966	0.00009017	0.00007675	0.00001342	0.0008261	0.00010669	0.00009186	0.00001483
590870.00	2369940.00	0.00050375	0.00007972	0.00006901	0.00001071	0.0010402	0.00009383	0.00008186	0.00001197
591370.00	2369940.00	0.00080884	0.00007382	0.00006554	0.00000828	0.002211	0.00008814	0.00007872	0.00000943
591870.00	2369940.00	0.00210407	0.00007397	0.00006779	0.00000617	0.0014994	0.0000781	0.00007097	0.00000714
592370.00	2369940.00	0.00193715	0.00006956	0.000065	0.00000456	0.0008567	0.000071	0.00006576	0.00000524
592870.00	2369940.00	0.00073225	0.0000611	0.00005771	0.00000339	0.0004697	0.00006436	0.00006062	0.00000374
593370.00	2369940.00	0.00042261	0.00005679	0.00005406	0.00000273	0.0003933	0.00006098	0.00005819	0.00000279
593870.00	2369940.00	0.0002506	0.00005087	0.00004852	0.00000234	0.0002888	0.00005445	0.00005229	0.00000215
594370.00	2369940.00	0.00027672	0.00005254	0.0000501	0.00000243	0.0003131	0.00005584	0.00005374	0.00000209
594870.00	2369940.00	0.00042768	0.00005972	0.00005707	0.00000265	0.0003975	0.00006172	0.00005947	0.00000225
595370.00	2369940.00	0.00090338	0.00007123	0.00006837	0.00000286	0.0005418	0.00006898	0.00006652	0.00000246
595870.00	2369940.00	0.00159559	0.00008096	0.00007795	0.00000301	0.0008712	0.00007875	0.00007608	0.00000267
596370.00	2369940.00	0.00180779	0.00008573	0.00008264	0.00000308	0.0011634	0.00008648	0.00008366	0.00000282
596870.00	2369940.00	0.00166465	0.00008662	0.00008355	0.00000307	0.001357	0.00009183	0.00008893	0.0000029
597370.00	2369940.00	0.0011893	0.00008348	0.00008045	0.00000303	0.0017055	0.00009647	0.00009354	0.00000293
597870.00	2369940.00	0.00114064	0.00007988	0.00007693	0.00000294	0.0015063	0.00009265	0.00008975	0.0000029
598370.00	2369940.00	0.00089445	0.00007397	0.00007109	0.00000287	0.0014859	0.00008724	0.00008437	0.00000287
598870.00	2369940.00	0.00067389	0.000068	0.00006518	0.00000282	0.0014251	0.0000809	0.00007806	0.00000285
599370.00	2369940.00	0.0005833	0.00006308	0.0000603	0.00000278	0.0013089	0.00007463	0.00007181	0.00000283
599870.00	2369940.00	0.00049702	0.00005875	0.000056	0.00000275	0.001182	0.00006946	0.00006664	0.00000281
600370.00	2369940.00	0.00040198	0.00005486	0.00005212	0.00000274	0.0008427	0.00006437	0.00006155	0.00000282
600870.00	2369940.00	0.00034273	0.00005203	0.00004926	0.00000277	0.0005465	0.00006102	0.00005816	0.00000286
601370.00	2369940.00	0.0004326	0.0000494	0.00004666	0.00000274	0.0008715	0.00005792	0.0000551	0.00000282
601870.00	2369940.00	0.0004501	0.00004695	0.0000442	0.00000275	0.0008876	0.00005509	0.00005225	0.00000283
602370.00	2369940.00	0.00044678	0.00004443	0.00004167	0.00000276	0.0008696	0.00005224	0.00004939	0.00000285
602870.00	2369940.00	0.00042173	0.00004181	0.00003903	0.00000277	0.0008609	0.00004952	0.00004666	0.00000287
603370.00	2369940.00	0.00043587	0.00003936	0.00003658	0.00000279	0.0008578	0.00004659	0.00004371	0.00000288
603870.00	2369940.00	0.00034952	0.00003649	0.00003368	0.00000281	0.000687	0.0000436	0.00004071	0.00000289
604370.00	2369940.00	0.00045243	0.00003438	0.00003156	0.00000281	0.0008439	0.00004075	0.00003785	0.0000029
604870.00	2369940.00	0.00039786	0.00003169	0.00002885	0.00000284	0.0008436	0.00003819	0.00003527	0.00000292
605370.00	2369940.00	0.00044254	0.00002948	0.00002661	0.00000286	0.0008303	0.00003521	0.00003228	0.00000293
605870.00	2369940.00	0.00045288	0.00002728	0.00002439	0.00000289	0.0007941	0.00003246	0.00002951	0.00000295
606370.00	2369940.00	0.00044648	0.00002522	0.00002229	0.00000293	0.0007908	0.00003007	0.0000271	0.00000297
606870.00	2369940.00	0.00040381	0.00002328	0.00002032	0.00000296	0.0008209	0.00002817	0.00002516	0.000003
607370.00	2369940.00	0.00055643	0.000022	0.00001902	0.00000299	0.0005796	0.0000249	0.00002188	0.00000302
607870.00	2369940.00	0.0003972	0.00002029	0.00001728	0.00000301	0.0008008	0.00002442	0.00002138	0.00000304
608370.00	2369940.00	0.0004392	0.00001922	0.00001621	0.00000301	0.0007494	0.00002257	0.00001953	0.00000304
608870.00	2369940.00	0.00038253	0.00001806	0.00001506	0.000003	0.0007893	0.00002163	0.0000186	0.00000303

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
609370.00	2369940.00	0.00026832	0.00001748	0.0000145	0.00000298	0.0004279	0.00002047	0.00001743	0.00000304
609870.00	2369940.00	0.00050922	0.00001674	0.00001384	0.00000289	0.0006173	0.00001857	0.00001564	0.00000293
610370.00	2369940.00	0.00050628	0.00001606	0.00001326	0.00000281	0.00062	0.00001773	0.00001488	0.00000285
610870.00	2369940.00	0.00052508	0.0000155	0.0000128	0.0000027	0.0005865	0.00001684	0.00001409	0.00000275
611370.00	2369940.00	0.00039951	0.00001465	0.00001207	0.00000258	0.0007677	0.00001703	0.00001439	0.00000264
611870.00	2369940.00	0.000315	0.00001396	0.0000115	0.00000247	0.0007396	0.0000168	0.00001426	0.00000254
612370.00	2369940.00	0.00047529	0.00001405	0.00001173	0.00000231	0.0008534	0.00001618	0.0000138	0.00000238
612870.00	2369940.00	0.00043552	0.0000135	0.00001132	0.00000218	0.0008626	0.0000158	0.00001355	0.00000225
613370.00	2369940.00	0.0003859	0.00001296	0.00001091	0.00000205	0.0008485	0.00001545	0.00001332	0.00000213
613870.00	2369940.00	0.00054236	0.00001292	0.00001104	0.00000188	0.0005289	0.00001352	0.00001157	0.00000195
614370.00	2369940.00	0.00049796	0.00001173	0.00001002	0.0000017	0.0003408	0.00001164	0.00000987	0.00000177
614870.00	2369940.00	0.00072147	0.00001276	0.00001114	0.00000162	0.0004857	0.00001246	0.00001077	0.00000168
615370.00	2369940.00	0.00049496	0.00001216	0.00001061	0.00000156	0.0007682	0.00001362	0.000012	0.00000162
615870.00	2369940.00	0.00057044	0.00001217	0.00001072	0.00000145	0.0006886	0.000013	0.0000115	0.0000015
616370.00	2369940.00	0.00062828	0.00001211	0.00001076	0.00000135	0.0006184	0.00001242	0.00001102	0.00000139
616870.00	2369940.00	0.00063667	0.00001149	0.00001026	0.00000123	0.0004271	0.00001112	0.00000986	0.00000126
617370.00	2369940.00	0.00054308	0.00001077	0.00000963	0.00000114	0.0003686	0.0000105	0.00000934	0.00000116
617870.00	2369940.00	0.00049718	0.00001039	0.00000932	0.00000107	0.0003418	0.00001012	0.00000904	0.00000108
618370.00	2369940.00	0.00023423	0.00000849	0.00000754	0.00000095	0.0002356	0.00000883	0.00000788	0.00000095
618870.00	2369940.00	0.00019571	0.00000803	0.00000715	0.00000089	0.0002182	0.00000843	0.00000756	0.00000087
619370.00	2369940.00	0.00017618	0.00000758	0.00000676	0.00000082	0.0002036	0.00000795	0.00000716	0.00000079
619870.00	2369940.00	0.00018724	0.00000777	0.00000696	0.00000081	0.0002105	0.00000813	0.00000736	0.00000077
590370.00	2370440.00	0.00048284	0.00008496	0.00007265	0.00001231	0.0008222	0.00009992	0.00008637	0.00001355
590870.00	2370440.00	0.00047975	0.00007616	0.00006623	0.00000993	0.000948	0.00008901	0.00007794	0.00001107
591370.00	2370440.00	0.00065255	0.00007036	0.00006263	0.00000773	0.0019525	0.00008388	0.00007512	0.00000877
591870.00	2370440.00	0.00114279	0.0000682	0.00006231	0.00000589	0.0022312	0.00007903	0.00007228	0.00000675
592370.00	2370440.00	0.00211677	0.00006882	0.00006442	0.00000439	0.0013781	0.0000715	0.00006649	0.00000501
592870.00	2370440.00	0.00172007	0.00006475	0.00006141	0.00000334	0.0007488	0.0000657	0.00006203	0.00000367
593370.00	2370440.00	0.00081126	0.00005902	0.00005632	0.0000027	0.0004602	0.00006109	0.00005834	0.00000275
593870.00	2370440.00	0.00037983	0.0000543	0.00005192	0.00000238	0.0003657	0.00005778	0.00005556	0.00000222
594370.00	2370440.00	0.00026794	0.00005074	0.00004842	0.00000232	0.0003046	0.00005391	0.00005191	0.000002
594870.00	2370440.00	0.00045764	0.00005826	0.00005575	0.00000252	0.000395	0.00005982	0.00005768	0.00000214
595370.00	2370440.00	0.00081323	0.00006725	0.00006454	0.00000271	0.0005035	0.00006544	0.00006312	0.00000232
595870.00	2370440.00	0.00138675	0.00007619	0.00007332	0.00000287	0.0007482	0.0000738	0.00007127	0.00000252
596370.00	2370440.00	0.00171355	0.00008188	0.00007892	0.00000295	0.0010107	0.00008129	0.00007861	0.00000268
596870.00	2370440.00	0.00154749	0.00008316	0.00008018	0.00000297	0.0014379	0.00008849	0.0000857	0.00000278
597370.00	2370440.00	0.00147627	0.00008281	0.00007989	0.00000292	0.0013523	0.00009001	0.00008721	0.00000281
597870.00	2370440.00	0.00121952	0.00007907	0.00007621	0.00000286	0.0014208	0.0000892	0.0000864	0.0000028
598370.00	2370440.00	0.0009548	0.00007402	0.00007123	0.00000279	0.0014481	0.0000866	0.00008383	0.00000277
598870.00	2370440.00	0.00074635	0.0000684	0.00006566	0.00000273	0.0014057	0.00008078	0.00007803	0.00000275
599370.00	2370440.00	0.0005272	0.00006291	0.00006021	0.0000027	0.0012671	0.00007494	0.0000722	0.00000273
599870.00	2370440.00	0.00048325	0.00005878	0.00005611	0.00000266	0.0011604	0.00006947	0.00006676	0.00000272
600370.00	2370440.00	0.00034653	0.00005501	0.00005234	0.00000267	0.0005865	0.00006441	0.00006166	0.00000275
600870.00	2370440.00	0.00040982	0.00005204	0.00004941	0.00000263	0.0008512	0.00006074	0.00005803	0.0000027
601370.00	2370440.00	0.00042262	0.00004949	0.00004686	0.00000263	0.0008444	0.0000577	0.000055	0.00000271
601870.00	2370440.00	0.0003974	0.00004691	0.00004427	0.00000264	0.0008485	0.00005519	0.00005247	0.00000272
602370.00	2370440.00	0.00033277	0.0000443	0.00004164	0.00000267	0.0006052	0.00005216	0.00004942	0.00000275
602870.00	2370440.00	0.00040953	0.00004231	0.00003965	0.00000266	0.0008335	0.00004985	0.0000471	0.00000275
603370.00	2370440.00	0.00041588	0.00004001	0.00003734	0.00000267	0.000776	0.00004696	0.0000442	0.00000276
603870.00	2370440.00	0.00048703	0.00003799	0.00003531	0.00000268	0.0007609	0.00004398	0.00004121	0.00000277
604370.00	2370440.00	0.00045402	0.00003547	0.00003278	0.00000269	0.0007975	0.00004155	0.00003877	0.00000278
604870.00	2370440.00	0.00041517	0.00003295	0.00003024	0.00000271	0.000814	0.00003911	0.00003632	0.00000279
605370.00	2370440.00	0.00034779	0.00003041	0.00002767	0.00000274	0.0007281	0.00003655	0.00003374	0.00000281
605870.00	2370440.00	0.00041567	0.00002843	0.00002568	0.00000275	0.0008026	0.00003394	0.00003112	0.00000282
606370.00	2370440.00	0.00043414	0.00002641	0.00002363	0.00000278	0.000779	0.00003138	0.00002854	0.00000284
606870.00	2370440.00	0.0003501	0.00002427	0.00002146	0.00000282	0.0007659	0.00002953	0.00002666	0.00000287
607370.00	2370440.00	0.00040338	0.00002271	0.00001987	0.00000285	0.0007859	0.00002725	0.00002437	0.00000289
607870.00	2370440.00	0.00029189	0.00002107	0.00001818	0.00000289	0.0005568	0.00002532	0.0000224	0.00000292
608370.00	2370440.00	0.00048113	0.00002009	0.0000172	0.00000289	0.0006494	0.00002309	0.00002017	0.00000292
608870.00	2370440.00	0.00052813	0.00001902	0.00001612	0.0000029	0.0005408	0.00002116	0.00001824	0.00000292
609370.00	2370440.00	0.00049441	0.00001802	0.00001513	0.00000289	0.000605	0.00002026	0.00001734	0.00000291
609870.00	2370440.00	0.00054756	0.00001723	0.00001437	0.00000286	0.0004878	0.00001863	0.00001575	0.00000289
610370.00	2370440.00	0.0002576	0.00001653	0.00001369	0.00000284	0.0004093	0.00001924	0.00001634	0.0000029
610870.00	2370440.00	0.00025525	0.00001589	0.00001311	0.00000277	0.0004078	0.00001843	0.00001559	0.00000284
611370.00	2370440.00	0.00027292	0.00001476	0.0000121	0.00000266	0.0005542	0.00001743	0.00001472	0.00000271
611870.00	2370440.00	0.00052607	0.00001477	0.00001224	0.00000253	0.0005153	0.00001572	0.00001314	0.00000257
612370.00	2370440.00	0.00027693	0.00001374	0.00001131	0.00000243	0.0005912	0.00001624	0.00001375	0.0000025
612870.00	2370440.00	0.000355	0.00001351	0.00001121	0.00000229	0.0008145	0.00001618	0.00001382	0.00000236
613370.00	2370440.00	0.00024885	0.00001299	0.00001079	0.0000022	0.0004392	0.00001495	0.00001267	0.00000229

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613870.00	2370440.00	0.00054247	0.00001311	0.00001111	0.000002	0.000486	0.0000136	0.00001154	0.00000207
614370.00	2370440.00	0.00042183	0.00001154	0.00000971	0.00000183	0.0003056	0.0000116	0.00000971	0.0000019
614870.00	2370440.00	0.00040983	0.00001117	0.00000947	0.0000017	0.000296	0.00001121	0.00000944	0.00000176
615370.00	2370440.00	0.00069698	0.00001256	0.00001094	0.00000161	0.0004636	0.00001226	0.00001058	0.00000168
615870.00	2370440.00	0.00066992	0.00001216	0.00001066	0.0000015	0.0004427	0.00001184	0.00001028	0.00000156
616370.00	2370440.00	0.00059356	0.00001151	0.00001012	0.00000139	0.0003947	0.00001125	0.00000981	0.00000145
616870.00	2370440.00	0.000584	0.00001127	0.00000997	0.0000013	0.0003905	0.000011	0.00000965	0.00000135
617370.00	2370440.00	0.00034845	0.00000964	0.00000847	0.00000118	0.0002662	0.00000972	0.0000085	0.00000121
617870.00	2370440.00	0.00023059	0.00000867	0.0000076	0.00000107	0.0002339	0.00000907	0.00000797	0.0000011
618370.00	2370440.00	0.00018099	0.00000799	0.00000701	0.00000098	0.00021	0.00000843	0.00000744	0.00000099
618870.00	2370440.00	0.00018275	0.00000791	0.00000699	0.00000092	0.0002101	0.00000834	0.00000741	0.00000093
619370.00	2370440.00	0.00019083	0.00000795	0.00000707	0.00000088	0.0002133	0.00000834	0.00000746	0.00000088
619870.00	2370440.00	0.00061379	0.00001087	0.00000991	0.00000096	0.0004349	0.00001046	0.00000952	0.00000094
590370.00	2370940.00	0.00046615	0.00008085	0.00006946	0.00001139	0.000787	0.00009452	0.00008202	0.00001251
590870.00	2370940.00	0.00046173	0.00007288	0.00006365	0.00000923	0.0008993	0.00008469	0.00007443	0.00001026
591370.00	2370940.00	0.00047814	0.00006734	0.00006005	0.00000729	0.0011971	0.0000785	0.00007026	0.00000824
591870.00	2370940.00	0.00070424	0.00006428	0.0000587	0.00000558	0.0021433	0.00007659	0.00007023	0.00000637
592370.00	2370940.00	0.00115932	0.00006158	0.00005757	0.00000401	0.0005621	0.00006357	0.00005903	0.00000454
592870.00	2370940.00	0.0010079	0.00005925	0.00005613	0.00000313	0.0005072	0.00006114	0.00005773	0.00000341
593370.00	2370940.00	0.00047417	0.00005433	0.0000518	0.00000253	0.0003905	0.00005756	0.00005499	0.00000257
593870.00	2370940.00	0.00032348	0.00005172	0.00004946	0.00000226	0.0003419	0.00005538	0.00005327	0.00000211
594370.00	2370940.00	0.00025724	0.00004894	0.00004674	0.0000022	0.0002937	0.00005202	0.00005012	0.00000191
594870.00	2370940.00	0.000429	0.00005581	0.00005342	0.00000239	0.0003769	0.00005744	0.00005541	0.00000203
595370.00	2370940.00	0.00081467	0.00006451	0.00006193	0.00000257	0.0004889	0.0000629	0.0000607	0.0000022
595870.00	2370940.00	0.0013133	0.0000724	0.00006967	0.00000273	0.0007023	0.0000701	0.00006771	0.00000239
596370.00	2370940.00	0.00165488	0.0000782	0.00007537	0.00000283	0.0009566	0.00007712	0.00007457	0.00000255
596870.00	2370940.00	0.00165821	0.00008107	0.00007821	0.00000286	0.0010773	0.00008246	0.00007981	0.00000264
597370.00	2370940.00	0.00154417	0.00008118	0.00007835	0.00000283	0.0012087	0.00008611	0.00008342	0.00000269
597870.00	2370940.00	0.00119618	0.00007814	0.00007536	0.00000278	0.0014471	0.000089	0.00008629	0.0000027
598370.00	2370940.00	0.0008958	0.0000733	0.00007058	0.00000272	0.001507	0.0000863	0.00008361	0.00000269
598870.00	2370940.00	0.00078716	0.00006855	0.0000659	0.00000266	0.0013915	0.00008066	0.000078	0.00000265
599370.00	2370940.00	0.00062694	0.00006349	0.00006088	0.00000261	0.0013141	0.00007494	0.00007231	0.00000263
599870.00	2370940.00	0.00040695	0.00005852	0.00005593	0.00000259	0.0009272	0.00006921	0.00006658	0.00000264
600370.00	2370940.00	0.00035071	0.00005493	0.00005235	0.00000258	0.0006603	0.00006429	0.00006165	0.00000264
600870.00	2370940.00	0.00040741	0.00005209	0.00004955	0.00000254	0.0008471	0.00006055	0.00005795	0.0000026
601370.00	2370940.00	0.00043357	0.00004964	0.00004711	0.00000253	0.0008414	0.00005743	0.00005483	0.0000026
601870.00	2370940.00	0.00037985	0.00004697	0.00004443	0.00000254	0.0008188	0.00005506	0.00005245	0.00000262
602370.00	2370940.00	0.00031274	0.00004471	0.00004213	0.00000258	0.0004938	0.00005227	0.00004961	0.00000266
602870.00	2370940.00	0.00042435	0.0000428	0.00004025	0.00000255	0.0008107	0.00004989	0.00004725	0.00000264
603370.00	2370940.00	0.00041489	0.00004058	0.00003802	0.00000256	0.0008022	0.00004746	0.00004481	0.00000265
603870.00	2370940.00	0.00037269	0.0000382	0.00003563	0.00000258	0.0007797	0.00004515	0.00004248	0.00000266
604370.00	2370940.00	0.0004415	0.00003631	0.00003373	0.00000258	0.0007706	0.00004228	0.00003961	0.00000267
604870.00	2370940.00	0.000416	0.00003398	0.00003138	0.0000026	0.0007825	0.00003993	0.00003725	0.00000268
605370.00	2370940.00	0.00043897	0.00003186	0.00002925	0.00000261	0.0007556	0.00003727	0.00003458	0.00000269
605870.00	2370940.00	0.00040676	0.00002958	0.00002695	0.00000263	0.0007842	0.00003507	0.00003237	0.0000027
606370.00	2370940.00	0.00041676	0.00002755	0.0000249	0.00000265	0.0007727	0.00003264	0.00002993	0.00000272
606870.00	2370940.00	0.0003724	0.00002547	0.00002279	0.00000268	0.0007769	0.00003063	0.00002789	0.00000274
607370.00	2370940.00	0.00044337	0.00002389	0.00002119	0.00000271	0.0007147	0.00002806	0.0000253	0.00000275
607870.00	2370940.00	0.00043487	0.00002226	0.00001952	0.00000274	0.0007102	0.00002616	0.00002338	0.00000277
608370.00	2370940.00	0.00051296	0.00002098	0.00001822	0.00000276	0.0005642	0.00002372	0.00002093	0.00000279
608870.00	2370940.00	0.00031553	0.00001932	0.00001652	0.00000279	0.0006976	0.00002343	0.00002061	0.00000282
609370.00	2370940.00	0.00025991	0.00001858	0.00001576	0.00000282	0.0004129	0.0000218	0.00001895	0.00000286
609870.00	2370940.00	0.00025589	0.00001767	0.00001486	0.00000281	0.0004061	0.00002067	0.00001781	0.00000285
610370.00	2370940.00	0.00043338	0.0000168	0.00001403	0.00000277	0.0006515	0.00001917	0.00001637	0.00000279
610870.00	2370940.00	0.00035628	0.00001589	0.00001316	0.00000273	0.0007271	0.00001879	0.00001603	0.00000276
611370.00	2370940.00	0.00028436	0.0000151	0.00001243	0.00000267	0.0006272	0.00001805	0.00001534	0.00000271
611870.00	2370940.00	0.00024824	0.00001538	0.00001273	0.00000264	0.0003972	0.0000178	0.00001507	0.00000273
612370.00	2370940.00	0.00052128	0.00001458	0.0000121	0.00000248	0.0004872	0.00001543	0.00001292	0.00000252
612870.00	2370940.00	0.00024209	0.00001381	0.0000114	0.00000241	0.0004024	0.00001586	0.00001338	0.00000248
613370.00	2370940.00	0.0004934	0.00001368	0.00001143	0.00000225	0.0005472	0.00001465	0.00001236	0.0000023
613870.00	2370940.00	0.00023938	0.00001326	0.00001104	0.00000221	0.0003924	0.00001518	0.00001287	0.00000231
614370.00	2370940.00	0.00043138	0.00001191	0.00000995	0.00000196	0.0003058	0.00001195	0.00000993	0.00000202
614870.00	2370940.00	0.00039024	0.00001131	0.00000948	0.00000182	0.0002846	0.0000114	0.00000952	0.00000189
615370.00	2370940.00	0.00038185	0.00001095	0.00000926	0.0000017	0.0002806	0.00001103	0.00000927	0.00000176
615870.00	2370940.00	0.00045856	0.00001114	0.00000956	0.00000159	0.0003143	0.00001106	0.00000942	0.00000165
616370.00	2370940.00	0.00052612	0.0000113	0.00000982	0.00000149	0.000351	0.0000111	0.00000956	0.00000154
616870.00	2370940.00	0.00028636	0.00000958	0.00000823	0.00000135	0.0002469	0.00000987	0.00000847	0.0000014
617370.00	2370940.00	0.00022923	0.00000896	0.00000772	0.00000124	0.0002312	0.00000939	0.0000081	0.00000129
617870.00	2370940.00	0.00017932	0.0000082	0.00000708	0.00000113	0.0002106	0.00000871	0.00000754	0.00000116

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission ($ug-s/m^3-g$)	Total dep rate/unit emission ($g-s/m^2-yr-g$)	Dry dep rate/unit emission ($g-s/m^2-yr-g$)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission ($ug-s/m^3-g$)	Total dep rate/unit emission ($g-s/m^2-yr-g$)	Dry dep rate/unit emission ($g-s/m^2-yr-g$)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2370940.00	0.00047213	0.00001028	0.00000915	0.00000113	0.0003225	0.00001005	0.00000888	0.00000117
618870.00	2370940.00	0.00062673	0.00001111	0.00001001	0.0000011	0.0004318	0.00001073	0.00000961	0.00000112
619370.00	2370940.00	0.00043294	0.00001069	0.0000096	0.00000109	0.000659	0.00001187	0.00001076	0.00000111
619870.00	2370940.00	0.00039975	0.00001045	0.0000094	0.00000104	0.000659	0.00001177	0.00001072	0.00000105
590370.00	2371440.00	0.00045113	0.00007737	0.00006677	0.0000106	0.00075	0.00008998	0.00007836	0.00001162
590870.00	2371440.00	0.00044141	0.00007017	0.00006155	0.00000863	0.0008068	0.00008103	0.00007145	0.00000958
591370.00	2371440.00	0.00044605	0.0000649	0.00005806	0.00000684	0.0010286	0.00007501	0.00006731	0.0000077
591870.00	2371440.00	0.00092676	0.00006295	0.00005774	0.00000521	0.0021455	0.00007353	0.00006763	0.00000591
592370.00	2371440.00	0.00160203	0.00006195	0.0000581	0.00000385	0.0007074	0.00006296	0.00005863	0.00000433
592870.00	2371440.00	0.0002594	0.00004895	0.00004617	0.00000278	0.0003116	0.00005321	0.00005019	0.00000302
593370.00	2371440.00	0.00024024	0.00004726	0.00004497	0.00000229	0.0002865	0.00005114	0.00004883	0.00000231
593870.00	2371440.00	0.00022535	0.00004588	0.00004385	0.00000203	0.0002586	0.00004894	0.00004705	0.00000188
594370.00	2371440.00	0.00025485	0.00004758	0.00004547	0.00000211	0.0002906	0.00005055	0.00004872	0.00000183
594870.00	2371440.00	0.00042454	0.00005398	0.0000517	0.00000227	0.0003666	0.00005552	0.00005358	0.00000193
595370.00	2371440.00	0.0007984	0.00006186	0.00005941	0.00000245	0.00048	0.00006046	0.00005837	0.00000209
595870.00	2371440.00	0.00125394	0.00006897	0.00006636	0.0000026	0.0006646	0.00006677	0.00006451	0.00000226
596370.00	2371440.00	0.00156898	0.00007459	0.00007188	0.00000271	0.0008788	0.00007304	0.00007062	0.00000242
596870.00	2371440.00	0.00161439	0.00007781	0.00007505	0.00000276	0.0011534	0.00007939	0.00007686	0.00000253
597370.00	2371440.00	0.00149075	0.00007861	0.00007587	0.00000275	0.0012322	0.00008317	0.00008058	0.00000259
597870.00	2371440.00	0.00135003	0.00007724	0.00007454	0.0000027	0.0012404	0.00008413	0.00008153	0.0000026
598370.00	2371440.00	0.00107124	0.00007356	0.00007092	0.00000264	0.0013554	0.00008435	0.00008176	0.00000259
598870.00	2371440.00	0.00071532	0.00006805	0.00006546	0.00000259	0.0014382	0.00008087	0.0000783	0.00000258
599370.00	2371440.00	0.00054936	0.00006318	0.00006063	0.00000255	0.0012913	0.00007536	0.00007281	0.00000256
599870.00	2371440.00	0.00059155	0.00005951	0.00005701	0.0000025	0.0012161	0.00006955	0.00006702	0.00000253
600370.00	2371440.00	0.00039318	0.0000551	0.00005261	0.00000248	0.0009061	0.00006475	0.00006222	0.00000253
600870.00	2371440.00	0.00041449	0.00005218	0.00004972	0.00000246	0.0008533	0.0000604	0.00005789	0.00000251
601370.00	2371440.00	0.00042736	0.00004965	0.00004721	0.00000245	0.0008326	0.00005723	0.00005472	0.00000251
601870.00	2371440.00	0.0004075	0.00004721	0.00004477	0.00000245	0.000797	0.00005461	0.0000521	0.00000251
602370.00	2371440.00	0.00039716	0.000045	0.00004255	0.00000245	0.000815	0.00005239	0.00004987	0.00000252
602870.00	2371440.00	0.00040585	0.00004299	0.00004053	0.00000246	0.0007956	0.00004999	0.00004746	0.00000254
603370.00	2371440.00	0.0004511	0.00004119	0.00003873	0.00000246	0.0007463	0.00004735	0.0000448	0.00000255
603870.00	2371440.00	0.00039216	0.00003885	0.00003638	0.00000248	0.0007739	0.00004543	0.00004287	0.00000256
604370.00	2371440.00	0.00038687	0.00003678	0.00003429	0.00000249	0.0007697	0.00004312	0.00004055	0.00000257
604870.00	2371440.00	0.00037397	0.00003466	0.00003216	0.0000025	0.0007658	0.00004083	0.00003825	0.00000258
605370.00	2371440.00	0.00031035	0.00003237	0.00002985	0.00000252	0.0005862	0.00003821	0.00003562	0.00000259
605870.00	2371440.00	0.00040758	0.00003065	0.00002813	0.00000252	0.0007557	0.00003598	0.00003338	0.0000026
606370.00	2371440.00	0.00031664	0.00002833	0.00002579	0.00000255	0.0006449	0.00003377	0.00003116	0.00000261
606870.00	2371440.00	0.00033789	0.00002647	0.0000239	0.00000256	0.0007238	0.00003174	0.00002912	0.00000262
607370.00	2371440.00	0.00035004	0.00002469	0.00002211	0.00000259	0.0007421	0.00002966	0.00002702	0.00000264
607870.00	2371440.00	0.00035117	0.00002303	0.00002042	0.00000261	0.0007393	0.0000277	0.00002504	0.00000266
608370.00	2371440.00	0.00031258	0.00002145	0.0000188	0.00000265	0.0006772	0.00002592	0.00002324	0.00000268
608870.00	2371440.00	0.00047744	0.00002048	0.00001782	0.00000266	0.0005828	0.00002331	0.00002062	0.00000269
609370.00	2371440.00	0.00041386	0.00001918	0.00001649	0.00000269	0.0006692	0.00002234	0.00001963	0.00000271
609870.00	2371440.00	0.00046409	0.00001826	0.00001556	0.0000027	0.0005774	0.00002062	0.0000179	0.00000272
610370.00	2371440.00	0.00024986	0.00001722	0.0000145	0.00000271	0.0004092	0.00002013	0.00001739	0.00000275
610870.00	2371440.00	0.00050892	0.00001665	0.00001397	0.00000268	0.000472	0.00001804	0.00001535	0.0000027
611370.00	2371440.00	0.00043783	0.00001588	0.00001324	0.00000265	0.0005997	0.00001783	0.00001516	0.00000267
611870.00	2371440.00	0.00049166	0.00001538	0.00001279	0.00000259	0.0005007	0.0000166	0.00001399	0.00000262
612370.00	2371440.00	0.00023943	0.00001455	0.00001201	0.00000254	0.0003978	0.00001679	0.0000142	0.00000259
612870.00	2371440.00	0.00049795	0.00001438	0.00001195	0.00000243	0.0004881	0.00001529	0.00001283	0.00000246
613370.00	2371440.00	0.00048885	0.00001393	0.0000116	0.00000233	0.0005142	0.00001484	0.00001247	0.00000237
613870.00	2371440.00	0.00023604	0.0000137	0.0000114	0.0000023	0.0003834	0.00001572	0.00001333	0.00000239
614370.00	2371440.00	0.0004969	0.00001255	0.00001046	0.00000208	0.0003294	0.00001255	0.00001042	0.00000213
614870.00	2371440.00	0.00048076	0.00001212	0.00001017	0.00000195	0.0003226	0.00001211	0.0000101	0.00000201
615370.00	2371440.00	0.00030362	0.00001067	0.00000885	0.00000181	0.0002492	0.000011	0.00000913	0.00000187
615870.00	2371440.00	0.00028112	0.00001023	0.00000854	0.00000169	0.000243	0.0000106	0.00000886	0.00000174
616370.00	2371440.00	0.00022101	0.00000951	0.00000796	0.00000156	0.000224	0.00001003	0.00000841	0.00000161
616870.00	2371440.00	0.00021837	0.00000926	0.00000782	0.00000144	0.0002231	0.00000976	0.00000826	0.0000015
617370.00	2371440.00	0.00018133	0.00000861	0.00000729	0.00000132	0.0002099	0.00000915	0.00000778	0.00000137
617870.00	2371440.00	0.00017999	0.00000841	0.00000718	0.00000122	0.0002088	0.00000893	0.00000766	0.00000127
618370.00	2371440.00	0.00064037	0.00001143	0.00001019	0.00000124	0.000442	0.00001109	0.0000098	0.00000129
618870.00	2371440.00	0.00025772	0.00001033	0.00000908	0.00000126	0.0005387	0.00001211	0.00001081	0.00000131
619370.00	2371440.00	0.0002195	0.00001029	0.00000904	0.00000125	0.0003695	0.00001166	0.00001036	0.0000013
619870.00	2371440.00	0.00021751	0.00001014	0.00000895	0.00000119	0.0003634	0.00001148	0.00001024	0.00000124
590370.00	2371940.00	0.00043677	0.0000737	0.00006388	0.00000982	0.0007337	0.00008527	0.00007452	0.00001074
590870.00	2371940.00	0.00042825	0.00006728	0.00005925	0.00000803	0.0007943	0.00007737	0.00006847	0.0000089
591370.00	2371940.00	0.00045831	0.00006246	0.0000561	0.00000636	0.0011856	0.00007243	0.00006529	0.00000714
591870.00	2371940.00	0.00133219	0.00006242	0.00005757	0.00000485	0.0018099	0.00006937	0.00006389	0.00000548
592370.00	2371940.00	0.00186354	0.00006157	0.00005788	0.00000369	0.0008754	0.00006216	0.00005803	0.00000412

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592870.00	2371940.00	0.00032476	0.0000503	0.00004758	0.00000273	0.0003509	0.00005432	0.00005138	0.00000294
593370.00	2371940.00	0.00021078	0.00004276	0.00004068	0.00000207	0.0002458	0.00004611	0.00004401	0.00000209
593870.00	2371940.00	0.00022938	0.00004529	0.00004329	0.000002	0.0002692	0.00004855	0.00004669	0.00000186
594370.00	2371940.00	0.00028968	0.00004829	0.00004624	0.00000205	0.0003142	0.0000514	0.00004961	0.00000179
594870.00	2371940.00	0.00049227	0.00005344	0.00005126	0.00000218	0.0003743	0.00005439	0.00005253	0.00000186
595370.00	2371940.00	0.00076073	0.00005922	0.00005689	0.00000233	0.0004576	0.00005806	0.00005607	0.00000198
595870.00	2371940.00	0.00133395	0.00006662	0.00006413	0.00000249	0.0006971	0.00006449	0.00006234	0.00000216
596370.00	2371940.00	0.00152275	0.00007133	0.00006873	0.0000026	0.0008431	0.00006961	0.00006731	0.0000023
596870.00	2371940.00	0.00157209	0.00007485	0.0000722	0.00000265	0.0009544	0.00007469	0.00007228	0.00000241
597370.00	2371940.00	0.00148358	0.00007626	0.00007359	0.00000266	0.001176	0.00007971	0.00007722	0.00000249
597870.00	2371940.00	0.00137404	0.00007579	0.00007316	0.00000262	0.0011792	0.00008142	0.00007891	0.0000025
598370.00	2371940.00	0.00115807	0.00007285	0.00007029	0.00000257	0.0012566	0.00008102	0.00007852	0.0000025
598870.00	2371940.00	0.00078989	0.00006813	0.00006561	0.00000252	0.0014089	0.00008015	0.00007766	0.00000249
599370.00	2371940.00	0.00056641	0.00006326	0.00006078	0.00000248	0.001307	0.00007545	0.00007297	0.00000248
599870.00	2371940.00	0.0006174	0.00005971	0.00005728	0.00000243	0.0012127	0.00006965	0.00006721	0.00000244
600370.00	2371940.00	0.00039924	0.00005522	0.00005281	0.00000241	0.0009294	0.00006492	0.00006247	0.00000245
600870.00	2371940.00	0.00044311	0.00005237	0.00005	0.00000238	0.0008652	0.0000602	0.00005778	0.00000242
601370.00	2371940.00	0.00040204	0.00004954	0.00004717	0.00000237	0.0008196	0.00005715	0.00005472	0.00000242
601870.00	2371940.00	0.00039195	0.00004717	0.00004481	0.00000236	0.0007835	0.00005445	0.00005202	0.00000242
602370.00	2371940.00	0.00038247	0.00004502	0.00004266	0.00000236	0.0007975	0.00005226	0.00004983	0.00000243
602870.00	2371940.00	0.00034817	0.00004286	0.00004049	0.00000237	0.0007376	0.00005007	0.00004763	0.00000244
603370.00	2371940.00	0.00055026	0.00004204	0.00003968	0.00000237	0.0005657	0.00004631	0.00004386	0.00000244
603870.00	2371940.00	0.00039256	0.00003928	0.00003689	0.00000238	0.0007515	0.00004561	0.00004314	0.00000246
604370.00	2371940.00	0.00037256	0.00003727	0.00003488	0.00000239	0.0007458	0.00004354	0.00004106	0.00000248
604870.00	2371940.00	0.00039249	0.00003543	0.00003303	0.0000024	0.0007422	0.00004124	0.00003876	0.00000248
605370.00	2371940.00	0.00038138	0.00003343	0.00003102	0.00000241	0.000744	0.0000391	0.00003661	0.00000249
605870.00	2371940.00	0.00031571	0.00003123	0.00002881	0.00000243	0.0006432	0.0000369	0.0000344	0.0000025
606370.00	2371940.00	0.00036228	0.00002947	0.00002703	0.00000244	0.0007384	0.00003481	0.0000323	0.00000251
606870.00	2371940.00	0.00045797	0.00002791	0.00002546	0.00000245	0.0006411	0.00003201	0.0000295	0.00000252
607370.00	2371940.00	0.00032705	0.00002566	0.00002319	0.00000247	0.0006976	0.00003067	0.00002814	0.00000253
607870.00	2371940.00	0.0002674	0.00002432	0.0000218	0.00000253	0.000401	0.00002844	0.00002585	0.00000259
608370.00	2371940.00	0.00049444	0.00002281	0.0000203	0.00000251	0.0005415	0.00002577	0.00002321	0.00000256
608870.00	2371940.00	0.00029468	0.00002093	0.00001838	0.00000255	0.0006243	0.00002517	0.00002258	0.00000259
609370.00	2371940.00	0.00042169	0.00001996	0.00001739	0.00000257	0.0006323	0.00002308	0.00002049	0.0000026
609870.00	2371940.00	0.00048342	0.00001894	0.00001634	0.00000259	0.0005148	0.00002112	0.00001851	0.00000261
610370.00	2371940.00	0.00050189	0.00001795	0.00001534	0.00000261	0.0004561	0.00001966	0.00001704	0.00000262
610870.00	2371940.00	0.00050335	0.00001709	0.00001448	0.00000261	0.0004402	0.00001854	0.00001592	0.00000262
611370.00	2371940.00	0.0002868	0.00001595	0.00001335	0.0000026	0.0006324	0.00001911	0.00001648	0.00000262
611870.00	2371940.00	0.00024035	0.00001627	0.00001365	0.00000263	0.0003785	0.00001888	0.00001618	0.0000027
612370.00	2371940.00	0.00023648	0.00001547	0.0000129	0.00000257	0.0003738	0.00001788	0.00001524	0.00000264
612870.00	2371940.00	0.00029283	0.0000142	0.00001173	0.00000247	0.0006502	0.00001687	0.00001438	0.0000025
613370.00	2371940.00	0.00023058	0.00001397	0.00001156	0.00000241	0.0003758	0.00001603	0.00001357	0.00000246
613870.00	2371940.00	0.00026382	0.00001324	0.00001094	0.0000023	0.0005758	0.00001563	0.00001329	0.00000235
614370.00	2371940.00	0.00042114	0.00001241	0.00001023	0.00000218	0.0002919	0.00001258	0.00001036	0.00000222
614870.00	2371940.00	0.00047512	0.00001237	0.00001031	0.00000206	0.0003158	0.00001239	0.00001028	0.00000211
615370.00	2371940.00	0.00043607	0.00001182	0.00000988	0.00000194	0.0002989	0.00001186	0.00000987	0.00000199
615870.00	2371940.00	0.00026611	0.00001037	0.00000857	0.00000181	0.000235	0.00001081	0.00000895	0.00000186
616370.00	2371940.00	0.00020451	0.00000961	0.00000793	0.00000168	0.0002158	0.00001018	0.00000845	0.00000173
616870.00	2371940.00	0.00021465	0.00000944	0.00000788	0.00000156	0.0002179	0.00000995	0.00000834	0.00000161
617370.00	2371940.00	0.00051442	0.00001117	0.00000967	0.00000149	0.0003389	0.00001098	0.00000944	0.00000155
617870.00	2371940.00	0.00058559	0.00001182	0.00001039	0.00000143	0.0005664	0.00001211	0.00001062	0.00000149
618370.00	2371940.00	0.0004638	0.00001049	0.00000919	0.0000013	0.0003136	0.00001032	0.00000897	0.00000135
618870.00	2371940.00	0.00061345	0.00001146	0.00001021	0.00000126	0.0004974	0.0000114	0.00001009	0.00000131
619370.00	2371940.00	0.00026062	0.00001026	0.00000901	0.00000125	0.0005563	0.00001206	0.00001076	0.0000013
619870.00	2371940.00	0.00021337	0.00001044	0.00000916	0.00000128	0.0003479	0.0000118	0.00001046	0.00000135
590370.00	2372440.00	0.00042346	0.00007049	0.00006135	0.00000914	0.0007149	0.00008117	0.00007119	0.00000998
590870.00	2372440.00	0.00041672	0.00006459	0.0000571	0.00000749	0.0007918	0.00007401	0.00006573	0.00000828
591370.00	2372440.00	0.00044548	0.0000603	0.00005433	0.00000597	0.0011529	0.00006969	0.00006302	0.00000667
591870.00	2372440.00	0.00090593	0.00005902	0.00005441	0.00000462	0.0019983	0.00006833	0.00006314	0.00000519
592370.00	2372440.00	0.00160263	0.00005863	0.00005515	0.00000348	0.0007161	0.00005922	0.00005535	0.00000386
592870.00	2372440.00	0.00041348	0.00005025	0.0000476	0.00000265	0.0003675	0.00005342	0.00005058	0.00000284
593370.00	2372440.00	0.00024081	0.00004513	0.00004298	0.00000215	0.0002846	0.00004859	0.00004643	0.00000216
593870.00	2372440.00	0.00023397	0.00004443	0.00004248	0.00000195	0.0002737	0.00004758	0.00004576	0.00000182
594370.00	2372440.00	0.00028928	0.00004732	0.00004536	0.00000196	0.000309	0.00005011	0.00004839	0.00000172
594870.00	2372440.00	0.00038836	0.00005022	0.00004815	0.00000207	0.0003409	0.00005178	0.00005003	0.00000176
595370.00	2372440.00	0.00066431	0.00005619	0.00005397	0.00000222	0.0004219	0.00005542	0.00005354	0.00000188
595870.00	2372440.00	0.00128983	0.00006378	0.00006141	0.00000238	0.0006674	0.00006178	0.00005973	0.00000205
596370.00	2372440.00	0.00149533	0.00006836	0.00006586	0.00000249	0.0008256	0.00006659	0.0000644	0.00000219
596870.00	2372440.00	0.00153565	0.00007187	0.00006932	0.00000256	0.00093	0.00007132	0.00006902	0.00000231

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
597370.00	2372440.00	0.00148733	0.00007391	0.00007133	0.00000257	0.0010911	0.00007609	0.0000737	0.00000238
597870.00	2372440.00	0.00137526	0.00007404	0.00007149	0.00000255	0.0011396	0.00007867	0.00007626	0.00000242
598370.00	2372440.00	0.00123153	0.0000722	0.0000697	0.0000025	0.0011561	0.00007883	0.00007641	0.00000241
598870.00	2372440.00	0.00097699	0.00006862	0.00006617	0.00000245	0.0012593	0.00007851	0.00007611	0.0000024
599370.00	2372440.00	0.00086161	0.00006459	0.00006219	0.0000024	0.0011903	0.00007408	0.00007171	0.00000238
599870.00	2372440.00	0.00071147	0.00006022	0.00005786	0.00000236	0.0011663	0.0000694	0.00006704	0.00000236
600370.00	2372440.00	0.00042638	0.00005545	0.0000531	0.00000234	0.0010142	0.00006523	0.00006286	0.00000237
600870.00	2372440.00	0.00048279	0.00005263	0.00005033	0.0000023	0.000854	0.00005994	0.0000576	0.00000234
601370.00	2372440.00	0.00040421	0.00004958	0.00004729	0.00000229	0.0008118	0.00005697	0.00005463	0.00000234
601870.00	2372440.00	0.00039802	0.00004723	0.00004495	0.00000229	0.0007858	0.00005423	0.00005189	0.00000234
602370.00	2372440.00	0.0004015	0.00004518	0.0000429	0.00000228	0.0007564	0.0000518	0.00004946	0.00000234
602870.00	2372440.00	0.00036764	0.00004307	0.00004078	0.00000229	0.0007633	0.00004993	0.00004758	0.00000235
603370.00	2372440.00	0.00031186	0.00004097	0.00003867	0.0000023	0.0006266	0.00004778	0.00004541	0.00000237
603870.00	2372440.00	0.00036926	0.00003946	0.00003716	0.0000023	0.0007343	0.00004581	0.00004343	0.00000238
604370.00	2372440.00	0.00036338	0.00003765	0.00003534	0.00000231	0.000725	0.0000438	0.00004141	0.00000239
604870.00	2372440.00	0.00034486	0.00003577	0.00003345	0.00000232	0.0007095	0.00004181	0.00003942	0.0000024
605370.00	2372440.00	0.00033553	0.00003391	0.00003159	0.00000233	0.0006972	0.00003976	0.00003736	0.00000241
605870.00	2372440.00	0.0004104	0.00003239	0.00003006	0.00000233	0.000691	0.00003731	0.0000349	0.00000241
606370.00	2372440.00	0.00030103	0.00003013	0.00002778	0.00000235	0.0005983	0.00003545	0.00003303	0.00000242
606870.00	2372440.00	0.00037511	0.00002858	0.00002622	0.00000235	0.0007135	0.00003344	0.00003101	0.00000243
607370.00	2372440.00	0.00047624	0.00002711	0.00002475	0.00000237	0.0005644	0.00003062	0.00002819	0.00000243
607870.00	2372440.00	0.00028431	0.00002485	0.00002245	0.0000024	0.0005495	0.00002941	0.00002695	0.00000245
608370.00	2372440.00	0.00028559	0.00002326	0.00002084	0.00000242	0.0005728	0.00002767	0.0000252	0.00000247
608870.00	2372440.00	0.0002578	0.00002193	0.00001948	0.00000245	0.0004182	0.0000257	0.0000232	0.0000025
609370.00	2372440.00	0.00050582	0.00002085	0.00001839	0.00000245	0.0004467	0.00002308	0.00002059	0.00000249
609870.00	2372440.00	0.00036187	0.00001941	0.00001693	0.00000248	0.0006732	0.00002289	0.00002038	0.00000251
610370.00	2372440.00	0.00026741	0.00001818	0.00001567	0.00000251	0.000547	0.0000217	0.00001917	0.00000254
610870.00	2372440.00	0.00023851	0.00001763	0.00001509	0.00000254	0.0003727	0.0000205	0.00001793	0.00000258
611370.00	2372440.00	0.00035409	0.00001659	0.00001406	0.00000253	0.0006548	0.0000194	0.00001686	0.00000254
611870.00	2372440.00	0.00044866	0.00001609	0.00001357	0.00000252	0.0005134	0.00001775	0.00001522	0.00000253
612370.00	2372440.00	0.00041751	0.00001541	0.00001291	0.0000025	0.0005583	0.0000172	0.00001469	0.00000251
612870.00	2372440.00	0.00038378	0.00001478	0.00001232	0.00000246	0.0006061	0.00001675	0.00001427	0.00000248
613370.00	2372440.00	0.00022625	0.00001431	0.00001189	0.00000242	0.0003639	0.00001643	0.00001396	0.00000247
613870.00	2372440.00	0.0004054	0.00001388	0.00001155	0.00000233	0.0005717	0.0000154	0.00001305	0.00000236
614370.00	2372440.00	0.00034362	0.00001224	0.00000999	0.00000225	0.00026	0.0000126	0.00001031	0.00000228
614870.00	2372440.00	0.00027568	0.00001136	0.0000092	0.00000215	0.0002347	0.00001186	0.00000968	0.00000219
615370.00	2372440.00	0.00026976	0.00001098	0.00000894	0.00000204	0.0002324	0.00001145	0.00000937	0.00000208
615870.00	2372440.00	0.00023203	0.00001036	0.00000844	0.00000192	0.0002218	0.00001091	0.00000895	0.00000196
616370.00	2372440.00	0.00019479	0.00000973	0.00000794	0.0000018	0.0002084	0.00001034	0.0000085	0.00000184
616870.00	2372440.00	0.00038769	0.00001091	0.00000922	0.0000017	0.0002763	0.00001093	0.00000918	0.00000175
617370.00	2372440.00	0.00030907	0.00001135	0.00000969	0.00000165	0.0006882	0.00001343	0.00001172	0.00000171
617870.00	2372440.00	0.00022225	0.00001097	0.00000937	0.0000016	0.0004043	0.00001253	0.00001086	0.00000166
618370.00	2372440.00	0.0002223	0.00001073	0.00000923	0.00000151	0.0004072	0.00001227	0.00001069	0.00000157
618870.00	2372440.00	0.00022322	0.00001052	0.0000091	0.00000142	0.0004135	0.00001204	0.00001055	0.00000149
619370.00	2372440.00	0.00021402	0.00001041	0.00000905	0.00000136	0.0003692	0.0000118	0.00001038	0.00000143
619870.00	2372440.00	0.0002106	0.00001058	0.00000924	0.00000134	0.0003446	0.00001197	0.00001055	0.00000142
590370.00	2372940.00	0.00041126	0.00006733	0.00005883	0.0000085	0.0007095	0.00007721	0.00006795	0.00000926
590870.00	2372940.00	0.00041082	0.00006199	0.00005501	0.00000697	0.0008338	0.0000709	0.00006321	0.00000769
591370.00	2372940.00	0.00048148	0.00005833	0.00005276	0.00000557	0.0013869	0.00006788	0.00006167	0.00000621
591870.00	2372940.00	0.00117993	0.00005828	0.00005395	0.00000433	0.0017588	0.00006502	0.00006018	0.00000484
592370.00	2372940.00	0.00179197	0.00005814	0.0000548	0.00000334	0.0008766	0.00005854	0.00005485	0.00000369
592870.00	2372940.00	0.00085901	0.00005226	0.00004965	0.00000261	0.0004482	0.0000537	0.00005091	0.00000279
593370.00	2372940.00	0.00031295	0.0000468	0.00004468	0.00000212	0.000324	0.00005006	0.00004792	0.00000213
593870.00	2372940.00	0.00020789	0.00004201	0.00004021	0.0000018	0.000239	0.00004472	0.00004304	0.00000168
594370.00	2372940.00	0.00022974	0.00004328	0.00004143	0.00000184	0.0002643	0.00004594	0.00004432	0.00000161
594870.00	2372940.00	0.00030815	0.00004723	0.00004528	0.00000196	0.0003109	0.00004935	0.00004769	0.00000166
595370.00	2372940.00	0.00068625	0.00005454	0.00005242	0.00000212	0.0004189	0.0000538	0.000052	0.0000018
595870.00	2372940.00	0.00095937	0.00005945	0.0000572	0.00000226	0.0005277	0.00005759	0.00005565	0.00000193
596370.00	2372940.00	0.001306	0.00006483	0.00006245	0.00000238	0.0006988	0.00006286	0.00006078	0.00000208
596870.00	2372940.00	0.0014909	0.00006899	0.00006653	0.00000246	0.000881	0.00006806	0.00006586	0.0000022
597370.00	2372940.00	0.0014576	0.00007135	0.00006886	0.00000249	0.0010588	0.0000729	0.00007061	0.00000229
597870.00	2372940.00	0.00138386	0.00007222	0.00006974	0.00000248	0.0010767	0.00007571	0.00007338	0.00000233
598370.00	2372940.00	0.00119946	0.0000708	0.00006836	0.00000244	0.0011893	0.00007717	0.00007483	0.00000234
598870.00	2372940.00	0.00082642	0.00006727	0.00006487	0.0000024	0.0013898	0.00007838	0.00007604	0.00000234
599370.00	2372940.00	0.00091535	0.00006466	0.00006232	0.00000234	0.0011499	0.00007359	0.00007129	0.0000023
599870.00	2372940.00	0.00060825	0.00005971	0.00005741	0.0000023	0.0009325	0.00006848	0.0000662	0.00000229
600370.00	2372940.00	0.00040456	0.00005543	0.00005315	0.00000228	0.0009363	0.00006529	0.00006299	0.0000023
600870.00	2372940.00	0.00051805	0.00005286	0.00005062	0.00000224	0.000829	0.00005974	0.00005748	0.00000226
601370.00	2372940.00	0.00041892	0.00004969	0.00004747	0.00000223	0.0008588	0.00005701	0.00005475	0.00000226

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
601870.00	2372940.00	0.00040753	0.0000473	0.00004509	0.00000221	0.0007811	0.00005399	0.00005173	0.00000226
602370.00	2372940.00	0.0003909	0.00004514	0.00004293	0.00000221	0.00075	0.00005164	0.00004937	0.00000226
602870.00	2372940.00	0.00038428	0.00004323	0.00004102	0.00000221	0.0007612	0.00004968	0.00004741	0.00000227
603370.00	2372940.00	0.00046244	0.00004192	0.00003971	0.00000221	0.0006699	0.00004708	0.0000448	0.00000228
603870.00	2372940.00	0.00038686	0.00003977	0.00003755	0.00000222	0.000717	0.0000457	0.00004341	0.00000229
604370.00	2372940.00	0.00041178	0.00003821	0.00003598	0.00000222	0.0006806	0.00004358	0.00004128	0.0000023
604870.00	2372940.00	0.00037134	0.00003631	0.00003408	0.00000223	0.0006989	0.00004193	0.00003962	0.00000231
605370.00	2372940.00	0.00029966	0.00003431	0.00003206	0.00000225	0.0005956	0.00004006	0.00003774	0.00000232
605870.00	2372940.00	0.00030765	0.00003263	0.00003037	0.00000226	0.0006299	0.00003818	0.00003585	0.00000233
606370.00	2372940.00	0.00034581	0.00003104	0.00002878	0.00000226	0.0006951	0.00003624	0.0000339	0.00000234
606870.00	2372940.00	0.00032154	0.00002921	0.00002694	0.00000227	0.0006719	0.00003433	0.00003199	0.00000234
607370.00	2372940.00	0.00040794	0.00002782	0.00002554	0.00000228	0.0006488	0.00003198	0.00002964	0.00000235
607870.00	2372940.00	0.00038396	0.00002605	0.00002376	0.00000229	0.0006725	0.00003027	0.00002791	0.00000236
608370.00	2372940.00	0.00044693	0.00002462	0.00002231	0.00000231	0.0005711	0.00002795	0.00002559	0.00000236
608870.00	2372940.00	0.00026889	0.00002265	0.00002031	0.00000234	0.0005076	0.00002673	0.00002435	0.00000239
609370.00	2372940.00	0.00025787	0.0000213	0.00001893	0.00000237	0.0004596	0.00002505	0.00002265	0.0000024
609870.00	2372940.00	0.00024624	0.00002096	0.00001851	0.00000245	0.0003712	0.00002441	0.00002189	0.00000253
610370.00	2372940.00	0.00041961	0.00001917	0.00001677	0.0000024	0.0005634	0.00002184	0.00001942	0.00000242
610870.00	2372940.00	0.00023865	0.00001799	0.00001555	0.00000244	0.0003957	0.00002102	0.00001855	0.00000246
611370.00	2372940.00	0.00023264	0.00001752	0.00001505	0.00000247	0.0003575	0.00002032	0.00001781	0.00000251
611870.00	2372940.00	0.00022935	0.00001665	0.00001418	0.00000247	0.0003559	0.00001927	0.00001676	0.00000251
612370.00	2372940.00	0.00023086	0.00001556	0.00001311	0.00000245	0.0003967	0.00001811	0.00001563	0.00000248
612870.00	2372940.00	0.000441	0.00001524	0.00001281	0.00000243	0.0004857	0.00001665	0.00001421	0.00000244
613370.00	2372940.00	0.00047414	0.00001471	0.00001232	0.0000024	0.0004079	0.0000156	0.00001319	0.00000241
613870.00	2372940.00	0.00046376	0.00001425	0.0000119	0.00000235	0.0004315	0.00001514	0.00001277	0.00000236
614370.00	2372940.00	0.0002256	0.00001159	0.00000927	0.00000231	0.0002183	0.00001238	0.00001005	0.00000233
614870.00	2372940.00	0.00022877	0.00001127	0.00000904	0.00000223	0.0002186	0.00001196	0.00000971	0.00000225
615370.00	2372940.00	0.00018939	0.00001051	0.00000838	0.00000214	0.0002036	0.00001124	0.00000908	0.00000216
615870.00	2372940.00	0.00018234	0.0000101	0.00000807	0.00000203	0.0002	0.00001078	0.00000873	0.00000206
616370.00	2372940.00	0.00017071	0.00000963	0.00000772	0.00000191	0.0001937	0.00001028	0.00000833	0.00000195
616870.00	2372940.00	0.00029043	0.00001049	0.00000869	0.0000018	0.0002348	0.00001078	0.00000894	0.00000184
617370.00	2372940.00	0.00046639	0.00001204	0.00001032	0.00000173	0.000643	0.00001315	0.00001138	0.00000177
617870.00	2372940.00	0.00025037	0.0000111	0.00000944	0.00000166	0.0005434	0.000013	0.00001129	0.00000171
618370.00	2372940.00	0.00021101	0.00001099	0.00000938	0.0000016	0.0003588	0.00001244	0.00001077	0.00000167
618870.00	2372940.00	0.00020908	0.00001096	0.00000942	0.00000154	0.0003461	0.0000124	0.00001078	0.00000162
619370.00	2372940.00	0.00020816	0.0000108	0.00000933	0.00000147	0.0003434	0.00001221	0.00001066	0.00000155
619870.00	2372940.00	0.00021041	0.000011	0.00000956	0.00000144	0.0003463	0.0000125	0.00001096	0.00000154
590370.00	2373440.00	0.00039988	0.00006458	0.00005665	0.00000793	0.000699	0.00007377	0.00006514	0.00000863
590870.00	2373440.00	0.00040334	0.00005972	0.0000532	0.00000652	0.0008462	0.00006816	0.00006098	0.00000718
591370.00	2373440.00	0.00047343	0.00005646	0.00005122	0.00000524	0.001369	0.00006556	0.00005974	0.00000582
591870.00	2373440.00	0.00141287	0.00005744	0.00005337	0.00000407	0.0014871	0.0000618	0.00005727	0.00000453
592370.00	2373440.00	0.00127128	0.00005404	0.00005091	0.00000312	0.0005625	0.00005478	0.00005134	0.00000343
592870.00	2373440.00	0.00038799	0.00004749	0.00004505	0.00000243	0.0003481	0.00005032	0.00004774	0.00000258
593370.00	2373440.00	0.00020732	0.00004139	0.00003947	0.00000192	0.0002422	0.00004433	0.0000424	0.00000193
593870.00	2373440.00	0.00021002	0.00004113	0.00003938	0.00000175	0.0002494	0.00004415	0.00004252	0.00000163
594370.00	2373440.00	0.00021416	0.0000414	0.00003967	0.00000173	0.0002525	0.00004422	0.00004271	0.00000151
594870.00	2373440.00	0.00025697	0.00004445	0.00004259	0.00000185	0.0002851	0.00004696	0.00004539	0.00000157
595370.00	2373440.00	0.00036249	0.0000483	0.0000463	0.00000199	0.0003283	0.00004955	0.00004788	0.00000168
595870.00	2373440.00	0.00089415	0.00005692	0.00005476	0.00000216	0.0004984	0.00005529	0.00005345	0.00000184
596370.00	2373440.00	0.00132961	0.00006246	0.00006017	0.00000228	0.0007044	0.00006053	0.00005855	0.00000199
596870.00	2373440.00	0.00145883	0.00006629	0.00006392	0.00000237	0.0008812	0.00006522	0.00006311	0.00000211
597370.00	2373440.00	0.00144097	0.00006891	0.0000665	0.00000241	0.0009893	0.00006956	0.00006737	0.00000219
597870.00	2373440.00	0.00132676	0.00006994	0.00006753	0.00000241	0.0011092	0.0000733	0.00007105	0.00000225
598370.00	2373440.00	0.00113412	0.00006908	0.0000667	0.00000238	0.0012339	0.00007543	0.00007316	0.00000227
598870.00	2373440.00	0.00106942	0.00006738	0.00006505	0.00000233	0.0011562	0.00007441	0.00007216	0.00000225
599370.00	2373440.00	0.0009564	0.00006429	0.00006201	0.00000228	0.0011086	0.00007174	0.00006951	0.00000223
599870.00	2373440.00	0.00064674	0.00005986	0.00005762	0.00000224	0.0009029	0.00006825	0.00006603	0.00000222
600370.00	2373440.00	0.00046343	0.0000557	0.00005348	0.00000221	0.0009264	0.00006474	0.00006253	0.00000222
600870.00	2373440.00	0.00048867	0.00005276	0.00005058	0.00000218	0.0008458	0.00006009	0.00005789	0.00000219
601370.00	2373440.00	0.00042419	0.00004975	0.00004759	0.00000216	0.0008587	0.00005698	0.00005479	0.00000219
601870.00	2373440.00	0.00040087	0.00004728	0.00004513	0.00000215	0.0008151	0.00005405	0.00005186	0.00000219
602370.00	2373440.00	0.00039592	0.00004518	0.00004304	0.00000214	0.0007811	0.00005156	0.00004937	0.00000219
602870.00	2373440.00	0.00037922	0.00004322	0.00004108	0.00000214	0.0007559	0.0000495	0.00004731	0.00000219
603370.00	2373440.00	0.00028473	0.00004104	0.00003888	0.00000216	0.0005304	0.00004745	0.00004523	0.00000221
603870.00	2373440.00	0.00034019	0.00003965	0.0000375	0.00000215	0.0006999	0.00004585	0.00004363	0.00000221
604370.00	2373440.00	0.0004538	0.00003866	0.00003652	0.00000215	0.0006056	0.00004321	0.00004099	0.00000222
604870.00	2373440.00	0.00034793	0.00003652	0.00003436	0.00000216	0.0006837	0.0000422	0.00003997	0.00000223
605370.00	2373440.00	0.00035757	0.00003497	0.0000328	0.00000217	0.0006794	0.00004034	0.0000381	0.00000224
605870.00	2373440.00	0.00034856	0.00003332	0.00003114	0.00000217	0.0006781	0.00003856	0.00003631	0.00000225

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
606370.00	2373440.00	0.00026108	0.0000316	0.0000294	0.0000022	0.0003941	0.00003651	0.00003423	0.00000228
606870.00	2373440.00	0.00025903	0.00003002	0.00002781	0.00000221	0.0003861	0.00003468	0.00003238	0.00000229
607370.00	2373440.00	0.00049061	0.00002885	0.00002666	0.00000219	0.0004647	0.00003178	0.00002952	0.00000227
607870.00	2373440.00	0.00033389	0.00002672	0.00002452	0.00000221	0.000672	0.00003129	0.00002902	0.00000228
608370.00	2373440.00	0.00029705	0.00002503	0.00002281	0.00000222	0.0006218	0.00002954	0.00002726	0.00000228
608870.00	2373440.00	0.00036086	0.00002372	0.00002149	0.00000223	0.0006552	0.00002767	0.00002538	0.00000229
609370.00	2373440.00	0.00026467	0.00002207	0.00001981	0.00000226	0.0005097	0.00002601	0.00002371	0.00000231
609870.00	2373440.00	0.00028758	0.00002078	0.0000185	0.00000228	0.0006092	0.00002474	0.00002242	0.00000232
610370.00	2373440.00	0.00026515	0.00001955	0.00001725	0.00000231	0.0005402	0.00002323	0.00002089	0.00000234
610870.00	2373440.00	0.00029058	0.0000185	0.00001618	0.00000233	0.0006187	0.00002208	0.00001973	0.00000235
611370.00	2373440.00	0.00033173	0.00001764	0.00001529	0.00000234	0.0006311	0.00002073	0.00001837	0.00000236
611870.00	2373440.00	0.00045605	0.00001701	0.00001465	0.00000236	0.0004381	0.00001862	0.00001626	0.00000237
612370.00	2373440.00	0.00030086	0.00001596	0.00001359	0.00000237	0.0006218	0.00001889	0.00001651	0.00000238
612870.00	2373440.00	0.00022183	0.00001584	0.00001343	0.0000024	0.0003441	0.00001826	0.00001581	0.00000244
613370.00	2373440.00	0.00039648	0.00001496	0.0000126	0.00000236	0.0005268	0.00001667	0.0000143	0.00000237
613870.00	2373440.00	0.00045551	0.00001452	0.00001218	0.00000233	0.0004131	0.00001546	0.00001312	0.00000234
614370.00	2373440.00	0.00038859	0.00001312	0.00001082	0.0000023	0.0002701	0.00001352	0.00001121	0.00000231
614870.00	2373440.00	0.00030875	0.00001221	0.00000996	0.00000225	0.0002417	0.00001268	0.00001042	0.00000226
615370.00	2373440.00	0.00022978	0.0000112	0.00000902	0.00000219	0.0002151	0.00001186	0.00000966	0.0000022
615870.00	2373440.00	0.00016844	0.00001014	0.00000803	0.00000211	0.00019	0.00001087	0.00000874	0.00000214
616370.00	2373440.00	0.00016339	0.00000967	0.00000766	0.00000201	0.000185	0.00001034	0.0000083	0.00000204
616870.00	2373440.00	0.00017655	0.00000971	0.00000781	0.0000019	0.0001943	0.00001035	0.00000842	0.00000193
617370.00	2373440.00	0.00042613	0.00001133	0.00000953	0.00000179	0.000285	0.0000113	0.00000947	0.00000183
617870.00	2373440.00	0.0006186	0.00001221	0.0000105	0.0000017	0.0004098	0.00001196	0.00001022	0.00000174
618370.00	2373440.00	0.00025544	0.00001102	0.00000938	0.00000165	0.0005654	0.00001295	0.00001125	0.0000017
618870.00	2373440.00	0.00020561	0.00001113	0.00000951	0.00000162	0.0003394	0.00001258	0.00001089	0.00000169
619370.00	2373440.00	0.00020675	0.00001117	0.00000961	0.00000157	0.0003405	0.00001267	0.00001101	0.00000165
619870.00	2373440.00	0.00020819	0.0000112	0.00000969	0.00000151	0.0003443	0.00001273	0.00001112	0.00000161
590370.00	2373940.00	0.00039077	0.00006192	0.00005452	0.0000074	0.0007085	0.00007052	0.00006248	0.00000804
590870.00	2373940.00	0.00045647	0.00005753	0.00005147	0.00000606	0.0012151	0.00006644	0.00005979	0.00000665
591370.00	2373940.00	0.00049792	0.00005479	0.00004987	0.00000492	0.001474	0.00006374	0.00005829	0.00000545
591870.00	2373940.00	0.00155587	0.00005633	0.0000525	0.00000383	0.0012657	0.00005897	0.00005472	0.00000425
592370.00	2373940.00	0.00077929	0.00005024	0.00004731	0.00000294	0.0004279	0.00005175	0.00004854	0.00000321
592870.00	2373940.00	0.00021223	0.00004139	0.00003918	0.00000221	0.0002533	0.00004444	0.0000421	0.00000234
593370.00	2373940.00	0.00021084	0.00004111	0.00003922	0.00000189	0.0002509	0.00004413	0.00004225	0.00000189
593870.00	2373940.00	0.00025394	0.00004307	0.0000413	0.00000177	0.000284	0.00004609	0.00004443	0.00000166
594370.00	2373940.00	0.00022725	0.00004129	0.00003957	0.00000171	0.0002603	0.0000437	0.0000422	0.00000151
594870.00	2373940.00	0.0002275	0.00004164	0.00003988	0.00000176	0.0002688	0.00004425	0.00004276	0.00000148
595370.00	2373940.00	0.00036387	0.00004705	0.00004515	0.00000191	0.0003228	0.00004817	0.00004657	0.00000161
595870.00	2373940.00	0.00075828	0.00005401	0.00005196	0.00000206	0.0004383	0.0000527	0.00005095	0.00000175
596370.00	2373940.00	0.0013647	0.0000604	0.00005821	0.00000219	0.0007331	0.00005859	0.00005669	0.0000019
596870.00	2373940.00	0.00141975	0.00006371	0.00006143	0.00000228	0.0008496	0.00006246	0.00006045	0.00000202
597370.00	2373940.00	0.00139579	0.00006636	0.00006403	0.00000233	0.000992	0.00006691	0.0000648	0.00000211
597870.00	2373940.00	0.00135799	0.0000681	0.00006577	0.00000233	0.0009946	0.00007001	0.00006785	0.00000216
598370.00	2373940.00	0.00124356	0.00006814	0.00006583	0.00000231	0.0010676	0.00007236	0.00007017	0.00000219
598870.00	2373940.00	0.00113565	0.00006677	0.0000645	0.00000227	0.0010655	0.00007247	0.00007029	0.00000218
599370.00	2373940.00	0.00096599	0.00006387	0.00006164	0.00000223	0.0011036	0.00007099	0.00006882	0.00000217
599870.00	2373940.00	0.00068881	0.00005975	0.00005757	0.00000218	0.0008575	0.00006682	0.00006467	0.00000215
600370.00	2373940.00	0.00049655	0.00005588	0.00005372	0.00000216	0.0009148	0.00006465	0.0000625	0.00000215
600870.00	2373940.00	0.00040959	0.00005247	0.00005034	0.00000213	0.0008531	0.0000608	0.00005865	0.00000214
601370.00	2373940.00	0.00039397	0.00004966	0.00004755	0.00000211	0.000847	0.00005721	0.00005508	0.00000213
601870.00	2373940.00	0.0003827	0.0000472	0.00004511	0.00000209	0.0008084	0.00005408	0.00005195	0.00000212
602370.00	2373940.00	0.00038506	0.00004511	0.00004304	0.00000208	0.0007754	0.00005144	0.00004932	0.00000212
602870.00	2373940.00	0.0003877	0.00004327	0.0000412	0.00000207	0.0007106	0.00004908	0.00004696	0.00000212
603370.00	2373940.00	0.00035378	0.00004139	0.00003931	0.00000207	0.0007204	0.00004747	0.00004534	0.00000213
603870.00	2373940.00	0.0003398	0.00003972	0.00003764	0.00000208	0.0006947	0.00004573	0.00004359	0.00000214
604370.00	2373940.00	0.0003588	0.0000383	0.00003622	0.00000208	0.000683	0.00004391	0.00004176	0.00000215
604870.00	2373940.00	0.00039021	0.00003697	0.00003488	0.00000209	0.0006471	0.00004197	0.00003982	0.00000216
605370.00	2373940.00	0.0003928	0.00003546	0.00003337	0.00000209	0.0006317	0.00004023	0.00003806	0.00000217
605870.00	2373940.00	0.00038782	0.00003392	0.00003182	0.0000021	0.0006299	0.00003854	0.00003637	0.00000218
606370.00	2373940.00	0.00026043	0.00003194	0.00002982	0.00000212	0.0004327	0.00003688	0.00003469	0.00000219
606870.00	2373940.00	0.00033614	0.00003061	0.00002849	0.00000212	0.0006577	0.00003542	0.00003323	0.00000219
607370.00	2373940.00	0.00032231	0.000029	0.00002687	0.00000212	0.0006525	0.00003373	0.00003153	0.0000022
607870.00	2373940.00	0.00025563	0.0000273	0.00002516	0.00000214	0.0004256	0.00003157	0.00002937	0.00000221
608370.00	2373940.00	0.00026188	0.00002575	0.00002361	0.00000215	0.0004775	0.00002997	0.00002777	0.00000221
608870.00	2373940.00	0.00041708	0.00002473	0.00002258	0.00000215	0.0005579	0.00002798	0.00002577	0.00000221
609370.00	2373940.00	0.00025922	0.00002286	0.00002068	0.00000217	0.0004884	0.00002677	0.00002455	0.00000222
609870.00	2373940.00	0.00028399	0.00002155	0.00001936	0.00000219	0.0005968	0.00002552	0.00002329	0.00000223
610370.00	2373940.00	0.00024546	0.0000203	0.00001809	0.00000222	0.00044	0.00002377	0.00002152	0.00000225

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
610870.00	2373940.00	0.00046411	0.00001951	0.00001729	0.00000222	0.0004162	0.00002146	0.00001921	0.00000225
611370.00	2373940.00	0.00022753	0.0000187	0.00001641	0.00000229	0.0003439	0.00002163	0.00001929	0.00000234
611870.00	2373940.00	0.00043789	0.00001754	0.00001527	0.00000227	0.0004505	0.00001937	0.00001709	0.00000228
612370.00	2373940.00	0.00022224	0.0000171	0.00001477	0.00000233	0.0003398	0.00001976	0.00001738	0.00000238
612870.00	2373940.00	0.00026952	0.00001566	0.00001335	0.0000023	0.0005777	0.0000186	0.00001629	0.00000231
613370.00	2373940.00	0.00042023	0.00001535	0.00001305	0.0000023	0.0004624	0.00001682	0.00001452	0.0000023
613870.00	2373940.00	0.00041547	0.00001479	0.0000125	0.00000229	0.0004675	0.00001617	0.00001387	0.0000023
614370.00	2373940.00	0.00023677	0.00001228	0.00000998	0.0000023	0.0002154	0.00001315	0.00001085	0.0000023
614870.00	2373940.00	0.0002099	0.00001164	0.00000937	0.00000227	0.0002067	0.0000125	0.00001023	0.00000227
615370.00	2373940.00	0.00018189	0.00001095	0.00000872	0.00000223	0.0001953	0.00001179	0.00000956	0.00000223
615870.00	2373940.00	0.00016302	0.00001024	0.00000807	0.00000217	0.0001832	0.00001101	0.00000882	0.00000219
616370.00	2373940.00	0.00015619	0.00000958	0.00000747	0.00000211	0.0001761	0.00001028	0.00000815	0.00000213
616870.00	2373940.00	0.00022943	0.00001052	0.00000855	0.00000198	0.0002103	0.00001105	0.00000906	0.000002
617370.00	2373940.00	0.00026668	0.00001176	0.00000986	0.0000019	0.0005974	0.00001385	0.00001192	0.00000193
617870.00	2373940.00	0.00021025	0.00001143	0.0000096	0.00000183	0.0003769	0.00001302	0.00001115	0.00000187
618370.00	2373940.00	0.0002034	0.00001129	0.00000953	0.00000175	0.0003421	0.00001276	0.00001095	0.00000181
618870.00	2373940.00	0.00020306	0.00001141	0.00000971	0.0000017	0.0003331	0.00001291	0.00001113	0.00000178
619370.00	2373940.00	0.00020545	0.0000115	0.00000985	0.00000165	0.0003394	0.00001307	0.00001132	0.00000174
619870.00	2373940.00	0.00020419	0.0000113	0.00000972	0.00000158	0.0003379	0.00001288	0.0000112	0.00000168
590370.00	2374440.00	0.00048553	0.0000592	0.00005238	0.00000682	0.0012761	0.00006857	0.00006118	0.00000739
590870.00	2374440.00	0.00153115	0.00005863	0.00005313	0.0000055	0.0008178	0.00006018	0.00005415	0.00000603
591370.00	2374440.00	0.00159938	0.00005662	0.00005214	0.00000448	0.0009531	0.00005793	0.00005298	0.00000495
591870.00	2374440.00	0.00164613	0.00005499	0.00005139	0.00000361	0.0009792	0.00005593	0.00005195	0.00000398
592370.00	2374440.00	0.00080341	0.00004913	0.00004633	0.00000281	0.0004307	0.00005043	0.00004737	0.00000306
592870.00	2374440.00	0.00020261	0.00003991	0.00003783	0.00000208	0.0002404	0.00004287	0.00004067	0.00000219
593370.00	2374440.00	0.00021213	0.00004033	0.0000385	0.00000184	0.0002517	0.00004322	0.00004139	0.00000183
593870.00	2374440.00	0.00027258	0.00004258	0.00004086	0.00000172	0.0002882	0.00004528	0.00004366	0.00000162
594370.00	2374440.00	0.00036326	0.00004414	0.00004243	0.00000171	0.0003107	0.00004589	0.00004438	0.00000152
594870.00	2374440.00	0.00049254	0.00004647	0.00004471	0.00000176	0.0003437	0.00004704	0.00004553	0.00000151
595370.00	2374440.00	0.00033538	0.00004525	0.00004342	0.00000182	0.0003079	0.00004651	0.00004498	0.00000153
595870.00	2374440.00	0.00075604	0.00005223	0.00005026	0.00000197	0.0004342	0.00005103	0.00004936	0.00000167
596370.00	2374440.00	0.00127408	0.00005786	0.00005576	0.0000021	0.0006677	0.00005602	0.00005421	0.00000181
596870.00	2374440.00	0.0013687	0.00006121	0.00005902	0.00000219	0.0007798	0.00005974	0.00005781	0.00000193
597370.00	2374440.00	0.00137886	0.00006403	0.00006178	0.00000225	0.0008681	0.00006358	0.00006156	0.00000202
597870.00	2374440.00	0.00134085	0.00006598	0.00006372	0.00000226	0.0009514	0.00006721	0.00006513	0.00000208
598370.00	2374440.00	0.00125678	0.0000666	0.00006435	0.00000225	0.0010064	0.00006982	0.0000677	0.00000211
598870.00	2374440.00	0.00116752	0.00006585	0.00006364	0.00000222	0.0010102	0.00007055	0.00006844	0.00000211
599370.00	2374440.00	0.00078484	0.00006249	0.00006032	0.00000217	0.0008718	0.00006895	0.00006685	0.0000021
599870.00	2374440.00	0.00062634	0.00005942	0.00005728	0.00000214	0.0009341	0.00006812	0.00006602	0.0000021
600370.00	2374440.00	0.0004648	0.00005572	0.00005361	0.00000211	0.0009452	0.00006505	0.00006296	0.00000209
600870.00	2374440.00	0.00053197	0.00005308	0.00005101	0.00000207	0.0008203	0.00006012	0.00005806	0.00000206
601370.00	2374440.00	0.00051144	0.00005027	0.00004822	0.00000204	0.0007917	0.00005642	0.00005437	0.00000205
601870.00	2374440.00	0.0003878	0.00004725	0.00004522	0.00000204	0.0008065	0.00005402	0.00005196	0.00000206
602370.00	2374440.00	0.0003604	0.00004499	0.00004296	0.00000202	0.0007626	0.00005143	0.00004937	0.00000206
602870.00	2374440.00	0.00037224	0.00004317	0.00004116	0.00000201	0.000715	0.000049	0.00004694	0.00000206
603370.00	2374440.00	0.00040815	0.0000417	0.0000397	0.00000201	0.0006787	0.00004686	0.0000448	0.00000206
603870.00	2374440.00	0.00035005	0.00003982	0.0000378	0.00000201	0.0006938	0.00004553	0.00004346	0.00000207
604370.00	2374440.00	0.00025589	0.00003812	0.00003608	0.00000204	0.0004055	0.00004386	0.00004176	0.0000021
604870.00	2374440.00	0.00036607	0.000037	0.00003498	0.00000202	0.0006515	0.00004213	0.00004004	0.00000209
605370.00	2374440.00	0.00037661	0.00003563	0.0000336	0.00000203	0.0006284	0.00004042	0.00003832	0.0000021
605870.00	2374440.00	0.00039357	0.00003428	0.00003225	0.00000203	0.0005991	0.00003864	0.00003654	0.0000021
606370.00	2374440.00	0.00039074	0.00003281	0.00003078	0.00000204	0.0005959	0.00003704	0.00003492	0.00000211
606870.00	2374440.00	0.00040143	0.00003139	0.00002935	0.00000204	0.0005769	0.00003531	0.00003319	0.00000212
607370.00	2374440.00	0.00032291	0.00002959	0.00002754	0.00000205	0.0006382	0.00003421	0.00003208	0.00000213
607870.00	2374440.00	0.00040541	0.00002843	0.00002637	0.00000206	0.0005637	0.00003199	0.00002987	0.00000213
608370.00	2374440.00	0.00042083	0.00002699	0.00002493	0.00000206	0.0005322	0.00003021	0.00002808	0.00000213
608870.00	2374440.00	0.00046203	0.0000256	0.00002353	0.00000207	0.0004431	0.00002817	0.00002603	0.00000214
609370.00	2374440.00	0.00034044	0.00002384	0.00002176	0.00000209	0.0006263	0.00002764	0.0000255	0.00000214
609870.00	2374440.00	0.00025399	0.00002227	0.00002016	0.00000211	0.0004825	0.00002603	0.00002388	0.00000216
610370.00	2374440.00	0.00023347	0.00002113	0.000019	0.00000213	0.000369	0.00002443	0.00002225	0.00000218
610870.00	2374440.00	0.0003563	0.00002006	0.00001793	0.00000213	0.000587	0.00002316	0.00002099	0.00000217
611370.00	2374440.00	0.00037074	0.00001901	0.00001685	0.00000215	0.0005567	0.00002176	0.00001958	0.00000218
611870.00	2374440.00	0.00022668	0.00001785	0.00001566	0.00000219	0.0003837	0.00002076	0.00001855	0.00000222
612370.00	2374440.00	0.00026322	0.00001689	0.00001469	0.0000022	0.0005577	0.00002005	0.00001783	0.00000222
612870.00	2374440.00	0.00039356	0.0000164	0.00001418	0.00000222	0.0004916	0.00001834	0.00001611	0.00000222
613370.00	2374440.00	0.00043795	0.00001573	0.0000135	0.00000223	0.0003932	0.000017	0.00001477	0.00000223
613870.00	2374440.00	0.00030283	0.00001489	0.00001266	0.00000223	0.0005851	0.00001737	0.00001513	0.00000224
614370.00	2374440.00	0.0002536	0.00001277	0.00001052	0.00000225	0.0002196	0.00001366	0.00001141	0.00000225
614870.00	2374440.00	0.00016903	0.00001133	0.00000907	0.00000226	0.0001866	0.00001232	0.00001006	0.00000226

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
615370.00	2374440.00	0.00016179	0.00001079	0.00000854	0.00000224	0.0001807	0.00001168	0.00000944	0.00000224
615870.00	2374440.00	0.00019701	0.00001105	0.00000888	0.00000217	0.0001984	0.00001184	0.00000967	0.00000217
616370.00	2374440.00	0.00016987	0.00001038	0.00000826	0.00000212	0.0001863	0.00001115	0.00000902	0.00000213
616870.00	2374440.00	0.00034527	0.00001163	0.00000961	0.00000202	0.0002478	0.00001185	0.00000981	0.00000204
617370.00	2374440.00	0.00024757	0.0000119	0.00000995	0.00000195	0.0005427	0.00001396	0.00001198	0.00000198
617870.00	2374440.00	0.00020556	0.00001161	0.00000973	0.00000189	0.000362	0.00001321	0.00001128	0.00000193
618370.00	2374440.00	0.00019911	0.00001161	0.00000978	0.00000183	0.0003258	0.00001311	0.00001123	0.00000188
618870.00	2374440.00	0.00019827	0.00001135	0.0000096	0.00000175	0.0003256	0.00001281	0.000011	0.00000181
619370.00	2374440.00	0.00020242	0.00001168	0.00000996	0.00000172	0.000334	0.00001327	0.00001147	0.0000018
619870.00	2374440.00	0.0002013	0.00001144	0.00000979	0.00000164	0.0003335	0.00001301	0.00001128	0.00000173
590370.00	2374940.00	0.0006712	0.00005771	0.00005135	0.00000636	0.0014986	0.00006627	0.0000594	0.00000688
590870.00	2374940.00	0.00089875	0.00005346	0.00004836	0.0000051	0.0004678	0.00005524	0.00004966	0.00000559
591370.00	2374940.00	0.00126539	0.00005311	0.00004894	0.00000417	0.0005788	0.00005388	0.00004927	0.0000046
591870.00	2374940.00	0.00127651	0.00005151	0.00004815	0.00000336	0.0005728	0.00005195	0.00004825	0.0000037
592370.00	2374940.00	0.00021746	0.00004128	0.00003877	0.00000252	0.0002614	0.00004431	0.00004158	0.00000273
592870.00	2374940.00	0.0002109	0.00004011	0.00003805	0.00000206	0.0002505	0.00004299	0.00004083	0.00000216
593370.00	2374940.00	0.00022037	0.00003976	0.00003796	0.00000179	0.000255	0.00004248	0.0000407	0.00000179
593870.00	2374940.00	0.00047575	0.0000442	0.00004248	0.00000172	0.0003346	0.00004567	0.00004405	0.00000162
594370.00	2374940.00	0.00061508	0.00004555	0.00004388	0.00000168	0.0003608	0.0000462	0.00004469	0.0000015
594870.00	2374940.00	0.000795	0.00004759	0.00004587	0.00000172	0.0004181	0.00004737	0.00004588	0.00000149
595370.00	2374940.00	0.00072468	0.00004851	0.00004673	0.00000179	0.0004041	0.00004793	0.00004641	0.00000152
595870.00	2374940.00	0.00060539	0.00004933	0.00004745	0.00000188	0.0003806	0.00004859	0.000047	0.00000159
596370.00	2374940.00	0.00113677	0.00005525	0.00005323	0.00000201	0.0005904	0.00005351	0.00005178	0.00000173
596870.00	2374940.00	0.00131851	0.00005885	0.00005675	0.00000211	0.0007352	0.00005725	0.00005541	0.00000184
597370.00	2374940.00	0.00134631	0.00006171	0.00005954	0.00000217	0.0008425	0.00006102	0.00005908	0.00000194
597870.00	2374940.00	0.00132145	0.00006387	0.00006167	0.00000219	0.0009046	0.00006447	0.00006246	0.000002
598370.00	2374940.00	0.0012694	0.000065	0.00006281	0.00000219	0.0009353	0.00006716	0.00006512	0.00000204
598870.00	2374940.00	0.00086893	0.00006335	0.00006119	0.00000216	0.0008355	0.00006804	0.00006599	0.00000205
599370.00	2374940.00	0.0006962	0.00006158	0.00005944	0.00000213	0.0009971	0.00007005	0.00006799	0.00000206
599870.00	2374940.00	0.00063501	0.00005914	0.00005705	0.00000209	0.0009459	0.0000677	0.00006566	0.00000204
600370.00	2374940.00	0.00063582	0.00005626	0.00005422	0.00000205	0.0008214	0.0000628	0.00006078	0.00000201
600870.00	2374940.00	0.00058918	0.00005325	0.00005124	0.00000202	0.0007664	0.00005917	0.00005717	0.000002
601370.00	2374940.00	0.00039173	0.00004977	0.00004776	0.000002	0.0008426	0.00005748	0.00005547	0.00000201
601870.00	2374940.00	0.00042316	0.00004745	0.00004547	0.00000198	0.0008045	0.00005385	0.00005185	0.00000199
602370.00	2374940.00	0.00036337	0.00004501	0.00004304	0.00000197	0.0007644	0.00005135	0.00004935	0.000002
602870.00	2374940.00	0.0003986	0.0000433	0.00004135	0.00000196	0.000726	0.00004876	0.00004677	0.00000199
603370.00	2374940.00	0.0003525	0.00004137	0.00003941	0.00000195	0.0007055	0.00004705	0.00004505	0.000002
603870.00	2374940.00	0.00032292	0.00003967	0.00003772	0.00000196	0.0006682	0.00004541	0.00004341	0.00000201
604370.00	2374940.00	0.00037915	0.00003856	0.0000366	0.00000195	0.0006461	0.0000435	0.00004149	0.00000201
604870.00	2374940.00	0.00025001	0.00003668	0.0000347	0.00000198	0.0004083	0.00004214	0.0000401	0.00000204
605370.00	2374940.00	0.00026585	0.00003528	0.0000333	0.00000198	0.0005079	0.00004067	0.00003864	0.00000203
605870.00	2374940.00	0.00024468	0.00003417	0.00003217	0.000002	0.0003711	0.00003927	0.0000372	0.00000207
606370.00	2374940.00	0.00024429	0.00003272	0.00003072	0.000002	0.0003782	0.00003757	0.00003551	0.00000207
606870.00	2374940.00	0.00024531	0.00003129	0.00002929	0.000002	0.0003933	0.00003593	0.00003387	0.00000207
607370.00	2374940.00	0.00039712	0.00003039	0.00002841	0.00000199	0.0005531	0.00003404	0.00003198	0.00000206
607870.00	2374940.00	0.00025122	0.00002846	0.00002646	0.000002	0.0004425	0.00003279	0.00003072	0.00000207
608370.00	2374940.00	0.0002385	0.0000272	0.00002518	0.00000202	0.0003609	0.00003118	0.0000291	0.00000209
608870.00	2374940.00	0.00023766	0.00002576	0.00002374	0.00000202	0.0003686	0.00002956	0.00002748	0.00000209
609370.00	2374940.00	0.00044352	0.00002486	0.00002285	0.00000201	0.0004447	0.00002737	0.0000253	0.00000207
609870.00	2374940.00	0.00042642	0.00002348	0.00002145	0.00000202	0.0004775	0.0000261	0.00002402	0.00000208
610370.00	2374940.00	0.0002431	0.00002171	0.00001967	0.00000205	0.0004439	0.00002525	0.00002316	0.00000209
610870.00	2374940.00	0.00034603	0.00002075	0.0000187	0.00000205	0.0005826	0.00002392	0.00002183	0.0000021
611370.00	2374940.00	0.00033714	0.0000196	0.00001753	0.00000207	0.0005832	0.00002267	0.00002057	0.00000211
611870.00	2374940.00	0.00043966	0.00001871	0.00001663	0.00000209	0.0003987	0.00002052	0.0000184	0.00000211
612370.00	2374940.00	0.00039372	0.00001774	0.00001563	0.00000211	0.0004819	0.00001988	0.00001775	0.00000213
612870.00	2374940.00	0.00021337	0.00001687	0.00001471	0.00000215	0.0003323	0.00001943	0.00001725	0.00000218
613370.00	2374940.00	0.00021998	0.00001588	0.00001372	0.00000216	0.0003943	0.00001849	0.00001631	0.00000218
613870.00	2374940.00	0.00029653	0.00001527	0.0000131	0.00000217	0.0005725	0.00001783	0.00001565	0.00000217
614370.00	2374940.00	0.00018063	0.00001229	0.00001009	0.0000022	0.0001925	0.00001348	0.00001129	0.00000219
614870.00	2374940.00	0.00016697	0.00001158	0.00000937	0.00000221	0.0001839	0.00001265	0.00001045	0.0000022
615370.00	2374940.00	0.00034136	0.00001288	0.00001071	0.00000216	0.0002431	0.00001341	0.00001124	0.00000216
615870.00	2374940.00	0.0004787	0.0000139	0.00001177	0.00000213	0.0005369	0.00001497	0.00001284	0.00000213
616370.00	2374940.00	0.0005836	0.00001363	0.00001154	0.00000209	0.0003708	0.00001365	0.00001156	0.00000209
616870.00	2374940.00	0.00058253	0.00001329	0.00001125	0.00000204	0.0003739	0.00001326	0.00001121	0.00000205
617370.00	2374940.00	0.00041975	0.00001267	0.00001069	0.00000198	0.0005875	0.00001392	0.00001193	0.000002
617870.00	2374940.00	0.00027823	0.00001189	0.00000997	0.00000192	0.0006064	0.00001395	0.00001201	0.00000194
618370.00	2374940.00	0.00019593	0.00001183	0.00000995	0.00000188	0.0003175	0.00001337	0.00001144	0.00000193
618870.00	2374940.00	0.00019595	0.00001169	0.00000987	0.00000182	0.0003182	0.00001321	0.00001133	0.00000188
619370.00	2374940.00	0.00019667	0.0000116	0.00000984	0.00000176	0.0003211	0.00001312	0.00001129	0.00000183

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
619870.00	2374940.00	0.00019751	0.00001156	0.00000985	0.0000017	0.0003251	0.00001314	0.00001136	0.00000178
590370.00	2375440.00	0.0014	0.00005771	0.00005184	0.00000586	0.0007779	0.00005968	0.00005334	0.00000634
590870.00	2375440.00	0.00101651	0.00005258	0.00004776	0.00000481	0.000495	0.00005407	0.00004881	0.00000527
591370.00	2375440.00	0.00039603	0.00004674	0.0000429	0.00000384	0.0003552	0.0000493	0.00004507	0.00000423
591870.00	2375440.00	0.00031804	0.00004441	0.00004134	0.00000307	0.0003285	0.00004716	0.0000438	0.00000337
592370.00	2375440.00	0.0002342	0.00004088	0.00003844	0.00000244	0.0002793	0.00004373	0.00004109	0.00000263
592870.00	2375440.00	0.00022248	0.00003966	0.00003765	0.00000201	0.0002647	0.0000424	0.0000403	0.0000021
593370.00	2375440.00	0.00033797	0.00004211	0.00004032	0.00000179	0.0003057	0.00004432	0.00004254	0.00000178
593870.00	2375440.00	0.00063795	0.0000444	0.00004271	0.00000168	0.0003624	0.00004529	0.00004371	0.00000159
594370.00	2375440.00	0.00079472	0.00004561	0.00004398	0.00000164	0.0004079	0.00004581	0.00004434	0.00000147
594870.00	2375440.00	0.00089707	0.00004697	0.00004531	0.00000166	0.0004455	0.00004666	0.00004522	0.00000144
595370.00	2375440.00	0.0010938	0.00004931	0.00004757	0.00000174	0.0005298	0.00004828	0.0000468	0.00000148
595870.00	2375440.00	0.00117819	0.00005151	0.00004967	0.00000184	0.0005949	0.00005008	0.00004851	0.00000156
596370.00	2375440.00	0.00128334	0.00005422	0.00005228	0.00000194	0.0006895	0.00005261	0.00005094	0.00000167
596870.00	2375440.00	0.00131109	0.00005686	0.00005483	0.00000203	0.000769	0.0000554	0.00005363	0.00000177
597370.00	2375440.00	0.00130122	0.00005942	0.00005733	0.00000209	0.0007767	0.00005827	0.00005641	0.00000186
597870.00	2375440.00	0.00129732	0.00006176	0.00005964	0.00000213	0.0008574	0.00006181	0.00005988	0.00000193
598370.00	2375440.00	0.00124692	0.00006315	0.00006102	0.00000213	0.0009183	0.00006486	0.00006289	0.00000197
598870.00	2375440.00	0.00075944	0.00006176	0.00005964	0.00000212	0.0009956	0.00006859	0.00006659	0.000002
599370.00	2375440.00	0.0007571	0.00006074	0.00005866	0.00000208	0.0009014	0.00006685	0.00006486	0.00000199
599870.00	2375440.00	0.00075024	0.00005907	0.00005703	0.00000203	0.000786	0.00006476	0.00006279	0.00000197
600370.00	2375440.00	0.00068794	0.00005638	0.00005438	0.000002	0.0007534	0.00006208	0.00006013	0.00000195
600870.00	2375440.00	0.00062274	0.0000534	0.00005143	0.00000197	0.0007318	0.0000589	0.00005696	0.00000194
601370.00	2375440.00	0.00040726	0.00004989	0.00004793	0.00000196	0.0008557	0.00005757	0.00005562	0.00000195
601870.00	2375440.00	0.00032291	0.00004709	0.00004515	0.00000194	0.0006759	0.00005427	0.00005231	0.00000196
602370.00	2375440.00	0.0003882	0.00004514	0.00004323	0.00000192	0.0007685	0.00005119	0.00004925	0.00000194
602870.00	2375440.00	0.00035125	0.00004304	0.00004113	0.00000191	0.0007304	0.00004894	0.000047	0.00000194
603370.00	2375440.00	0.000389	0.00004155	0.00003965	0.0000019	0.0006972	0.00004666	0.00004473	0.00000194
603870.00	2375440.00	0.00034856	0.0000398	0.0000379	0.0000019	0.000682	0.00004514	0.0000432	0.00000194
604370.00	2375440.00	0.00032182	0.00003824	0.00003634	0.0000019	0.0006481	0.00004364	0.00004169	0.00000195
604870.00	2375440.00	0.00033765	0.000037	0.0000351	0.0000019	0.000643	0.0000421	0.00004015	0.00000196
605370.00	2375440.00	0.0003679	0.00003588	0.00003397	0.0000019	0.0006076	0.00004043	0.00003847	0.00000196
605870.00	2375440.00	0.00040236	0.00003477	0.00003286	0.00000191	0.0005475	0.00003864	0.00003667	0.00000197
606370.00	2375440.00	0.00041472	0.00003352	0.00003161	0.00000191	0.0005103	0.00003703	0.00003504	0.00000198
606870.00	2375440.00	0.00025224	0.00003154	0.0000296	0.00000193	0.0004606	0.00003627	0.00003427	0.00000199
607370.00	2375440.00	0.00028078	0.00003033	0.0000284	0.00000193	0.0005711	0.00003499	0.00003299	0.000002
607870.00	2375440.00	0.00030389	0.0000291	0.00002717	0.00000193	0.0006027	0.00003348	0.00003148	0.000002
608370.00	2375440.00	0.00032302	0.00002785	0.00002591	0.00000194	0.0006041	0.0000319	0.0000299	0.00000201
608870.00	2375440.00	0.00026212	0.0000263	0.00002435	0.00000195	0.0005217	0.00003043	0.00002842	0.00000201
609370.00	2375440.00	0.00024188	0.00002494	0.00002298	0.00000196	0.0004277	0.00002873	0.00002671	0.00000202
609870.00	2375440.00	0.00022788	0.00002398	0.00002199	0.00000199	0.0003355	0.00002746	0.0000254	0.00000206
610370.00	2375440.00	0.00022532	0.00002269	0.00002069	0.00000199	0.0003339	0.00002599	0.00002393	0.00000206
610870.00	2375440.00	0.00023545	0.00002119	0.0000192	0.00000199	0.0004222	0.00002456	0.00002252	0.00000203
611370.00	2375440.00	0.00032688	0.00002025	0.00001825	0.00000199	0.0005778	0.0000234	0.00002136	0.00000203
611870.00	2375440.00	0.00021898	0.00001976	0.00001769	0.00000207	0.0003271	0.00002274	0.00002059	0.00000214
612370.00	2375440.00	0.00032385	0.00001818	0.00001615	0.00000203	0.0005645	0.00002103	0.00001897	0.00000206
612870.00	2375440.00	0.00038245	0.00001741	0.00001537	0.00000205	0.0004742	0.0000195	0.00001743	0.00000207
613370.00	2375440.00	0.00037445	0.00001659	0.00001452	0.00000207	0.0004769	0.00001858	0.0000165	0.00000208
613870.00	2375440.00	0.00020579	0.00001605	0.00001393	0.00000212	0.0003147	0.00001842	0.00001627	0.00000215
614370.00	2375440.00	0.00017343	0.00001248	0.00001036	0.00000213	0.000187	0.00001376	0.00001164	0.00000212
614870.00	2375440.00	0.00015469	0.00001143	0.00000927	0.00000216	0.0001723	0.00001257	0.00001042	0.00000215
615370.00	2375440.00	0.00037282	0.00001338	0.00001126	0.00000211	0.0002507	0.00001392	0.00001181	0.00000211
615870.00	2375440.00	0.00045131	0.00001408	0.00001198	0.0000021	0.0005435	0.00001538	0.00001328	0.0000021
616370.00	2375440.00	0.00022677	0.00001299	0.00001091	0.00000208	0.0004665	0.00001518	0.00001309	0.00000209
616870.00	2375440.00	0.00019957	0.00001268	0.00001063	0.00000205	0.0003386	0.00001447	0.0000124	0.00000207
617370.00	2375440.00	0.00020369	0.00001228	0.00001027	0.00000201	0.0003651	0.00001405	0.00001202	0.00000203
617870.00	2375440.00	0.0002162	0.00001193	0.00000998	0.00000195	0.0004294	0.00001379	0.00001181	0.00000197
618370.00	2375440.00	0.00022849	0.00001165	0.00000976	0.00000189	0.0004828	0.00001356	0.00001164	0.00000191
618870.00	2375440.00	0.0002144	0.00001135	0.00000952	0.00000183	0.0004265	0.00001308	0.00001122	0.00000186
619370.00	2375440.00	0.00019087	0.00001133	0.00000955	0.00000178	0.0003125	0.00001276	0.00001094	0.00000182
619870.00	2375440.00	0.00019412	0.00001169	0.00000994	0.00000175	0.0003177	0.00001329	0.00001146	0.00000183
590370.00	2375940.00	0.00023108	0.00004545	0.00004019	0.00000527	0.0002699	0.0000492	0.00004347	0.00000573
590870.00	2375940.00	0.00021765	0.00004264	0.00003833	0.00000431	0.0002544	0.00004579	0.00004107	0.00000472
591370.00	2375940.00	0.0002146	0.00004095	0.00003745	0.0000035	0.0002547	0.00004377	0.00003993	0.00000385
591870.00	2375940.00	0.00034775	0.00004377	0.00004083	0.00000294	0.0003308	0.00004613	0.00004292	0.00000321
592370.00	2375940.00	0.00044838	0.00004363	0.00004121	0.00000242	0.0003434	0.0000455	0.0000429	0.0000026
592870.00	2375940.00	0.00047841	0.00004308	0.00004105	0.00000203	0.0003396	0.00004474	0.00004264	0.00000211
593370.00	2375940.00	0.000516	0.0000428	0.00004104	0.00000176	0.0003386	0.0000442	0.00004244	0.00000176
593870.00	2375940.00	0.00069143	0.00004375	0.00004212	0.00000163	0.000371	0.00004443	0.00004289	0.00000154

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
594370.00	2375940.00	0.00102709	0.00004577	0.00004418	0.0000016	0.0004728	0.00004554	0.00004409	0.00000144
594870.00	2375940.00	0.00106016	0.00004668	0.00004507	0.00000161	0.0004992	0.00004607	0.00004467	0.0000014
595370.00	2375940.00	0.00112012	0.00004817	0.0000465	0.00000168	0.0005453	0.00004716	0.00004573	0.00000143
595870.00	2375940.00	0.00120112	0.00005016	0.00004839	0.00000177	0.000606	0.00004877	0.00004727	0.0000015
596370.00	2375940.00	0.001285	0.00005261	0.00005074	0.00000187	0.0007159	0.00005118	0.00004958	0.0000016
596870.00	2375940.00	0.00127206	0.00005483	0.00005288	0.00000195	0.0007176	0.00005331	0.00005162	0.00000169
597370.00	2375940.00	0.00127823	0.00005736	0.00005534	0.00000202	0.0007728	0.00005624	0.00005445	0.00000179
597870.00	2375940.00	0.00126573	0.00005967	0.00005761	0.00000206	0.0008562	0.00005963	0.00005777	0.00000186
598370.00	2375940.00	0.00085189	0.00005965	0.00005758	0.00000208	0.0008661	0.00006262	0.0000607	0.00000191
598870.00	2375940.00	0.0008567	0.00006057	0.00005851	0.00000206	0.0007885	0.00006406	0.00006213	0.00000193
599370.00	2375940.00	0.00081547	0.00006013	0.00005811	0.00000203	0.0007826	0.00006467	0.00006275	0.00000193
599870.00	2375940.00	0.00075978	0.00005856	0.00005657	0.00000199	0.0007697	0.00006381	0.00006189	0.00000192
600370.00	2375940.00	0.00070749	0.00005624	0.00005429	0.00000195	0.0007353	0.00006158	0.00005967	0.0000019
600870.00	2375940.00	0.00066604	0.00005357	0.00005165	0.00000192	0.000672	0.00005837	0.00005649	0.00000188
601370.00	2375940.00	0.00043268	0.00005003	0.00004812	0.00000191	0.0008624	0.00005758	0.00005568	0.0000019
601870.00	2375940.00	0.00032992	0.00004718	0.00004528	0.0000019	0.0006972	0.00005441	0.0000525	0.0000019
602370.00	2375940.00	0.00038609	0.00004516	0.00004329	0.00000187	0.0007672	0.00005122	0.00004934	0.00000188
602870.00	2375940.00	0.00039466	0.00004325	0.0000414	0.00000186	0.0007251	0.00004858	0.00004671	0.00000188
603370.00	2375940.00	0.00033839	0.00004125	0.0000394	0.00000185	0.0006987	0.0000468	0.00004492	0.00000188
603870.00	2375940.00	0.00033815	0.00003972	0.00003787	0.00000185	0.0006771	0.000045	0.00004312	0.00000189
604370.00	2375940.00	0.00032682	0.00003826	0.00003641	0.00000185	0.000654	0.00004347	0.00004158	0.00000189
604870.00	2375940.00	0.00032806	0.00003697	0.00003512	0.00000185	0.0006357	0.000042	0.0000401	0.0000019
605370.00	2375940.00	0.00032485	0.00003571	0.00003386	0.00000185	0.0006208	0.00004061	0.00003871	0.00000191
605870.00	2375940.00	0.00030994	0.00003441	0.00003256	0.00000186	0.0006057	0.00003931	0.00003739	0.00000192
606370.00	2375940.00	0.0002467	0.00003296	0.00003109	0.00000187	0.0004485	0.00003782	0.00003589	0.00000193
606870.00	2375940.00	0.00027246	0.00003184	0.00002997	0.00000187	0.0005506	0.00003662	0.00003469	0.00000193
607370.00	2375940.00	0.000401	0.00003116	0.00002929	0.00000187	0.0004975	0.00003441	0.00003248	0.00000194
607870.00	2375940.00	0.00033343	0.00002963	0.00002775	0.00000187	0.0005807	0.00003361	0.00003167	0.00000194
608370.00	2375940.00	0.00023105	0.0000281	0.00002621	0.00000189	0.0003631	0.00003211	0.00003015	0.00000196
608870.00	2375940.00	0.00025354	0.0000268	0.00002491	0.00000189	0.000494	0.00003088	0.00002892	0.00000195
609370.00	2375940.00	0.00038433	0.00002599	0.00002411	0.00000189	0.0005091	0.00002897	0.00002702	0.00000195
609870.00	2375940.00	0.0002484	0.00002426	0.00002236	0.0000019	0.0004815	0.00002804	0.00002608	0.00000196
610370.00	2375940.00	0.00031532	0.00002324	0.00002134	0.0000019	0.0005818	0.00002672	0.00002476	0.00000196
610870.00	2375940.00	0.00042782	0.00002231	0.00002041	0.00000191	0.0004064	0.00002443	0.00002247	0.00000196
611370.00	2375940.00	0.00021748	0.00002088	0.00001894	0.00000194	0.0003292	0.00002389	0.0000219	0.00000199
611870.00	2375940.00	0.00027182	0.00001966	0.00001772	0.00000194	0.0005584	0.00002302	0.00002104	0.00000198
612370.00	2375940.00	0.00040354	0.00001896	0.00001701	0.00000195	0.0004309	0.00002097	0.00001898	0.00000198
612870.00	2375940.00	0.00029463	0.00001777	0.0000158	0.00000197	0.0005608	0.00002071	0.00001871	0.000002
613370.00	2375940.00	0.00038349	0.00001711	0.00001512	0.00000199	0.0004466	0.00001902	0.00001702	0.00000201
613870.00	2375940.00	0.00021311	0.00001607	0.00001405	0.00000202	0.0003782	0.00001865	0.00001661	0.00000204
614370.00	2375940.00	0.00018711	0.00001312	0.00001108	0.00000204	0.0001917	0.00001447	0.00001243	0.00000204
614870.00	2375940.00	0.00015142	0.00001164	0.00000956	0.00000209	0.0001685	0.00001287	0.00001079	0.00000208
615370.00	2375940.00	0.00017593	0.000012	0.00000993	0.00000208	0.0001851	0.00001314	0.00001107	0.00000207
615870.00	2375940.00	0.00045931	0.00001373	0.00001168	0.00000205	0.0002739	0.00001409	0.00001204	0.00000205
616370.00	2375940.00	0.00055775	0.000014	0.00001195	0.00000204	0.0003428	0.00001417	0.00001213	0.00000204
616870.00	2375940.00	0.00020378	0.00001285	0.00001082	0.00000203	0.0003684	0.00001478	0.00001273	0.00000204
617370.00	2375940.00	0.00019157	0.00001268	0.00001068	0.00000201	0.0003066	0.00001439	0.00001236	0.00000203
617870.00	2375940.00	0.00019085	0.00001257	0.00001058	0.00000199	0.0003025	0.00001424	0.00001222	0.00000202
618370.00	2375940.00	0.00019026	0.00001229	0.00001035	0.00000194	0.000303	0.00001391	0.00001193	0.00000198
618870.00	2375940.00	0.00020598	0.00001152	0.00000965	0.00000186	0.0003939	0.00001321	0.00001133	0.00000189
619370.00	2375940.00	0.00018832	0.00001141	0.0000096	0.00000181	0.0003093	0.00001287	0.00001102	0.00000185
619870.00	2375940.00	0.00018991	0.00001167	0.00000989	0.00000179	0.000308	0.0000132	0.00001135	0.00000184
590370.00	2376440.00	0.0002282	0.00004418	0.00003922	0.00000496	0.0002681	0.00004768	0.0000423	0.00000539
590870.00	2376440.00	0.0002284	0.000043	0.00003889	0.00000411	0.0002717	0.00004611	0.00004162	0.00000449
591370.00	2376440.00	0.00025998	0.00004285	0.00003945	0.0000034	0.0003007	0.00004565	0.00004193	0.00000372
591870.00	2376440.00	0.00034962	0.00004276	0.00003995	0.0000028	0.000325	0.00004495	0.0000419	0.00000305
592370.00	2376440.00	0.00064595	0.00004392	0.00004158	0.00000235	0.0003767	0.00004507	0.00004256	0.00000251
592870.00	2376440.00	0.00081547	0.00004412	0.00004213	0.00000199	0.0004143	0.0000448	0.00004273	0.00000207
593370.00	2376440.00	0.00088221	0.000044	0.00004226	0.00000174	0.0004281	0.00004444	0.0000427	0.00000173
593870.00	2376440.00	0.00089374	0.00004391	0.00004231	0.0000016	0.0004297	0.0000442	0.00004269	0.00000151
594370.00	2376440.00	0.00115206	0.00004546	0.0000439	0.00000156	0.0005418	0.00004502	0.00004361	0.00000141
594870.00	2376440.00	0.00121985	0.00004644	0.00004487	0.00000157	0.0005878	0.00004567	0.00004429	0.00000137
595370.00	2376440.00	0.00126793	0.00004777	0.00004615	0.00000163	0.000658	0.0000468	0.0000454	0.00000139
595870.00	2376440.00	0.00122173	0.00004892	0.00004722	0.0000017	0.0006315	0.00004764	0.00004619	0.00000145
596370.00	2376440.00	0.00124821	0.00005089	0.00004909	0.0000018	0.0006867	0.00004948	0.00004795	0.00000153
596870.00	2376440.00	0.00125548	0.00005315	0.00005127	0.00000189	0.000835	0.00005229	0.00005065	0.00000163
597370.00	2376440.00	0.00125117	0.0000554	0.00005345	0.00000195	0.0007648	0.00005427	0.00005256	0.00000172
597870.00	2376440.00	0.00122406	0.00005763	0.00005563	0.000002	0.0008671	0.00005761	0.00005582	0.00000179
598370.00	2376440.00	0.00087029	0.00005802	0.00005601	0.00000201	0.0007449	0.00005975	0.00005791	0.00000184

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission ($ug\text{-}s/m^3\text{-}g$)	Total dep rate/unit emission ($g\text{-}s/m^2\text{-}yr\text{-}g$)	Dry dep rate/unit emission ($g\text{-}s/m^2\text{-}yr\text{-}g$)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission ($ug\text{-}s/m^3\text{-}g$)	Total dep rate/unit emission ($g\text{-}s/m^2\text{-}yr\text{-}g$)	Dry dep rate/unit emission ($g\text{-}s/m^2\text{-}yr\text{-}g$)	Wet dep rate/unit emission (g-s/m2-yr-g)
598870.00	2376440.00	0.00085222	0.0000591	0.00005709	0.00000201	0.0007515	0.0000619	0.00006004	0.00000187
599370.00	2376440.00	0.00081875	0.00005909	0.0000571	0.00000198	0.0007549	0.00006298	0.00006111	0.00000187
599870.00	2376440.00	0.00077964	0.00005804	0.00005609	0.00000195	0.0007223	0.00006248	0.00006062	0.00000186
600370.00	2376440.00	0.00072206	0.00005599	0.00005408	0.00000191	0.0007113	0.00006091	0.00005906	0.00000185
600870.00	2376440.00	0.00067808	0.00005352	0.00005164	0.00000188	0.0006576	0.0000581	0.00005627	0.00000183
601370.00	2376440.00	0.00041718	0.00004998	0.00004811	0.00000187	0.000846	0.00005772	0.00005587	0.00000185
601870.00	2376440.00	0.00038602	0.00004742	0.00004558	0.00000185	0.0008066	0.00005446	0.00005262	0.00000184
602370.00	2376440.00	0.0003848	0.00004518	0.00004336	0.00000183	0.0007659	0.0000513	0.00004947	0.00000183
602870.00	2376440.00	0.00035941	0.00004308	0.00004127	0.00000181	0.0007285	0.00004878	0.00004695	0.00000183
603370.00	2376440.00	0.00025705	0.00004102	0.0000392	0.00000182	0.0004529	0.00004673	0.00004487	0.00000185
603870.00	2376440.00	0.00025209	0.00003937	0.00003755	0.00000181	0.0004543	0.00004482	0.00004297	0.00000185
604370.00	2376440.00	0.00034691	0.00003834	0.00003655	0.00000179	0.0006504	0.00004317	0.00004134	0.00000183
604870.00	2376440.00	0.00030152	0.00003681	0.00003502	0.0000018	0.0006191	0.00004193	0.00004009	0.00000184
605370.00	2376440.00	0.00034145	0.00003582	0.00003403	0.0000018	0.0006038	0.00004037	0.00003852	0.00000185
605870.00	2376440.00	0.00040285	0.00003499	0.00003319	0.0000018	0.0005178	0.00003851	0.00003665	0.00000185
606370.00	2376440.00	0.00035459	0.00003356	0.00003176	0.0000018	0.0005635	0.00003763	0.00003577	0.00000186
606870.00	2376440.00	0.00038013	0.00003252	0.00003072	0.00000181	0.0005191	0.00003607	0.0000342	0.00000187
607370.00	2376440.00	0.0003835	0.00003136	0.00002955	0.00000181	0.0005042	0.00003471	0.00003283	0.00000188
607870.00	2376440.00	0.00039186	0.0000302	0.00002838	0.00000182	0.0004849	0.00003329	0.0000314	0.00000189
608370.00	2376440.00	0.00041345	0.00002905	0.00002723	0.00000182	0.0004409	0.00003171	0.00002982	0.00000189
608870.00	2376440.00	0.0002554	0.00002726	0.00002543	0.00000183	0.0005082	0.00003134	0.00002944	0.0000019
609370.00	2376440.00	0.00035584	0.00002642	0.00002459	0.00000183	0.0005295	0.00002962	0.00002772	0.0000019
609870.00	2376440.00	0.0003141	0.00002505	0.00002321	0.00000184	0.0005702	0.00002858	0.00002668	0.0000019
610370.00	2376440.00	0.00040669	0.00002413	0.00002229	0.00000184	0.0004365	0.00002649	0.00002458	0.0000019
610870.00	2376440.00	0.00034589	0.00002277	0.00002092	0.00000185	0.0005308	0.00002574	0.00002383	0.00000191
611370.00	2376440.00	0.00021541	0.00002181	0.00001991	0.00000191	0.0003171	0.00002493	0.00002295	0.00000198
611870.00	2376440.00	0.00021636	0.00002026	0.00001838	0.00000188	0.0003528	0.00002323	0.00002131	0.00000193
612370.00	2376440.00	0.0002184	0.0000192	0.0000173	0.00000189	0.0003773	0.00002214	0.0000202	0.00000193
612870.00	2376440.00	0.00036487	0.00001853	0.00001663	0.0000019	0.0004716	0.00002077	0.00001884	0.00000193
613370.00	2376440.00	0.00028999	0.00001744	0.00001552	0.00000192	0.0005462	0.00002026	0.00001832	0.00000194
613870.00	2376440.00	0.00039348	0.00001683	0.00001489	0.00000193	0.0004006	0.00001847	0.00001652	0.00000195
614370.00	2376440.00	0.00015478	0.00001278	0.0000108	0.00000198	0.0001717	0.00001422	0.00001223	0.00000198
614870.00	2376440.00	0.00014807	0.00001187	0.00000986	0.00000201	0.0001652	0.00001319	0.00001118	0.00000201
615370.00	2376440.00	0.00034916	0.00001392	0.00001193	0.00000199	0.0002384	0.00001468	0.00001269	0.00000199
615870.00	2376440.00	0.00029583	0.00001419	0.00001219	0.000002	0.0005965	0.00001662	0.00001462	0.000002
616370.00	2376440.00	0.00022683	0.00001352	0.00001152	0.000002	0.0004717	0.00001585	0.00001384	0.00000201
616870.00	2376440.00	0.00020925	0.00001308	0.00001108	0.000002	0.0004012	0.00001515	0.00001315	0.000002
617370.00	2376440.00	0.00018922	0.00001287	0.00001088	0.00000199	0.0003032	0.00001462	0.00001262	0.000002
617870.00	2376440.00	0.00018836	0.00001283	0.00001085	0.00000198	0.0002962	0.00001455	0.00001253	0.00000201
618370.00	2376440.00	0.00018738	0.00001249	0.00001054	0.00000195	0.0002963	0.00001414	0.00001215	0.00000198
618870.00	2376440.00	0.00019055	0.0000126	0.00001066	0.00000193	0.0003053	0.00001431	0.00001232	0.00000199
619370.00	2376440.00	0.00018965	0.0000123	0.00001042	0.00000188	0.0003064	0.00001399	0.00001204	0.00000195
619870.00	2376440.00	0.00018864	0.00001201	0.00001018	0.00000183	0.0003062	0.00001365	0.00001176	0.00000189
590370.00	2376940.00	0.00021222	0.00004224	0.00003761	0.00000463	0.0002454	0.00004545	0.00004043	0.00000503
590870.00	2376940.00	0.00023379	0.00004223	0.00003831	0.00000391	0.0002782	0.00004518	0.00004092	0.00000426
591370.00	2376940.00	0.00032089	0.00004253	0.00003928	0.00000326	0.0003191	0.00004495	0.0000414	0.00000355
591870.00	2376940.00	0.00041421	0.00004236	0.00003967	0.00000269	0.0003341	0.00004418	0.00004127	0.00000292
592370.00	2376940.00	0.00058076	0.0000426	0.00004035	0.00000225	0.0003557	0.0000438	0.00004141	0.00000239
592870.00	2376940.00	0.00077351	0.00004299	0.00004107	0.00000192	0.0003971	0.00004366	0.00004168	0.00000198
593370.00	2376940.00	0.00086665	0.00004303	0.00004134	0.00000168	0.0004205	0.00004347	0.00004179	0.00000168
593870.00	2376940.00	0.00099665	0.00004348	0.00004193	0.00000155	0.0004542	0.00004345	0.00004198	0.00000147
594370.00	2376940.00	0.00107043	0.00004407	0.00004257	0.0000015	0.0004974	0.00004371	0.00004235	0.00000136
594870.00	2376940.00	0.00109712	0.00004477	0.00004326	0.00000151	0.0005248	0.00004412	0.0000428	0.00000132
595370.00	2376940.00	0.00116231	0.00004603	0.00004447	0.00000156	0.0005699	0.00004504	0.00004371	0.00000134
595870.00	2376940.00	0.00119858	0.00004754	0.0000459	0.00000164	0.0006206	0.00004631	0.00004492	0.00000139
596370.00	2376940.00	0.00119204	0.00004915	0.00004743	0.00000172	0.0006337	0.0000477	0.00004623	0.00000147
596870.00	2376940.00	0.00121318	0.00005125	0.00004943	0.00000181	0.0006814	0.00004977	0.00004821	0.00000156
597370.00	2376940.00	0.00121765	0.00005349	0.00005161	0.00000188	0.0007281	0.00005222	0.00005058	0.00000165
597870.00	2376940.00	0.00085889	0.00005425	0.00005232	0.00000193	0.0006865	0.00005472	0.00005299	0.00000172
598370.00	2376940.00	0.0008578	0.00005624	0.00005429	0.00000196	0.0007106	0.00005747	0.00005569	0.00000178
598870.00	2376940.00	0.00084444	0.0000576	0.00005565	0.00000195	0.0006859	0.00005956	0.00005775	0.00000181
599370.00	2376940.00	0.00082065	0.00005799	0.00005606	0.00000194	0.0006968	0.00006099	0.00005917	0.00000182
599870.00	2376940.00	0.00078402	0.00005732	0.00005541	0.0000019	0.0006851	0.0000611	0.00005929	0.00000181
600370.00	2376940.00	0.00073584	0.00005566	0.00005379	0.00000187	0.0006786	0.00006002	0.00005822	0.0000018
600870.00	2376940.00	0.00068789	0.0000534	0.00005157	0.00000184	0.0006439	0.00005774	0.00005596	0.00000178
601370.00	2376940.00	0.00044568	0.00005008	0.00004825	0.00000183	0.0009156	0.0000579	0.0000561	0.0000018
601870.00	2376940.00	0.00033596	0.00004731	0.00004549	0.00000181	0.0007294	0.00005478	0.00005298	0.00000181
602370.00	2376940.00	0.00035002	0.00004508	0.0000433	0.00000179	0.0007465	0.00005159	0.0000498	0.00000179
602870.00	2376940.00	0.00046214	0.00004358	0.00004182	0.00000176	0.0006542	0.00004796	0.00004619	0.00000177

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission ($ug-s/m^3-g$)	Total dep rate/unit emission ($g-s/m^2-yr-g$)	Dry dep rate/unit emission ($g-s/m^2-yr-g$)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission ($ug-s/m^3-g$)	Total dep rate/unit emission ($g-s/m^2-yr-g$)	Dry dep rate/unit emission ($g-s/m^2-yr-g$)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2376940.00	0.00042278	0.00004164	0.00003989	0.00000175	0.000652	0.00004599	0.00004422	0.00000177
603870.00	2376940.00	0.00037819	0.00003986	0.00003812	0.00000175	0.000657	0.00004441	0.00004264	0.00000178
604370.00	2376940.00	0.00024101	0.00003792	0.00003615	0.00000177	0.0004183	0.0000431	0.0000413	0.0000018
604870.00	2376940.00	0.00031334	0.00003685	0.0000351	0.00000175	0.0006258	0.00004172	0.00003993	0.00000179
605370.00	2376940.00	0.00025548	0.00003539	0.00003363	0.00000176	0.0005097	0.00004039	0.00003859	0.0000018
605870.00	2376940.00	0.0003067	0.0000345	0.00003275	0.00000175	0.0005936	0.00003915	0.00003735	0.0000018
606370.00	2376940.00	0.00035567	0.00003366	0.00003191	0.00000175	0.0005514	0.00003757	0.00003576	0.00000181
606870.00	2376940.00	0.00040326	0.00003279	0.00003103	0.00000176	0.0004689	0.00003584	0.00003402	0.00000182
607370.00	2376940.00	0.00022416	0.00003099	0.00002921	0.00000178	0.0003591	0.00003535	0.00003351	0.00000184
607870.00	2376940.00	0.00026378	0.00002992	0.00002815	0.00000177	0.000531	0.00003428	0.00003245	0.00000183
608370.00	2376940.00	0.00026508	0.00002881	0.00002703	0.00000178	0.0005343	0.00003301	0.00003117	0.00000184
608870.00	2376940.00	0.00037904	0.00002812	0.00002635	0.00000177	0.0004754	0.000031	0.00002916	0.00000184
609370.00	2376940.00	0.00022206	0.00002646	0.00002467	0.00000179	0.0003595	0.00003013	0.00002827	0.00000185
609870.00	2376940.00	0.0004157	0.00002587	0.00002409	0.00000178	0.0003948	0.00002803	0.00002618	0.00000185
610370.00	2376940.00	0.00040496	0.00002467	0.00002289	0.00000179	0.0004169	0.00002692	0.00002507	0.00000185
610870.00	2376940.00	0.00033672	0.00002333	0.00002154	0.00000179	0.0005249	0.0000263	0.00002444	0.00000185
611370.00	2376940.00	0.00023531	0.00002188	0.00002007	0.00000181	0.0004546	0.00002523	0.00002337	0.00000186
611870.00	2376940.00	0.00022287	0.00002079	0.00001897	0.00000182	0.0003999	0.0000239	0.00002204	0.00000186
612370.00	2376940.00	0.00028982	0.0000199	0.00001808	0.00000182	0.0005474	0.00002297	0.00002111	0.00000187
612870.00	2376940.00	0.00025506	0.00001882	0.00001698	0.00000184	0.0005229	0.00002195	0.00002008	0.00000187
613370.00	2376940.00	0.00040869	0.00001818	0.00001634	0.00000184	0.0003523	0.00001974	0.00001787	0.00000188
613870.00	2376940.00	0.00036521	0.00001731	0.00001545	0.00000186	0.0004384	0.00001925	0.00001736	0.00000189
614370.00	2376940.00	0.00015443	0.00001333	0.00001143	0.0000019	0.0001714	0.00001486	0.00001294	0.00000192
614870.00	2376940.00	0.00015115	0.00001257	0.00001065	0.00000192	0.0001678	0.00001398	0.00001205	0.00000193
615370.00	2376940.00	0.00028462	0.00001387	0.00001195	0.00000192	0.0002179	0.00001483	0.0000129	0.00000192
615870.00	2376940.00	0.00051223	0.00001512	0.00001319	0.00000193	0.0004165	0.00001594	0.00001401	0.00000193
616370.00	2376940.00	0.00020906	0.00001381	0.00001186	0.00000195	0.0004	0.00001603	0.00001408	0.00000196
616870.00	2376940.00	0.0001918	0.00001342	0.00001146	0.00000196	0.0003206	0.00001535	0.00001338	0.00000197
617370.00	2376940.00	0.00018753	0.00001306	0.00001111	0.00000195	0.0003028	0.00001487	0.0000129	0.00000197
617870.00	2376940.00	0.00018483	0.00001283	0.00001088	0.00000195	0.0002909	0.00001455	0.00001258	0.00000197
618370.00	2376940.00	0.00018548	0.00001279	0.00001084	0.00000194	0.0002913	0.0000145	0.00001252	0.00000198
618870.00	2376940.00	0.00018747	0.00001279	0.00001085	0.00000193	0.0002989	0.00001457	0.00001258	0.00000199
619370.00	2376940.00	0.00018613	0.00001245	0.00001056	0.00000189	0.0002976	0.00001417	0.00001222	0.00000195
619870.00	2376940.00	0.00018526	0.00001216	0.0000103	0.00000185	0.0002976	0.00001381	0.0000119	0.00000191
590370.00	2377440.00	0.00021347	0.0000413	0.0000369	0.00000439	0.0002496	0.00004433	0.00003957	0.00000476
590870.00	2377440.00	0.00022189	0.00004084	0.00003716	0.00000369	0.0002651	0.00004362	0.00003961	0.00000401
591370.00	2377440.00	0.00029791	0.00004133	0.00003824	0.00000309	0.0003083	0.00004368	0.00004033	0.00000336
591870.00	2377440.00	0.00043963	0.00004162	0.00003905	0.00000258	0.0003327	0.0000432	0.00004042	0.00000278
592370.00	2377440.00	0.00068326	0.00004227	0.0000401	0.00000217	0.000374	0.0000431	0.00004079	0.0000023
592870.00	2377440.00	0.00073403	0.00004192	0.00004007	0.00000185	0.0003811	0.00004259	0.00004068	0.00000191
593370.00	2377440.00	0.00098582	0.00004271	0.00004108	0.00000164	0.000448	0.00004279	0.00004116	0.00000163
593870.00	2377440.00	0.00099841	0.00004262	0.00004112	0.00000151	0.0004612	0.00004255	0.00004113	0.00000143
594370.00	2377440.00	0.00103495	0.00004298	0.00004153	0.00000145	0.0004819	0.00004263	0.00004131	0.00000132
594870.00	2377440.00	0.0010943	0.00004378	0.00004233	0.00000146	0.0005219	0.00004314	0.00004186	0.00000128
595370.00	2377440.00	0.00112387	0.00004476	0.00004326	0.0000015	0.0005476	0.00004382	0.00004253	0.00000129
595870.00	2377440.00	0.00115422	0.00004611	0.00004454	0.00000158	0.0005887	0.00004493	0.00004359	0.00000134
596370.00	2377440.00	0.00115912	0.00004764	0.00004598	0.00000166	0.0006114	0.00004625	0.00004484	0.00000141
596870.00	2377440.00	0.00117791	0.00004958	0.00004783	0.00000174	0.0006519	0.00004811	0.00004661	0.0000015
597370.00	2377440.00	0.00118715	0.00005171	0.0000499	0.00000182	0.000703	0.00005039	0.00004881	0.00000158
597870.00	2377440.00	0.00083837	0.00005244	0.00005057	0.00000187	0.0006605	0.00005273	0.00005107	0.00000166
598370.00	2377440.00	0.00083706	0.00005446	0.00005256	0.0000019	0.0006654	0.00005527	0.00005355	0.00000172
598870.00	2377440.00	0.00082935	0.00005598	0.00005408	0.00000191	0.0006812	0.00005764	0.00005589	0.00000175
599370.00	2377440.00	0.00080987	0.00005667	0.00005478	0.00000189	0.0006964	0.00005939	0.00005762	0.00000177
599870.00	2377440.00	0.00077833	0.00005637	0.00005451	0.00000187	0.0006898	0.00005993	0.00005817	0.00000177
600370.00	2377440.00	0.00073741	0.00005513	0.0000533	0.00000183	0.0006696	0.0000592	0.00005745	0.00000176
600870.00	2377440.00	0.00069203	0.00005317	0.00005137	0.0000018	0.00064	0.00005736	0.00005562	0.00000174
601370.00	2377440.00	0.00045731	0.00005006	0.00004827	0.00000179	0.0009259	0.00005787	0.00005611	0.00000176
601870.00	2377440.00	0.00040401	0.00004756	0.00004579	0.00000177	0.0008613	0.00005483	0.00005308	0.00000175
602370.00	2377440.00	0.00029509	0.000045	0.00004324	0.00000176	0.000576	0.00005175	0.00004998	0.00000176
602870.00	2377440.00	0.00037351	0.00004319	0.00004146	0.00000173	0.0007258	0.00004876	0.00004703	0.00000173
603370.00	2377440.00	0.00034635	0.00004126	0.00003955	0.00000172	0.0006926	0.00004651	0.00004478	0.00000173
603870.00	2377440.00	0.00038281	0.00003985	0.00003815	0.00000171	0.0006473	0.00004424	0.00004251	0.00000173
604370.00	2377440.00	0.00019825	0.00003343	0.00003163	0.0000018	0.0003039	0.00003808	0.00003617	0.00000191
604870.00	2377440.00	0.00041743	0.00003739	0.0000357	0.0000017	0.0005458	0.00004074	0.00003901	0.00000173
605370.00	2377440.00	0.00032995	0.00003574	0.00003404	0.0000017	0.0006033	0.00004013	0.00003839	0.00000174
605870.00	2377440.00	0.0001868	0.00003011	0.00002831	0.0000018	0.0002813	0.00003426	0.00003235	0.00000191
606370.00	2377440.00	0.00022231	0.0000332	0.00003147	0.00000173	0.0003609	0.0000378	0.00003603	0.00000177
606870.00	2377440.00	0.00026817	0.00003221	0.00003049	0.00000171	0.000542	0.00003677	0.000035	0.00000177
607370.00	2377440.00	0.00018194	0.00002721	0.0000254	0.00000181	0.0002695	0.00003097	0.00002905	0.00000192

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
607870.00	2377440.00	0.00040811	0.00003075	0.00002903	0.00000172	0.0004136	0.00003327	0.00003149	0.00000178
608370.00	2377440.00	0.00027417	0.0000291	0.00002737	0.00000173	0.0005423	0.0000332	0.00003141	0.00000179
608870.00	2377440.00	0.00017941	0.00002439	0.00002258	0.00000181	0.0002627	0.00002776	0.00002583	0.00000193
609370.00	2377440.00	0.00027455	0.00002694	0.00002521	0.00000173	0.0005429	0.00003076	0.00002896	0.0000018
609870.00	2377440.00	0.00039176	0.00002626	0.00002452	0.00000173	0.0004213	0.00002861	0.00002681	0.0000018
610370.00	2377440.00	0.00017631	0.00002153	0.00001972	0.00000182	0.0002569	0.00002451	0.00002258	0.00000193
610870.00	2377440.00	0.00039673	0.00002402	0.00002228	0.00000174	0.0004014	0.00002614	0.00002434	0.0000018
611370.00	2377440.00	0.00024237	0.00002244	0.00002069	0.00000175	0.0004865	0.00002584	0.00002403	0.00000181
611870.00	2377440.00	0.00017288	0.00001888	0.00001705	0.00000183	0.000252	0.00002151	0.00001958	0.00000193
612370.00	2377440.00	0.00038297	0.00002074	0.00001898	0.00000176	0.0004162	0.0000228	0.00002099	0.00000181
612870.00	2377440.00	0.00023255	0.00001933	0.00001755	0.00000178	0.0004634	0.00002241	0.00002059	0.00000182
613370.00	2377440.00	0.00016732	0.00001641	0.00001455	0.00000186	0.0002459	0.00001874	0.00001679	0.00000195
613870.00	2377440.00	0.00021593	0.00001751	0.0000157	0.00000181	0.0004055	0.00002028	0.00001844	0.00000184
614370.00	2377440.00	0.00014688	0.00001349	0.00001165	0.00000184	0.0001636	0.00001509	0.00001323	0.00000186
614870.00	2377440.00	0.00015524	0.00001326	0.00001141	0.00000185	0.0001713	0.00001475	0.00001289	0.00000186
615370.00	2377440.00	0.00048489	0.00001557	0.00001373	0.00000185	0.0002814	0.0000162	0.00001434	0.00000186
615870.00	2377440.00	0.00046624	0.00001539	0.00001353	0.00000186	0.0004637	0.00001663	0.00001476	0.00000187
616370.00	2377440.00	0.00050372	0.0000149	0.00001302	0.00000188	0.0004043	0.00001568	0.0000138	0.00000188
616870.00	2377440.00	0.00019681	0.00001364	0.00001174	0.0000019	0.0003511	0.00001571	0.0000138	0.00000191
617370.00	2377440.00	0.00018398	0.00001341	0.0000115	0.00000191	0.000289	0.00001524	0.00001331	0.00000193
617870.00	2377440.00	0.00018241	0.00001308	0.00001117	0.00000191	0.0002849	0.00001484	0.00001291	0.00000193
618370.00	2377440.00	0.00018447	0.00001316	0.00001123	0.00000193	0.0002888	0.00001496	0.00001299	0.00000197
618870.00	2377440.00	0.00018484	0.00001298	0.00001106	0.00000192	0.0002928	0.0000148	0.00001282	0.00000197
619370.00	2377440.00	0.00018348	0.00001263	0.00001074	0.00000189	0.0002914	0.00001438	0.00001243	0.00000194
619870.00	2377440.00	0.00018257	0.00001232	0.00001046	0.00000186	0.0002914	0.00001401	0.00001209	0.00000191
590370.00	2377940.00	0.0002212	0.00004159	0.0000374	0.00000418	0.000262	0.00004453	0.00004002	0.00000452
590870.00	2377940.00	0.0002503	0.00004109	0.00003756	0.00000353	0.0002873	0.00004365	0.00003983	0.00000382
591370.00	2377940.00	0.00033755	0.00004088	0.00003793	0.00000296	0.0003131	0.00004283	0.00003963	0.0000032
591870.00	2377940.00	0.00052864	0.00004129	0.00003881	0.00000248	0.0003436	0.00004249	0.00003982	0.00000267
592370.00	2377940.00	0.00067037	0.00004134	0.00003925	0.00000208	0.0003669	0.0000421	0.00003989	0.00000221
592870.00	2377940.00	0.00089079	0.00004182	0.00004003	0.0000018	0.0004215	0.00004216	0.00004031	0.00000185
593370.00	2377940.00	0.00096282	0.00004178	0.00004019	0.00000159	0.0004389	0.00004182	0.00004025	0.00000157
593870.00	2377940.00	0.001033	0.00004199	0.00004052	0.00000147	0.0004735	0.00004179	0.0000404	0.00000139
594370.00	2377940.00	0.00106236	0.00004227	0.00004086	0.00000141	0.000495	0.00004186	0.00004058	0.00000128
594870.00	2377940.00	0.00108007	0.00004279	0.00004138	0.00000141	0.0005155	0.00004215	0.00004091	0.00000124
595370.00	2377940.00	0.00113661	0.00004384	0.00004239	0.00000145	0.0005627	0.00004293	0.00004168	0.00000125
595870.00	2377940.00	0.00112732	0.00004486	0.00004334	0.00000152	0.0005732	0.00004372	0.00004243	0.00000129
596370.00	2377940.00	0.00115221	0.00004639	0.00004479	0.0000016	0.0006186	0.0000451	0.00004374	0.00000136
596870.00	2377940.00	0.00116235	0.00004813	0.00004645	0.00000168	0.0006722	0.00004682	0.00004538	0.00000144
597370.00	2377940.00	0.00116717	0.00005013	0.00004837	0.00000176	0.0007168	0.00004895	0.00004742	0.00000153
597870.00	2377940.00	0.00116098	0.00005217	0.00005036	0.00000181	0.0007475	0.00005128	0.00004968	0.0000016
598370.00	2377940.00	0.00081977	0.00005274	0.00005089	0.00000185	0.0006688	0.00005342	0.00005177	0.00000166
598870.00	2377940.00	0.00081953	0.00005441	0.00005255	0.00000186	0.0006535	0.00005564	0.00005395	0.0000017
599370.00	2377940.00	0.0008063	0.00005539	0.00005354	0.00000185	0.0006492	0.00005742	0.0000557	0.00000171
599870.00	2377940.00	0.00078086	0.00005545	0.00005362	0.00000182	0.0006518	0.00005837	0.00005666	0.00000172
600370.00	2377940.00	0.00074269	0.00005459	0.00005279	0.00000179	0.0006229	0.00005799	0.00005628	0.00000171
600870.00	2377940.00	0.00069899	0.00005296	0.00005121	0.00000176	0.000572	0.00005638	0.00005468	0.00000169
601370.00	2377940.00	0.00045663	0.00004993	0.00004818	0.00000176	0.0009492	0.00005786	0.00005614	0.00000171
601870.00	2377940.00	0.00041402	0.00004759	0.00004586	0.00000173	0.0008731	0.00005489	0.00005319	0.0000017
602370.00	2377940.00	0.00037695	0.00004526	0.00004355	0.00000171	0.0007459	0.00005163	0.00004994	0.00000169
602870.00	2377940.00	0.00035343	0.00004314	0.00004145	0.00000169	0.0007245	0.00004898	0.00004729	0.00000169
603370.00	2377940.00	0.00028886	0.00004107	0.00003939	0.00000169	0.0006022	0.00004666	0.00004497	0.0000017
603870.00	2377940.00	0.00034785	0.00003966	0.00003799	0.00000167	0.0006657	0.00004442	0.00004274	0.00000168
604370.00	2377940.00	0.00023434	0.00003821	0.00003652	0.00000169	0.0003705	0.0000434	0.00004166	0.00000174
604870.00	2377940.00	0.00033068	0.00003687	0.00003521	0.00000166	0.0006202	0.00004127	0.00003958	0.00000169
605370.00	2377940.00	0.00031226	0.0000356	0.00003394	0.00000166	0.0006022	0.00004004	0.00003835	0.00000169
605870.00	2377940.00	0.00028197	0.00003436	0.00003269	0.00000166	0.0005732	0.00003895	0.00003725	0.0000017
606370.00	2377940.00	0.00033266	0.00003359	0.00003194	0.00000166	0.0005567	0.00003753	0.00003582	0.00000171
606870.00	2377940.00	0.00022577	0.00003211	0.00003043	0.00000168	0.0004046	0.00003655	0.00003482	0.00000172
607370.00	2377940.00	0.00025938	0.00003123	0.00002955	0.00000167	0.0005223	0.00003561	0.00003388	0.00000173
607870.00	2377940.00	0.00021305	0.00003029	0.00002859	0.00000169	0.0003273	0.00003443	0.00003268	0.00000175
608370.00	2377940.00	0.00022091	0.00002915	0.00002746	0.00000169	0.0003794	0.00003316	0.00003142	0.00000174
608870.00	2377940.00	0.00024506	0.00002821	0.00002652	0.00000169	0.0004938	0.00003226	0.00003052	0.00000174
609370.00	2377940.00	0.00045165	0.00002805	0.00002637	0.00000168	0.000536	0.00003066	0.00002891	0.00000175
609870.00	2377940.00	0.00021604	0.00002608	0.00002438	0.0000017	0.0003583	0.00002959	0.00002784	0.00000176
610370.00	2377940.00	0.00023182	0.00002504	0.00002334	0.0000017	0.0004432	0.0000286	0.00002684	0.00000176
610870.00	2377940.00	0.00024617	0.00002403	0.00002233	0.0000017	0.0005083	0.0000276	0.00002584	0.00000176
611370.00	2377940.00	0.00039561	0.00002358	0.00002188	0.0000017	0.0005881	0.00002636	0.0000246	0.00000176
611870.00	2377940.00	0.00028723	0.00002209	0.00002039	0.0000017	0.0006028	0.00002552	0.00002376	0.00000176

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
612370.00	2377940.00	0.0002322	0.00002088	0.00001916	0.00000171	0.0004618	0.00002406	0.00002229	0.00000176
612870.00	2377940.00	0.00020256	0.00001993	0.0000182	0.00000173	0.0003174	0.00002265	0.00002088	0.00000178
613370.00	2377940.00	0.0002527	0.00001902	0.00001728	0.00000173	0.0005382	0.00002216	0.00002039	0.00000177
613870.00	2377940.00	0.00012994	0.00001257	0.00001076	0.00000181	0.0002042	0.00001438	0.00001249	0.0000019
614370.00	2377940.00	0.00032643	0.00001673	0.00001498	0.00000175	0.0002395	0.00001806	0.00001628	0.00000178
614870.00	2377940.00	0.00026001	0.00001543	0.00001367	0.00000176	0.0002185	0.00001679	0.000015	0.00000179
615370.00	2377940.00	0.00036386	0.00001551	0.00001373	0.00000178	0.000254	0.00001658	0.00001479	0.0000018
615870.00	2377940.00	0.00030563	0.00001523	0.00001343	0.0000018	0.0004695	0.00001724	0.00001543	0.00000181
616370.00	2377940.00	0.00024974	0.0000145	0.00001268	0.00000182	0.0004924	0.00001686	0.00001504	0.00000183
616870.00	2377940.00	0.00020893	0.00001391	0.00001207	0.00000184	0.0004147	0.00001618	0.00001433	0.00000184
617370.00	2377940.00	0.00019649	0.00001343	0.00001159	0.00000185	0.0003657	0.00001551	0.00001365	0.00000186
617870.00	2377940.00	0.00018154	0.00001359	0.0000117	0.00000188	0.00028	0.00001544	0.00001352	0.00000192
618370.00	2377940.00	0.00018099	0.00001273	0.00001087	0.00000186	0.0002952	0.00001446	0.0000126	0.00000187
618870.00	2377940.00	0.00019294	0.00001224	0.0000104	0.00000185	0.0003619	0.00001407	0.00001222	0.00000185
619370.00	2377940.00	0.00018049	0.00001201	0.00001017	0.00000183	0.0003002	0.00001361	0.00001177	0.00000184
619870.00	2377940.00	0.0001788	0.00001172	0.00000991	0.00000181	0.0002954	0.00001325	0.00001143	0.00000182
590370.00	2378440.00	0.0002173	0.00004048	0.00003652	0.00000396	0.0002579	0.00004326	0.00003899	0.00000427
590870.00	2378440.00	0.00032407	0.00004107	0.00003769	0.00000338	0.0003098	0.00004311	0.00003946	0.00000365
591370.00	2378440.00	0.0004804	0.00004107	0.00003822	0.00000284	0.0003353	0.00004239	0.00003932	0.00000307
591870.00	2378440.00	0.00064519	0.00004111	0.00003872	0.00000239	0.0003615	0.00004189	0.00003933	0.00000256
592370.00	2378440.00	0.00095019	0.00004188	0.00003985	0.00000203	0.0004382	0.000042	0.00003986	0.00000214
592870.00	2378440.00	0.00101526	0.00004164	0.0000399	0.00000174	0.0004638	0.0000416	0.00003981	0.00000179
593370.00	2378440.00	0.00104123	0.00004141	0.00003986	0.00000155	0.00048	0.00004124	0.00003971	0.00000153
593870.00	2378440.00	0.0010158	0.00004112	0.00003969	0.00000142	0.0004705	0.00004089	0.00003954	0.00000135
594370.00	2378440.00	0.00111892	0.00004174	0.00004036	0.00000137	0.0005266	0.00004122	0.00003997	0.00000125
594870.00	2378440.00	0.00109069	0.00004197	0.0000406	0.00000137	0.0005197	0.0000413	0.0000401	0.0000012
595370.00	2378440.00	0.00112567	0.00004285	0.00004144	0.00000141	0.0005618	0.00004197	0.00004076	0.00000121
595870.00	2378440.00	0.00115958	0.00004405	0.00004257	0.00000147	0.0006489	0.00004309	0.00004184	0.00000125
596370.00	2378440.00	0.00113645	0.00004516	0.00004362	0.00000154	0.0006177	0.00004396	0.00004265	0.00000131
596870.00	2378440.00	0.001137	0.00004671	0.00004509	0.00000162	0.000657	0.00004545	0.00004406	0.00000139
597370.00	2378440.00	0.00110913	0.00004854	0.00004684	0.0000017	0.0008217	0.00004806	0.00004659	0.00000148
597870.00	2378440.00	0.00113547	0.00005051	0.00004875	0.00000175	0.0007091	0.00004943	0.00004789	0.00000154
598370.00	2378440.00	0.00080028	0.00005106	0.00004927	0.00000179	0.0006416	0.00005149	0.00004988	0.0000016
598870.00	2378440.00	0.00079215	0.00005277	0.00005096	0.00000181	0.0006074	0.0000535	0.00005186	0.00000164
599370.00	2378440.00	0.00077381	0.00005395	0.00005215	0.0000018	0.0005854	0.00005528	0.00005362	0.00000166
599870.00	2378440.00	0.00076155	0.00005438	0.00005259	0.00000178	0.000594	0.00005657	0.0000549	0.00000167
600370.00	2378440.00	0.00073789	0.00005388	0.00005212	0.00000176	0.0005916	0.00005677	0.0000551	0.00000167
600870.00	2378440.00	0.00068293	0.00005253	0.00005081	0.00000172	0.0005409	0.00005549	0.00005384	0.00000165
601370.00	2378440.00	0.00046539	0.00004978	0.00004806	0.00000172	0.0009583	0.00005764	0.00005596	0.00000167
601870.00	2378440.00	0.00037722	0.00004741	0.00004571	0.0000017	0.0008596	0.00005512	0.00005345	0.00000167
602370.00	2378440.00	0.00038947	0.00004534	0.00004366	0.00000167	0.0007735	0.00005178	0.00005013	0.00000165
602870.00	2378440.00	0.0003484	0.00004316	0.0000415	0.00000166	0.0007224	0.00004912	0.00004747	0.00000165
603370.00	2378440.00	0.00035461	0.00004133	0.00003969	0.00000164	0.0006947	0.00004652	0.00004488	0.00000164
603870.00	2378440.00	0.00026633	0.00003935	0.00003771	0.00000164	0.0005344	0.00004456	0.00004291	0.00000165
604370.00	2378440.00	0.00034627	0.00003819	0.00003657	0.00000162	0.000636	0.00004255	0.00004091	0.00000164
604870.00	2378440.00	0.00030281	0.00003668	0.00003506	0.00000162	0.0006135	0.00004125	0.0000396	0.00000164
605370.00	2378440.00	0.00036812	0.00003586	0.00003425	0.00000161	0.0005656	0.00003948	0.00003784	0.00000164
605870.00	2378440.00	0.00034514	0.00003466	0.00003305	0.00000161	0.0005625	0.00003844	0.00003679	0.00000165
606370.00	2378440.00	0.00041785	0.00003408	0.00003246	0.00000161	0.0004371	0.00003656	0.0000349	0.00000166
606870.00	2378440.00	0.00038417	0.00003289	0.00003127	0.00000162	0.0004683	0.00003581	0.00003414	0.00000166
607370.00	2378440.00	0.0002126	0.00003175	0.00003007	0.00000168	0.0003203	0.00003615	0.00003439	0.00000176
607870.00	2378440.00	0.00022213	0.00003023	0.00002859	0.00000164	0.0003996	0.00003438	0.00003269	0.00000169
608370.00	2378440.00	0.00039708	0.00003008	0.00002845	0.00000163	0.0005779	0.00003334	0.00003165	0.00000169
608870.00	2378440.00	0.00020812	0.00002841	0.00002676	0.00000165	0.0003221	0.00003221	0.0000305	0.00000171
609370.00	2378440.00	0.00033543	0.00002783	0.0000262	0.00000164	0.0006077	0.00003143	0.00002973	0.0000017
609870.00	2378440.00	0.000207	0.00002643	0.00002477	0.00000166	0.0003204	0.00002991	0.0000282	0.00000172
610370.00	2378440.00	0.00020479	0.00002549	0.00002383	0.00000166	0.0003079	0.00002882	0.0000271	0.00000172
610870.00	2378440.00	0.00020452	0.00002475	0.00002306	0.00000169	0.0002998	0.00002805	0.00002628	0.00000177
611370.00	2378440.00	0.00028645	0.00002359	0.00002194	0.00000165	0.0005955	0.00002706	0.00002535	0.00000171
611870.00	2378440.00	0.00032758	0.00002275	0.0000211	0.00000166	0.0006089	0.0000259	0.00002419	0.00000171
612370.00	2378440.00	0.00019933	0.00002161	0.00001992	0.00000169	0.0002931	0.00002445	0.0000227	0.00000175
612870.00	2378440.00	0.00019762	0.00002054	0.00001886	0.00000169	0.0002949	0.00002325	0.00002151	0.00000174
613370.00	2378440.00	0.0002193	0.00001944	0.00001776	0.00000168	0.000419	0.00002235	0.00002062	0.00000172
613870.00	2378440.00	0.00013819	0.00001391	0.00001215	0.00000176	0.0002112	0.00001589	0.00001405	0.00000184
614370.00	2378440.00	0.00016548	0.00001622	0.00001445	0.00000177	0.0002416	0.00001848	0.00001663	0.00000185
614870.00	2378440.00	0.00020333	0.00001687	0.00001515	0.00000172	0.0003673	0.00001941	0.00001766	0.00000174
615370.00	2378440.00	0.00029057	0.00001629	0.00001457	0.00000172	0.0004829	0.00001857	0.00001682	0.00000175
615870.00	2378440.00	0.00019719	0.00001545	0.0000137	0.00000175	0.0003524	0.00001779	0.00001602	0.00000177
616370.00	2378440.00	0.00028531	0.00001496	0.00001321	0.00000175	0.0004729	0.00001704	0.00001527	0.00000177

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
616870.00	2378440.00	0.00020672	0.00001424	0.00001246	0.00000178	0.0004073	0.00001654	0.00001475	0.00000179
617370.00	2378440.00	0.00018309	0.00001456	0.00001272	0.00000184	0.0002806	0.00001659	0.0000147	0.00000189
617870.00	2378440.00	0.00025303	0.00001334	0.00001154	0.0000018	0.0004785	0.00001538	0.00001358	0.0000018
618370.00	2378440.00	0.00022659	0.00001286	0.00001105	0.00000181	0.0004617	0.00001495	0.00001314	0.00000181
618870.00	2378440.00	0.00025112	0.00001253	0.00001073	0.00000181	0.0004361	0.00001427	0.00001246	0.0000018
619370.00	2378440.00	0.00025617	0.0000122	0.0000104	0.0000018	0.0004337	0.00001381	0.00001202	0.0000018
619870.00	2378440.00	0.00025576	0.00001189	0.0000101	0.00000179	0.0004328	0.00001343	0.00001164	0.00000178
590370.00	2378940.00	0.00023605	0.00004043	0.00003666	0.00000377	0.0002751	0.00004301	0.00003895	0.00000406
590870.00	2378940.00	0.00026348	0.00003937	0.00003618	0.00000319	0.0002892	0.00004161	0.00003817	0.00000344
591370.00	2378940.00	0.00028665	0.00003855	0.00003587	0.00000268	0.0002915	0.00004053	0.00003765	0.00000288
591870.00	2378940.00	0.00044059	0.00003906	0.00003679	0.00000227	0.0003184	0.00004032	0.0000379	0.00000242
592370.00	2378940.00	0.00048031	0.00003861	0.0000367	0.00000192	0.0003214	0.00003971	0.0000377	0.00000201
592870.00	2378940.00	0.00072296	0.00003945	0.00003778	0.00000167	0.0003725	0.0000399	0.00003819	0.00000171
593370.00	2378940.00	0.00100487	0.00004046	0.00003897	0.0000015	0.0004598	0.00004031	0.00003883	0.00000148
593870.00	2378940.00	0.00103561	0.00004047	0.00003909	0.00000138	0.0004794	0.00004017	0.00003886	0.00000131
594370.00	2378940.00	0.00106057	0.00004066	0.00003933	0.00000133	0.0004997	0.0000402	0.00003899	0.00000121
594870.00	2378940.00	0.00111703	0.0000413	0.00003997	0.00000133	0.0005442	0.00004062	0.00003945	0.00000117
595370.00	2378940.00	0.00117067	0.00004231	0.00004094	0.00000137	0.0006771	0.00004177	0.00004058	0.00000118
595870.00	2378940.00	0.00114191	0.00004313	0.0000417	0.00000143	0.0007565	0.00004279	0.00004157	0.00000122
596370.00	2378940.00	0.00102024	0.00004391	0.0000424	0.00000151	0.0009391	0.00004461	0.00004332	0.00000129
596870.00	2378940.00	0.00100711	0.00004523	0.00004365	0.00000158	0.0009336	0.00004577	0.00004441	0.00000136
597370.00	2378940.00	0.00111061	0.00004705	0.00004541	0.00000164	0.0006563	0.00004576	0.00004435	0.00000141
597870.00	2378940.00	0.00109699	0.00004882	0.00004713	0.00000169	0.0006404	0.00004746	0.00004597	0.00000148
598370.00	2378940.00	0.00077691	0.00004941	0.00004767	0.00000174	0.0005865	0.00004947	0.00004792	0.00000154
598870.00	2378940.00	0.00076374	0.00005114	0.00004938	0.00000176	0.0005595	0.00005147	0.00004989	0.00000159
599370.00	2378940.00	0.0007464	0.00005248	0.00005072	0.00000176	0.0005512	0.00005336	0.00005175	0.00000161
599870.00	2378940.00	0.00072874	0.00005317	0.00005142	0.00000174	0.0005478	0.00005475	0.00005313	0.00000162
600370.00	2378940.00	0.00070464	0.000053	0.00005129	0.00000172	0.0005401	0.00005523	0.00005361	0.00000162
600870.00	2378940.00	0.00069499	0.00005205	0.00005036	0.00000169	0.0005449	0.00005485	0.00005324	0.00000161
601370.00	2378940.00	0.00031906	0.00004924	0.00004752	0.00000172	0.0005396	0.00005715	0.00005545	0.0000017
601870.00	2378940.00	0.00058216	0.00004802	0.00004638	0.00000165	0.0006494	0.00005237	0.00005076	0.0000016
602370.00	2378940.00	0.00040887	0.00004541	0.00004378	0.00000164	0.0007736	0.00005175	0.00005014	0.00000161
602870.00	2378940.00	0.00036097	0.00004324	0.00004161	0.00000162	0.0007302	0.00004918	0.00004757	0.00000161
603370.00	2378940.00	0.00036772	0.00004141	0.0000398	0.0000016	0.0006932	0.00004652	0.00004492	0.0000016
603870.00	2378940.00	0.0003502	0.00003966	0.00003807	0.00000159	0.0006626	0.00004436	0.00004276	0.0000016
604370.00	2378940.00	0.00044232	0.0000386	0.00003702	0.00000158	0.0005297	0.00004149	0.0000399	0.00000159
604870.00	2378940.00	0.00029216	0.0000366	0.00003501	0.00000158	0.0006035	0.00004116	0.00003955	0.0000016
605370.00	2378940.00	0.00040425	0.00003599	0.00003442	0.00000157	0.0005161	0.00003893	0.00003734	0.0000016
605870.00	2378940.00	0.00032633	0.00003451	0.00003294	0.00000157	0.0005714	0.00003839	0.00003678	0.00000161
606370.00	2378940.00	0.00030301	0.00003339	0.00003181	0.00000158	0.0005618	0.00003742	0.0000358	0.00000161
606870.00	2378940.00	0.00026122	0.00003223	0.00003065	0.00000158	0.0005293	0.00003652	0.00003489	0.00000162
607370.00	2378940.00	0.00024471	0.00003124	0.00002965	0.00000159	0.0004927	0.0000355	0.00003386	0.00000163
607870.00	2378940.00	0.00021951	0.00003027	0.00002868	0.0000016	0.0003991	0.00003438	0.00003274	0.00000164
608370.00	2378940.00	0.00020573	0.00002944	0.00002784	0.00000161	0.0003248	0.00003337	0.00003171	0.00000166
608870.00	2378940.00	0.00024374	0.00002856	0.00002696	0.0000016	0.0004999	0.00003258	0.00003092	0.00000165
609370.00	2378940.00	0.00024431	0.00002764	0.00002604	0.0000016	0.0005025	0.00003154	0.00002988	0.00000166
609870.00	2378940.00	0.00020524	0.00002664	0.00002503	0.00000161	0.0003276	0.00003013	0.00002846	0.00000167
610370.00	2378940.00	0.0002032	0.00002571	0.00002409	0.00000162	0.0003173	0.00002904	0.00002737	0.00000167
610870.00	2378940.00	0.00020037	0.00002482	0.0000232	0.00000162	0.000301	0.00002802	0.00002633	0.00000168
611370.00	2378940.00	0.00019922	0.00002399	0.00002235	0.00000164	0.0002926	0.00002709	0.00002539	0.00000171
611870.00	2378940.00	0.00023548	0.00002282	0.00002121	0.00000162	0.000482	0.00002612	0.00002445	0.00000167
612370.00	2378940.00	0.00021108	0.00002179	0.00002017	0.00000162	0.000375	0.00002476	0.00002308	0.00000167
612870.00	2378940.00	0.00038291	0.00002148	0.00001986	0.00000162	0.000556	0.00002394	0.00002227	0.00000167
613370.00	2378940.00	0.00019391	0.00002003	0.00001839	0.00000164	0.0002932	0.00002264	0.00002094	0.00000169
613870.00	2378940.00	0.00012729	0.00001306	0.00001136	0.0000017	0.0001985	0.00001489	0.0000131	0.00000179
614370.00	2378940.00	0.00025777	0.00001825	0.00001661	0.00000164	0.0004971	0.00002099	0.0000193	0.00000168
614870.00	2378940.00	0.00018867	0.00001786	0.00001616	0.0000017	0.0002796	0.00002026	0.00001851	0.00000175
615370.00	2378940.00	0.00026613	0.00001669	0.00001502	0.00000167	0.0004887	0.00001916	0.00001747	0.00000169
615870.00	2378940.00	0.00022721	0.00001587	0.00001419	0.00000168	0.0004604	0.00001844	0.00001674	0.00000171
616370.00	2378940.00	0.00027464	0.00001533	0.00001363	0.00000169	0.0004689	0.0000175	0.00001579	0.00000171
616870.00	2378940.00	0.00018169	0.00001472	0.000013	0.00000173	0.0002896	0.00001676	0.00001502	0.00000174
617370.00	2378940.00	0.0003232	0.00001428	0.00001256	0.00000172	0.0004029	0.00001578	0.00001405	0.00000173
617870.00	2378940.00	0.00023545	0.00001359	0.00001184	0.00000174	0.000466	0.00001575	0.00001401	0.00000175
618370.00	2378940.00	0.00024279	0.00001315	0.0000114	0.00000175	0.0004673	0.00001519	0.00001343	0.00000175
618870.00	2378940.00	0.0002425	0.00001274	0.00001098	0.00000176	0.0004319	0.00001457	0.00001281	0.00000176
619370.00	2378940.00	0.00025222	0.0000124	0.00001064	0.00000176	0.0004255	0.00001405	0.00001229	0.00000176
619870.00	2378940.00	0.00025164	0.00001207	0.00001031	0.00000176	0.0004243	0.00001365	0.00001189	0.00000176
590370.00	2379440.00	0.00019742	0.0000371	0.00003357	0.00000353	0.0002328	0.00003948	0.00003569	0.00000379
590870.00	2379440.00	0.00020074	0.00003678	0.0000338	0.00000299	0.00024	0.00003902	0.0000358	0.00000322

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591370.00	2379440.00	0.0002134	0.00003604	0.00003351	0.00000252	0.0002539	0.00003813	0.00003543	0.00000271
591870.00	2379440.00	0.00019491	0.00003481	0.00003271	0.0000021	0.0002339	0.00003684	0.00003461	0.00000224
592370.00	2379440.00	0.00033996	0.00003688	0.00003505	0.00000183	0.0002881	0.00003835	0.00003643	0.00000191
592870.00	2379440.00	0.00067309	0.00003847	0.00003686	0.00000161	0.000355	0.00003896	0.00003732	0.00000165
593370.00	2379440.00	0.00094972	0.00003946	0.00003801	0.00000145	0.0004378	0.00003935	0.00003792	0.00000143
593870.00	2379440.00	0.00121429	0.0000407	0.00003934	0.00000136	0.0006119	0.00004025	0.00003896	0.0000013
594370.00	2379440.00	0.00109483	0.00004009	0.0000388	0.0000013	0.0005196	0.00003956	0.00003837	0.00000118
594870.00	2379440.00	0.00111885	0.00004054	0.00003925	0.00000129	0.0005555	0.00003987	0.00003873	0.00000114
595370.00	2379440.00	0.0011342	0.00004141	0.00004007	0.00000133	0.0007644	0.00004135	0.0000402	0.00000116
595870.00	2379440.00	0.00107869	0.00004168	0.00004031	0.00000137	0.0005556	0.00004068	0.00003952	0.00000116
596370.00	2379440.00	0.00106714	0.00004267	0.00004124	0.00000144	0.0005607	0.0000415	0.00004028	0.00000122
596870.00	2379440.00	0.00104616	0.00004385	0.00004234	0.00000151	0.0005529	0.00004248	0.0000412	0.00000128
597370.00	2379440.00	0.00108144	0.00004563	0.00004405	0.00000158	0.0006284	0.00004432	0.00004296	0.00000136
597870.00	2379440.00	0.00105848	0.00004724	0.0000456	0.00000164	0.000589	0.00004579	0.00004436	0.00000143
598370.00	2379440.00	0.00073189	0.0000477	0.00004601	0.00000168	0.0005168	0.00004739	0.0000459	0.00000149
598870.00	2379440.00	0.00071472	0.00004943	0.00004772	0.00000171	0.0005068	0.00004938	0.00004785	0.00000153
599370.00	2379440.00	0.00071134	0.00005095	0.00004924	0.00000171	0.0005144	0.00005145	0.00004988	0.00000156
599870.00	2379440.00	0.00070615	0.0000519	0.0000502	0.00000171	0.0005229	0.0000531	0.00005152	0.00000158
600370.00	2379440.00	0.0006946	0.00005207	0.00005038	0.00000168	0.0005267	0.00005398	0.00005239	0.00000158
600870.00	2379440.00	0.00065521	0.00005136	0.0000497	0.00000166	0.000502	0.00005365	0.00005208	0.00000157
601370.00	2379440.00	0.00047407	0.00004924	0.00004758	0.00000166	0.0009776	0.0000569	0.0000553	0.0000016
601870.00	2379440.00	0.00045202	0.00004747	0.00004584	0.00000163	0.000901	0.00005463	0.00005304	0.00000158
602370.00	2379440.00	0.00028949	0.00004516	0.00004352	0.00000163	0.0005035	0.00005208	0.00005046	0.00000162
602870.00	2379440.00	0.00031525	0.00004312	0.00004152	0.0000016	0.0006553	0.00004938	0.0000478	0.00000158
603370.00	2379440.00	0.00027782	0.00004115	0.00003957	0.00000158	0.000545	0.00004683	0.00004525	0.00000158
603870.00	2379440.00	0.0003079	0.00003951	0.00003794	0.00000156	0.0006438	0.00004461	0.00004305	0.00000156
604370.00	2379440.00	0.00027305	0.00003786	0.00003631	0.00000156	0.0005696	0.00004271	0.00004114	0.00000157
604870.00	2379440.00	0.00027149	0.00003649	0.00003494	0.00000155	0.0005693	0.00004109	0.00003952	0.00000156
605370.00	2379440.00	0.0002385	0.00003516	0.00003361	0.00000155	0.0004693	0.00003962	0.00003805	0.00000157
605870.00	2379440.00	0.00027746	0.00003421	0.00003267	0.00000154	0.0005651	0.00003847	0.0000369	0.00000157
606370.00	2379440.00	0.00036827	0.00003371	0.00003217	0.00000153	0.0005041	0.00003675	0.00003518	0.00000157
606870.00	2379440.00	0.00023112	0.00003208	0.00003054	0.00000155	0.0004554	0.00003632	0.00003474	0.00000158
607370.00	2379440.00	0.0002176	0.00003114	0.00002959	0.00000155	0.0004014	0.00003528	0.00003369	0.00000159
607870.00	2379440.00	0.00029225	0.00003059	0.00002905	0.00000154	0.0005181	0.00003428	0.00003269	0.00000159
608370.00	2379440.00	0.0003916	0.00003025	0.00002871	0.00000155	0.0005572	0.00003336	0.00003176	0.0000016
608870.00	2379440.00	0.00021991	0.00002858	0.00002702	0.00000156	0.0004127	0.00003244	0.00003083	0.00000161
609370.00	2379440.00	0.00041779	0.00002859	0.00002703	0.00000155	0.0005167	0.0000312	0.00002958	0.00000161
609870.00	2379440.00	0.00027005	0.00002702	0.00002546	0.00000156	0.0005583	0.00003076	0.00002914	0.00000162
610370.00	2379440.00	0.00030452	0.00002628	0.00002471	0.00000156	0.0005819	0.00002972	0.00002809	0.00000162
610870.00	2379440.00	0.00036938	0.00002563	0.00002407	0.00000156	0.0005568	0.00002845	0.00002682	0.00000163
611370.00	2379440.00	0.00025488	0.00002422	0.00002265	0.00000157	0.0005367	0.00002766	0.00002603	0.00000163
611870.00	2379440.00	0.00023638	0.00002322	0.00002164	0.00000157	0.0004884	0.00002651	0.00002488	0.00000163
612370.00	2379440.00	0.00019396	0.00002232	0.00002073	0.00000159	0.0002907	0.00002514	0.00002349	0.00000165
612870.00	2379440.00	0.00024852	0.00002141	0.00001983	0.00000158	0.0005257	0.00002457	0.00002294	0.00000163
613370.00	2379440.00	0.00019373	0.00002041	0.00001882	0.00000159	0.0003037	0.00002303	0.00002139	0.00000164
613870.00	2379440.00	0.00012565	0.00001327	0.00001161	0.00000165	0.0001956	0.00001511	0.00001336	0.00000174
614370.00	2379440.00	0.00015228	0.00001604	0.00001437	0.00000166	0.000224	0.00001818	0.00001644	0.00000175
614870.00	2379440.00	0.00020545	0.00001778	0.00001618	0.00000161	0.0003852	0.00002039	0.00001874	0.00000165
615370.00	2379440.00	0.00018946	0.00001704	0.00001542	0.00000162	0.0003129	0.00001939	0.00001773	0.00000166
615870.00	2379440.00	0.00036775	0.00001657	0.00001495	0.00000162	0.00032	0.00001785	0.0000162	0.00000165
616370.00	2379440.00	0.00018031	0.00001601	0.00001434	0.00000167	0.0002697	0.00001815	0.00001644	0.00000171
616870.00	2379440.00	0.00020882	0.00001496	0.0000133	0.00000166	0.0004156	0.00001734	0.00001566	0.00000168
617370.00	2379440.00	0.00019794	0.00001437	0.0000127	0.00000167	0.0003797	0.00001661	0.00001492	0.00000169
617870.00	2379440.00	0.00022444	0.00001387	0.00001219	0.00000169	0.0004508	0.00001611	0.00001441	0.00000169
618370.00	2379440.00	0.00017318	0.00001365	0.00001194	0.00000172	0.0002669	0.00001547	0.00001373	0.00000173
618870.00	2379440.00	0.00022238	0.00001295	0.00001124	0.00000171	0.0004294	0.00001495	0.00001324	0.00000171
619370.00	2379440.00	0.00024865	0.00001262	0.0000109	0.00000172	0.0004183	0.00001431	0.00001259	0.00000172
619870.00	2379440.00	0.00024788	0.00001226	0.00001054	0.00000172	0.0004166	0.00001388	0.00001216	0.00000172
590370.00	2379940.00	0.00020215	0.00003733	0.00003396	0.00000337	0.0002403	0.00003968	0.00003606	0.00000361
590870.00	2379940.00	0.00019949	0.00003604	0.00003318	0.00000285	0.0002391	0.00003817	0.00003511	0.00000306
591370.00	2379940.00	0.00019318	0.00003488	0.00003248	0.0000024	0.0002323	0.00003689	0.00003433	0.00000256
591870.00	2379940.00	0.00018601	0.00003388	0.00003187	0.00000201	0.0002237	0.00003583	0.0000337	0.00000213
592370.00	2379940.00	0.00036973	0.00003643	0.00003466	0.00000177	0.0002907	0.0000377	0.00003585	0.00000185
592870.00	2379940.00	0.00075545	0.00003817	0.0000366	0.00000157	0.0003747	0.00003839	0.00003679	0.0000016
593370.00	2379940.00	0.00094816	0.00003876	0.00003735	0.00000141	0.0004364	0.00003859	0.0000372	0.00000139
593870.00	2379940.00	0.00112342	0.0000395	0.00003818	0.00000132	0.0005351	0.00003901	0.00003776	0.00000125
594370.00	2379940.00	0.00109515	0.00003939	0.00003813	0.00000126	0.0005259	0.00003884	0.00003769	0.00000115
594870.00	2379940.00	0.00056178	0.00003826	0.00003694	0.00000132	0.0012723	0.00004292	0.00004174	0.00000118
595370.00	2379940.00	0.00107018	0.00004003	0.00003876	0.00000127	0.0005381	0.00003923	0.00003813	0.0000011

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
595870.00	2379940.00	0.00105109	0.00004066	0.00003934	0.00000132	0.0005374	0.00003969	0.00003857	0.00000112
596370.00	2379940.00	0.0010197	0.00004144	0.00004006	0.00000138	0.0005231	0.00004029	0.00003912	0.00000117
596870.00	2379940.00	0.00099759	0.00004252	0.00004107	0.00000145	0.0005164	0.00004119	0.00003995	0.00000123
597370.00	2379940.00	0.00103439	0.00004418	0.00004265	0.00000153	0.0005624	0.00004275	0.00004144	0.00000131
597870.00	2379940.00	0.00103395	0.00004583	0.00004424	0.00000159	0.000572	0.00004437	0.00004299	0.00000138
598370.00	2379940.00	0.00072182	0.00004627	0.00004463	0.00000163	0.0005106	0.00004592	0.00004448	0.00000144
598870.00	2379940.00	0.00072723	0.00004808	0.00004641	0.00000166	0.0005232	0.00004804	0.00004655	0.00000149
599370.00	2379940.00	0.00074998	0.00004974	0.00004806	0.00000168	0.0005566	0.00005033	0.00004881	0.00000152
599870.00	2379940.00	0.00069635	0.00005064	0.00004897	0.00000167	0.0005114	0.00005158	0.00005004	0.00000154
600370.00	2379940.00	0.0006867	0.00005107	0.00004942	0.00000165	0.0005143	0.00005267	0.00005113	0.00000154
600870.00	2379940.00	0.00065028	0.00005065	0.00004903	0.00000163	0.0004953	0.00005272	0.00005118	0.00000154
601370.00	2379940.00	0.00048047	0.00004887	0.00004724	0.00000163	0.0009723	0.00005629	0.00005473	0.00000156
601870.00	2379940.00	0.00045741	0.0000473	0.0000457	0.0000016	0.0009199	0.00005446	0.00005291	0.00000155
602370.00	2379940.00	0.00040338	0.00004529	0.00004372	0.00000158	0.0007746	0.00005179	0.00005026	0.00000154
602870.00	2379940.00	0.00038997	0.00004338	0.00004182	0.00000156	0.0007338	0.00004921	0.00004768	0.00000153
603370.00	2379940.00	0.00035017	0.00004139	0.00003985	0.00000154	0.0006965	0.00004684	0.00004531	0.00000153
603870.00	2379940.00	0.00045314	0.00004007	0.00003855	0.00000152	0.0005611	0.00004328	0.00004177	0.00000151
604370.00	2379940.00	0.00035538	0.00003818	0.00003667	0.00000151	0.0006264	0.00004234	0.00004082	0.00000152
604870.00	2379940.00	0.00024275	0.00003639	0.00003487	0.00000152	0.0004726	0.00004096	0.00003943	0.00000153
605370.00	2379940.00	0.00023349	0.00003512	0.0000336	0.00000152	0.0004498	0.0000395	0.00003797	0.00000153
605870.00	2379940.00	0.00026643	0.00003411	0.00003261	0.00000151	0.000551	0.00003834	0.00003681	0.00000153
606370.00	2379940.00	0.00021169	0.00003297	0.00003145	0.00000152	0.0003695	0.00003715	0.0000356	0.00000154
606870.00	2379940.00	0.0002048	0.00003209	0.00003057	0.00000152	0.0003352	0.00003621	0.00003465	0.00000156
607370.00	2379940.00	0.00024261	0.0000312	0.0000297	0.00000151	0.0004918	0.00003529	0.00003374	0.00000155
607870.00	2379940.00	0.00031378	0.00003072	0.00002921	0.0000015	0.0004975	0.00003404	0.00003249	0.00000155
608370.00	2379940.00	0.00037836	0.00003021	0.00002871	0.00000151	0.0003895	0.00003241	0.00003086	0.00000155
608870.00	2379940.00	0.00025638	0.0000288	0.00002729	0.00000152	0.0005336	0.00003274	0.00003117	0.00000157
609370.00	2379940.00	0.00031001	0.00002823	0.00002671	0.00000152	0.0005715	0.00003176	0.00003019	0.00000157
609870.00	2379940.00	0.00022272	0.000027	0.00002548	0.00000153	0.0004341	0.00003064	0.00002906	0.00000158
610370.00	2379940.00	0.00019501	0.00002643	0.00002487	0.00000156	0.0002885	0.00002985	0.00002822	0.00000163
610870.00	2379940.00	0.00019368	0.00002544	0.00002389	0.00000155	0.0002876	0.00002868	0.00002706	0.00000161
611370.00	2379940.00	0.00047555	0.00002538	0.00002385	0.00000153	0.0004156	0.00002693	0.00002534	0.00000159
611870.00	2379940.00	0.00020726	0.00002347	0.00002193	0.00000154	0.0003702	0.00002652	0.00002493	0.00000159
612370.00	2379940.00	0.00024334	0.00002269	0.00002115	0.00000154	0.000511	0.00002591	0.00002431	0.00000159
612870.00	2379940.00	0.00028933	0.00002199	0.00002045	0.00000154	0.0005687	0.000025	0.00002341	0.00000159
613370.00	2379940.00	0.00034603	0.00002132	0.00001978	0.00000154	0.0005536	0.00002387	0.00002227	0.00000159
613870.00	2379940.00	0.00013329	0.00001471	0.0000131	0.00000161	0.0002025	0.00001671	0.00001501	0.0000017
614370.00	2379940.00	0.00015286	0.0000166	0.00001499	0.00000162	0.0002235	0.00001878	0.00001708	0.0000017
614870.00	2379940.00	0.00019305	0.00001824	0.00001667	0.00000156	0.0003298	0.0000207	0.0000191	0.0000016
615370.00	2379940.00	0.00031042	0.00001773	0.00001617	0.00000156	0.000427	0.00001973	0.00001813	0.0000016
615870.00	2379940.00	0.00019334	0.0000167	0.00001512	0.00000158	0.000344	0.00001907	0.00001746	0.00000161
616370.00	2379940.00	0.00030262	0.00001623	0.00001465	0.00000158	0.0004249	0.00001814	0.00001652	0.00000161
616870.00	2379940.00	0.0001858	0.00001536	0.00001375	0.00000161	0.0003203	0.00001754	0.00001591	0.00000163
617370.00	2379940.00	0.00021988	0.00001475	0.00001313	0.00000162	0.0004417	0.00001709	0.00001546	0.00000163
617870.00	2379940.00	0.00017468	0.00001431	0.00001267	0.00000164	0.0002757	0.00001624	0.00001458	0.00000166
618370.00	2379940.00	0.00017437	0.00001376	0.00001211	0.00000166	0.0002819	0.00001564	0.00001397	0.00000167
618870.00	2379940.00	0.00019139	0.00001319	0.00001153	0.00000166	0.0003672	0.00001521	0.00001355	0.00000167
619370.00	2379940.00	0.00017551	0.00001282	0.00001114	0.00000168	0.0002996	0.00001461	0.00001292	0.00000168
619870.00	2379940.00	0.00023994	0.00001246	0.00001078	0.00000168	0.0004106	0.00001415	0.00001247	0.00000167
590370.00	2380440.00	0.00024945	0.00003783	0.00003458	0.00000324	0.0002755	0.00003995	0.00003649	0.00000347
590870.00	2380440.00	0.00028182	0.00003703	0.00003426	0.00000277	0.000281	0.00003884	0.00003588	0.00000296
591370.00	2380440.00	0.00050103	0.00003788	0.0000355	0.00000238	0.0003222	0.00003875	0.00003621	0.00000254
591870.00	2380440.00	0.00023274	0.00003492	0.00003295	0.00000197	0.0002588	0.00003674	0.00003466	0.00000208
592370.00	2380440.00	0.00022552	0.00003424	0.00003257	0.00000168	0.0002504	0.00003607	0.00003433	0.00000174
592870.00	2380440.00	0.00026847	0.00003438	0.00003291	0.00000147	0.0002572	0.00003593	0.00003444	0.00000149
593370.00	2380440.00	0.00031329	0.00003447	0.00003315	0.00000132	0.0002631	0.00003578	0.00003449	0.00000129
593870.00	2380440.00	0.00048941	0.00003553	0.00003429	0.00000124	0.0002972	0.0000362	0.00003503	0.00000117
594370.00	2380440.00	0.00112597	0.00003892	0.00003768	0.00000123	0.0005672	0.00003839	0.00003726	0.00000113
594870.00	2380440.00	0.00112966	0.00003931	0.00003808	0.00000123	0.0006922	0.00003911	0.00003802	0.00000109
595370.00	2380440.00	0.00104565	0.00003914	0.00003791	0.00000124	0.0005236	0.00003836	0.00003729	0.00000107
595870.00	2380440.00	0.00104435	0.00003982	0.00003854	0.00000128	0.0005419	0.0000389	0.00003781	0.00000109
596370.00	2380440.00	0.00099923	0.00004043	0.0000391	0.00000134	0.0005117	0.00003932	0.00003819	0.00000113
596870.00	2380440.00	0.00101614	0.00004165	0.00004025	0.00000141	0.0005416	0.00004039	0.0000392	0.00000119
597370.00	2380440.00	0.00102859	0.00004307	0.00004159	0.00000148	0.0005715	0.00004173	0.00004046	0.00000126
597870.00	2380440.00	0.00104115	0.00004472	0.00004318	0.00000154	0.0006468	0.00004357	0.00004224	0.00000133
598370.00	2380440.00	0.00073678	0.00004508	0.00004349	0.00000159	0.0005528	0.00004489	0.0000435	0.00000139
598870.00	2380440.00	0.00074411	0.00004683	0.00004521	0.00000162	0.0005697	0.00004696	0.00004551	0.00000144
599370.00	2380440.00	0.00071296	0.00004824	0.0000466	0.00000163	0.0005149	0.00004848	0.000047	0.00000148
599870.00	2380440.00	0.00068555	0.00004936	0.00004773	0.00000163	0.0004996	0.00005007	0.00004857	0.0000015

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
600370.00	2380440.00	0.00071928	0.00005015	0.00004852	0.00000162	0.0005378	0.00005166	0.00005015	0.00000151
600870.00	2380440.00	0.0007193	0.00005008	0.00004848	0.0000016	0.0005604	0.00005232	0.00005081	0.00000151
601370.00	2380440.00	0.000434	0.0000482	0.0000466	0.0000016	0.0009657	0.00005579	0.00005425	0.00000153
601870.00	2380440.00	0.00046503	0.00004707	0.0000455	0.00000157	0.0009161	0.00005407	0.00005256	0.00000152
602370.00	2380440.00	0.0004243	0.00004527	0.00004373	0.00000155	0.0007762	0.00005161	0.0000501	0.0000015
602870.00	2380440.00	0.00037102	0.00004328	0.00004175	0.00000153	0.0007377	0.00004939	0.00004789	0.0000015
603370.00	2380440.00	0.00036761	0.00004148	0.00003997	0.00000151	0.0006986	0.00004684	0.00004535	0.00000149
603870.00	2380440.00	0.00034369	0.00003969	0.00003819	0.0000015	0.0006646	0.00004458	0.0000431	0.00000148
604370.00	2380440.00	0.00025976	0.00003786	0.00003637	0.00000149	0.0005177	0.0000427	0.0000412	0.0000015
604870.00	2380440.00	0.00027287	0.00003647	0.00003499	0.00000148	0.0005698	0.00004097	0.00003949	0.00000149
605370.00	2380440.00	0.00028598	0.00003527	0.00003379	0.00000147	0.0005814	0.00003944	0.00003795	0.00000149
605870.00	2380440.00	0.00040352	0.00003473	0.00003327	0.00000146	0.000471	0.00003715	0.00003567	0.00000148
606370.00	2380440.00	0.00030438	0.00003325	0.00003178	0.00000147	0.0005518	0.0000369	0.00003541	0.00000149
606870.00	2380440.00	0.00025675	0.00003209	0.00003062	0.00000147	0.0005223	0.00003609	0.00003459	0.0000015
607370.00	2380440.00	0.00022292	0.0000311	0.00002963	0.00000147	0.0004372	0.00003509	0.00003359	0.00000151
607870.00	2380440.00	0.00019748	0.00003034	0.00002885	0.00000149	0.0003169	0.00003423	0.0000327	0.00000153
608370.00	2380440.00	0.00019512	0.0000296	0.00002811	0.00000149	0.0003043	0.00003341	0.00003187	0.00000154
608870.00	2380440.00	0.00025705	0.00002885	0.00002737	0.00000148	0.0005331	0.00003272	0.0000312	0.00000152
609370.00	2380440.00	0.00019391	0.00002828	0.00002675	0.00000152	0.0002906	0.00003196	0.00003037	0.00000159
609870.00	2380440.00	0.00043229	0.00002805	0.00002657	0.00000148	0.000466	0.00003021	0.00002867	0.00000154
610370.00	2380440.00	0.00025617	0.00002645	0.00002496	0.00000149	0.0005283	0.00003002	0.00002847	0.00000154
610870.00	2380440.00	0.00023536	0.00002554	0.00002404	0.00000149	0.0004844	0.000029	0.00002746	0.00000155
611370.00	2380440.00	0.00018981	0.00002477	0.00002326	0.00000151	0.0002828	0.00002787	0.00002629	0.00000157
611870.00	2380440.00	0.00018923	0.00002387	0.00002236	0.00000151	0.0002843	0.00002682	0.00002525	0.00000157
612370.00	2380440.00	0.00019065	0.00002292	0.00002142	0.00000151	0.0002982	0.00002576	0.0000242	0.00000156
612870.00	2380440.00	0.00024236	0.00002216	0.00002066	0.0000015	0.0005084	0.00002527	0.00002371	0.00000156
613370.00	2380440.00	0.00030613	0.00002157	0.00002007	0.0000015	0.0005588	0.00002435	0.00002279	0.00000156
613870.00	2380440.00	0.00012277	0.00001369	0.00001212	0.00000157	0.0001905	0.00001555	0.00001389	0.00000166
614370.00	2380440.00	0.00018494	0.00001996	0.00001841	0.00000155	0.0002717	0.00002251	0.00002088	0.00000163
614870.00	2380440.00	0.00018547	0.00001942	0.00001785	0.00000158	0.0002754	0.00002201	0.00002035	0.00000166
615370.00	2380440.00	0.00031663	0.00001819	0.00001667	0.00000152	0.0004053	0.00002008	0.00001852	0.00000156
615870.00	2380440.00	0.00030182	0.00001739	0.00001586	0.00000153	0.0004225	0.00001935	0.00001779	0.00000156
616370.00	2380440.00	0.00030061	0.00001665	0.00001512	0.00000154	0.000418	0.00001855	0.00001698	0.00000157
616870.00	2380440.00	0.00017539	0.00001592	0.00001435	0.00000157	0.0002666	0.00001798	0.00001638	0.0000016
617370.00	2380440.00	0.00022357	0.00001513	0.00001357	0.00000156	0.0004439	0.00001747	0.00001589	0.00000158
617870.00	2380440.00	0.00030232	0.00001474	0.00001316	0.00000157	0.0003965	0.00001635	0.00001476	0.00000159
618370.00	2380440.00	0.0003305	0.00001423	0.00001264	0.00000159	0.0003451	0.00001545	0.00001385	0.0000016
618870.00	2380440.00	0.00016959	0.00001402	0.00001238	0.00000164	0.0002569	0.00001587	0.00001419	0.00000168
619370.00	2380440.00	0.0001707	0.00001311	0.00001149	0.00000163	0.0002794	0.00001489	0.00001325	0.00000164
619870.00	2380440.00	0.00022084	0.00001266	0.00001103	0.00000163	0.0004336	0.0000146	0.00001297	0.00000163
590370.00	2380940.00	0.00032095	0.00003781	0.00003469	0.00000311	0.0002887	0.00003945	0.00003613	0.00000332
590870.00	2380940.00	0.00034514	0.00003695	0.00003429	0.00000266	0.000292	0.00003833	0.00003549	0.00000284
591370.00	2380940.00	0.00090956	0.00003925	0.00003694	0.00000231	0.0004244	0.00003916	0.0000367	0.00000247
591870.00	2380940.00	0.00050302	0.00003649	0.00003455	0.00000194	0.0003135	0.00003723	0.00003518	0.00000205
592370.00	2380940.00	0.00072695	0.00003712	0.00003544	0.00000168	0.0003633	0.00003729	0.00003554	0.00000175
592870.00	2380940.00	0.00064583	0.00003629	0.00003483	0.00000147	0.0003392	0.00003665	0.00003516	0.00000149
593370.00	2380940.00	0.0007135	0.00003631	0.00003499	0.00000132	0.0003568	0.00003647	0.00003518	0.0000013
593870.00	2380940.00	0.00092676	0.00003719	0.00003596	0.00000123	0.0004329	0.00003689	0.00003572	0.00000117
594370.00	2380940.00	0.00032672	0.00003588	0.0000346	0.00000129	0.0010128	0.00004072	0.00003952	0.0000012
594870.00	2380940.00	0.00108035	0.00003824	0.00003705	0.00000118	0.0005545	0.00003764	0.00003658	0.00000105
595370.00	2380940.00	0.00105072	0.00003848	0.00003728	0.0000012	0.000542	0.00003776	0.00003672	0.00000104
595870.00	2380940.00	0.00103218	0.00003898	0.00003774	0.00000124	0.0005414	0.00003812	0.00003707	0.00000106
596370.00	2380940.00	0.00104347	0.00003993	0.00003863	0.0000013	0.0006187	0.00003914	0.00003804	0.0000011
596870.00	2380940.00	0.00099442	0.00004088	0.0000395	0.00000137	0.0007603	0.00004069	0.00003952	0.00000117
597370.00	2380940.00	0.00100952	0.00004193	0.0000405	0.00000143	0.0005767	0.00004064	0.00003942	0.00000122
597870.00	2380940.00	0.00069904	0.00004203	0.00004054	0.00000149	0.0004957	0.00004166	0.00004038	0.00000128
598370.00	2380940.00	0.00069191	0.00004356	0.00004202	0.00000154	0.0004868	0.00004314	0.0000418	0.00000134
598870.00	2380940.00	0.00068752	0.0000452	0.00004363	0.00000157	0.0004843	0.0000449	0.00004351	0.00000139
599370.00	2380940.00	0.00066662	0.00004671	0.00004512	0.00000159	0.0004719	0.00004665	0.00004522	0.00000143
599870.00	2380940.00	0.00064717	0.00004797	0.00004637	0.00000159	0.0004667	0.00004835	0.0000469	0.00000146
600370.00	2380940.00	0.00065984	0.00004888	0.0000473	0.00000159	0.0004842	0.00004991	0.00004844	0.00000147
600870.00	2380940.00	0.00060333	0.00004887	0.00004731	0.00000156	0.0004562	0.00005035	0.00004889	0.00000146
601370.00	2380940.00	0.00031434	0.00004746	0.00004586	0.0000016	0.0005291	0.00005439	0.00005284	0.00000155
601870.00	2380940.00	0.00039188	0.00004645	0.0000449	0.00000155	0.0008814	0.00005383	0.00005234	0.00000149
602370.00	2380940.00	0.00041063	0.00004508	0.00004356	0.00000152	0.0008763	0.00005196	0.00005049	0.00000148
602870.00	2380940.00	0.00033671	0.00004312	0.00004161	0.00000151	0.000699	0.00004948	0.000048	0.00000147
603370.00	2380940.00	0.00051321	0.00004198	0.00004052	0.00000147	0.0005325	0.00004505	0.00004361	0.00000143
603870.00	2380940.00	0.00040958	0.00003998	0.00003852	0.00000146	0.0006247	0.00004417	0.00004273	0.00000144
604370.00	2380940.00	0.00025777	0.00003788	0.00003642	0.00000147	0.0005055	0.00004273	0.00004127	0.00000146

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
604870.00	2380940.00	0.00023661	0.0000364	0.00003495	0.00000146	0.0004409	0.00004093	0.00003946	0.00000146
605370.00	2380940.00	0.00030895	0.00003534	0.0000339	0.00000144	0.0005874	0.00003924	0.00003779	0.00000145
605870.00	2380940.00	0.00032985	0.00003432	0.00003289	0.00000143	0.0005557	0.00003773	0.00003629	0.00000145
606370.00	2380940.00	0.00035509	0.00003345	0.00003202	0.00000143	0.0005077	0.00003634	0.00003489	0.00000145
606870.00	2380940.00	0.00035595	0.00003255	0.00003112	0.00000143	0.0004823	0.00003529	0.00003383	0.00000145
607370.00	2380940.00	0.00019829	0.00003109	0.00002964	0.00000145	0.0003289	0.00003497	0.00003349	0.00000148
607870.00	2380940.00	0.00030907	0.00003065	0.00002922	0.00000143	0.0004922	0.00003382	0.00003235	0.00000147
608370.00	2380940.00	0.00026005	0.00002962	0.00002818	0.00000144	0.0004969	0.00003324	0.00003176	0.00000148
608870.00	2380940.00	0.00026669	0.00002892	0.00002748	0.00000144	0.0005434	0.00003268	0.0000312	0.00000149
609370.00	2380940.00	0.000224	0.00002797	0.00002652	0.00000145	0.0004501	0.00003168	0.00003019	0.00000149
609870.00	2380940.00	0.00021847	0.0000272	0.00002574	0.00000145	0.0004298	0.00003078	0.00002928	0.0000015
610370.00	2380940.00	0.00019239	0.00002639	0.00002493	0.00000146	0.0003137	0.00002971	0.0000282	0.00000151
610870.00	2380940.00	0.00027178	0.00002587	0.00002441	0.00000145	0.0005385	0.00002922	0.00002771	0.00000151
611370.00	2380940.00	0.00044878	0.00002578	0.00002433	0.00000145	0.0004162	0.00002742	0.0000259	0.00000151
611870.00	2380940.00	0.00023584	0.00002411	0.00002265	0.00000146	0.0004884	0.00002736	0.00002584	0.00000152
612370.00	2380940.00	0.00018565	0.00002328	0.0000218	0.00000148	0.0002794	0.00002611	0.00002458	0.00000153
612870.00	2380940.00	0.00018444	0.0000225	0.00002102	0.00000148	0.0002739	0.00002524	0.0000237	0.00000154
613370.00	2380940.00	0.00030539	0.00002193	0.00002046	0.00000146	0.0005476	0.00002465	0.00002313	0.00000152
613870.00	2380940.00	0.000121	0.00001384	0.00001231	0.00000153	0.0001879	0.00001571	0.00001409	0.00000162
614370.00	2380940.00	0.00014598	0.00001686	0.00001533	0.00000153	0.0002142	0.00001902	0.00001739	0.00000162
614870.00	2380940.00	0.00024748	0.0000192	0.00001773	0.00000147	0.0004659	0.00002177	0.00002024	0.00000152
615370.00	2380940.00	0.00018317	0.0000183	0.00001681	0.00000149	0.0002976	0.00002063	0.0000191	0.00000153
615870.00	2380940.00	0.00027782	0.00001775	0.00001626	0.00000148	0.0004389	0.0000199	0.00001837	0.00000153
616370.00	2380940.00	0.00023662	0.00001689	0.0000154	0.00000149	0.0004549	0.00001932	0.00001779	0.00000153
616870.00	2380940.00	0.00034466	0.00001643	0.00001493	0.0000015	0.0003206	0.00001771	0.00001618	0.00000153
617370.00	2380940.00	0.00021997	0.0000155	0.00001399	0.00000151	0.0004365	0.00001786	0.00001631	0.00000154
617870.00	2380940.00	0.00019839	0.00001486	0.00001333	0.00000153	0.0003881	0.00001711	0.00001556	0.00000155
618370.00	2380940.00	0.00030019	0.00001452	0.00001299	0.00000154	0.0003844	0.00001606	0.00001451	0.00000155
618870.00	2380940.00	0.00032053	0.00001403	0.00001248	0.00000155	0.0003461	0.00001526	0.0000137	0.00000156
619370.00	2380940.00	0.00016828	0.00001402	0.0000124	0.00000162	0.0002558	0.00001587	0.00001421	0.00000166
619870.00	2380940.00	0.00017614	0.00001288	0.00001129	0.00000159	0.0003137	0.00001471	0.00001312	0.00000159
588472.38	2364388.75	0.00081012	0.00029292	0.00023846	0.00005446	0.0011836	0.00029595	0.00026091	0.00003505
588972.38	2364388.75	0.0008696	0.00032041	0.00025069	0.00006972	0.001238	0.00032832	0.00027693	0.00005139
589472.38	2364388.75	0.00091316	0.00032165	0.00024836	0.00007329	0.0012858	0.00034875	0.00028501	0.00006374
589972.38	2364388.75	0.00192471	0.00028689	0.0002252	0.00006169	0.0022358	0.00033927	0.00027396	0.00006531
590472.38	2364388.75	0.00268243	0.00022859	0.00018522	0.00004337	0.0016416	0.0002812	0.00022932	0.00005187
590972.38	2364388.75	0.00277499	0.0001773	0.00014726	0.00003004	0.0014899	0.00021635	0.00017981	0.00003654
588472.38	2364888.75	0.00078594	0.00028641	0.00022903	0.00005738	0.001138	0.00029083	0.00025116	0.00003967
588972.38	2364888.75	0.00083414	0.00030304	0.00023563	0.00006741	0.0011856	0.00031654	0.00026304	0.0000535
589472.38	2364888.75	0.00086182	0.00029284	0.00022673	0.00006611	0.0012182	0.00032551	0.0002645	0.00006102
589972.38	2364888.75	0.00084546	0.00025	0.0001964	0.0000536	0.001223	0.00030152	0.00024362	0.0000579
590472.38	2364888.75	0.00248451	0.0002005	0.00016353	0.00003697	0.0014379	0.0002444	0.00020031	0.00004409
590972.38	2364888.75	0.00157508	0.00015184	0.00012571	0.00002613	0.000921	0.00018329	0.00015201	0.00003128
588472.38	2365388.75	0.00076144	0.00027742	0.00021924	0.00005818	0.0010968	0.00028471	0.00024165	0.00004307
588972.38	2365388.75	0.00079359	0.00028351	0.00021985	0.00006366	0.0011204	0.00030121	0.00024748	0.00005373
589472.38	2365388.75	0.00080808	0.00026469	0.00020583	0.00005886	0.0011394	0.00030014	0.00024299	0.00005715
589972.38	2365388.75	0.00080768	0.00022731	0.00017966	0.00004766	0.0011763	0.00027602	0.00022438	0.00005164
590472.38	2365388.75	0.00078966	0.00017493	0.00014196	0.00003298	0.0015031	0.00022326	0.00018449	0.00003876
590972.38	2365388.75	0.00274313	0.00014654	0.00012317	0.00002337	0.0015708	0.00017256	0.00014494	0.00002761
588472.38	2365888.75	0.00073485	0.000266	0.00020875	0.00005724	0.0010516	0.00027613	0.00023113	0.000045
588972.38	2365888.75	0.00074851	0.00026341	0.00020411	0.0000593	0.0010519	0.00028452	0.00023166	0.00005286
589472.38	2365888.75	0.0007613	0.00023913	0.00018722	0.00005191	0.0010766	0.00027602	0.0002235	0.00005252
589972.38	2365888.75	0.00074442	0.00019864	0.0001587	0.00003994	0.0010964	0.0002436	0.00019888	0.00004472
590472.38	2365888.75	0.00072261	0.00016196	0.00013216	0.0000298	0.0011191	0.00020383	0.00016912	0.0000347
590972.38	2365888.75	0.00071832	0.00012931	0.00010785	0.00002146	0.0014783	0.00016272	0.00013761	0.00002511
588472.38	2366388.75	0.00070799	0.00025309	0.00019811	0.00005498	0.0010089	0.00026649	0.00022081	0.00004568
588972.38	2366388.75	0.00072125	0.00024387	0.00019021	0.00005366	0.0010157	0.00026882	0.0002187	0.00005012
589472.38	2366388.75	0.00075963	0.00021271	0.00016799	0.00004471	0.0015208	0.00025168	0.00020435	0.00004734
589972.38	2366388.75	0.00070266	0.00017654	0.00014225	0.00003429	0.0011257	0.00021736	0.00017854	0.00003882
590472.38	2366388.75	0.00067828	0.00014499	0.00011914	0.00002584	0.0010853	0.00018112	0.00015124	0.00002987
590972.38	2366388.75	0.00067548	0.00011946	0.00010017	0.00001929	0.0013604	0.00014844	0.00012607	0.00002237
588472.38	2366888.75	0.0006781	0.00023896	0.00018703	0.00005193	0.0009611	0.00025505	0.0002098	0.00004525
588972.38	2366888.75	0.00068697	0.00022468	0.00017627	0.00004842	0.0009693	0.00025171	0.00020471	0.000047
589472.38	2366888.75	0.00080415	0.0001926	0.00015364	0.00003895	0.0018098	0.00023106	0.00018889	0.00004217
589972.38	2366888.75	0.00189792	0.00016144	0.00013246	0.00002899	0.0010833	0.00018938	0.00015627	0.00003311
590472.38	2366888.75	0.00070484	0.00013081	0.00010819	0.00002262	0.001578	0.00016341	0.00013751	0.0000259
590972.38	2366888.75	0.00069626	0.00011072	0.00009339	0.00001733	0.001708	0.00013718	0.00011725	0.00001993
591758.19	2356560.25	0.01125108	0.00447824	0.00430202	0.00017621	0.0289914	0.00997435	0.0098679	0.00010646
592258.19	2356560.25	0.0024974	0.00111585	0.00057287	0.00054298	0.0286269	0.01042898	0.01018857	0.00024041

Dioxin Vapor		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592758.19	2356560.25	0.01311449	0.0010204	0.00047769	0.00054272	0.0131673	0.00191283	0.00160289	0.00030995
593258.19	2356560.25	0.01042771	0.00099751	0.0004186	0.00057891	0.0321698	0.00225132	0.001304	0.00094733
593758.19	2356560.25	0.0077138	0.000668	0.00028812	0.00037989	0.0207076	0.00125354	0.00075126	0.00050228
594258.19	2356560.25	0.0059573	0.00045589	0.00019882	0.00025707	0.013741	0.0007331	0.00042548	0.00030763
591758.19	2357060.25	0.01487212	0.00716325	0.0068455	0.00031775	0.024194	0.00996802	0.00986999	0.00009803
592258.19	2357060.25	0.00982252	0.00289696	0.00267875	0.00021821	0.0339852	0.0153433	0.01481471	0.00052859
592758.19	2357060.25	0.01022646	0.00214833	0.00209421	0.00005413	0.0250073	0.00613248	0.00602522	0.00010726
593258.19	2357060.25	0.0082791	0.00061451	0.00055296	0.00006155	0.0208184	0.00252394	0.00245638	0.00006757
593758.19	2357060.25	0.00626875	0.00039534	0.00027061	0.00012474	0.0141842	0.00082063	0.00069283	0.00012781
594258.19	2357060.25	0.00446473	0.00036167	0.00017775	0.00018392	0.0094057	0.00058327	0.00036359	0.00021968
591758.19	2357560.25	0.01065576	0.00489787	0.00435603	0.00054184	0.0138523	0.0059002	0.00579145	0.00010875
592258.19	2357560.25	0.00661803	0.00188703	0.00176007	0.00012696	0.0192413	0.00724701	0.00676613	0.00048089
592758.19	2357560.25	0.00726618	0.00178207	0.00174698	0.00003509	0.01279	0.00291865	0.0028359	0.00008275
593258.19	2357560.25	0.00555491	0.00090075	0.00086759	0.00003317	0.0121299	0.00250571	0.00246818	0.00003753
593758.19	2357560.25	0.00480952	0.00038144	0.00034742	0.00003402	0.0098429	0.00099416	0.0009556	0.00003856
594258.19	2357560.25	0.00393939	0.00022667	0.00018512	0.00004155	0.0073491	0.00044163	0.00039402	0.00004761
591758.19	2358060.25	0.00683766	0.00277877	0.00242681	0.00035196	0.0096001	0.00366936	0.00344083	0.00022853
592258.19	2358060.25	0.00438249	0.00119944	0.00111137	0.00008807	0.010934	0.00332621	0.00306066	0.00026555
592758.19	2358060.25	0.00511049	0.0011144	0.00108587	0.00002852	0.0077407	0.00161965	0.00155566	0.000064
593258.19	2358060.25	0.00404935	0.00088686	0.00086372	0.00002314	0.0092788	0.00164096	0.00161251	0.00002844
593758.19	2358060.25	0.00359778	0.00046894	0.00044509	0.00002385	0.0065866	0.00100447	0.0009784	0.00002607
594258.19	2358060.25	0.0031588	0.00024785	0.00022361	0.00002424	0.0057643	0.0005118	0.00048483	0.00002697
591758.19	2358560.25	0.00455828	0.00160579	0.00139147	0.00021432	0.0073412	0.00256231	0.00230566	0.00025665
592258.19	2358560.25	0.00315182	0.00081551	0.00074927	0.00006623	0.0071615	0.00178979	0.00162942	0.00016037
592758.19	2358560.25	0.00361575	0.00072275	0.00069831	0.00002444	0.0053762	0.00100848	0.00095879	0.00004969
593258.19	2358560.25	0.00327305	0.00071722	0.00069826	0.00001896	0.0070261	0.00103161	0.00100824	0.00002336
593758.19	2358560.25	0.00271145	0.00048383	0.00046582	0.00001801	0.0050881	0.0008526	0.00083225	0.00002035
594258.19	2358560.25	0.00257398	0.00028854	0.00026996	0.00001859	0.0043842	0.00053144	0.00051124	0.00002019
591758.19	2359060.25	0.00325869	0.00101498	0.00087415	0.00014083	0.005602	0.00175747	0.0015446	0.00021287
592258.19	2359060.25	0.00241383	0.00058928	0.00053697	0.00005231	0.0052077	0.0011032	0.00099549	0.00010771
592758.19	2359060.25	0.0026217	0.00050804	0.00048656	0.00002148	0.0041246	0.00069649	0.00065642	0.00004007
593258.19	2359060.25	0.00284264	0.00054916	0.00053266	0.0000165	0.0051761	0.00069683	0.00067693	0.00001991
593758.19	2359060.25	0.00218132	0.00044003	0.00042536	0.00001466	0.0045892	0.00067513	0.00065828	0.00001685
594258.19	2359060.25	0.0020392	0.00030215	0.00028743	0.00001472	0.0034224	0.00048914	0.00047302	0.00001612

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
600239.00	2356326.00	0.00117968	0.00066717	0.00063559	0.00003158	0.00166957	0.00070447	0.00067072	0.00003374
601239.00	2356326.00	0.001018	0.00054868	0.00052263	0.00002605	0.0014258	0.00057162	0.00054412	0.00002749
602239.00	2356326.00	0.00089506	0.00046209	0.00044022	0.00002187	0.0012449	0.00047759	0.00045474	0.00002285
596178.25	2355631.50	0.00317017	0.00227748	0.00214985	0.00012763	0.00503277	0.00300846	0.00286315	0.0001453
596670.63	2355544.50	0.00269336	0.00187115	0.00176235	0.0001088	0.00413042	0.0023437	0.00222246	0.00012124
597163.06	2355457.75	0.00232827	0.00156564	0.00147144	0.0000942	0.00347959	0.00188375	0.00178055	0.00010321
598147.88	2355284.00	0.00181526	0.00114782	0.00107472	0.0000731	0.00262046	0.00130826	0.00123014	0.00007813
599132.63	2355110.50	0.00147953	0.00088535	0.0008266	0.00005874	0.00209217	0.0009764	0.00091471	0.0000617
600117.44	2354936.75	0.00124618	0.0007098	0.00066137	0.00004843	0.00174045	0.00076704	0.00071679	0.00005025
601102.25	2354763.25	0.00107642	0.00058664	0.00054593	0.00004071	0.00149181	0.00062587	0.000584	0.00004188
602087.06	2354589.50	0.00094779	0.00049643	0.00046168	0.00003475	0.00130714	0.00052552	0.00049	0.00003553
594823.13	2355385.50	0.00603293	0.00508035	0.00484222	0.00023813	0.01091432	0.00729999	0.0071032	0.00019679
595058.06	2355300.00	0.00534032	0.00442198	0.00420756	0.00021443	0.00940168	0.00614272	0.00596211	0.00018061
595527.94	2355129.00	0.00429428	0.00343035	0.0032532	0.00017714	0.00720515	0.0044871	0.00433442	0.00015268
595997.75	2354958.00	0.00355497	0.00273586	0.00258642	0.00014944	0.00573641	0.00341471	0.00328377	0.00013094
596467.63	2354787.00	0.00301172	0.00223337	0.00210514	0.00012822	0.0047079	0.00268811	0.00257445	0.00011366
596937.44	2354616.00	0.00259938	0.00185911	0.00174758	0.00011153	0.00396045	0.00217652	0.00207674	0.00009978
597877.19	2354274.00	0.0020246	0.00135523	0.00126811	0.00008712	0.00296756	0.00152536	0.00144633	0.00007904
598816.88	2353931.75	0.0016514	0.00104324	0.00097284	0.0000704	0.00235345	0.00114377	0.00107928	0.00006448
599756.56	2353589.75	0.00139254	0.00083666	0.00077835	0.00005831	0.001944	0.00090185	0.00084802	0.00005383
600696.25	2353247.75	0.0012037	0.0006924	0.00064317	0.00004923	0.00165459	0.000738	0.00069225	0.00004575
601635.94	2352905.75	0.00106027	0.00058721	0.000545	0.00004221	0.00144034	0.00062112	0.00058168	0.00003944
593971.06	2355326.00	0.00853898	0.00613519	0.00599056	0.00014463	0.01619399	0.00920008	0.00899232	0.00020776
594187.56	2355201.00	0.00740706	0.00522466	0.00509931	0.00012535	0.01348398	0.00737205	0.00720429	0.00016775
594404.06	2355076.00	0.00650039	0.00449131	0.00438105	0.00011026	0.01143054	0.00602452	0.00588539	0.00013913
594620.56	2354951.00	0.00576554	0.00389664	0.00379866	0.00009798	0.00985086	0.00501318	0.0048952	0.00011798
594837.06	2354826.00	0.00515953	0.00340961	0.00332204	0.00008757	0.00861048	0.00423677	0.00413493	0.00010184
595270.06	2354576.00	0.00422773	0.00267217	0.00260069	0.00007148	0.00680724	0.00314443	0.00306557	0.00007886
595703.13	2354326.00	0.00355162	0.00215082	0.00209109	0.00005973	0.00558372	0.0024327	0.00236929	0.00006341
596136.13	2354076.00	0.00304276	0.00177072	0.00171991	0.00005081	0.00470845	0.00194575	0.00189315	0.0000526
596569.13	2353826.00	0.00264841	0.00148527	0.00144143	0.00004384	0.00405555	0.00159826	0.00155367	0.00004459
597435.13	2353326.00	0.0020891	0.00109655	0.00106283	0.00003372	0.00315687	0.00114727	0.00111367	0.0000336
598301.19	2352826.00	0.00171652	0.00085131	0.0008245	0.00002682	0.00257567	0.00087663	0.00085014	0.00002649
599167.19	2352326.00	0.00145465	0.00068677	0.00066488	0.00002188	0.0021706	0.00070111	0.00067954	0.00002156
600033.25	2351826.00	0.00126282	0.00057096	0.00055274	0.00001822	0.00187396	0.00058048	0.00056251	0.00001797
600899.25	2351326.00	0.00111701	0.00048603	0.00047062	0.00001541	0.00164755	0.00049338	0.00047813	0.00001524
593579.56	2355201.00	0.00932766	0.00592692	0.00571925	0.00020767	0.01510296	0.00857161	0.00828558	0.00028604
593771.06	2355040.50	0.00798756	0.00501333	0.00483585	0.00017749	0.01368091	0.00755389	0.00730237	0.00025152
593962.63	2354879.75	0.0069206	0.00427839	0.00412413	0.00015427	0.01214002	0.00648813	0.00626793	0.0002202
594154.13	2354719.00	0.00606172	0.00368383	0.00354784	0.00013599	0.01070927	0.00553005	0.00533704	0.00019301
594345.63	2354558.25	0.00536432	0.00319997	0.00307879	0.00012118	0.00945486	0.00471743	0.00454764	0.00016979
594537.13	2354397.75	0.00479107	0.00280314	0.00269435	0.00010879	0.00838335	0.00404526	0.00389513	0.00015013
594920.19	2354076.25	0.00391083	0.00220054	0.00211093	0.00008961	0.00670308	0.00303534	0.00291643	0.00011891
595303.19	2353754.75	0.00327612	0.00177473	0.00169922	0.00007552	0.00549191	0.00234706	0.00225082	0.00009625
595686.19	2353433.50	0.00280343	0.00146443	0.0013997	0.00006473	0.00460195	0.00186785	0.00178824	0.00007961
596069.25	2353112.00	0.00243955	0.00123148	0.00117536	0.00005611	0.003931	0.00152355	0.00145655	0.000067
596835.25	2352469.25	0.00192358	0.00091198	0.00086866	0.00004332	0.0030138	0.00107729	0.00102776	0.00004953
597601.31	2351826.50	0.00158076	0.00070932	0.0006749	0.00003443	0.00243015	0.00081173	0.00077344	0.00003829
598367.38	2351183.75	0.00134025	0.00057338	0.00054529	0.00002809	0.00203097	0.00064171	0.00061106	0.00003065
599133.38	2350541.00	0.00116425	0.00047766	0.00045428	0.00002338	0.00174272	0.00052622	0.00050103	0.00002519
593138.88	2355253.50	0.00858786	0.00572501	0.0054017	0.00032331	0.00715826	0.00300787	0.00288726	0.00012062
593203.19	2355177.00	0.00817215	0.00544219	0.00514242	0.00029977	0.00744703	0.00312446	0.00300175	0.00012271
593363.88	2354985.50	0.00719838	0.00474851	0.00449632	0.00025219	0.00781207	0.00326416	0.00313853	0.00012563
593524.56	2354794.00	0.00637791	0.00413915	0.00392242	0.00021673	0.00780545	0.00322055	0.00309551	0.00012504
593685.25	2354602.50	0.00569693	0.00362097	0.00343161	0.00018936	0.00757532	0.00306114	0.00294004	0.0001211
593846.00	2354411.00	0.00512827	0.00318321	0.00301539	0.00016782	0.00723613	0.00284671	0.00273117	0.00011554
594006.69	2354219.50	0.00464835	0.00281375	0.00266376	0.00014999	0.00684611	0.00261437	0.00250518	0.00010919
594167.38	2354027.75	0.00424059	0.00250115	0.00236599	0.00013516	0.00644242	0.0023851	0.00228249	0.00010261
594488.75	2353644.75	0.00359463	0.0020118	0.00189972	0.00011207	0.00567738	0.00197369	0.00188386	0.00008983
594810.13	2353261.75	0.00310462	0.00165188	0.00155696	0.00009492	0.0050039	0.00163844	0.00155979	0.00007865
595131.56	2352878.75	0.00272226	0.0013807	0.00129903	0.00008167	0.00442965	0.00137481	0.00130554	0.00006927
595452.94	2352495.75	0.00241836	0.0011719	0.00110074	0.00007115	0.00394384	0.00116698	0.00110558	0.0000614
596095.75	2351729.75	0.00197159	0.00087727	0.00082165	0.00005561	0.00319065	0.00087061	0.0008214	0.00004922
596738.50	2350963.75	0.00165871	0.00068454	0.00063973	0.00004481	0.00264715	0.00067668	0.00063624	0.00004043
597381.31	2350197.75	0.00142638	0.0005523	0.00051526	0.00003703	0.00224377	0.00054425	0.00051032	0.00003392
592839.00	2355286.75	0.00457581	0.00244896	0.00224997	0.00019899	0.00329081	0.00149902	0.00141656	0.00008246
592889.00	2355200.25	0.00437543	0.00234289	0.00216005	0.00018284	0.00326153	0.00140249	0.00132667	0.00007581
592939.00	2355113.50	0.00418632	0.00223997	0.00207103	0.00016894	0.00328558	0.00133181	0.00126113	0.00007068
592989.00	2355027.00	0.00401082	0.00213973	0.00198347	0.00015626	0.00334738	0.00128091	0.00121505	0.00006585
593114.00	2354810.50	0.0036183	0.00189805	0.00176731	0.00013073	0.00355455	0.0012022	0.00114537	0.00005684

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593239.00	2354594.00	0.00330914	0.00169249	0.00158065	0.00011184	0.00371925	0.00115074	0.00109987	0.00005087
593364.00	2354377.50	0.00305781	0.00151759	0.00142018	0.00009741	0.00379269	0.00110088	0.00105453	0.00004636
593489.00	2354161.00	0.00284895	0.00136733	0.00128123	0.00008609	0.00378264	0.00104629	0.00100352	0.00004276
593614.00	2353944.50	0.00266822	0.00123703	0.00116032	0.00007671	0.0037197	0.00098815	0.00094836	0.00003979
593739.00	2353728.00	0.00250803	0.00112431	0.00105536	0.00006895	0.00362365	0.0009288	0.00089154	0.00003725
593989.00	2353295.00	0.00223438	0.00094013	0.00088315	0.00005698	0.00338269	0.00081344	0.00078049	0.00003295
594239.00	2352862.00	0.00200648	0.00079753	0.0007493	0.00004823	0.00312184	0.00070944	0.00068003	0.00002941
594489.00	2352429.00	0.00181536	0.00068532	0.00064374	0.00004158	0.00287047	0.0006203	0.00059386	0.00002644
594739.00	2351995.75	0.0016529	0.00059525	0.00055902	0.00003623	0.00263428	0.00054461	0.00052071	0.0000239
595239.00	2351129.75	0.00139595	0.0004622	0.00043382	0.00002838	0.00222968	0.00042783	0.00040803	0.0000198
595739.00	2350263.75	0.00120244	0.00037046	0.00034751	0.00002294	0.00191497	0.00034547	0.00032876	0.00001671
592615.25	2355292.25	0.00248015	0.00118331	0.00109543	0.00008789	0.00272475	0.00137363	0.00129088	0.00008275
592649.44	2355198.25	0.00233415	0.0010923	0.00101295	0.00007935	0.00246226	0.0012147	0.0011399	0.0000748
592683.63	2355104.50	0.00219615	0.00100842	0.00093608	0.00007234	0.00225406	0.00108295	0.00101466	0.00006829
592717.81	2355010.50	0.00206983	0.00093325	0.0008668	0.00006645	0.00209077	0.0009725	0.00091009	0.0000624
592752.00	2354916.50	0.00195665	0.00086567	0.00080449	0.00006118	0.00196623	0.00088029	0.00082301	0.00005728
592837.56	2354681.50	0.00172834	0.0007264	0.00067578	0.00005063	0.00178709	0.00071062	0.00066344	0.00004718
592923.06	2354446.50	0.00156489	0.00062286	0.00058004	0.00004282	0.00173286	0.00060025	0.00056039	0.00003986
593008.56	2354211.75	0.00144722	0.00054614	0.00050924	0.0000369	0.00173621	0.00052452	0.00049026	0.00003425
593094.06	2353976.75	0.00135685	0.00048653	0.00045409	0.00003244	0.00175627	0.0004693	0.00043949	0.00002982
593179.56	2353741.75	0.00128228	0.00043806	0.0004094	0.00002866	0.00177635	0.00042682	0.00040053	0.00002629
593265.06	2353507.00	0.00121881	0.00039801	0.0003725	0.0000255	0.00179135	0.00039269	0.00036929	0.0000234
593436.06	2353037.00	0.00111302	0.00033539	0.0003147	0.0000207	0.00179387	0.00033927	0.00032028	0.000019
593607.06	2352567.25	0.0010269	0.00028867	0.00027141	0.00001726	0.00176371	0.00029815	0.00028231	0.00001583
593778.06	2352097.50	0.00095462	0.00025238	0.00023766	0.00001472	0.00170972	0.00026477	0.0002513	0.00001347
593949.13	2351627.50	0.00089148	0.00022318	0.00021047	0.00001271	0.00163954	0.00023687	0.00022523	0.00001164
594291.13	2350687.75	0.00078627	0.00017945	0.00016966	0.00000979	0.0014827	0.00019308	0.00018408	0.000009
592412.63	2355341.25	0.00174255	0.00094363	0.00086189	0.00008174	0.00355966	0.00163047	0.00154365	0.00008682
592430.00	2355242.75	0.00163625	0.00086627	0.00079341	0.00007286	0.00303279	0.001384	0.00130634	0.00007765
592447.38	2355144.25	0.00152766	0.00079221	0.0007267	0.0000655	0.00264077	0.00119286	0.0011225	0.00007035
592464.75	2355045.75	0.00142281	0.00072356	0.00066419	0.00005937	0.00233727	0.00104043	0.00097627	0.00006417
592482.13	2354947.25	0.00132386	0.00066078	0.00060665	0.00005413	0.00209555	0.00091628	0.00085761	0.00005867
592499.50	2354848.75	0.00123264	0.00060423	0.00055462	0.00004961	0.00189957	0.00081376	0.00075984	0.00005392
592542.88	2354602.50	0.00104014	0.00048783	0.00044709	0.00004074	0.00154076	0.00062328	0.00057879	0.00004449
592586.31	2354356.50	0.00089261	0.00040066	0.00036644	0.00003422	0.0013084	0.00049459	0.00045706	0.00003753
592629.69	2354110.25	0.00078018	0.00033517	0.0003059	0.00002927	0.0011538	0.00040386	0.00037173	0.00003214
592673.13	2353864.00	0.00069382	0.00028536	0.00025988	0.00002548	0.00105167	0.0003381	0.00031027	0.00002784
592716.50	2353617.75	0.00062639	0.00024658	0.00022417	0.00002241	0.00098296	0.00028922	0.0002648	0.00002442
592759.94	2353371.50	0.00057302	0.00021588	0.00019604	0.00001984	0.00093749	0.00025201	0.00023042	0.00002158
592846.75	2352879.25	0.00049621	0.00017141	0.00015546	0.00001595	0.00088479	0.00020008	0.00018279	0.00001729
592933.56	2352386.75	0.00044418	0.00014123	0.00012804	0.00001318	0.0008561	0.00016612	0.00015189	0.00001423
593020.44	2351894.25	0.00040704	0.00011974	0.00010861	0.00001113	0.00083464	0.00014239	0.00013043	0.00001195
593107.25	2351402.00	0.00038036	0.00010393	0.00009438	0.00000955	0.0008141	0.00012488	0.00011468	0.0000102
593280.88	2350417.25	0.00034234	0.00008228	0.00007498	0.0000073	0.00077141	0.00010074	0.000093	0.00000774
592239.00	2355426.00	0.00158569	0.00093846	0.00084608	0.00009238	0.00694618	0.0026907	0.00255734	0.00013336
592239.00	2355326.00	0.00150305	0.00086724	0.00078649	0.00008075	0.00563271	0.00217081	0.0020664	0.00010441
592239.00	2355226.00	0.00141251	0.0007972	0.00072522	0.00007199	0.00469567	0.00179146	0.00170461	0.00008685
592239.00	2355126.00	0.00131827	0.00072953	0.00066481	0.00006472	0.00401933	0.0015077	0.0014327	0.000075
592239.00	2355026.00	0.00122584	0.00066647	0.00060782	0.00005865	0.00352424	0.00129038	0.00122426	0.00006613
592239.00	2354926.00	0.00113803	0.00060861	0.00055516	0.00005345	0.00315644	0.00112082	0.0010615	0.00005932
592239.00	2354826.00	0.00105651	0.00055627	0.0005073	0.00004897	0.00287602	0.00098592	0.00093206	0.00005386
592239.00	2354576.00	0.00088233	0.00044779	0.00040762	0.00004017	0.00239559	0.0007453	0.00070149	0.00004381
592239.00	2354326.00	0.00074602	0.00036562	0.00033192	0.0000337	0.00207612	0.00058718	0.0005504	0.00003678
592239.00	2354076.00	0.0006402	0.00030324	0.00027444	0.0000288	0.00183918	0.00047647	0.000445	0.00003147
592239.00	2353826.00	0.0005577	0.00025546	0.0002304	0.00002506	0.00165331	0.00039559	0.00036828	0.00002731
592239.00	2353576.00	0.00049268	0.0002182	0.00019621	0.00002199	0.00150408	0.00033469	0.00031075	0.00002394
592239.00	2353326.00	0.00044104	0.00018881	0.00016934	0.00001947	0.00138097	0.0002876	0.00026647	0.00002113
592239.00	2352826.00	0.00036564	0.00014624	0.00013059	0.00001565	0.00118143	0.00022043	0.00020351	0.00001691
592239.00	2352326.00	0.0003154	0.00011776	0.00010482	0.00001294	0.00103221	0.00017596	0.00016205	0.00001391
592239.00	2351826.00	0.00028101	0.00009787	0.00008695	0.00001092	0.00091456	0.00014494	0.00013324	0.00001169
592239.00	2351326.00	0.00025671	0.00008348	0.00007411	0.00000938	0.00082084	0.00012244	0.00011246	0.00000999
592239.00	2350326.00	0.00022194	0.00006431	0.00005715	0.00000716	0.00068279	0.00009267	0.0000851	0.00000758
592100.06	2355538.25	0.00181206	0.00106354	0.00095511	0.00010844	0.01516153	0.0056307	0.00516816	0.00046255
592082.75	2355439.75	0.00176792	0.001004	0.00091093	0.00009306	0.01233842	0.00444137	0.00410827	0.00033311
592065.38	2355341.25	0.00168867	0.00093356	0.00085226	0.00008131	0.01026232	0.00358258	0.00333509	0.00024749
592048.00	2355242.75	0.00159583	0.00086218	0.00078974	0.00007245	0.00871889	0.00294904	0.00275989	0.00018915
592030.63	2355144.25	0.00149769	0.00079223	0.00072712	0.00006511	0.00755884	0.00247311	0.00232387	0.00014923
592013.25	2355045.75	0.00139949	0.00072615	0.00066715	0.000059	0.00667833	0.00210916	0.00198786	0.0001213
591995.88	2354947.25	0.00130565	0.00066504	0.00061128	0.00005376	0.00600225	0.00182509	0.00172384	0.00010126
591978.50	2354848.75	0.00121827	0.00060943	0.00056017	0.00004925	0.00546776	0.00159786	0.00151138	0.00008647

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591935.13	2354602.50	0.00103202	0.00049333	0.00045293	0.0000404	0.00455039	0.00119918	0.00113621	0.00006297
591891.69	2354356.50	0.0008877	0.00040491	0.00037101	0.0000339	0.00395497	0.00094395	0.00089441	0.00004954
591848.31	2354110.25	0.0007778	0.00033764	0.00030867	0.00002897	0.00353867	0.00076999	0.00072905	0.00004094
591804.88	2353864.00	0.00069476	0.00028628	0.00026107	0.00002521	0.00322712	0.00064489	0.00061045	0.00003444
591761.50	2353617.75	0.0006318	0.00024648	0.00022435	0.00002212	0.00298196	0.00055121	0.00052195	0.00002926
591718.06	2353371.50	0.00058391	0.00021532	0.00019573	0.00001959	0.00278172	0.00047903	0.00045378	0.00002525
591631.25	2352879.25	0.0005186	0.00017086	0.0001551	0.00001576	0.00245634	0.00037526	0.00035571	0.00001954
591544.44	2352386.75	0.00047637	0.00014129	0.00012825	0.00001304	0.00220552	0.00030512	0.00028942	0.0000157
591457.56	2351894.25	0.00044575	0.00012053	0.0001095	0.00001102	0.00199523	0.0002548	0.00024184	0.00001297
591370.75	2351402.00	0.00042118	0.00010527	0.00009578	0.00000949	0.00181637	0.00021725	0.00020633	0.00001093
591197.13	2350417.25	0.00038156	0.00008439	0.0000771	0.00000729	0.00153154	0.0001656	0.00015747	0.00000813
591999.56	2355668.25	0.00274082	0.00149079	0.00130046	0.00019032	0.03302109	0.01254295	0.01163845	0.00090449
591965.38	2355574.25	0.00286887	0.0014768	0.00132055	0.00015625	0.02680086	0.00988737	0.00910213	0.00078525
591931.19	2355480.25	0.00287755	0.00142114	0.00128916	0.00013198	0.02246428	0.00802377	0.00735432	0.00066944
591897.00	2355386.25	0.00280827	0.001342	0.00122802	0.00011398	0.01933887	0.00666342	0.00609806	0.00056537
591862.75	2355292.25	0.00270323	0.00125562	0.00115499	0.00010064	0.0170411	0.00564337	0.00516689	0.00047649
591828.56	2355198.25	0.00257471	0.00116652	0.00107658	0.00008993	0.01529795	0.00485679	0.00445438	0.00040241
591794.38	2355104.50	0.00243755	0.00107999	0.00099872	0.00008127	0.01394973	0.00423773	0.00389572	0.00034202
591760.19	2355010.50	0.00229888	0.00099761	0.00092362	0.000074	0.01285042	0.00373202	0.00343943	0.0002926
591726.00	2354916.50	0.00216553	0.0009214	0.00085356	0.00006784	0.01194355	0.0033158	0.00306349	0.00025231
591640.44	2354681.50	0.00186549	0.00075792	0.00070229	0.00005563	0.01024075	0.0025486	0.00236792	0.00018067
591554.94	2354446.50	0.00161975	0.00062995	0.00058324	0.00004671	0.00903477	0.00203139	0.00189576	0.00013563
591469.44	2354211.75	0.00142872	0.00053165	0.00049162	0.00004003	0.00813464	0.00166687	0.00156075	0.00010611
591383.94	2353976.75	0.00128303	0.00045605	0.00042114	0.00003491	0.00741992	0.00139778	0.0013123	0.00008547
591298.44	2353741.75	0.0011743	0.00039764	0.00036687	0.00003076	0.00684696	0.00119464	0.00112408	0.00007056
591212.94	2353507.00	0.00109388	0.00035218	0.00032479	0.00002738	0.00637189	0.00103723	0.00097778	0.00005945
591041.94	2353037.00	0.00098599	0.00028681	0.00026452	0.00002229	0.0056046	0.00081005	0.00076584	0.00004421
590870.94	2352567.25	0.00091711	0.00024287	0.00022412	0.00001875	0.00501627	0.00065709	0.00062263	0.00003446
590699.94	2352097.50	0.00086833	0.00021155	0.00019539	0.00001616	0.00452541	0.00054753	0.00051978	0.00002776
590528.88	2351627.50	0.00082839	0.00018797	0.00017373	0.00001424	0.00409891	0.0004654	0.00044247	0.00002293
590186.88	2350687.75	0.00075943	0.00015449	0.0001432	0.00001129	0.00340905	0.00035174	0.00033533	0.0000164
591889.00	2355719.75	0.00514549	0.00281703	0.00216738	0.00064965	0.059854	0.02321282	0.02233011	0.00088271
591839.00	2355633.25	0.00561088	0.00285583	0.00230142	0.00055442	0.04888166	0.01825766	0.0174671	0.00079056
591789.00	2355546.50	0.00580651	0.00280589	0.00232486	0.00048103	0.04117756	0.01480557	0.01407965	0.00072592
591739.00	2355460.00	0.00581298	0.00270051	0.00227641	0.0004241	0.03577294	0.01236316	0.01169156	0.0006716
591689.00	2355373.25	0.00570412	0.00256402	0.00218524	0.00037878	0.03190892	0.01057211	0.00994911	0.000623
591639.00	2355286.75	0.0055238	0.00241413	0.00207208	0.00034205	0.02913362	0.00923361	0.00865521	0.0005784
591589.00	2355200.25	0.00530003	0.00226009	0.00194847	0.00031162	0.02706962	0.00819487	0.00765773	0.00053714
591539.00	2355113.50	0.00505627	0.00210859	0.00182274	0.00028586	0.02547087	0.00736095	0.0068621	0.00049885
591489.00	2355027.00	0.00481355	0.0019659	0.00170213	0.00026377	0.0242334	0.00668615	0.00622252	0.00046363
591364.00	2354810.50	0.00424969	0.00165266	0.00143309	0.00021957	0.02200905	0.00543227	0.00504462	0.00038765
591239.00	2354594.00	0.00378701	0.00140457	0.00121809	0.00018649	0.0203945	0.00455399	0.00422712	0.00032687
591114.00	2354377.50	0.00343785	0.00121492	0.00105368	0.00016124	0.01903024	0.00389352	0.00361538	0.00027815
590989.00	2354161.00	0.00318892	0.00107201	0.00093054	0.00014146	0.01781001	0.00337647	0.00313734	0.00023913
590864.00	2353944.50	0.00301602	0.00096295	0.00083749	0.00012546	0.01670819	0.0029618	0.00275432	0.00020747
590739.00	2353728.00	0.00288658	0.00087528	0.00076299	0.0001123	0.0157157	0.00262331	0.0024415	0.00018181
590489.00	2353295.00	0.00270722	0.00074389	0.00065183	0.00009206	0.01402075	0.00210865	0.0019653	0.00014336
590239.00	2352862.00	0.00258241	0.00064976	0.00057243	0.00007733	0.012617	0.00173956	0.0016232	0.00011636
589989.00	2352429.00	0.00248371	0.00057819	0.00051222	0.00006597	0.01143062	0.00146496	0.00136823	0.00009673
589739.00	2351995.75	0.00239592	0.00052116	0.00046405	0.00005711	0.01040691	0.00125384	0.00117196	0.00008188
589239.00	2351129.75	0.00223286	0.00043496	0.00039054	0.00004442	0.00875887	0.00095482	0.00089418	0.00006064
588739.00	2350263.75	0.00208292	0.0003722	0.00033642	0.00003578	0.00748462	0.00075611	0.00070925	0.00004686
591853.31	2355866.25	0.00896342	0.00500059	0.00366103	0.00133957	0.12963106	0.05622749	0.05428057	0.00194692
591789.06	2355789.75	0.01099079	0.00559753	0.00444327	0.00115426	0.10773496	0.04494255	0.04352142	0.00142115
591724.75	2355713.25	0.01231181	0.00593033	0.00491714	0.00101319	0.09066032	0.03637228	0.03526817	0.0011041
591660.50	2355636.50	0.01296916	0.00600892	0.00510853	0.0009004	0.07749832	0.02985911	0.02895681	0.00090229
591596.19	2355560.00	0.01314531	0.00591412	0.00510507	0.00080905	0.06760305	0.02495811	0.02419087	0.00076724
591531.94	2355483.25	0.01300096	0.00570542	0.00497132	0.0007341	0.06012748	0.02119516	0.02052456	0.00067059
591467.63	2355406.75	0.0126611	0.00543879	0.00476762	0.00067117	0.05460326	0.01831288	0.01771364	0.00059924
591403.38	2355330.25	0.01219187	0.00514032	0.00452248	0.00061785	0.05044547	0.01605016	0.01550607	0.00054408
591339.13	2355253.50	0.01165254	0.0048309	0.00425876	0.00057215	0.04729246	0.01424181	0.01374189	0.00049992
591274.81	2355177.00	0.01110255	0.00453109	0.00399898	0.00053211	0.044945	0.01279819	0.01233424	0.00046395
591114.13	2354985.50	0.0098116	0.00385392	0.00340427	0.00044965	0.04109023	0.0101975	0.00980204	0.00039546
590953.44	2354794.00	0.00875858	0.0033095	0.00292282	0.00038669	0.03873053	0.00848493	0.00813778	0.00034716
590792.75	2354602.50	0.00796716	0.00288897	0.00255138	0.00033759	0.036998	0.00727039	0.00696216	0.00030823
590632.00	2354411.00	0.00739762	0.00256635	0.00226794	0.00029841	0.03550367	0.00635853	0.00608266	0.00027587
590471.31	2354219.50	0.00698686	0.00231323	0.00204688	0.00026636	0.0341206	0.00564529	0.00539621	0.00024907
590310.63	2354027.75	0.00668272	0.00210879	0.00186907	0.00023972	0.03278312	0.00506712	0.00484052	0.0002266
589989.25	2353644.75	0.00629305	0.00180371	0.00160542	0.00019829	0.03022878	0.00418457	0.00399391	0.00019066
589667.88	2353261.75	0.00605893	0.00158511	0.00141738	0.00016773	0.02784981	0.00353746	0.00337454	0.00016292

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
589346.44	2352878.75	0.00588874	0.00141775	0.00127351	0.00014424	0.02566652	0.00304213	0.00290088	0.00014125
589025.06	2352495.75	0.00574458	0.00128419	0.00115832	0.00012587	0.02367459	0.00265061	0.00252683	0.00012379
588382.25	2351729.75	0.0054547	0.00107945	0.00098054	0.00009892	0.02025793	0.0020747	0.00197716	0.00009754
591779.38	2355940.25	0.02347414	0.01216623	0.01015969	0.00200655	0.1895605	0.0878031	0.08399059	0.00381254
591702.75	2355876.00	0.02928092	0.01438251	0.01276323	0.00161928	0.16762009	0.07548438	0.07239038	0.00309402
591626.19	2355811.75	0.03297574	0.01569322	0.01433984	0.00135338	0.14858936	0.0649136	0.06236097	0.00255266
591549.56	2355747.50	0.03479208	0.01617889	0.01501765	0.00116126	0.13273114	0.05609095	0.0539496	0.00214134
591472.94	2355683.25	0.03519705	0.01606104	0.01504548	0.00101557	0.11982285	0.04881117	0.04698613	0.00182503
591396.38	2355619.00	0.03471072	0.01556124	0.01465881	0.00090243	0.10946703	0.0428205	0.0412429	0.00157761
591319.75	2355554.75	0.03364111	0.01483993	0.01402786	0.00081206	0.10124477	0.03788301	0.03650128	0.00138175
591243.13	2355490.50	0.03222633	0.0140059	0.01326781	0.00073808	0.0947116	0.03378787	0.03256349	0.00122436
591166.56	2355426.00	0.03060951	0.01311795	0.0124415	0.00067645	0.08947185	0.03034557	0.02925159	0.00109398
591089.94	2355361.75	0.02896616	0.01225005	0.01162669	0.00062336	0.08530151	0.02746573	0.02647861	0.00098713
590898.44	2355201.00	0.02503401	0.01025316	0.00973425	0.0005189	0.07788282	0.02197602	0.02118765	0.00078836
590706.94	2355040.50	0.02171093	0.00861207	0.00816963	0.00044243	0.07310061	0.01816163	0.01750976	0.00065187
590515.38	2354879.75	0.01905561	0.00730576	0.00692155	0.0003842	0.06958734	0.0153779	0.01482641	0.00055149
590323.88	2354719.00	0.01701584	0.00628413	0.0059455	0.00033863	0.06675307	0.01327995	0.0128045	0.00047546
590132.38	2354558.25	0.01548042	0.00548409	0.00518216	0.00030193	0.06427521	0.0116488	0.01123265	0.00041615
589940.88	2354397.75	0.01432705	0.00485063	0.00457873	0.00027191	0.06203542	0.01035268	0.00998331	0.00036937
589557.81	2354076.25	0.01278117	0.0039228	0.0036971	0.0002257	0.05792749	0.00841415	0.0081169	0.00029724
589174.81	2353754.75	0.01185739	0.003291	0.00309965	0.00019135	0.0541478	0.00704186	0.00679564	0.00024622
588791.81	2353433.50	0.01127465	0.0028412	0.00267582	0.00016537	0.05065038	0.00602227	0.00581412	0.00020815
588408.75	2353112.00	0.01086336	0.00250467	0.00235953	0.00014514	0.0474247	0.00523507	0.0050563	0.00017877
591719.38	2356026.00	0.0535644	0.03238202	0.0255139	0.00686814	0.21703932	0.10379125	0.09977808	0.00401317
591632.75	2355976.00	0.06693685	0.03766813	0.03223246	0.00543562	0.20019963	0.09397185	0.0904154	0.00355643
591546.19	2355926.00	0.07545936	0.04087078	0.03640307	0.00446776	0.18426788	0.084701	0.08152657	0.00317443
591459.56	2355876.00	0.07959355	0.04203962	0.03826207	0.0037776	0.17004485	0.07632668	0.07347466	0.00285199
591373.00	2355826.00	0.08046029	0.04170238	0.03843843	0.00326397	0.15783766	0.06894323	0.0663649	0.00257836
591286.38	2355776.00	0.07924934	0.04041261	0.03753234	0.00288028	0.14756519	0.06249744	0.06015337	0.00234407
591199.75	2355726.00	0.07667908	0.03854269	0.03597799	0.00256472	0.13901836	0.056891	0.05474837	0.00214263
591113.19	2355676.00	0.07335349	0.03639043	0.03408743	0.00230303	0.13194727	0.05201831	0.05004961	0.00196871
591026.56	2355626.00	0.06965588	0.03414323	0.03205865	0.0020846	0.12609116	0.04777227	0.04595469	0.0018176
590939.94	2355576.00	0.06584096	0.03191248	0.03001262	0.00189986	0.12118266	0.04405197	0.04236668	0.00168532
590723.44	2355451.00	0.05679422	0.02679994	0.02525455	0.00154539	0.11189123	0.03656088	0.03514328	0.00141761
590506.94	2355326.00	0.0491502	0.02257431	0.02128065	0.00129367	0.1053769	0.03097808	0.02976231	0.00121578
590290.44	2355201.00	0.04304375	0.01920241	0.01809489	0.00110752	0.10043842	0.02670917	0.02565022	0.00105894
590073.94	2355076.00	0.0382953	0.01653753	0.01557225	0.00096528	0.09637077	0.02336325	0.02242964	0.0009336
589857.44	2354951.00	0.03463751	0.01442299	0.01356953	0.00085347	0.09282833	0.02068492	0.01985281	0.00083211
589640.94	2354826.00	0.03180414	0.01272582	0.01196221	0.00076361	0.0895864	0.01849895	0.01775005	0.0007489
589207.94	2354576.00	0.02784691	0.01021933	0.00959098	0.00062834	0.08366636	0.0151656	0.01454277	0.00062282
588774.88	2354326.00	0.02527548	0.00848924	0.0079571	0.00053214	0.07825931	0.01275643	0.01222582	0.00053061
588341.88	2354076.00	0.02348884	0.00724172	0.00678163	0.00046009	0.07325848	0.01094247	0.01048295	0.00045953
591675.19	2356120.75	0.06426777	0.03896732	0.03174304	0.00722429	0.18823903	0.09102028	0.08828888	0.00273144
591581.25	2356086.50	0.0799521	0.04555757	0.04001532	0.00554226	0.17494946	0.08340716	0.08097503	0.00243211
591487.25	2356052.50	0.0897962	0.04958	0.04513626	0.00444376	0.16206984	0.07604555	0.0738586	0.00218689
591393.25	2356018.25	0.09444006	0.05110705	0.04741895	0.00368816	0.15039572	0.069303	0.06731744	0.00198556
591299.31	2355984.00	0.09522557	0.05076743	0.04762724	0.00314021	0.14010837	0.06324129	0.06142473	0.00181654
591205.31	2355949.75	0.09351468	0.04921707	0.04648302	0.00273403	0.13115112	0.05783576	0.0561633	0.00167247
591111.38	2355915.50	0.09024692	0.04696745	0.04455102	0.00241645	0.12342738	0.05304877	0.05150003	0.00154879
591017.38	2355881.25	0.08613203	0.04437067	0.04221131	0.00215938	0.11677307	0.0488083	0.04736726	0.00144102
590923.44	2355847.25	0.08159439	0.04164344	0.03969821	0.00194524	0.11098	0.04504064	0.04369512	0.00134551
590829.44	2355813.00	0.0769689	0.03894156	0.03717458	0.001767	0.10592773	0.04169492	0.0404339	0.00126103
590594.56	2355727.50	0.06605862	0.03273871	0.0313101	0.00142865	0.09567752	0.03480853	0.033721	0.00108756
590359.63	2355642.00	0.05683448	0.02759195	0.02640128	0.00119067	0.08787125	0.0295386	0.02858743	0.00095116
590124.69	2355556.50	0.04941693	0.02346332	0.02244811	0.0010152	0.0816544	0.02543122	0.02459141	0.0008398
589889.75	2355471.00	0.04355607	0.02017568	0.0192944	0.00088126	0.07650295	0.0221749	0.02142567	0.00074923
589654.88	2355385.50	0.0389258	0.01754256	0.01676678	0.00077579	0.07207261	0.01954805	0.01887338	0.00067467
589419.94	2355300.00	0.03523525	0.01541093	0.01471983	0.00069109	0.06810969	0.01739186	0.01677954	0.00061233
588950.06	2355129.00	0.02985476	0.01223304	0.01166931	0.00056373	0.06125878	0.01409183	0.01358027	0.00051157
588480.25	2354958.00	0.02615711	0.01002085	0.00954786	0.00047299	0.05550508	0.01171482	0.01127858	0.00043625
591648.13	2356221.75	0.03751346	0.02072392	0.01789899	0.00282492	0.12681348	0.06117353	0.05936431	0.00180923
591549.63	2356204.50	0.04571788	0.02459532	0.02226051	0.00233482	0.1145871	0.05457269	0.0529707	0.001602
591451.13	2356187.00	0.05046885	0.02678144	0.02479031	0.00199114	0.1037702	0.04870101	0.04726423	0.00143677
591352.69	2356169.75	0.05217271	0.02741174	0.02567829	0.00173345	0.09428263	0.04351205	0.04221125	0.00130078
591254.19	2356152.25	0.05189832	0.02704248	0.02550954	0.00153293	0.08623986	0.0390423	0.03785444	0.00118784
591155.69	2356135.00	0.05033772	0.02601264	0.02463764	0.00137501	0.0793047	0.03514053	0.03404905	0.00109148
591057.25	2356117.50	0.04811084	0.024669	0.02342198	0.00124701	0.07343744	0.03178987	0.0307804	0.00100947
590958.75	2356100.25	0.04548001	0.02314373	0.02200535	0.00113838	0.0683437	0.02885433	0.02791635	0.00093797
590860.25	2356083.00	0.04272473	0.02158624	0.02054058	0.00104567	0.06394356	0.02629768	0.02542223	0.00087545
590761.81	2356065.50	0.0400376	0.02008697	0.01912163	0.00096535	0.06014	0.02407665	0.02325603	0.00082062

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
590515.56	2356022.00	0.0338598	0.01669126	0.01588538	0.00080588	0.05239454	0.019585	0.01887844	0.00070657
590269.38	2355978.75	0.02879121	0.01392688	0.01323933	0.00068754	0.04650932	0.01623702	0.0156201	0.00061694
590023.19	2355935.25	0.02482493	0.01175381	0.01115688	0.00059693	0.04189683	0.01369677	0.01315245	0.00054433
589777.00	2355892.00	0.02172207	0.01003658	0.00951137	0.00052521	0.03813149	0.01171705	0.01123298	0.00048407
589530.75	2355848.50	0.01929007	0.00867482	0.00820757	0.00046724	0.03501945	0.01015439	0.00972076	0.00043362
589284.56	2355805.00	0.0173499	0.00757811	0.00715868	0.00041943	0.0323576	0.00889566	0.00850447	0.00039119
588792.19	2355718.25	0.0144896	0.00594694	0.00560161	0.00034533	0.02798579	0.00701112	0.00668684	0.00032429
588299.75	2355631.50	0.01251092	0.0048189	0.00452825	0.00029066	0.02454862	0.00569126	0.00541723	0.00027403
591539.00	2356326.00	0.01940924	0.01053825	0.00865079	0.00188746	0.06251478	0.02913519	0.02791218	0.00122301
591439.00	2356326.00	0.02065131	0.01090146	0.00928032	0.00162115	0.05430633	0.02493214	0.02383322	0.00109893
591339.00	2356326.00	0.02079613	0.01077998	0.00936328	0.00141669	0.04758979	0.02149089	0.0204937	0.00099719
591239.00	2356326.00	0.02025192	0.01035909	0.00910373	0.00125536	0.04210608	0.01867012	0.01775773	0.00091237
591139.00	2356326.00	0.01934629	0.00978565	0.00865808	0.00112756	0.03760105	0.01634284	0.01550246	0.00084038
591039.00	2356326.00	0.01825528	0.00914598	0.00812192	0.00102406	0.03385681	0.01440602	0.01362732	0.0007787
590939.00	2356326.00	0.01709171	0.00849088	0.00755401	0.00093688	0.03072009	0.01278242	0.01205739	0.00072502
590839.00	2356326.00	0.01592994	0.00785163	0.00699111	0.00086052	0.02807269	0.01141226	0.01073427	0.00067799
590739.00	2356326.00	0.0148141	0.00724786	0.00645361	0.00079426	0.02580112	0.01024514	0.00960857	0.00063657
590489.00	2356326.00	0.01234002	0.00593495	0.00527226	0.0006627	0.02137912	0.00799685	0.00744509	0.00055176
590239.00	2356326.00	0.01035627	0.0048995	0.00433475	0.00056475	0.01820092	0.00641091	0.00592748	0.00048343
589989.00	2356326.00	0.00880808	0.00409504	0.00360556	0.00048948	0.01581825	0.0052539	0.00482776	0.00042614
589739.00	2356326.00	0.00760358	0.00346851	0.00303847	0.00043004	0.01396616	0.00438721	0.00400856	0.00037865
589489.00	2356326.00	0.00665568	0.00297421	0.00259237	0.00038183	0.01248955	0.00372268	0.0033838	0.00033887
589239.00	2356326.00	0.00589998	0.00257914	0.00223705	0.00034209	0.01128003	0.00320213	0.00289688	0.00030525
588739.00	2356326.00	0.00479014	0.00199811	0.0017176	0.00028051	0.00941809	0.00245128	0.00219943	0.00025185
588239.00	2356326.00	0.00402526	0.00160062	0.00136526	0.00023535	0.00805249	0.00194644	0.00173463	0.00021181
591549.63	2356447.50	0.01247347	0.00775022	0.0055249	0.00222533	0.03496818	0.01606766	0.01478225	0.00128542
591451.13	2356465.00	0.01288288	0.00762555	0.00569766	0.0019279	0.02969448	0.0135106	0.01232947	0.00118114
591352.69	2356482.25	0.01272855	0.00730143	0.00560425	0.00169719	0.02556391	0.01151528	0.0104239	0.00109139
591254.19	2356499.75	0.01223402	0.00686585	0.00535418	0.00151169	0.02225445	0.00991875	0.0089052	0.00101355
591155.69	2356517.00	0.01158134	0.00639305	0.00503036	0.00136269	0.01960285	0.00863713	0.00769243	0.00094471
591057.25	2356534.50	0.01086061	0.00591963	0.00467882	0.00124081	0.01742785	0.00758494	0.00670091	0.00088403
590958.75	2356551.75	0.0101301	0.00546596	0.00432749	0.00113848	0.01564303	0.00671786	0.00588814	0.00082973
590860.25	2356569.00	0.00941996	0.00503799	0.00399014	0.00104785	0.01415928	0.00599313	0.00521201	0.00078112
590761.81	2356586.50	0.00874732	0.00464315	0.00367383	0.00096932	0.01290924	0.00537997	0.00464262	0.00073736
590515.56	2356630.00	0.00727908	0.00380372	0.00299276	0.00081096	0.01054634	0.00421116	0.00356703	0.00064414
590269.38	2356673.25	0.0061055	0.00315144	0.00245891	0.00069253	0.00891535	0.00339458	0.00282761	0.00056696
590023.19	2356716.75	0.0051816	0.00264488	0.00204388	0.00060101	0.00773763	0.00280118	0.00229853	0.00050264
589777.00	2356760.00	0.00445557	0.00224925	0.00172068	0.00052857	0.00685565	0.00235878	0.00190936	0.00044942
589530.75	2356803.50	0.00387834	0.00193553	0.00146604	0.00046949	0.00616919	0.00201887	0.00161456	0.00040431
589284.56	2356847.00	0.00341545	0.00168407	0.00126335	0.00042072	0.00562353	0.00175245	0.00138674	0.00036572
588792.19	2356933.75	0.00273252	0.00131284	0.00096748	0.00034536	0.00480699	0.00136743	0.00106345	0.00030399
588299.75	2357020.50	0.00226666	0.00105825	0.00076802	0.00029024	0.00421464	0.00110692	0.00084964	0.00025728
591487.25	2356599.50	0.01272758	0.00814892	0.00641036	0.00173857	0.02150123	0.01011397	0.00876644	0.00134755
591393.25	2356633.75	0.01246102	0.00772262	0.00620311	0.00151952	0.01883657	0.00881072	0.00757748	0.00123325
591299.31	2356668.00	0.01190353	0.00719875	0.00585356	0.00134519	0.01668589	0.00774619	0.00661331	0.00113289
591205.31	2356702.25	0.01121683	0.00665077	0.00544496	0.0012058	0.01492928	0.00686366	0.00581983	0.00104384
591111.38	2356736.50	0.01048814	0.00611811	0.00502573	0.00109238	0.01348075	0.00612516	0.00515966	0.00096553
591017.38	2356770.75	0.00976256	0.00561657	0.00461839	0.00099819	0.01227514	0.00550046	0.00460414	0.00089634
590923.44	2356804.75	0.00906948	0.00515421	0.00423544	0.00091877	0.01127002	0.00496893	0.00413385	0.0008351
590829.44	2356839.00	0.00841986	0.00473081	0.00388321	0.00084762	0.01042057	0.0045117	0.0037312	0.00078051
590594.56	2356924.50	0.00701607	0.00384244	0.00313896	0.00070348	0.00880193	0.00361618	0.00294979	0.00066639
590359.63	2357010.00	0.00590618	0.00316252	0.0025656	0.00059693	0.00765008	0.0029687	0.00239218	0.00057652
590124.69	2357095.50	0.00503682	0.00264018	0.0021249	0.00051529	0.00678884	0.00248591	0.00198191	0.000504
589889.75	2357181.00	0.00435364	0.00223509	0.001784	0.00045109	0.00611908	0.00211769	0.00167214	0.00044556
589654.88	2357266.50	0.00381054	0.00191533	0.00151665	0.00039867	0.00557883	0.00182941	0.00143291	0.00039649
589419.94	2357352.00	0.00337363	0.00166028	0.00130451	0.00035577	0.00513218	0.00159959	0.00124444	0.00035515
588950.06	2357523.00	0.00272681	0.00128653	0.00099638	0.00029014	0.00443428	0.00126107	0.0009709	0.00029018
588480.25	2357694.00	0.00228189	0.00103235	0.00078975	0.00024261	0.00390703	0.00102769	0.0007857	0.000242
591286.38	2356876.00	0.01263868	0.00921486	0.00788042	0.00133444	0.01491336	0.00725571	0.00627084	0.00098489
591199.75	2356926.00	0.01175187	0.00843275	0.00722413	0.00120862	0.01362303	0.00658325	0.00567866	0.0009046
591113.19	2356976.00	0.01088978	0.0077069	0.00660431	0.0011026	0.01250764	0.00599756	0.00516116	0.00083641
591026.56	2357026.00	0.01007856	0.00704363	0.00603207	0.00101156	0.01153926	0.00548408	0.00470659	0.00077749
590939.94	2357076.00	0.0093282	0.0064447	0.00551277	0.00093193	0.01069622	0.00503224	0.00430599	0.00072626
590723.44	2357201.00	0.00773403	0.00520893	0.00443576	0.00077317	0.0090036	0.00411618	0.00349366	0.00062253
590506.94	2357326.00	0.00649197	0.00427189	0.00361724	0.00065465	0.00772993	0.0034271	0.0028845	0.0005426
590290.44	2357451.00	0.00552801	0.00355633	0.00299293	0.00056341	0.00674485	0.00289578	0.00241942	0.00047636
590073.94	2357576.00	0.00477349	0.00300288	0.00251157	0.00049131	0.00596633	0.0024809	0.00205841	0.0004225
589857.44	2357701.00	0.00417267	0.00256678	0.00213384	0.00043294	0.00533918	0.00215091	0.00177367	0.00037724
589640.94	2357826.00	0.00368921	0.00221949	0.00183455	0.00038495	0.00482495	0.00188495	0.00154575	0.0003392
589207.94	2358076.00	0.00297204	0.00171107	0.00139972	0.00031135	0.00403981	0.00148727	0.00120926	0.00027801

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
588774.88	2358326.00	0.0024751	0.00136526	0.00110735	0.00025791	0.00347334	0.00120982	0.00097785	0.00023198
588341.88	2358576.00	0.00211737	0.00112013	0.00090281	0.00021733	0.00304802	0.00100875	0.00081259	0.00019617
591089.94	2357290.25	0.00953496	0.00844941	0.00758538	0.00086403	0.01157451	0.00669398	0.00589531	0.00079868
590898.44	2357451.00	0.00780871	0.00677539	0.00605617	0.00071922	0.00955154	0.00549023	0.00479949	0.00069076
590706.94	2357611.50	0.00649531	0.00552227	0.00491176	0.00061052	0.00804622	0.00455802	0.00395671	0.0006013
590515.38	2357772.25	0.00548981	0.00457312	0.00404607	0.00052705	0.00690196	0.00383324	0.00330608	0.00052717
590323.88	2357933.00	0.00470843	0.00384355	0.00338234	0.00046122	0.00601575	0.00326452	0.00279926	0.00046526
590132.38	2358093.75	0.00409099	0.00327264	0.00286508	0.00040756	0.00531495	0.00281232	0.0023993	0.00041302
589940.88	2358254.25	0.00359744	0.00282051	0.00245701	0.0003635	0.00474973	0.00244872	0.00207979	0.00036893
589557.81	2358575.75	0.00286646	0.00216158	0.00186617	0.00029541	0.00390152	0.00190921	0.00160984	0.00029937
589174.81	2358897.25	0.00236074	0.00171521	0.00147035	0.00024487	0.00330054	0.0015363	0.00128874	0.00024757
588791.81	2359218.50	0.00199811	0.00140109	0.00119432	0.00020678	0.00285552	0.00126895	0.00106105	0.0002079
588408.75	2359540.00	0.00172994	0.00117177	0.00099491	0.00017687	0.00251496	0.0010712	0.00089427	0.00017693
590953.44	2357858.00	0.00575219	0.00535597	0.00493578	0.00042019	0.00820339	0.00565761	0.00510349	0.00055412
590792.75	2358049.50	0.00481208	0.0043842	0.00402425	0.00035995	0.00694967	0.00464909	0.00418161	0.00046748
590632.00	2358241.00	0.0040952	0.00364791	0.00333459	0.00031331	0.0059914	0.00387702	0.00347696	0.00040006
590471.31	2358432.50	0.00353538	0.00307905	0.00280351	0.00027554	0.0052416	0.0032783	0.00293149	0.00034681
590310.63	2358624.25	0.00309234	0.00263305	0.00238832	0.00024473	0.00464288	0.00280689	0.00250345	0.00030344
589989.25	2359007.25	0.00244417	0.00199275	0.00179543	0.00019732	0.00375694	0.00212774	0.00188929	0.00023845
589667.88	2359390.25	0.00200165	0.00156696	0.00140418	0.00016278	0.00313893	0.00167436	0.00148179	0.00019257
589346.44	2359773.25	0.0016872	0.00127155	0.00113466	0.00013689	0.00268803	0.00135832	0.00119974	0.00015858
589025.06	2360156.25	0.00145568	0.00105877	0.00094187	0.00011691	0.00234774	0.00113013	0.00099734	0.00013279
588382.25	2360922.25	0.00114298	0.00077932	0.00069137	0.00008795	0.00187182	0.0008304	0.00073354	0.00009686
590489.00	2359357.00	0.00238021	0.00178478	0.00165895	0.00012584	0.00350375	0.00185778	0.00169342	0.00016436
590239.00	2359790.00	0.00196337	0.00140586	0.00130397	0.0001019	0.00293374	0.00144266	0.00131146	0.0001312
589989.00	2360223.00	0.00166405	0.00114389	0.00105926	0.00008463	0.002516	0.00116186	0.00105494	0.00010692
589739.00	2360656.25	0.00144202	0.00095554	0.00088387	0.00007166	0.00220244	0.00096324	0.00087447	0.00008877
589239.00	2361522.25	0.00113827	0.00070847	0.00065484	0.00005363	0.00176614	0.00070748	0.0006435	0.00006399
588739.00	2362388.25	0.00094312	0.00055768	0.00051594	0.00004174	0.00147925	0.00055439	0.0005062	0.00004818
588239.00	2363254.25	0.00080902	0.00045823	0.0004248	0.00003343	0.00127715	0.00045472	0.00041718	0.00003754
591373.00	2356826.00	0.01350192	0.01003273	0.00854479	0.00148794	0.01641542	0.0080315	0.00695121	0.00108031
591166.56	2357226.00	0.01036567	0.00927017	0.00833397	0.0009362	0.01257693	0.00726882	0.00641972	0.00084912
592239.00	2355526.00	0.00164073	0.00100182	0.00089428	0.00010755	0.00878613	0.00342104	0.00323521	0.00018583
598239.00	2356326.00	0.00172471	0.00108874	0.00103921	0.00004953	0.00254385	0.00121737	0.00116238	0.00005499
599239.00	2356326.00	0.00140153	0.00083612	0.00079707	0.00003905	0.00201448	0.00090256	0.00086013	0.00004243
595685.81	2355718.25	0.00380847	0.00283173	0.00267948	0.00015225	0.00634124	0.00401701	0.00383823	0.00017878
594118.38	2355642.00	0.00926127	0.00811875	0.00777532	0.00034344	0.01845975	0.01297948	0.01272618	0.0002533
594353.31	2355556.50	0.0079397	0.00688434	0.00658389	0.00030045	0.01527749	0.01061928	0.01038586	0.00023342
594588.25	2355471.00	0.00688406	0.00588803	0.00562178	0.00026625	0.01282697	0.00876117	0.00854664	0.00021453
593364.81	2355676.00	0.01368467	0.0100792	0.00984058	0.00023863	0.02813046	0.0177976	0.01734	0.00045759
593451.44	2355626.00	0.01267308	0.00933116	0.0091106	0.00022055	0.02616081	0.0163408	0.0159384	0.00040239
593538.06	2355576.00	0.01181335	0.00868685	0.00848317	0.00020367	0.02425401	0.0149298	0.01457463	0.00035517
593754.56	2355451.00	0.00997903	0.00727413	0.00710436	0.00016978	0.01977006	0.01169192	0.01142523	0.00026669
592698.63	2355940.25	0.01477961	0.00935168	0.00869394	0.00065774	0.00545195	0.00310166	0.00285866	0.00024299
592775.25	2355876.00	0.01594738	0.0101431	0.00958441	0.00055871	0.00687815	0.00350485	0.00329148	0.00021337
592851.81	2355811.75	0.01631455	0.01043203	0.00994594	0.0004861	0.00862398	0.00410696	0.00389583	0.00021112
592928.44	2355747.50	0.01594838	0.01023632	0.00980588	0.00043044	0.01045055	0.00501043	0.00476795	0.00024248
593005.06	2355683.25	0.01513516	0.00973502	0.00934797	0.00038706	0.01213112	0.00611596	0.00583555	0.00028041
593081.63	2355619.00	0.01427373	0.00918615	0.00883721	0.00034895	0.01358184	0.00720298	0.00689387	0.00030911
593158.25	2355554.75	0.01341345	0.00863161	0.00831436	0.00031725	0.01472877	0.00812373	0.00779851	0.00032523
593234.88	2355490.50	0.01257147	0.00808645	0.00779558	0.00029087	0.01547094	0.00874961	0.0084195	0.00033011
593311.44	2355426.00	0.01176234	0.00755497	0.00728701	0.00026796	0.01582996	0.0090666	0.0087399	0.00032671
593388.06	2355361.75	0.01100047	0.00705045	0.00680225	0.0002482	0.01589739	0.0091386	0.00882025	0.00031835
592431.81	2356096.25	0.00287296	0.00292332	0.00125579	0.00166754	0.00983958	0.00556629	0.00412538	0.00144092
592496.13	2356019.50	0.00523896	0.00373164	0.00250767	0.00122398	0.00609468	0.00335358	0.00300927	0.0003443
592560.38	2355943.00	0.00744051	0.0048236	0.00385869	0.00096491	0.0048948	0.00291394	0.00267026	0.00024369
592624.69	2355866.25	0.00906709	0.00577744	0.00498382	0.00079362	0.00480059	0.00280901	0.0026071	0.00020191
592688.94	2355789.75	0.0102615	0.0065785	0.00590614	0.00067236	0.00503461	0.00277119	0.00260073	0.00017046
592753.25	2355713.25	0.0104367	0.00674177	0.00616005	0.00058172	0.00509658	0.00263875	0.00249028	0.00014847
592817.50	2355636.50	0.01041935	0.00679036	0.00627914	0.00051121	0.00531252	0.00256521	0.00243166	0.00013355
592881.81	2355560.00	0.01018856	0.00669387	0.00623778	0.00045609	0.00561549	0.00255701	0.00243298	0.00012403
592946.06	2355483.25	0.00983372	0.0064971	0.00608376	0.00041334	0.00598404	0.00261429	0.00249534	0.00011895
593010.38	2355406.75	0.00943289	0.00626057	0.00588254	0.00037803	0.0064004	0.00273076	0.00261333	0.00011743
593074.63	2355330.25	0.00901633	0.00600517	0.00565644	0.00034873	0.00680548	0.00287207	0.00275373	0.00011835
592339.00	2356152.75	0.00052937	0.00164473	0.00022071	0.00142403	0.03746581	0.01744944	0.01470154	0.00274791
592389.00	2356066.25	0.00179297	0.00167386	0.00078719	0.00088667	0.01443804	0.00739853	0.00578616	0.00161238
592439.00	2355979.50	0.00311362	0.00205652	0.00141816	0.00063836	0.00899749	0.00441806	0.0039849	0.00043317
592489.00	2355893.00	0.0041512	0.00243258	0.00193433	0.00049825	0.00615945	0.00326088	0.00304265	0.00021823
592539.00	2355806.50	0.00482644	0.00268706	0.0022776	0.00040947	0.00492428	0.00274488	0.00256923	0.00017566
592589.00	2355719.75	0.00518459	0.00282679	0.00247928	0.00034751	0.00438427	0.00244425	0.00229452	0.00014974

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592639.00	2355633.25	0.00526742	0.00284225	0.00253981	0.00030245	0.00404742	0.00220067	0.00207062	0.00013005
592689.00	2355546.50	0.00517327	0.00277735	0.00250912	0.00026823	0.0037751	0.00198207	0.00186802	0.00011405
592739.00	2355460.00	0.00499512	0.00267901	0.00243674	0.00024227	0.00355186	0.00178969	0.00168844	0.00010125
592789.00	2355373.25	0.00478687	0.00256307	0.00234461	0.00021847	0.00338586	0.00162698	0.00153617	0.00009081
592307.38	2356138.00	0.00032104	0.00094664	0.00015006	0.00079659	0.05172082	0.02349129	0.0207624	0.0027289
592341.63	2356044.00	0.00107236	0.00097943	0.00051997	0.00045947	0.02126788	0.0100158	0.00826998	0.00174582
592375.81	2355950.00	0.00180747	0.00120657	0.00089198	0.00031459	0.01304366	0.00599746	0.00529876	0.00069871
592410.00	2355856.25	0.00237662	0.00140705	0.00117087	0.00023619	0.00878898	0.00407791	0.0038172	0.00026071
592444.19	2355762.25	0.0027292	0.00150911	0.00132226	0.00018685	0.0062861	0.00308434	0.0029179	0.00016644
592478.44	2355668.25	0.00287022	0.00151783	0.00136443	0.00015341	0.00488428	0.00249399	0.0023576	0.00013638
592512.63	2355574.25	0.00286205	0.00146421	0.00133467	0.00012954	0.00404111	0.00209592	0.00197792	0.000118
592546.81	2355480.25	0.00276657	0.00137779	0.00126602	0.00011177	0.00347404	0.00180006	0.00169617	0.00010389
592581.00	2355386.25	0.00262741	0.00127928	0.00118109	0.00009819	0.00305359	0.00156555	0.00147322	0.00009233
592273.75	2356129.00	0.00021894	0.00080633	0.00011497	0.00069137	0.07173865	0.03265218	0.02963504	0.00301717
592291.06	2356030.50	0.00070966	0.00078352	0.00038917	0.00039435	0.03212486	0.01417186	0.01241878	0.00175308
592308.44	2355932.00	0.00120504	0.00093935	0.00067092	0.00026843	0.01932939	0.00853418	0.00744864	0.00108553
592325.81	2355833.50	0.00159149	0.00108098	0.00088033	0.00020065	0.0132976	0.00569963	0.00522323	0.0004764
592343.19	2355735.00	0.00182411	0.00114505	0.00098671	0.00015834	0.00950146	0.00406976	0.00383855	0.00023121
592360.56	2355636.75	0.00191637	0.00114154	0.00101196	0.00012958	0.00701013	0.00306866	0.0029191	0.00014955
592377.94	2355538.25	0.00190851	0.00109352	0.00098458	0.00010894	0.00537597	0.00241167	0.00229493	0.00011673
592395.25	2355439.75	0.00184063	0.00102272	0.00092919	0.00009353	0.00429733	0.00195838	0.00185946	0.00009892
592239.00	2356126.00	0.0001862	0.00078179	0.0001026	0.0006792	0.09850837	0.04584211	0.04200711	0.00383498
592239.00	2356026.00	0.0005847	0.00072588	0.00034018	0.0003857	0.04946388	0.02118093	0.01950118	0.00167973
592239.00	2355926.00	0.00101333	0.00086324	0.00060004	0.0002632	0.02983985	0.01266275	0.0113058	0.00135695
592239.00	2355826.00	0.00134898	0.00098792	0.00079069	0.00019723	0.02060321	0.00855462	0.00767493	0.0008797
592239.00	2355726.00	0.00155479	0.00104585	0.00088988	0.00015597	0.0151032	0.006075	0.00557577	0.00049924
592239.00	2355626.00	0.00164208	0.00104416	0.00091637	0.00012779	0.01138301	0.00448033	0.00419091	0.00028941
592204.25	2356129.00	0.00018408	0.00083529	0.00009977	0.00073553	0.13078865	0.0628648	0.05747506	0.00538979
592186.94	2356030.50	0.00058845	0.00073919	0.00033824	0.00040095	0.07746523	0.03353392	0.03175099	0.00178289
592169.56	2355932.00	0.0010458	0.00087682	0.000608	0.00026882	0.0483376	0.02002175	0.01866536	0.00135641
592152.19	2355833.50	0.0014229	0.00101342	0.00081337	0.00020005	0.03332378	0.01348532	0.01232895	0.00115637
592134.81	2355735.00	0.00167036	0.00108651	0.00092882	0.00015769	0.02465531	0.00973664	0.00884117	0.00089549
592117.44	2355636.75	0.00179095	0.00109748	0.00096844	0.00012904	0.01906096	0.00730801	0.00665843	0.00064957
592170.63	2356138.00	0.00020222	0.00130063	0.0001031	0.00119753	0.16694267	0.08289365	0.0753483	0.00754537
592136.38	2356044.00	0.00071584	0.00103669	0.00037891	0.00065778	0.11787164	0.05311481	0.05051443	0.00260039
592102.19	2355950.00	0.00137679	0.00115118	0.00072199	0.00042919	0.08039666	0.03391316	0.03250896	0.0014042
592068.00	2355856.25	0.00198298	0.00131964	0.00100917	0.00031047	0.05690157	0.02295318	0.02181759	0.00113559
592033.81	2355762.25	0.00244848	0.00144066	0.00120193	0.00023872	0.04231585	0.01653171	0.01551458	0.00101713
592189.00	2356239.50	0.00000734	0.00585022	0.00000176	0.00584847	0.20011353	0.1051412	0.09198754	0.01315366
592139.00	2356152.75	0.00023951	0.00271267	0.00011186	0.00260082	0.20047453	0.1019342	0.09245009	0.00948419
592089.00	2356066.25	0.00099436	0.0021478	0.00047145	0.00167635	0.16785506	0.07953276	0.07490161	0.00463118
592039.00	2355979.50	0.00212438	0.00220803	0.00098613	0.00122191	0.12920667	0.05745461	0.05518628	0.00226834
591989.00	2355893.00	0.00331529	0.00244332	0.00148837	0.00095495	0.09818934	0.04141763	0.0400363	0.00138135
591939.00	2355806.50	0.00436762	0.00267394	0.00189547	0.00077847	0.0756868	0.03054112	0.02949999	0.00104114
592174.75	2356249.50	0.00000785	0.01368972	0.00000184	0.01368791	0.2013098	0.10478334	0.09351958	0.01126376
592110.44	2356172.75	0.0003196	0.00455725	0.00013344	0.00442382	0.22628294	0.11624976	0.10618279	0.01006715
592046.19	2356096.25	0.00159594	0.00342124	0.00066966	0.00275158	0.21633527	0.1065233	0.09961386	0.00690943
591981.88	2356019.50	0.00382305	0.00362825	0.00159434	0.00203392	0.18778108	0.08847916	0.08405675	0.00442245
591917.63	2355943.00	0.00643645	0.00427239	0.00265618	0.00161622	0.15686298	0.07085049	0.06799066	0.00285985
592085.81	2356197.50	0.00052689	0.0128691	0.00019381	0.01267535	0.23517651	0.12068968	0.11178695	0.00890274
592009.19	2356133.25	0.00340819	0.00730606	0.00133093	0.00597514	0.24634909	0.12343026	0.11599062	0.00743956
591932.56	2356069.00	0.00920944	0.00748529	0.00379889	0.00368641	0.23471878	0.1146291	0.1086375	0.00599156
591856.00	2356004.50	0.01632636	0.00956681	0.00694653	0.00262029	0.21306517	0.10137376	0.09660854	0.00476525
592065.81	2356226.00	0.00088255	0.04528305	0.00030585	0.04497752	0.22402277	0.11420699	0.10735622	0.00685076
591979.19	2356176.00	0.00690531	0.02503259	0.00276455	0.02226804	0.24396169	0.12259023	0.11659024	0.00600001
592130.25	2356186.50	0.00016869	0.00465748	0.0000703	0.00458719	0.2204462	0.11429129	0.10343471	0.01085672
591806.00	2356076.00	0.03712371	0.02644119	0.01728847	0.00915273	0.23284486	0.1132748	0.10871189	0.00456291
592051.06	2356257.50	0.00107114	0.05163092	0.00036309	0.05126803	0.19612642	0.09916182	0.09418739	0.00497448
591957.06	2356223.50	0.00833433	0.02872034	0.0033545	0.02536587	0.20999503	0.10523827	0.10103823	0.00420004
591863.13	2356189.25	0.02450787	0.02615505	0.01111794	0.01503714	0.20943086	0.10379269	0.1002103	0.00358242
591769.13	2356155.00	0.04474328	0.03153684	0.02152358	0.01001329	0.20058662	0.09824308	0.09513683	0.00310625
592042.06	2356291.25	0.00092683	0.01470793	0.00030963	0.01439834	0.15919115	0.07965598	0.07600405	0.00365194
591943.56	2356274.00	0.00591449	0.00968169	0.00227152	0.00741021	0.1598667	0.07946707	0.07654125	0.0029258
591845.06	2356256.50	0.01547453	0.01152693	0.00666972	0.00485722	0.15177977	0.07477867	0.07234898	0.00242978
591746.63	2356239.25	0.02673026	0.01588188	0.01230902	0.00357287	0.13957794	0.06809248	0.06601768	0.00207476
592039.00	2356326.00	0.00075343	0.00794821	0.00025591	0.00769234	0.12208167	0.06027075	0.05739988	0.00287089
591939.00	2356326.00	0.00375507	0.00627911	0.00140881	0.00487033	0.11146982	0.05455518	0.05231769	0.00223745
591839.00	2356326.00	0.00819784	0.00684662	0.00331369	0.00353294	0.09780195	0.04735226	0.04550038	0.00185188
591739.00	2356326.00	0.01273696	0.00815859	0.00540366	0.00275494	0.08432162	0.04035395	0.03877375	0.00158018
591639.00	2356326.00	0.01669589	0.00954477	0.00729888	0.0022459	0.07247256	0.03424556	0.03286715	0.00137841

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591943.56	2356378.00	0.00311749	0.00670779	0.00125115	0.00545667	0.07522205	0.03616382	0.03412973	0.00203407
591845.06	2356395.50	0.00621137	0.00666038	0.00263248	0.00402791	0.06141217	0.02916041	0.02740058	0.00175983
591746.63	2356412.75	0.00904174	0.00711839	0.00393529	0.00318311	0.05035791	0.0236363	0.02207377	0.00156252
591648.13	2356430.25	0.01121636	0.00756891	0.00494577	0.00262314	0.04166374	0.01934439	0.0179344	0.00141002
591863.13	2356462.75	0.0064635	0.0069645	0.00319279	0.00377172	0.04216368	0.02008783	0.01812947	0.00195838
591769.13	2356497.00	0.00934189	0.00769244	0.00474411	0.00294835	0.03464048	0.01645828	0.01467593	0.00178235
591675.19	2356531.25	0.01141435	0.0082432	0.00583651	0.0024067	0.02907589	0.01378045	0.01215774	0.00162271
591581.25	2356565.50	0.01248039	0.00837281	0.00634969	0.00202312	0.02482954	0.01172911	0.01025179	0.00147732
591719.38	2356626.00	0.01349237	0.01168793	0.00905509	0.00263287	0.02565467	0.0126773	0.01097507	0.00170224
591632.75	2356676.00	0.01456647	0.01187746	0.00965519	0.00222228	0.0227057	0.01121136	0.00971225	0.00149912
591546.19	2356726.00	0.01469411	0.0115058	0.00959107	0.00191473	0.02024839	0.00997847	0.00864747	0.00133103
591459.56	2356776.00	0.01424979	0.01083269	0.0091559	0.00167679	0.01817384	0.00892958	0.00773584	0.00119376
591549.56	2356904.50	0.01540058	0.01471143	0.0131632	0.00154822	0.01992846	0.01107448	0.00986683	0.00120766
591472.94	2356968.75	0.01439968	0.01351183	0.01214032	0.00137153	0.0181014	0.01018841	0.00907285	0.00111557
591396.38	2357033.00	0.01332779	0.01232267	0.01109216	0.00123051	0.01646412	0.00936254	0.00832611	0.00103643
591319.75	2357097.25	0.01227587	0.01120707	0.01009225	0.00111481	0.01500741	0.00859984	0.00763305	0.00096681
591243.13	2357161.50	0.0112821	0.01018735	0.00916907	0.00101828	0.01371607	0.00790168	0.00699689	0.0009048
591467.63	2357245.25	0.011436	0.01139988	0.01060292	0.00079697	0.01622078	0.0115147	0.01046327	0.00105144
591403.38	2357321.75	0.01042673	0.01029091	0.00956786	0.00072305	0.01469428	0.01050181	0.00953942	0.0009624
591339.13	2357398.50	0.00950726	0.00929952	0.00863915	0.00066036	0.01335909	0.00957549	0.0086923	0.0008832
590438.50	2356953.50	0.00624536	0.003348	0.00270779	0.00064021	0.00805122	0.00318827	0.00257648	0.00061179
591489.00	2357625.00	0.00836198	0.00774844	0.00728278	0.00046566	0.01189783	0.00959919	0.00895822	0.00064097
591364.00	2357841.50	0.00670132	0.00605727	0.00569081	0.00036646	0.00938686	0.00724047	0.00673741	0.00050306
591239.00	2358058.00	0.00549513	0.00483924	0.00454246	0.00029679	0.00767986	0.00560077	0.00519352	0.00040726
591114.00	2358274.50	0.00460564	0.00394555	0.00369879	0.00024676	0.00646691	0.00444007	0.00410217	0.0003379
590989.00	2358491.00	0.00393028	0.00327388	0.00306408	0.0002098	0.00556495	0.00359971	0.00331476	0.00028496
590864.00	2358707.50	0.0034034	0.00275837	0.00257696	0.00018141	0.0048698	0.00297788	0.00273373	0.00024416
592204.81	2356232.00	0.00000676	0.00316705	0.00000173	0.00316532	0.1920369	0.10217619	0.08750706	0.0146691
592221.63	2356227.50	0.00000631	0.00208778	0.0000017	0.00208609	0.17950424	0.09665327	0.08097324	0.01568008
592162.38	2356261.75	0.00000872	0.04674165	0.00000202	0.04673977	0.19572342	0.10102788	0.09175488	0.00927297
592622.00	2356004.50	0.01244651	0.00788077	0.00708218	0.00079859	0.00443216	0.00279295	0.00249681	0.00029614
592239.00	2356226.00	0.0000062	0.00185275	0.00000169	0.00185106	0.16441249	0.08964517	0.07333077	0.01631462
592152.38	2356276.00	0.0000099	0.12719003	0.00000225	0.12718797	0.18240703	0.09409432	0.08663864	0.00745567
591806.00	2356576.00	0.01118225	0.0107249	0.00751634	0.00320856	0.02927461	0.01444915	0.01251446	0.00193471
592239.00	2356426.00	0.00002632	0.0316926	0.00000937	0.03168325	0.0352066	0.01824932	0.01427048	0.00397884
592273.19	2356420.00	0.00004386	0.00891365	0.00002703	0.00888663	0.03091607	0.01660341	0.01224135	0.00436207
592289.00	2356412.50	0.00005348	0.00786172	0.00003691	0.00782483	0.03009042	0.01631867	0.01177927	0.00453943
592303.25	2356402.50	0.00005612	0.01055571	0.00004006	0.01051569	0.03037515	0.0165477	0.01178927	0.00475844
592315.63	2356390.25	0.00005236	0.0165808	0.00003673	0.01654411	0.03217759	0.01763231	0.01245764	0.00517469
592325.63	2356376.00	0.00004491	0.02442143	0.00002928	0.02439221	0.03603886	0.02022247	0.01404295	0.00617952
592333.00	2356360.25	0.00003977	0.03350903	0.00002202	0.03348708	0.04217448	0.02521454	0.01667313	0.0085414
592337.50	2356343.25	0.00004063	0.03620984	0.00001834	0.03619162	0.05045702	0.03363698	0.02032558	0.0133114
592339.00	2356326.00	0.00004508	0.0290593	0.00001815	0.02904121	0.06044473	0.04516732	0.02487988	0.02028746
592439.00	2356326.00	0.00232046	0.01001051	0.00144057	0.00857001	0.01352231	0.06705621	0.0043281	0.06272828
592337.50	2356308.75	0.00004721	0.01841585	0.00001823	0.01839767	0.071063	0.05608213	0.02939858	0.02668361
592435.94	2356291.25	0.00257767	0.00709929	0.00146707	0.00563225	0.01464161	0.02862081	0.00481269	0.0238082
592534.44	2356274.00	0.00790962	0.00773018	0.00474699	0.0029832	0.00106958	0.00413397	0.00039913	0.00373486
592333.00	2356291.75	0.00004388	0.01058311	0.00001589	0.01056725	0.08085269	0.0625051	0.03346652	0.0290386
592426.94	2356257.50	0.0025634	0.00553624	0.00135836	0.00417791	0.01548949	0.01332957	0.00531915	0.00801043
592520.94	2356223.50	0.00829549	0.00754098	0.00490271	0.00263827	0.00232851	0.00299443	0.00100773	0.00198671
592614.88	2356189.25	0.01336353	0.01034252	0.00840134	0.00194119	0.00170656	0.00157601	0.00091677	0.00065924
592708.88	2356155.00	0.01747406	0.01323149	0.01169345	0.00153804	0.00429185	0.00258581	0.00200708	0.00057873
592802.81	2356120.75	0.0196878	0.01515925	0.01389012	0.00126914	0.01164796	0.00624209	0.00524942	0.00099267
592896.75	2356086.50	0.0204365	0.01614489	0.01506817	0.00107672	0.02435091	0.01425595	0.01304501	0.00121094
592990.75	2356052.50	0.02022427	0.01642097	0.01548929	0.00093166	0.0368609	0.02264903	0.02165902	0.00099001
593883.44	2355727.50	0.01100684	0.00971428	0.00931549	0.0003988	0.0228212	0.01603415	0.01575972	0.00027444
592325.63	2356276.00	0.00003632	0.00488192	0.00001145	0.00487047	0.08989156	0.06468861	0.03738476	0.02730392
592412.19	2356226.00	0.00199704	0.00289784	0.00098476	0.00191309	0.01756166	0.01081813	0.00637983	0.0044383
592498.81	2356176.00	0.00689845	0.00503105	0.00386882	0.00116223	0.00415733	0.00332907	0.00187559	0.00145348
592585.44	2356126.00	0.01169254	0.00784779	0.00701768	0.00083011	0.00282687	0.00206703	0.00159512	0.00047191
592672.00	2356076.00	0.01567959	0.0105289	0.00988358	0.00064532	0.00415955	0.00262748	0.00224517	0.00038231
592758.63	2356026.00	0.01800419	0.01228651	0.0117573	0.00052923	0.00742846	0.00386425	0.00351831	0.00034595
592845.25	2355976.00	0.01878065	0.01303357	0.01258207	0.0004515	0.01232854	0.00611459	0.00566203	0.00045256
592931.81	2355926.00	0.01856828	0.01310253	0.01270914	0.00039339	0.01803051	0.00985832	0.00925446	0.00060386
593018.44	2355876.00	0.01781075	0.01276349	0.01241516	0.00034833	0.02371227	0.01430046	0.01363659	0.00066386
593105.00	2355826.00	0.01687695	0.0122532	0.01193999	0.0003132	0.02800209	0.01772502	0.01707919	0.00064582
593191.63	2355776.00	0.01579599	0.0115624	0.01127912	0.00028328	0.02964496	0.01899324	0.01840623	0.00058702
593278.25	2355726.00	0.01479977	0.01087886	0.0106198	0.00025906	0.02971346	0.01889064	0.01837041	0.00052026
592315.63	2356261.75	0.00002739	0.00493898	0.00000744	0.00493155	0.0985431	0.06550311	0.04146225	0.02404085
592392.19	2356197.50	0.00132343	0.00278833	0.00056843	0.00221992	0.02137555	0.01152725	0.0081117	0.00341555

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592468.81	2356133.25	0.00479003	0.00376068	0.00235957	0.00140111	0.00664125	0.00426649	0.00291644	0.00135004
592545.44	2356069.00	0.00886464	0.00579314	0.00477605	0.0010171	0.00422338	0.00266716	0.0022947	0.00037246
592303.25	2356249.50	0.00001912	0.00546272	0.0000047	0.00545803	0.10855749	0.06729951	0.04623576	0.02106368
592367.56	2356172.75	0.00084673	0.00291902	0.00033754	0.0025815	0.02789132	0.01372988	0.01076483	0.00296504
592289.00	2356239.50	0.00001242	0.00330058	0.00000298	0.00329761	0.12005025	0.07060516	0.05168245	0.01892272
592273.19	2356232.00	0.00000842	0.00208392	0.0000021	0.00208182	0.13352605	0.07573091	0.05815176	0.01757916
592256.38	2356227.50	0.00000672	0.00185178	0.00000177	0.00185001	0.14860168	0.08233394	0.06549717	0.01683676
592145.00	2356291.75	0.00001143	0.14032301	0.00000249	0.14032097	0.16598093	0.08464382	0.07867189	0.00597196
592140.50	2356308.75	0.00001352	0.04971651	0.00000266	0.04971398	0.14641701	0.07384019	0.06899289	0.00484729
592139.00	2356326.00	0.00001727	0.01823732	0.0000029	0.01823447	0.12579927	0.06274415	0.05867143	0.00407275
592140.50	2356343.25	0.00002274	0.01741294	0.00000334	0.01740964	0.10634659	0.05246998	0.0488997	0.00357031
592042.06	2356360.75	0.00071295	0.00862212	0.00025454	0.00836763	0.09099947	0.04427016	0.04175514	0.00251505
592145.00	2356360.25	0.00002848	0.01709337	0.00000401	0.0170894	0.08920393	0.04359208	0.04031342	0.00327866
592051.06	2356394.50	0.00077745	0.00837081	0.00031062	0.00806022	0.06853828	0.03302635	0.03055794	0.00246842
591957.06	2356428.50	0.0032681	0.0066898	0.00151649	0.00517333	0.0526997	0.02520801	0.02305392	0.0021541
592152.38	2356376.00	0.00003231	0.01710939	0.00000489	0.01710454	0.07498546	0.03639946	0.03324133	0.00315818
592065.81	2356426.00	0.00091112	0.00887224	0.00045523	0.00841707	0.05389791	0.02604517	0.02342263	0.00262256
591979.19	2356476.00	0.00391332	0.00789046	0.00237181	0.00551868	0.04116485	0.0200658	0.01765431	0.0024115
591892.56	2356526.00	0.00771968	0.00910381	0.00502989	0.00407392	0.03395388	0.01669415	0.01451149	0.00218267
592162.38	2356390.25	0.00003336	0.01767253	0.00000579	0.01766676	0.06353691	0.03077855	0.02761835	0.00316021
592085.81	2356454.50	0.00105352	0.00874951	0.00067322	0.00807634	0.04403777	0.02167035	0.01879347	0.00287688
592009.19	2356518.75	0.00485069	0.00915021	0.00394461	0.00520562	0.03630587	0.01825847	0.01562649	0.00263198
591932.56	2356583.00	0.00926826	0.01189686	0.00808082	0.00381605	0.03175718	0.01629543	0.01404339	0.00225205
591856.00	2356647.50	0.01315354	0.01475221	0.01176151	0.0029907	0.02890759	0.01504864	0.01313737	0.00191127
591779.38	2356711.75	0.01548303	0.01625207	0.01380334	0.00244874	0.0264479	0.01399387	0.01234012	0.00165377
591702.75	2356776.00	0.0163153	0.01642589	0.01436406	0.00206183	0.02412163	0.01298464	0.01152335	0.00146129
591626.19	2356840.25	0.01613891	0.01577088	0.01399892	0.00177195	0.02194112	0.01201063	0.01069195	0.00131868
592174.75	2356402.50	0.00003205	0.02614085	0.00000647	0.02613441	0.05489427	0.02669517	0.02344592	0.00324925
592110.44	2356479.25	0.0012414	0.00953647	0.00092303	0.00861347	0.03848482	0.01937613	0.01622602	0.00315012
591596.19	2357092.00	0.01368729	0.01397619	0.01297713	0.00099906	0.01994609	0.01375535	0.01249661	0.00125875
591531.94	2357168.75	0.01253065	0.01263151	0.01174494	0.00088658	0.01796603	0.01260705	0.01145666	0.0011504
592189.00	2356412.50	0.00002998	0.05304037	0.00000722	0.05303317	0.04808416	0.02361177	0.020217	0.0033948
591639.00	2357365.25	0.01110929	0.01064712	0.00998977	0.00065736	0.01651027	0.01372794	0.01283117	0.00089679
591589.00	2357451.75	0.01009553	0.00955924	0.00897879	0.00058044	0.01473398	0.01217791	0.01138194	0.00079597
591539.00	2357538.50	0.0091588	0.00858035	0.00806235	0.000518	0.01317721	0.01079371	0.01008162	0.0007121
592204.81	2356420.00	0.00002845	0.07413768	0.00000819	0.07412951	0.04281196	0.02133679	0.01776011	0.00357669
591760.19	2357641.50	0.00991061	0.00920243	0.00859927	0.00060316	0.01275139	0.01042356	0.00986502	0.00055854
591726.00	2357735.50	0.00906844	0.00832523	0.0077905	0.00053474	0.01155813	0.009194	0.00869548	0.00049852
592221.63	2356424.50	0.00002666	0.05845803	0.00000839	0.05844967	0.03864647	0.01962277	0.01584716	0.00377561
592435.94	2356360.75	0.00223276	0.01294121	0.00154434	0.01139694	0.01088165	0.04054787	0.00331116	0.03723678
592632.94	2356256.50	0.01241573	0.00975864	0.00776046	0.00199818	0.00073945	0.0013823	0.00031281	0.00106949
592256.38	2356424.50	0.00003216	0.01557689	0.00001552	0.01556139	0.0326416	0.01725401	0.01307669	0.00417733
592239.00	2356526.00	0.00138115	0.01140938	0.00105195	0.01035745	0.02784031	0.01686031	0.01276785	0.00409246
592239.00	2356626.00	0.00472168	0.00920352	0.00381853	0.005385	0.0357008	0.02680917	0.02295926	0.00384994
592239.00	2356726.00	0.00795042	0.00986722	0.00639809	0.00346912	0.0428341	0.0387299	0.03548426	0.00324562
592239.00	2356826.00	0.00966963	0.01042478	0.0078988	0.00252598	0.04193131	0.04124127	0.0389296	0.00231167
592239.00	2356926.00	0.01040765	0.01033874	0.00837882	0.00195993	0.03825512	0.03728886	0.03545663	0.00183222
592239.00	2357026.00	0.01030082	0.00973581	0.00814706	0.00158875	0.03437399	0.03252623	0.03098771	0.00153851
592239.00	2357126.00	0.00976975	0.00891818	0.00759041	0.00132777	0.03102066	0.02857876	0.02723582	0.00134295
592239.00	2357226.00	0.00908366	0.00807528	0.0069378	0.00113749	0.02801484	0.02523445	0.0240413	0.00119313
592239.00	2357326.00	0.00830743	0.00723641	0.00624317	0.00099324	0.02506338	0.02214188	0.02107405	0.00106785
592239.00	2357426.00	0.00764724	0.00652424	0.00564135	0.0008829	0.022504	0.01936961	0.01841307	0.00095654
592273.75	2356523.00	0.00167527	0.00699453	0.00127205	0.00572251	0.02493136	0.01597084	0.01150218	0.00446868
592291.06	2356621.50	0.00501822	0.00719807	0.00390841	0.00328966	0.03360234	0.02834051	0.0238719	0.00446864
592308.44	2356720.00	0.00806638	0.00848717	0.00621848	0.0022687	0.04214317	0.04173146	0.03842424	0.00330726
592325.81	2356818.50	0.00959559	0.00922246	0.00749452	0.00172794	0.04257999	0.04321682	0.04056969	0.00264712
592343.19	2356917.00	0.01014721	0.00920931	0.00782439	0.00138492	0.04174403	0.04081314	0.03842345	0.00238969
592360.56	2357015.25	0.00998627	0.00872902	0.00758094	0.0011481	0.03941006	0.03744709	0.03529522	0.00215188
592377.94	2357113.75	0.00944679	0.00803668	0.0070597	0.00097698	0.03511851	0.03249037	0.03061444	0.00187594
592412.63	2357310.75	0.00804311	0.00658904	0.00584123	0.00074781	0.02507789	0.0217441	0.02037927	0.00136484
592430.00	2357409.25	0.00744196	0.00597328	0.00530395	0.00066933	0.02106396	0.01753774	0.01635773	0.00118001
592307.38	2356514.00	0.00239286	0.00572596	0.00189993	0.00382605	0.02135426	0.01464013	0.00966856	0.00497159
592341.63	2356608.00	0.00659285	0.00768206	0.0052723	0.00240976	0.02875333	0.02697206	0.02181205	0.00516
592375.81	2356702.00	0.01031997	0.00987775	0.00812305	0.00175469	0.03853841	0.04033523	0.03648465	0.00385059
592410.00	2356795.75	0.01203779	0.01093413	0.00955719	0.00137694	0.04398009	0.04559283	0.04155482	0.00403803
592444.19	2356889.75	0.01247583	0.01089774	0.00976642	0.00113134	0.04507528	0.04500397	0.04131182	0.00369214
592478.44	2356983.75	0.01224961	0.01039	0.00943593	0.00095407	0.0393998	0.03728098	0.03441595	0.00286504
592512.63	2357077.75	0.01149176	0.00953806	0.00871534	0.00082272	0.0312806	0.02796727	0.02579251	0.00217477
592546.81	2357171.75	0.01062066	0.00865986	0.00793931	0.00072056	0.02480242	0.02094645	0.01925168	0.00169476
592581.00	2357265.75	0.00973078	0.00781553	0.0071766	0.00063893	0.02008434	0.01612402	0.01475977	0.00136426

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592615.25	2357359.75	0.00892146	0.00706402	0.00649047	0.00057355	0.01677502	0.01287788	0.01175232	0.00112555
592649.44	2357453.75	0.00821052	0.00639368	0.00587536	0.00051831	0.01439407	0.01061312	0.00966556	0.00094756
592339.00	2356499.25	0.00282714	0.00585409	0.00229918	0.00355494	0.01725799	0.01305439	0.0074125	0.0056419
592389.00	2356585.75	0.0072377	0.00816997	0.00591678	0.00225319	0.02153362	0.02267722	0.01661547	0.00606173
592439.00	2356672.50	0.01101694	0.01045847	0.00882708	0.00163138	0.03156054	0.03515082	0.029414	0.0057368
592489.00	2356759.00	0.01278447	0.01141862	0.0101492	0.00126942	0.04266182	0.04623626	0.03928466	0.00695159
592539.00	2356845.50	0.01282258	0.01114172	0.0101117	0.00103003	0.0381296	0.0381378	0.03353469	0.00460309
592589.00	2356932.25	0.01238874	0.01046379	0.00960131	0.00086249	0.03037593	0.02714212	0.02432096	0.00282116
592639.00	2357018.75	0.01152891	0.00952991	0.00879146	0.00073845	0.02490161	0.02041059	0.01851193	0.00189865
592689.00	2357105.50	0.01053401	0.00855851	0.00791545	0.00064306	0.02181375	0.0169627	0.01555933	0.00140337
592739.00	2357192.00	0.00960211	0.00767657	0.00710877	0.0005678	0.02039695	0.01532367	0.01419962	0.00112404
592789.00	2357278.75	0.00870238	0.00687136	0.00636175	0.00050961	0.01928071	0.01423025	0.01329823	0.00093203
592839.00	2357365.25	0.00792201	0.00616307	0.00570426	0.00045881	0.01812469	0.0131297	0.01233404	0.00079568
592889.00	2357451.75	0.00718724	0.00553307	0.00511868	0.0004144	0.01679277	0.0119536	0.01126065	0.00069295
592939.00	2357538.50	0.00653422	0.00499751	0.00461982	0.0003777	0.01550773	0.01086444	0.01024988	0.00061458
592367.56	2356479.25	0.00285901	0.00708832	0.00236293	0.00472542	0.0130897	0.01170597	0.00519184	0.00651414
592431.81	2356555.75	0.0071017	0.00893546	0.00591693	0.00301854	0.01320634	0.01697363	0.00950423	0.00746941
592496.13	2356632.50	0.0104412	0.01087524	0.00868144	0.00219377	0.02061777	0.03049944	0.01902245	0.01147699
592560.38	2356709.00	0.01229232	0.01172155	0.01001013	0.00171143	0.02891947	0.03454829	0.02513784	0.00941044
592624.69	2356785.75	0.01240969	0.01145978	0.01006709	0.0013927	0.02628734	0.02441301	0.02043474	0.00397828
592688.94	2356862.25	0.01174501	0.01057932	0.00940898	0.00117034	0.02685979	0.02223933	0.02005864	0.00218073
592753.25	2356938.75	0.01101165	0.00971476	0.0087044	0.00101036	0.02935835	0.0231789	0.02165448	0.00152442
592817.50	2357015.50	0.01006336	0.00874798	0.00786768	0.00088031	0.02880971	0.02212844	0.02095504	0.00117339
592881.81	2357092.00	0.00915428	0.00786691	0.00709085	0.00077607	0.02625878	0.01960871	0.01866182	0.0009469
592946.06	2357168.75	0.00838201	0.00712905	0.00643678	0.00069228	0.02323635	0.01689883	0.01610526	0.00079357
593010.38	2357245.25	0.00770962	0.00647513	0.00585303	0.00062209	0.02021725	0.01439131	0.013708	0.00068331
593074.63	2357321.75	0.00707875	0.00590034	0.00533811	0.00056223	0.01753013	0.01229176	0.01169124	0.00060053
592392.19	2356454.50	0.00273746	0.00892751	0.0022711	0.00665645	0.0095752	0.01096786	0.00350433	0.00746353
592468.81	2356518.75	0.0071009	0.01001741	0.00588545	0.00413199	0.00585861	0.01312339	0.00327369	0.00984976
592545.44	2356583.00	0.01031193	0.01156446	0.0085797	0.00298477	0.00851394	0.03474723	0.00732928	0.02741796
592622.00	2356647.50	0.01219521	0.01239532	0.01007506	0.00232027	0.01293497	0.01757378	0.00958188	0.00799192
592698.63	2356711.75	0.01262052	0.0121442	0.01025751	0.0018867	0.02547529	0.02207106	0.01916588	0.00290521
592775.25	2356776.00	0.01209549	0.0114055	0.00982485	0.00158064	0.03441489	0.02784848	0.02606574	0.00178274
592851.81	2356840.25	0.01124154	0.01045417	0.00910141	0.00135274	0.03355396	0.02678474	0.02540128	0.00138344
592928.44	2356904.50	0.01045174	0.00962766	0.00845061	0.00117706	0.03024961	0.02392002	0.02270647	0.00121354
593005.06	2356968.75	0.0097101	0.00886427	0.00782906	0.00103522	0.02686997	0.02101186	0.01990983	0.00110204
593081.63	2357033.00	0.00893243	0.00812737	0.00720717	0.00092021	0.02358735	0.01843614	0.0174376	0.00099856
592412.19	2356426.00	0.00255071	0.01005111	0.00205891	0.00799225	0.00768897	0.01036068	0.00253133	0.00782936
592498.81	2356476.00	0.00713607	0.01011115	0.00581306	0.00429812	0.00170251	0.01369623	0.00055795	0.01313834
592585.44	2356526.00	0.01064011	0.01164714	0.00877412	0.00287301	0.00121617	0.06272231	0.00057532	0.06214703
592672.00	2356576.00	0.01255119	0.01249247	0.01034902	0.00214345	0.00780003	0.01098792	0.00581072	0.00517724
592758.63	2356626.00	0.01311442	0.01250239	0.01079706	0.00170533	0.02210332	0.02085101	0.01775569	0.00309533
592845.25	2356676.00	0.01292593	0.01202692	0.01061169	0.00141523	0.03120759	0.02763835	0.02487094	0.00276742
592931.81	2356726.00	0.01228067	0.01132968	0.01011999	0.00120968	0.03309798	0.02869049	0.02625779	0.00243268
593018.44	2356776.00	0.01137578	0.01056566	0.00951921	0.00104646	0.0318191	0.02766357	0.02557751	0.00208607
592426.94	2356394.50	0.00234862	0.01249077	0.00179028	0.01070055	0.00812879	0.01206039	0.00247653	0.00958391
592520.94	2356428.50	0.00673861	0.01056969	0.00525446	0.00531523	0.00040835	0.01815326	0.00007195	0.01808134
592614.88	2356462.75	0.0104362	0.01153034	0.00821107	0.00331926	0.00001706	0.11927509	0.00000149	0.11927361
592708.88	2356497.00	0.01259439	0.01222572	0.00986741	0.00235833	0.00247219	0.01300023	0.00174605	0.01125424
592802.81	2356531.25	0.01315168	0.01213794	0.01033031	0.00180763	0.01568321	0.01906552	0.01226621	0.00679933
592896.75	2356565.50	0.01286315	0.01155131	0.01009812	0.00145318	0.02942072	0.02762332	0.02345914	0.00416422
592990.75	2356599.50	0.01215762	0.01079812	0.00959011	0.00120801	0.0350999	0.03128802	0.02839712	0.0028909
593883.44	2356924.50	0.00579344	0.0049825	0.00458331	0.0003992	0.01343697	0.01063982	0.01004196	0.00059787
594118.38	2357010.00	0.0048603	0.00410818	0.00378043	0.00032775	0.01050561	0.00794278	0.0074801	0.00046268
594353.31	2357095.50	0.00414152	0.00344013	0.00316607	0.00027406	0.00858474	0.00616322	0.00579083	0.00037238
592534.44	2356378.00	0.0065757	0.0101806	0.0047554	0.0054252	0.00021353	0.20559944	0.0000388	0.20556129
592632.94	2356395.50	0.01013363	0.01079373	0.00753268	0.00326105	0.0000001	0.02434709	0	0.02434709
592731.38	2356412.75	0.01244476	0.01169038	0.00944503	0.00224537	0.00143801	0.02393813	0.00062044	0.02331778
592829.88	2356430.25	0.01338722	0.01200353	0.01032426	0.00167927	0.01364572	0.01770941	0.00877444	0.00893505
592928.38	2356447.50	0.01328811	0.01170194	0.01038078	0.00132115	0.02834635	0.02466205	0.02009577	0.00456633
593026.88	2356465.00	0.0127451	0.01114776	0.01006891	0.00107883	0.03606256	0.02999976	0.02712808	0.00287166
592539.00	2356326.00	0.00687852	0.0085286	0.00452791	0.0040007	0.00039529	0.0096738	0.00010474	0.0095691
592639.00	2356326.00	0.01072786	0.00972655	0.00732987	0.00239668	0.00009525	0.00237225	0.0000201	0.00235216
592739.00	2356326.00	0.01342775	0.01117389	0.00951617	0.00165772	0.00378296	0.0042421	0.00144633	0.00279577
592839.00	2356326.00	0.01460715	0.01193916	0.01068933	0.00124982	0.02213925	0.01608201	0.0127252	0.00335681
592939.00	2356326.00	0.01476907	0.01212869	0.01113316	0.00099553	0.03983193	0.02809038	0.02555973	0.00253066
593039.00	2356326.00	0.01436473	0.01195056	0.01113	0.00082056	0.0471292	0.03444479	0.03255989	0.00188491
593139.00	2356326.00	0.01376007	0.01160928	0.01091585	0.00069343	0.04769221	0.03624537	0.03474955	0.00149583
596739.00	2356326.00	0.00254159	0.00178275	0.00170656	0.00007619	0.00402578	0.0022026	0.00211379	0.00008881
592731.38	2356239.25	0.0157992	0.01178791	0.01028225	0.00150567	0.0046482	0.00356497	0.00174074	0.00182424

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592829.88	2356221.75	0.01730235	0.01297386	0.01176399	0.00120988	0.01953653	0.01131881	0.00949492	0.0018239
592928.38	2356204.50	0.01747345	0.01340571	0.01239159	0.00101412	0.03958314	0.02388612	0.02297046	0.00091563
593026.88	2356187.00	0.01696049	0.01328852	0.0124184	0.00087012	0.05112598	0.03523738	0.0343546	0.00088274
593125.31	2356169.75	0.01608941	0.01283045	0.01206961	0.00076084	0.05493064	0.04226575	0.04126654	0.00099922
593223.81	2356152.25	0.0150958	0.01222562	0.01155113	0.0006745	0.05326818	0.04350859	0.04250116	0.00100745
593322.31	2356135.00	0.01416685	0.01161499	0.01101053	0.00060446	0.04902235	0.04100798	0.04005186	0.00095612
593420.75	2356117.50	0.01324476	0.01094613	0.01039884	0.00054728	0.04376054	0.0368518	0.03597191	0.00087988
593519.25	2356100.25	0.01238117	0.01028404	0.00978452	0.00049952	0.03871233	0.03255032	0.03174983	0.00080049
594208.63	2355978.75	0.00788334	0.00646357	0.00616085	0.00030272	0.01776466	0.01374821	0.01331897	0.00042923
594454.81	2355935.25	0.00684595	0.00553332	0.00526986	0.00026345	0.01426634	0.01064561	0.01028802	0.00035759
594701.00	2355892.00	0.00600994	0.004769	0.0045365	0.0002325	0.01171443	0.00842936	0.00812702	0.00030232
594947.25	2355848.50	0.00529779	0.00414202	0.00393502	0.000207	0.00984727	0.00684547	0.00658461	0.00026086
593084.75	2356018.25	0.01946253	0.01619884	0.0153777	0.00082114	0.04232749	0.02631615	0.02559373	0.00072243
593178.69	2355984.00	0.01844765	0.0156691	0.01493359	0.00073551	0.04242232	0.02670756	0.02615713	0.00055042
593272.69	2355949.75	0.01734749	0.01495642	0.01429296	0.00066347	0.04007443	0.02568165	0.0252377	0.00044396
593366.63	2355915.50	0.01622062	0.01412493	0.01352159	0.00060334	0.03696257	0.02421272	0.02383397	0.00037875
593460.63	2355881.25	0.01511409	0.01325011	0.01269706	0.00055305	0.03380479	0.02263677	0.02229692	0.00033987
593554.56	2355847.25	0.01407726	0.01239601	0.01188571	0.00051029	0.03094095	0.02111113	0.02079508	0.00031605
593648.56	2355813.00	0.01313304	0.01159618	0.01112308	0.0004731	0.02838859	0.0196324	0.01933224	0.00030016
592046.19	2356555.75	0.00544746	0.00975324	0.00501617	0.00473708	0.03426999	0.01806202	0.01533061	0.00273142
591981.88	2356632.50	0.01023386	0.01320142	0.00999792	0.00320353	0.03270161	0.01787399	0.01563444	0.00223956
591917.63	2356709.00	0.01408509	0.01643688	0.01402418	0.00241272	0.03135306	0.01795859	0.01601437	0.00194422
591853.31	2356785.75	0.01601402	0.01783254	0.01591173	0.0019208	0.02943282	0.01771009	0.01594209	0.00176802
591789.06	2356862.25	0.01631665	0.01762879	0.01605135	0.00157746	0.02700754	0.01699789	0.01537067	0.00162723
591724.75	2356938.75	0.01580062	0.01667996	0.01535215	0.0013278	0.02454366	0.01603903	0.0145397	0.00149933
591660.50	2357015.50	0.01482928	0.01537042	0.01422867	0.00114176	0.02215111	0.01492429	0.01354834	0.00137594
591114.13	2357666.50	0.00700525	0.00665821	0.00615827	0.00049994	0.00988006	0.00698356	0.00631827	0.00066529
592139.00	2356499.25	0.00152676	0.01777986	0.00126532	0.01651457	0.03492958	0.01826365	0.01487216	0.00339152
592089.00	2356585.75	0.00637368	0.01364831	0.00602803	0.00762029	0.03410077	0.01903898	0.01625325	0.00278577
592039.00	2356672.50	0.01147069	0.01550936	0.01113094	0.00437841	0.0353018	0.02138417	0.01899642	0.00238776
591989.00	2356759.00	0.01508098	0.01763708	0.01473302	0.00290407	0.03472972	0.02303353	0.02082438	0.00220917
591939.00	2356845.50	0.01665568	0.01825395	0.01614851	0.00210544	0.03274049	0.02343597	0.02141582	0.00202017
591889.00	2356932.25	0.01687913	0.01775853	0.01615744	0.0016011	0.03014157	0.02279282	0.02100205	0.00179078
591839.00	2357018.75	0.01596901	0.01635117	0.01507768	0.0012735	0.02687525	0.02122523	0.01966701	0.00155824
591789.00	2357105.50	0.0147963	0.0148299	0.01378486	0.00104504	0.02385118	0.01935057	0.01800416	0.0013464
591739.00	2357192.00	0.01354919	0.013343	0.01246429	0.00087871	0.02113215	0.01738867	0.01622173	0.00116695
591689.00	2357278.75	0.01225426	0.01189734	0.01114343	0.0007539	0.01861841	0.01547072	0.01445206	0.00101867
592170.63	2356514.00	0.00177708	0.02614113	0.00156257	0.02457858	0.03236109	0.01773105	0.01413064	0.0036004
592136.38	2356608.00	0.00731131	0.01823873	0.0069805	0.01125822	0.034985	0.02115513	0.01820488	0.00295025
592102.19	2356702.00	0.01293191	0.01864757	0.01242684	0.00622072	0.0388146	0.02675524	0.02400458	0.00275066
592068.00	2356795.75	0.01642726	0.01973684	0.01582374	0.00391311	0.03820516	0.02991753	0.02745275	0.00246478
592033.81	2356889.75	0.01789237	0.01975377	0.01705195	0.00270183	0.03552717	0.03006913	0.02803369	0.00203545
591999.56	2356983.75	0.01790606	0.01885476	0.01683832	0.00201645	0.03182228	0.02809601	0.02645486	0.00164116
591965.38	2357077.75	0.01697939	0.01733053	0.01575304	0.0015775	0.02771227	0.02493728	0.02359461	0.00134268
591931.19	2357171.75	0.01572805	0.01568649	0.01440948	0.00127701	0.02395173	0.02160685	0.02048641	0.00112045
591897.00	2357265.75	0.01436104	0.01406539	0.01300495	0.00106045	0.02069851	0.01852104	0.01756838	0.00095267
591862.75	2357359.75	0.01307044	0.01260575	0.01170455	0.0009012	0.01804073	0.01588619	0.01506432	0.00082187
591828.56	2357453.75	0.01189364	0.01131678	0.01053734	0.00077944	0.01590192	0.01370164	0.01298478	0.00071685
591794.38	2357547.50	0.01083728	0.01018723	0.00950213	0.0006851	0.01415599	0.01190057	0.01127021	0.00063036
591640.44	2357970.50	0.00737347	0.00658314	0.00617518	0.00040797	0.00931809	0.00693559	0.00655147	0.00038411
591554.94	2358205.50	0.0061261	0.00531397	0.00499296	0.00032101	0.00776514	0.0054395	0.00513519	0.00030432
592204.25	2356523.00	0.00161079	0.02002779	0.00134977	0.01867806	0.03009207	0.01736909	0.01355299	0.0038161
592186.94	2356621.50	0.00620156	0.01442765	0.00558399	0.00884366	0.03578333	0.02396774	0.02065043	0.00331732
592169.56	2356720.00	0.0108377	0.01491482	0.00969431	0.00522051	0.04155231	0.03305996	0.0299531	0.00310689
592152.19	2356818.50	0.0134547	0.01578025	0.01223678	0.00354349	0.04086481	0.03688518	0.03446188	0.00242331
592134.81	2356917.00	0.01457449	0.01572981	0.01309233	0.00263747	0.03717887	0.03505026	0.03323058	0.00181969
592117.44	2357015.25	0.0144634	0.01485207	0.01279826	0.00205381	0.03237774	0.03062012	0.02916751	0.00145263
592100.06	2357113.75	0.01371322	0.01361289	0.0119479	0.001665	0.02794668	0.02599683	0.02479405	0.00120279
592082.75	2357212.25	0.01270292	0.01229678	0.01090602	0.00139076	0.0243418	0.02210742	0.02109277	0.00101465
592065.38	2357310.75	0.01159357	0.01100679	0.00981899	0.0011878	0.02142781	0.0189905	0.01812321	0.00086729
592048.00	2357409.25	0.01061773	0.00990138	0.00886871	0.00103266	0.01921547	0.01660147	0.01584693	0.00075454
592030.63	2357507.75	0.00965419	0.00887289	0.00796297	0.00090993	0.01730342	0.01461899	0.01395216	0.00066683
592013.25	2357606.25	0.00883478	0.00800511	0.00719491	0.00081019	0.01576748	0.01301193	0.01241506	0.00059686
591995.88	2357704.75	0.00807422	0.00722671	0.00649843	0.00072828	0.01439946	0.01162957	0.01109062	0.00053895
591978.50	2357803.25	0.00740254	0.00654816	0.00588868	0.00065948	0.0132063	0.01044201	0.00995236	0.00048964
593158.25	2357097.25	0.00828361	0.00747111	0.0066458	0.00082531	0.02092844	0.01621092	0.01530512	0.0009058
594947.25	2356803.50	0.00353884	0.00289897	0.00273066	0.00016832	0.0070633	0.00471559	0.00450575	0.00020985
593617.75	2356083.00	0.01154919	0.0096139	0.00915536	0.00045855	0.03415806	0.02852123	0.02779525	0.00072597
592239.00	2357526.00	0.00694552	0.00585025	0.00505768	0.00079257	0.01989255	0.01682013	0.01595945	0.00086068
592239.00	2357626.00	0.00634868	0.00527454	0.00455524	0.0007193	0.01767002	0.01458267	0.01380351	0.00077917

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592395.25	2357212.25	0.00879007	0.0073204	0.00647217	0.00084823	0.03008363	0.02692092	0.02532249	0.00159842
592447.38	2357507.75	0.00680035	0.00541099	0.00480522	0.00060577	0.01772021	0.01426423	0.01323044	0.00103381
592464.75	2357606.25	0.00623629	0.00491239	0.00435858	0.00055381	0.01504287	0.01171722	0.01080355	0.00091367
592683.63	2357547.50	0.00748686	0.00579002	0.00531851	0.0004715	0.01266204	0.00911168	0.00829469	0.000817
593138.88	2357398.50	0.00651483	0.00538932	0.00487832	0.00051101	0.01532534	0.01059849	0.01006094	0.00053756
593234.88	2357161.50	0.00765501	0.00687517	0.0061295	0.00074567	0.01855394	0.01427735	0.01345499	0.00082235
593311.44	2357226.00	0.00707748	0.00633066	0.0056529	0.00067775	0.01658981	0.01266524	0.01191493	0.00075032
593105.00	2356826.00	0.01052703	0.00979025	0.00887149	0.00091876	0.02944452	0.02562124	0.02384912	0.00177214
593191.63	2356876.00	0.00974522	0.00906304	0.00824514	0.00081791	0.02667801	0.02314724	0.02163103	0.00151622
593278.25	2356926.00	0.0090378	0.00837494	0.00764033	0.0007346	0.02392688	0.02054032	0.01922484	0.00131548
593364.81	2356976.00	0.00835013	0.00771307	0.0070482	0.00066487	0.0210906	0.01802174	0.01686984	0.00115191
593451.44	2357026.00	0.00768624	0.00708545	0.00648036	0.00060509	0.01860952	0.01580446	0.01478654	0.00101792
593754.56	2357201.00	0.00588143	0.00536866	0.0049126	0.00045606	0.01261565	0.01036522	0.0096617	0.0007035
593084.75	2356633.75	0.01135102	0.01004837	0.00902223	0.00102615	0.03525048	0.0310394	0.02884912	0.00219026
593178.69	2356668.00	0.01052108	0.00931639	0.00843138	0.00088502	0.03282009	0.02882036	0.02705827	0.00176211
593272.69	2356702.25	0.0096723	0.00855394	0.00777663	0.00077731	0.02920239	0.0255061	0.02405898	0.00144712
593366.63	2356736.50	0.00890399	0.00785628	0.00716855	0.00068773	0.02576575	0.02225137	0.02102971	0.00122167
593460.63	2356770.75	0.0082182	0.00723086	0.00661712	0.00061373	0.02273331	0.01936104	0.01830767	0.00105337
593648.56	2356839.00	0.00699233	0.0061044	0.0056048	0.00049961	0.01772923	0.0146654	0.01386623	0.00079918
593125.31	2356482.25	0.01199117	0.01051253	0.00960714	0.00090538	0.0372789	0.03144722	0.02940055	0.00204667
593223.81	2356499.75	0.01118473	0.00987697	0.00910084	0.00077613	0.03558594	0.03056543	0.02898757	0.00157787
593322.31	2356517.00	0.01039217	0.00921828	0.00854464	0.00067365	0.03238402	0.02791868	0.02664632	0.00127236
593420.75	2356534.50	0.00963128	0.00856222	0.00796928	0.00059294	0.02895177	0.02484102	0.02378378	0.00105725
593962.44	2356630.00	0.00640599	0.00562204	0.00528534	0.0003367	0.01556062	0.01248711	0.01199066	0.00049646
594208.63	2356673.25	0.00540786	0.00468007	0.004404	0.00027608	0.01221955	0.00941474	0.00903307	0.00038167
602087.06	2358062.50	0.00070106	0.00034541	0.00032624	0.00001917	0.00112809	0.00037305	0.00035358	0.00001948
593239.00	2356326.00	0.01301416	0.0111337	0.01053572	0.00059799	0.04492703	0.03549168	0.03427662	0.00121501
593339.00	2356326.00	0.01228054	0.01058948	0.01006514	0.00052434	0.04110219	0.03296851	0.03196061	0.00100791
593439.00	2356326.00	0.011479	0.00999972	0.00953475	0.00046496	0.0368391	0.02978481	0.02893045	0.00085434
593539.00	2356326.00	0.01078395	0.00942466	0.00900785	0.00041681	0.03307789	0.02665193	0.02591407	0.00073786
593639.00	2356326.00	0.01011817	0.00884508	0.00846819	0.00037688	0.02972963	0.0237845	0.02313791	0.0006466
594239.00	2356326.00	0.00709515	0.00602584	0.0057912	0.00023464	0.01657617	0.01238251	0.01203356	0.00034895
594739.00	2356326.00	0.00547923	0.00447823	0.0043036	0.00017462	0.01115949	0.00781909	0.00758077	0.00023832
594989.00	2356326.00	0.00486409	0.00390301	0.00374944	0.00015357	0.0094289	0.00638876	0.00618578	0.00020298
597239.00	2356326.00	0.0022044	0.00149007	0.00142486	0.00006522	0.00338588	0.00176597	0.00169155	0.00007442
593716.19	2356065.50	0.01077708	0.00897418	0.00855076	0.00042343	0.0301905	0.02496232	0.024303	0.00065931
593962.44	2356022.00	0.00915755	0.00758909	0.0072351	0.000354	0.02273837	0.01823044	0.01770378	0.00052666
595193.44	2355805.00	0.00469161	0.00361224	0.00342653	0.00018572	0.00835371	0.00564138	0.00541357	0.00022781
590739.00	2358924.00	0.00298712	0.0023571	0.00219801	0.00015909	0.00431933	0.00250767	0.00229558	0.00021209
591469.44	2358440.25	0.00519924	0.00437609	0.00411655	0.00025954	0.00663551	0.00439671	0.00414993	0.00024678
591383.94	2358675.25	0.00446809	0.00365692	0.00344213	0.00021479	0.00573214	0.00363701	0.00343297	0.00020405
593538.06	2357076.00	0.00708581	0.0065149	0.00596097	0.00055393	0.01647865	0.01388914	0.01298246	0.00090669
589160.81	2364783.25	0.00084319	0.00046957	0.00044747	0.0000221	0.00120371	0.00046327	0.00044303	0.00002024
592239.00	2357726.00	0.00580794	0.00476228	0.00410899	0.00065329	0.01571391	0.01264159	0.01193121	0.0007104
592482.13	2357704.75	0.00575979	0.00449094	0.0039828	0.00050814	0.01299539	0.00976107	0.0089471	0.00081397
592717.81	2357641.50	0.00689534	0.00527682	0.0048456	0.00043122	0.01138133	0.00798459	0.00726935	0.00071524
593203.19	2357475.00	0.00601104	0.00493845	0.00447122	0.00046723	0.01358339	0.00926517	0.00877598	0.0004892
593388.06	2357290.25	0.00653498	0.00582086	0.00520151	0.00061935	0.01483903	0.01123041	0.01054497	0.00068545
593971.06	2357326.00	0.00492975	0.00443525	0.00405251	0.00038274	0.00983472	0.00782285	0.00726436	0.0005585
593554.56	2356804.75	0.00758629	0.00664466	0.00609271	0.00055195	0.0200782	0.01682252	0.01591008	0.00091243
593519.25	2356551.75	0.0089184	0.00793778	0.00741189	0.00052589	0.02586438	0.02201863	0.02111473	0.0009039
593617.75	2356569.00	0.00825095	0.00734223	0.00687173	0.0004705	0.02298849	0.01935662	0.01858093	0.0007757
593716.19	2356586.50	0.00765269	0.00679339	0.00636911	0.00042427	0.02046844	0.01702237	0.01634766	0.00067471
594454.81	2356716.75	0.00463138	0.0039412	0.00371142	0.00022978	0.0099248	0.00730291	0.0069983	0.00030461
601102.25	2357888.75	0.00078772	0.00040549	0.00038228	0.0000232	0.00128452	0.00044165	0.00041797	0.00002368
593739.00	2356326.00	0.00949967	0.00829104	0.00794778	0.00034327	0.02674425	0.02120807	0.02063566	0.00057241
593989.00	2356326.00	0.00817699	0.00705927	0.00677998	0.0002793	0.02083475	0.01605318	0.01561392	0.00043927
594489.00	2356326.00	0.00620587	0.00517649	0.00497562	0.00020087	0.01346956	0.00974963	0.00946424	0.00028539
595239.00	2356326.00	0.00435538	0.00342623	0.00329007	0.00013617	0.0080821	0.00529397	0.00511888	0.00017509
596239.00	2356326.00	0.00298289	0.00217022	0.00207962	0.0000906	0.00489925	0.00283357	0.00272589	0.00010768
591298.44	2358910.25	0.00391064	0.00310754	0.00292623	0.00018131	0.00505501	0.00306621	0.00289477	0.00017144
591935.13	2358049.50	0.00604965	0.00520046	0.00467183	0.00052863	0.01078586	0.00810053	0.00770852	0.00039201
591891.69	2358295.50	0.00506324	0.00422463	0.00378791	0.00043672	0.00897781	0.00640734	0.00608647	0.00032086
591848.31	2358541.75	0.0043123	0.0034925	0.00312343	0.00036907	0.00757392	0.00515847	0.00488945	0.00026902
592989.00	2357625.00	0.00598665	0.00453309	0.00418722	0.00034587	0.014283	0.00975541	0.00920595	0.00054947
592239.00	2357826.00	0.00532941	0.00431574	0.00371866	0.00059708	0.01402	0.01098063	0.01033049	0.00065013
592499.50	2357803.25	0.00534342	0.00412565	0.00365815	0.0004675	0.01136439	0.00823578	0.00750592	0.00072986
594701.00	2356760.00	0.00401069	0.0033507	0.00315608	0.00019462	0.00825513	0.00579044	0.00554144	0.000249
598147.88	2357368.00	0.00125749	0.0007806	0.00073341	0.00004719	0.00214799	0.00090609	0.00085603	0.00005005
600117.44	2357715.25	0.00089704	0.00048736	0.00045871	0.00002864	0.00147786	0.00053714	0.00050776	0.00002938

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
595739.00	2356326.00	0.00355916	0.00269104	0.00258165	0.0001094	0.00615167	0.00378103	0.00364695	0.00013409
591212.94	2359145.00	0.00345272	0.00267254	0.0025175	0.00015505	0.00448453	0.00262625	0.00248006	0.00014619
590699.94	2360554.50	0.00196958	0.00133693	0.00126212	0.00007481	0.00262539	0.0013015	0.0012315	0.00007
591631.25	2359772.75	0.00236046	0.00166598	0.00147042	0.00019556	0.00391172	0.00219031	0.0020489	0.00014141
593579.56	2357451.00	0.00546117	0.00480502	0.00429949	0.00050553	0.01162997	0.00857816	0.00801933	0.00055883
594187.56	2357451.00	0.00420114	0.00372296	0.00339731	0.00032565	0.00797776	0.00610886	0.00565287	0.00045599
599132.63	2357541.50	0.00104711	0.00060478	0.00056853	0.00003625	0.00175205	0.00067969	0.00064203	0.00003766
591041.94	2359615.00	0.0027822	0.0020475	0.00193016	0.00011734	0.00364742	0.00200142	0.00189112	0.0001103
592752.00	2357735.50	0.00637766	0.00483199	0.00443564	0.00039636	0.01039205	0.0071286	0.00649302	0.00063559
591804.88	2358788.00	0.00373949	0.00293625	0.00261837	0.00031789	0.00648325	0.00422303	0.0039929	0.00023013
592239.00	2358076.00	0.00436826	0.00343286	0.00294522	0.00048764	0.01077398	0.00786096	0.00732996	0.000531
601635.94	2359746.25	0.00064794	0.00030682	0.00028706	0.00001975	0.00109651	0.00033684	0.00031688	0.00001997
595193.44	2356847.00	0.00314001	0.00252008	0.00237338	0.00014669	0.00611574	0.00388804	0.00370932	0.00017872
595685.81	2356933.75	0.00252607	0.00194432	0.0018302	0.00011412	0.00474483	0.0027582	0.00262446	0.00013374
596670.63	2357107.50	0.00180169	0.00127063	0.00119471	0.00007592	0.0032262	0.00161252	0.00152802	0.0000845
597163.06	2357194.25	0.00157099	0.00106082	0.00099702	0.0000638	0.00276315	0.00129768	0.00122805	0.00006963
590870.94	2360084.75	0.00231706	0.00162944	0.0015372	0.00009223	0.00305643	0.00158704	0.00150088	0.00008616
594588.25	2357181.00	0.00358088	0.00291184	0.00267913	0.00023272	0.00715803	0.00487015	0.00456609	0.00030407
592239.00	2358326.00	0.00366265	0.00279166	0.00238318	0.00040848	0.00858597	0.00581442	0.0053694	0.00044502
592542.88	2358049.50	0.00450484	0.00339802	0.00301078	0.00038724	0.00855577	0.00568205	0.00511236	0.00056969
593114.00	2357841.50	0.00487069	0.00360136	0.00331715	0.00028421	0.01147187	0.00734874	0.00692238	0.00042636
593239.00	2358058.00	0.00406164	0.00292709	0.00268982	0.00023727	0.00934197	0.00558735	0.00524846	0.0003389
593363.88	2357666.50	0.00500125	0.00402306	0.00364205	0.00038101	0.01033833	0.00680545	0.00641049	0.00039495
594404.06	2357576.00	0.00363342	0.00316533	0.00288425	0.00028107	0.00665653	0.00488533	0.00450562	0.00037971
596178.25	2357020.50	0.00210438	0.00155099	0.00145913	0.00009186	0.00384846	0.00206606	0.00196144	0.00010462
592837.56	2357970.50	0.00533705	0.00394457	0.00361714	0.00032743	0.00866543	0.00564225	0.00514941	0.00049284
592923.06	2358205.50	0.00456849	0.00328149	0.00300464	0.00027686	0.00749861	0.00461097	0.00421515	0.00039583
593364.00	2358274.50	0.00344262	0.00241516	0.00221415	0.00020101	0.00768643	0.00431184	0.00403704	0.0002748
593524.56	2357858.00	0.00423379	0.00333363	0.00301595	0.00031768	0.00823253	0.00522218	0.00489462	0.00032756
593771.06	2357611.50	0.00460513	0.00399845	0.00357761	0.00042084	0.00930698	0.00666657	0.00620496	0.00046161
593962.63	2357772.25	0.00392635	0.003353	0.00299717	0.00035584	0.007555	0.00525458	0.00487064	0.00038394
600899.25	2361326.00	0.000624	0.00033648	0.00030752	0.00002896	0.00106133	0.00036447	0.00033427	0.00003021
599756.56	2359062.25	0.00081407	0.00042492	0.00039453	0.00003038	0.00139918	0.00047467	0.00044363	0.00003104
600696.25	2359404.25	0.00071961	0.00035659	0.00033241	0.00002419	0.00122555	0.00039417	0.00036965	0.00002451
591761.50	2359034.25	0.00326977	0.0025026	0.00222488	0.00027773	0.00560411	0.00351249	0.00331194	0.00020056
592239.00	2358576.00	0.00313168	0.00231201	0.00196312	0.0003489	0.00706842	0.00444542	0.00406513	0.0003803
592586.31	2358295.50	0.00386309	0.0028379	0.00251057	0.00032733	0.00679024	0.0041389	0.00368257	0.00045633
594823.13	2357266.50	0.00312268	0.00248429	0.00228464	0.00019965	0.00609853	0.00392761	0.00367514	0.00025247
592239.00	2359826.00	0.00171016	0.00108558	0.00089914	0.00018644	0.00356871	0.00164914	0.0014462	0.00020294
593685.25	2358049.50	0.00362943	0.00279128	0.00252273	0.00026855	0.00669829	0.00409808	0.00382397	0.0002741
591718.06	2359280.50	0.00290436	0.00216245	0.00191738	0.00024507	0.00491948	0.0029638	0.00278664	0.00017716
592239.00	2358826.00	0.00271771	0.00194651	0.00164387	0.00030264	0.0059707	0.00350196	0.00317233	0.00032963
593008.56	2358440.25	0.00391739	0.00274468	0.00250681	0.00023787	0.00656947	0.0038281	0.00350291	0.0003252
594620.56	2357701.00	0.00316178	0.00270753	0.00246395	0.00024359	0.00563603	0.00395968	0.0036411	0.00031857
594837.06	2357826.00	0.00280392	0.00235487	0.00214037	0.0002145	0.00490841	0.00329204	0.00301892	0.00027312
595058.06	2357352.00	0.0027561	0.00214344	0.00197054	0.00017291	0.00528964	0.00322767	0.00301479	0.00021288
595527.94	2357523.00	0.0022205	0.00164871	0.00151525	0.00013345	0.00415995	0.00229942	0.00214166	0.00015776
595997.75	2357694.00	0.00185606	0.00131559	0.00120913	0.00010645	0.00342016	0.00173301	0.00161101	0.000122
598816.88	2358720.25	0.00093964	0.00052128	0.00048225	0.00003903	0.00163123	0.00059206	0.00055169	0.00004037
590186.88	2361964.25	0.0013545	0.00084197	0.00079704	0.00004493	0.00185443	0.00081907	0.00077773	0.00004134
592629.69	2358541.75	0.00332339	0.00238884	0.00210711	0.00028174	0.00559718	0.00316234	0.00278861	0.00037373
593846.00	2358241.00	0.00317581	0.00238794	0.00215659	0.00023135	0.00566362	0.00334311	0.00310748	0.00023563
594154.13	2357933.00	0.00339787	0.00285395	0.00254883	0.00030512	0.00630717	0.00424768	0.00392297	0.00032472
594345.63	2358093.75	0.00297694	0.00245761	0.00219354	0.00026407	0.00537411	0.00349785	0.00322018	0.00027767
600033.25	2360826.00	0.00069595	0.00039164	0.00035695	0.00003469	0.00117751	0.00042492	0.00038853	0.00003639
596467.63	2357865.00	0.00159223	0.00107772	0.00099084	0.00008688	0.00289573	0.00136008	0.00126306	0.00009702
596937.44	2358036.00	0.00139218	0.00090125	0.00082917	0.00007208	0.00250284	0.00110097	0.00102224	0.00007873
597877.19	2358378.00	0.00111981	0.0006672	0.00061525	0.00005195	0.00197332	0.00077888	0.00072395	0.00005493
594537.13	2358254.25	0.00263876	0.00213997	0.00190928	0.00023069	0.00465928	0.00292736	0.00268746	0.0002399
593094.06	2358675.25	0.00344104	0.00235007	0.00214179	0.00020829	0.0059077	0.00325863	0.00298285	0.00027578
593489.00	2358491.00	0.00297166	0.00203432	0.00186082	0.0001735	0.00646701	0.00342844	0.00319973	0.00022871
594006.69	2358432.50	0.00279807	0.00205719	0.00185687	0.00020031	0.00485082	0.00276565	0.00256231	0.00020334
595703.13	2358326.00	0.00186483	0.00144688	0.00131129	0.00013558	0.00314478	0.00178959	0.00162891	0.00016068
596569.13	2358826.00	0.00138452	0.00099218	0.00089805	0.00009413	0.00231336	0.00115018	0.00104373	0.00010645
599167.19	2360326.00	0.00078955	0.00046651	0.00042405	0.00004245	0.0013288	0.00050824	0.0004633	0.00004494
596136.13	2358576.00	0.00159198	0.00118594	0.00107379	0.00011215	0.00266879	0.00141298	0.00128343	0.00012955
592239.00	2359076.00	0.00239559	0.00166357	0.00139778	0.00026579	0.00514669	0.00282689	0.00253823	0.00028867
592673.13	2358788.00	0.00292838	0.00206066	0.00181304	0.00024762	0.00483153	0.00255243	0.00223783	0.0003146
594920.19	2358575.75	0.00211329	0.0016544	0.00147512	0.00017928	0.00361318	0.00212545	0.0019428	0.00018266
595270.06	2358076.00	0.00225069	0.00181786	0.00164949	0.00016837	0.00384429	0.00236646	0.00216048	0.00020599

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598301.19	2359826.00	0.00091907	0.00057334	0.00051983	0.00005352	0.00154215	0.00063059	0.00057311	0.00005748
597435.13	2359326.00	0.00110559	0.00073463	0.00066486	0.00006977	0.00185061	0.00082286	0.00074629	0.00007658
592239.00	2359326.00	0.00211526	0.00142529	0.00119102	0.00023427	0.0044847	0.00231961	0.00206518	0.00025444
592716.50	2359034.25	0.00256296	0.00176504	0.00154838	0.00021666	0.00416778	0.00205672	0.00179202	0.0002647
593614.00	2358707.50	0.00260884	0.00174362	0.00159212	0.0001515	0.00554562	0.00279656	0.00260245	0.00019411
594167.38	2358624.25	0.00249854	0.00179748	0.001622	0.00017549	0.00423968	0.00233706	0.00215922	0.00017784
595686.19	2359218.50	0.00150067	0.00109222	0.00097504	0.00011719	0.00247824	0.00128551	0.00116974	0.00011578
591544.44	2360265.25	0.00197724	0.00133327	0.00117232	0.00016095	0.0032275	0.00169147	0.00157361	0.00011785
592846.75	2359772.75	0.00189741	0.00122596	0.00107103	0.00015493	0.00312445	0.00130909	0.00113226	0.00017683
593179.56	2358910.25	0.00307727	0.00204836	0.00186395	0.00018441	0.00539088	0.00281076	0.00257168	0.00023908
593739.00	2358924.00	0.0022896	0.00149397	0.00136288	0.0001311	0.00473781	0.00228243	0.00211856	0.00016387
594810.13	2359390.25	0.00170452	0.00113213	0.00102208	0.00011005	0.00272659	0.00133591	0.00122577	0.00011014
595303.19	2358897.25	0.00175847	0.00132733	0.00118388	0.00014345	0.00294413	0.00162291	0.00147915	0.00014376
596069.25	2359540.00	0.00130616	0.00091704	0.00081972	0.00009732	0.00213732	0.00104875	0.0009538	0.00009494
592759.94	2359280.50	0.00230098	0.00155102	0.00135852	0.0001925	0.00373972	0.00174205	0.00151301	0.00022904
596835.25	2360182.75	0.0010355	0.00067924	0.00060944	0.0000698	0.00167717	0.00074862	0.00068185	0.00006677
593265.06	2359145.00	0.00275117	0.00178488	0.00162191	0.00016297	0.00490914	0.00243236	0.00222548	0.00020689
594488.75	2359007.25	0.00203092	0.00140138	0.00126447	0.00013691	0.00332489	0.00172277	0.00158497	0.0001378
590528.88	2361024.50	0.00171104	0.00112443	0.00106228	0.00006215	0.00230097	0.00109382	0.00103592	0.0000579
599899.44	2362754.00	0.0005724	0.00030845	0.00028275	0.0000257	0.00091871	0.00032746	0.0003035	0.00002396
593436.06	2359615.00	0.0022736	0.00140195	0.00127154	0.00013041	0.00418085	0.00187868	0.00171812	0.00016057
593989.00	2359357.00	0.00185012	0.00115444	0.0010519	0.00010254	0.0036706	0.00163614	0.00151277	0.00012337
595131.56	2359773.25	0.00147282	0.00094503	0.00085401	0.00009102	0.00232186	0.00108152	0.00099069	0.00009083
597601.31	2360825.50	0.00085701	0.0005299	0.00047781	0.00005208	0.00138024	0.00057301	0.00052384	0.00004917
598367.38	2361468.25	0.00073323	0.0004304	0.00039024	0.00004016	0.00117742	0.00046057	0.00042295	0.00003763
599133.38	2362111.00	0.00064181	0.00036018	0.00032841	0.00003177	0.00102973	0.00038345	0.0003538	0.00002965
593607.06	2360084.75	0.00195304	0.00114816	0.00104053	0.00010763	0.00364346	0.0014994	0.00136954	0.00012986
591457.56	2360757.75	0.00168609	0.00109289	0.00095796	0.00013494	0.0027262	0.001351	0.00125169	0.00009931
589844.88	2362903.75	0.00111907	0.00066772	0.00063323	0.00003449	0.00155759	0.0006521	0.00062033	0.00003177
595452.94	2360156.25	0.00129241	0.00080266	0.00072625	0.00007641	0.00201552	0.00089654	0.00082063	0.00007592
592933.56	2360265.25	0.00161358	0.00100032	0.00087231	0.00012801	0.00271645	0.00103843	0.00089666	0.00014177
592239.00	2360326.00	0.00145675	0.00087666	0.00072287	0.0001538	0.00301282	0.0012604	0.0010937	0.00016669
596095.75	2360922.25	0.00102782	0.00060209	0.00054664	0.00005545	0.00157867	0.00065099	0.00059648	0.00005451
597381.31	2362454.25	0.00073669	0.00039347	0.00036012	0.00003335	0.00111859	0.00041267	0.00038007	0.00003259
594239.00	2359790.00	0.001553	0.00093112	0.00084822	0.0000829	0.00298804	0.00125036	0.00115335	0.00009701
596738.50	2361688.25	0.00085402	0.00047612	0.00043407	0.00004205	0.00130799	0.0005059	0.00046477	0.00004113
598024.06	2363220.50	0.00064483	0.00033192	0.00030508	0.00002684	0.00098009	0.00034665	0.00032041	0.00002623
598666.88	2363986.50	0.00057505	0.0002863	0.00026416	0.00002214	0.000874	0.00029828	0.0002766	0.00002168
588818.81	2365723.00	0.00074685	0.00040771	0.00039006	0.00001765	0.00106554	0.00040469	0.00038876	0.00001593
591370.75	2361250.00	0.00144635	0.00090396	0.00078972	0.00011424	0.0023777	0.0011085	0.00102609	0.00008241
592239.00	2360826.00	0.00124307	0.00070597	0.00057914	0.00012684	0.00259706	0.00098109	0.00084304	0.00013805
594489.00	2360223.00	0.00132233	0.00076371	0.0006964	0.00006731	0.00247812	0.00097766	0.00090121	0.00007645
593020.44	2360757.75	0.00137674	0.00081715	0.00071242	0.00010472	0.00246802	0.00081869	0.00070659	0.0001121
594739.00	2360656.25	0.00114827	0.00063349	0.00057896	0.00005453	0.00225308	0.00078493	0.00072543	0.00005949
590502.50	2366174.00	0.00068446	0.00033223	0.00029315	0.00003908	0.00109078	0.00036731	0.0003359	0.00003141
593778.06	2360554.50	0.00170316	0.0009538	0.00086415	0.00008966	0.00324322	0.00123125	0.00112524	0.00010601
596239.00	2363254.25	0.00121543	0.00034168	0.00031828	0.0000234	0.00247045	0.00039081	0.00036715	0.00002366
597239.00	2364986.25	0.00057598	0.00024704	0.00023068	0.00001636	0.00126508	0.00028605	0.00026976	0.00001629
595239.00	2361522.25	0.00094469	0.00048413	0.00044431	0.00003982	0.00200882	0.00058603	0.00054395	0.00004208
593949.13	2361024.50	0.00151972	0.00080545	0.00072985	0.00007559	0.00308222	0.0010336	0.00094566	0.00008794
592239.00	2361326.00	0.00114811	0.00058462	0.00047925	0.00010537	0.00309021	0.00081931	0.00070531	0.000114
596739.00	2364120.25	0.00066567	0.00028286	0.00026326	0.0000196	0.0016071	0.00033285	0.00031318	0.00001967
593107.25	2361250.00	0.00121981	0.00068639	0.00059856	0.00008783	0.00253704	0.00068771	0.00059642	0.00009129
591197.13	2362234.75	0.00116916	0.00067714	0.00059072	0.00008642	0.00197948	0.0008076	0.00074416	0.00006344
589502.81	2363843.50	0.00096205	0.00055162	0.00052441	0.00002721	0.00135945	0.00054107	0.00051622	0.00002486
590676.19	2365189.25	0.00256143	0.00041837	0.00037393	0.00004444	0.00166376	0.0004301	0.00039549	0.00003461
594975.19	2363843.50	0.00266252	0.00044983	0.00041486	0.00003497	0.00174187	0.00047652	0.00043604	0.00004047
594291.13	2361964.25	0.00219227	0.00064189	0.00058639	0.00005549	0.00528886	0.00082328	0.00075889	0.00006439
595739.00	2362388.25	0.00093568	0.00039379	0.0003638	0.00002999	0.0025813	0.00048085	0.00044992	0.00003093
593280.88	2362234.75	0.00236929	0.00055748	0.00049427	0.0000632	0.00581842	0.00058208	0.00051855	0.00006353
592239.00	2362326.00	0.00123616	0.00045644	0.00037831	0.00007813	0.00462619	0.00065447	0.00057042	0.00008405
594633.13	2362903.75	0.00321773	0.00055114	0.00050779	0.00004335	0.00291462	0.00060877	0.00055874	0.00005003
595659.19	2365723.00	0.00199741	0.00033456	0.00031046	0.0000241	0.0012956	0.00034451	0.00031707	0.00002743
591023.44	2363219.75	0.00228104	0.00057302	0.00050725	0.00006578	0.00324021	0.00065557	0.00060661	0.00004895
593454.56	2363219.75	0.00340025	0.00046242	0.00041413	0.00004828	0.00151255	0.00037371	0.00032539	0.00004833
590849.81	2364204.50	0.00290832	0.00048956	0.00043614	0.00005342	0.00184948	0.00051107	0.00047029	0.00004079
595317.19	2364783.25	0.00233972	0.00038587	0.00035708	0.00002879	0.00152922	0.00040205	0.00036909	0.00003296
592239.00	2363326.00	0.00273105	0.00039245	0.00033277	0.00005968	0.00132421	0.00042097	0.00035417	0.0000668
593628.19	2364204.50	0.00096721	0.00031579	0.0002769	0.00003889	0.00068052	0.00027968	0.00024185	0.00003783
592239.00	2364326.00	0.00103312	0.00028689	0.00023831	0.00004858	0.0007744	0.00032666	0.00027306	0.0000536

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593975.50	2366174.00	0.00038587	0.00021109	0.00018461	0.00002648	0.0004446	0.00019658	0.00017189	0.00002469
592239.00	2366326.00	0.00093671	0.00021679	0.00018398	0.00003281	0.00064074	0.00023614	0.00020078	0.00003536
593801.81	2365189.25	0.00102888	0.0002767	0.00024487	0.00003183	0.00063943	0.00024304	0.00021226	0.00003078
592239.00	2365326.00	0.0004481	0.00022519	0.00018515	0.00004005	0.00055639	0.00026369	0.00021987	0.00004382
596202.50	2360140.75	0.00117601	0.00076654	0.00069281	0.00007373	0.00186565	0.00084752	0.00077682	0.0000707
596702.50	2360140.75	0.00106549	0.00070226	0.00063052	0.00007174	0.0017219	0.00077594	0.00070739	0.00006855
597202.50	2360140.75	0.0009781	0.00063997	0.0005723	0.00006767	0.00160039	0.00070435	0.00063855	0.0000658
597702.50	2360140.75	0.00091813	0.00059036	0.00052837	0.00006199	0.00151833	0.00064693	0.00058505	0.00006188
598202.50	2360140.75	0.00087614	0.00054973	0.00049441	0.00005532	0.00146217	0.000601	0.00054408	0.00005692
598702.50	2360140.75	0.00084256	0.00051233	0.00046413	0.0000482	0.00141521	0.00055976	0.00050879	0.00005097
599202.50	2360140.75	0.00080922	0.00047454	0.00043339	0.00004115	0.00136353	0.00051857	0.00047434	0.00004423
599702.50	2360140.75	0.00077452	0.0004362	0.00040139	0.00003481	0.00130763	0.00047709	0.00043952	0.00003757
600202.50	2360140.75	0.00073841	0.00039874	0.00036925	0.00002949	0.00124804	0.0004365	0.00040489	0.00003162
600702.50	2360140.75	0.00070214	0.00036392	0.00033868	0.00002524	0.00118671	0.00039859	0.0003719	0.00002669
596202.50	2360640.75	0.0010851	0.00065993	0.00059957	0.00006036	0.00167615	0.0007158	0.00065671	0.00005909
596702.50	2360640.75	0.00101491	0.00063175	0.00057291	0.00005884	0.00159518	0.00068295	0.00062703	0.00005592
597202.50	2360640.75	0.0009324	0.00058481	0.00052744	0.00005737	0.00149694	0.00063353	0.00057931	0.00005422
597702.50	2360640.75	0.00086028	0.00053757	0.00048287	0.00005471	0.00140066	0.00058374	0.00053144	0.0000523
598202.50	2360640.75	0.00080982	0.00049943	0.00044827	0.00005116	0.00133455	0.0005419	0.000492	0.0000499
598702.50	2360640.75	0.00077632	0.00046951	0.00042252	0.00004699	0.00129404	0.00050919	0.00046215	0.00004704
599202.50	2360640.75	0.00075263	0.00044347	0.00040105	0.00004242	0.00126609	0.00048129	0.00043763	0.00004367
599702.50	2360640.75	0.00072815	0.00041712	0.00037973	0.00003739	0.00122956	0.00045308	0.00041376	0.00003932
600202.50	2360640.75	0.00070422	0.00039021	0.00035773	0.00003247	0.00119129	0.00042428	0.00038968	0.0000346
600702.50	2360640.75	0.00067874	0.00036276	0.0003348	0.00002797	0.00114847	0.00039483	0.00036495	0.00002988
596202.50	2361140.75	0.00097223	0.00055945	0.00050819	0.00005126	0.00149523	0.00060232	0.00055216	0.00005016
596702.50	2361140.75	0.00094862	0.00055644	0.00050711	0.00004933	0.00145689	0.00059341	0.00054552	0.0000479
597202.50	2361140.75	0.000892	0.00053301	0.0004852	0.00004781	0.00139296	0.00056804	0.0005229	0.00004514
597702.50	2361140.75	0.00082283	0.0004967	0.00045022	0.00004649	0.0013105	0.00053304	0.00048952	0.00004352
598202.50	2361140.75	0.00076623	0.00046045	0.00041565	0.0000448	0.00123966	0.00049581	0.00045349	0.00004232
598702.50	2361140.75	0.00072713	0.00043141	0.00038882	0.00004259	0.00119483	0.00046496	0.00042407	0.00004089
599202.50	2361140.75	0.00069931	0.00040825	0.0003683	0.00003995	0.00116473	0.00044054	0.00040135	0.00003919
599702.50	2361140.75	0.00067725	0.00038815	0.00035128	0.00003687	0.00113839	0.00041944	0.00038238	0.00003706
600202.50	2361140.75	0.00065959	0.00036935	0.00033588	0.00003348	0.00111548	0.00039974	0.0003653	0.00003444
600702.50	2361140.75	0.00064404	0.00035021	0.00032022	0.00002999	0.0010937	0.00037961	0.00034817	0.00003144
596202.50	2361640.75	0.00087143	0.00047949	0.00043553	0.00004396	0.00136337	0.00051538	0.00047358	0.00004179
596702.50	2361640.75	0.00086205	0.00048194	0.00043929	0.00004264	0.00132273	0.00051279	0.00047109	0.0000417
597202.50	2361640.75	0.00084227	0.00047794	0.00043705	0.0000409	0.00128899	0.00050401	0.00046455	0.00003946
597702.50	2361640.75	0.00079545	0.00045866	0.00041919	0.00003947	0.00123653	0.00048446	0.00044739	0.00003707
598202.50	2361640.75	0.00074169	0.00043063	0.00039215	0.00003848	0.00117577	0.00045799	0.00042212	0.00003587
598702.50	2361640.75	0.00069444	0.00040209	0.00036483	0.00003726	0.00111911	0.00043016	0.00039522	0.00003494
599202.50	2361640.75	0.00066016	0.00037846	0.0003427	0.00003576	0.00108092	0.00040606	0.0003721	0.00003395
599702.50	2361640.75	0.00063589	0.00035976	0.00032573	0.00003403	0.00105632	0.00038685	0.00035397	0.00003287
600202.50	2361640.75	0.00061867	0.00034432	0.00031226	0.00003207	0.00104013	0.0003711	0.00033944	0.00003166
600702.50	2361640.75	0.00060446	0.00033005	0.00030025	0.00002981	0.00102407	0.00035643	0.00032633	0.0000301
596202.50	2362140.75	0.00083492	0.00041018	0.00037461	0.00003557	0.00185974	0.00046607	0.00043308	0.000033
596702.50	2362140.75	0.00078453	0.0004184	0.00038117	0.00003723	0.00129801	0.00045003	0.00041447	0.00003556
597202.50	2362140.75	0.00077953	0.00042415	0.00038786	0.00003629	0.00118442	0.00044601	0.00041053	0.00003549
597702.50	2362140.75	0.00075623	0.00041679	0.00038253	0.00003426	0.00115453	0.00043672	0.00040384	0.00003288
598202.50	2362140.75	0.00071826	0.0004011	0.00036804	0.00003306	0.0011132	0.00042136	0.0003904	0.00003096
598702.50	2362140.75	0.0006733	0.00037876	0.00034655	0.00003221	0.00106396	0.00040118	0.00037126	0.00002992
599202.50	2362140.75	0.00063587	0.00035599	0.00032461	0.00003138	0.00102141	0.00037907	0.00034977	0.0000293
599702.50	2362140.75	0.00060744	0.00033688	0.00030651	0.00003036	0.0009928	0.00036021	0.00033157	0.00002864
600202.50	2362140.75	0.00058707	0.00032163	0.0002924	0.00002923	0.00097498	0.00034504	0.00031708	0.00002796
600702.50	2362140.75	0.00057167	0.00030894	0.000281	0.00002794	0.00096153	0.00033237	0.00030514	0.00002722
596202.50	2362640.75	0.00119314	0.00037673	0.00034817	0.00002856	0.00261981	0.00042847	0.00040129	0.00002718
596702.50	2362640.75	0.00076915	0.00036839	0.00033678	0.00003161	0.00171332	0.00041308	0.00038372	0.00002936
597202.50	2362640.75	0.00071645	0.00037707	0.0003444	0.00003267	0.00109695	0.00039661	0.00036507	0.00003154
597702.50	2362640.75	0.00070784	0.00037551	0.00034462	0.00003089	0.00107348	0.00039267	0.0003625	0.00003017
598202.50	2362640.75	0.00068685	0.00036844	0.00033936	0.00002908	0.00104812	0.00038457	0.00035677	0.0000278
598702.50	2362640.75	0.00065549	0.00035536	0.00032729	0.00002806	0.00101412	0.00037195	0.0003457	0.00002625
599202.50	2362640.75	0.00061908	0.00033725	0.00030987	0.00002739	0.00097341	0.00035551	0.00033009	0.00002543
599702.50	2362640.75	0.00058782	0.0003188	0.00029205	0.00002675	0.00094199	0.00033822	0.00031329	0.00002493
600202.50	2362640.75	0.00056228	0.0003028	0.0002768	0.00002599	0.0009162	0.00032293	0.00029852	0.00002441
600702.50	2362640.75	0.0005503	0.00029124	0.00026586	0.00002538	0.00092068	0.00031213	0.00028788	0.00002424
596202.50	2363140.75	0.00156495	0.0003551	0.00033124	0.00002386	0.00219825	0.00038801	0.00036398	0.00002403
596702.50	2363140.75	0.00068726	0.0003306	0.00030381	0.00002679	0.00137674	0.00037037	0.00034542	0.00002495
597202.50	2363140.75	0.00066156	0.00033715	0.00030824	0.00002891	0.00103415	0.0003563	0.00032909	0.00002721
597702.50	2363140.75	0.00065721	0.00033853	0.00031021	0.00002832	0.0010028	0.00035434	0.00032686	0.00002749
598202.50	2363140.75	0.00064757	0.00033562	0.00030913	0.00002649	0.00098334	0.0003501	0.00032427	0.00002583
598702.50	2363140.75	0.00063009	0.00032935	0.00030436	0.000025	0.00096086	0.0003428	0.00031894	0.00002386

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
599202.50	2363140.75	0.00060359	0.00031813	0.00029401	0.00002412	0.00093235	0.00033209	0.00030952	0.00002257
599702.50	2363140.75	0.00057299	0.00030327	0.00027975	0.00002353	0.00090051	0.00031889	0.00029702	0.00002186
600202.50	2363140.75	0.00055181	0.00028846	0.00026531	0.00002314	0.00088809	0.00030492	0.00028328	0.00002165
600702.50	2363140.75	0.00053086	0.00027578	0.00025313	0.00002265	0.00087156	0.00029344	0.00027208	0.00002137
596202.50	2363640.75	0.00087934	0.00031875	0.00029695	0.0000218	0.00238324	0.00038689	0.0003636	0.0000233
596702.50	2363640.75	0.00064924	0.00030234	0.00027972	0.00002262	0.00132377	0.00034463	0.00032279	0.00002184
597202.50	2363640.75	0.00061763	0.00030307	0.00027833	0.00002475	0.00102621	0.00032622	0.00030327	0.00002295
597702.50	2363640.75	0.00061315	0.00030719	0.00028142	0.00002577	0.0009434	0.00032193	0.00029744	0.00002449
598202.50	2363640.75	0.00060904	0.00030694	0.00028214	0.0000248	0.00092289	0.0003197	0.00029549	0.00002421
598702.50	2363640.75	0.00059822	0.00030309	0.00028008	0.00002301	0.00090692	0.00031528	0.00029286	0.00002242
599202.50	2363640.75	0.000582	0.00029705	0.00027538	0.00002168	0.00088768	0.00030875	0.00028808	0.00002068
599702.50	2363640.75	0.000559	0.00028746	0.00026656	0.00002089	0.00086323	0.00029979	0.00028022	0.00001957
600202.50	2363640.75	0.00054183	0.00027482	0.00025418	0.00002064	0.00085815	0.00028769	0.00026833	0.00001936
600702.50	2363640.75	0.0005182	0.00026283	0.00024265	0.00002018	0.00083679	0.00027734	0.00025837	0.00001896
596202.50	2364140.75	0.00106393	0.00031117	0.00029092	0.00002025	0.00250444	0.0003722	0.00034969	0.00002251
596702.50	2364140.75	0.00069125	0.0002836	0.00026418	0.00001941	0.00174355	0.00033584	0.00031618	0.00001965
597202.50	2364140.75	0.00058423	0.00027767	0.00025658	0.00002109	0.00098982	0.00030302	0.00028314	0.00001988
597702.50	2364140.75	0.00057355	0.0002786	0.00025601	0.00002259	0.00092281	0.00029597	0.00027497	0.000021
598202.50	2364140.75	0.00056905	0.00028027	0.00025744	0.00002283	0.00087825	0.00029334	0.00027148	0.00002186
598702.50	2364140.75	0.00056375	0.0002788	0.0002572	0.00002161	0.00086101	0.0002909	0.00026976	0.00002114
599202.50	2364140.75	0.00055534	0.0002755	0.0002554	0.0000201	0.00084315	0.0002864	0.00026684	0.00001957
599702.50	2364140.75	0.00054177	0.0002699	0.00025088	0.00001902	0.00082502	0.00027999	0.00026183	0.00001816
600202.50	2364140.75	0.00052406	0.00026105	0.00024263	0.00001842	0.00080965	0.00027142	0.00025407	0.00001735
600702.50	2364140.75	0.00050804	0.00025096	0.00023288	0.00001808	0.00080464	0.00026246	0.00024543	0.00001703
596202.50	2364640.75	0.00182347	0.00030978	0.00029092	0.00001885	0.00126224	0.0003285	0.00030636	0.00002214
596702.50	2364640.75	0.00128239	0.00028523	0.00026813	0.00001711	0.00195201	0.00031464	0.00029663	0.00001801
597202.50	2364640.75	0.0005732	0.00025748	0.00023956	0.00001791	0.00114717	0.00029261	0.00027517	0.00001744
597702.50	2364640.75	0.00054617	0.00025539	0.00023599	0.0000194	0.00094781	0.00027753	0.00025956	0.00001797
598202.50	2364640.75	0.00053599	0.00025712	0.00023654	0.00002058	0.00084803	0.00027113	0.00025187	0.00001926
598702.50	2364640.75	0.00053254	0.00025774	0.00023735	0.00002038	0.00081419	0.00026877	0.00024908	0.00001969
599202.50	2364640.75	0.00052735	0.0002557	0.00023659	0.00001911	0.00079997	0.00026601	0.00024724	0.00001876
599702.50	2364640.75	0.00052236	0.00025248	0.00023457	0.00001791	0.00079085	0.00026141	0.00024392	0.0000175
600202.50	2364640.75	0.00050604	0.00024687	0.00023012	0.00001675	0.00077109	0.00025612	0.00024012	0.000016
600702.50	2364640.75	0.00049038	0.00023917	0.00022296	0.00001621	0.00075659	0.00024863	0.00023333	0.0000153
590370.00	2357440.00	0.00580628	0.00384591	0.00325044	0.00059548	0.00702114	0.00310504	0.00260783	0.00049721
590870.00	2357440.00	0.00774185	0.00659392	0.00586215	0.00073178	0.00940497	0.00529257	0.00461382	0.00067875
591370.00	2357440.00	0.00916175	0.00891493	0.00829468	0.00062025	0.01325825	0.00986227	0.0090122	0.00085008
591870.00	2357440.00	0.01206501	0.01149712	0.01065868	0.00083843	0.0164326	0.01420193	0.01348013	0.0007218
592370.00	2357440.00	0.0069918	0.00563793	0.00493631	0.00070162	0.02148612	0.01809884	0.01700021	0.00109863
592870.00	2357440.00	0.00734026	0.0056461	0.00522696	0.00041914	0.01675838	0.0119777	0.01126229	0.00071543
593370.00	2357440.00	0.00591325	0.00506359	0.00454803	0.00051557	0.01273344	0.00905919	0.00852571	0.00053348
593870.00	2357440.00	0.00484647	0.00434683	0.00391413	0.0004327	0.00973311	0.00752281	0.00696709	0.00055572
594370.00	2357440.00	0.00389434	0.00338112	0.00310626	0.00027486	0.00735962	0.00547091	0.00508006	0.00039085
594870.00	2357440.00	0.00300198	0.00242044	0.00223282	0.00018761	0.005677	0.003704	0.0034605	0.00024351
595370.00	2357440.00	0.00237903	0.00179168	0.00164592	0.00014576	0.00450236	0.00256218	0.00238839	0.00017379
595870.00	2357440.00	0.00198202	0.00142423	0.00130707	0.00011716	0.00373081	0.00192038	0.001787	0.00013339
596370.00	2357440.00	0.00171951	0.00119174	0.00109727	0.00009447	0.00319859	0.0015362	0.00143171	0.00010449
596870.00	2357440.00	0.00153075	0.00102615	0.00094957	0.00007659	0.00279688	0.00127709	0.00119408	0.000083
597370.00	2357440.00	0.00139144	0.00090246	0.00083954	0.00006292	0.0024869	0.0010905	0.00102322	0.00006728
597870.00	2357440.00	0.00128503	0.0008061	0.00075344	0.00005266	0.00224383	0.00094896	0.00089314	0.00005582
598370.00	2357440.00	0.00119331	0.00072539	0.00068069	0.0000447	0.00203678	0.00083531	0.00078824	0.00004707
598870.00	2357440.00	0.00111184	0.00065741	0.00061898	0.00003843	0.00186251	0.00074325	0.0007029	0.00004035
599370.00	2357440.00	0.00104146	0.00059954	0.00056611	0.00003343	0.00170567	0.00066693	0.00063206	0.00003487
599870.00	2357440.00	0.00098043	0.00055031	0.00052081	0.0000295	0.00157892	0.00060414	0.00057345	0.00003069
600370.00	2357440.00	0.00092428	0.00050743	0.00048118	0.00002625	0.00146866	0.00055111	0.0005238	0.00002731
600870.00	2357440.00	0.00087488	0.00047002	0.00044646	0.00002357	0.00136922	0.00050574	0.00048128	0.00002446
601370.00	2357440.00	0.00083134	0.00043699	0.0004157	0.0000213	0.00128488	0.00046661	0.00044455	0.00002206
601870.00	2357440.00	0.00079051	0.00040771	0.00038833	0.00001938	0.00120704	0.00043258	0.00041254	0.00002004
602370.00	2357440.00	0.00075408	0.00038155	0.00036383	0.00001772	0.00114005	0.00040268	0.00038439	0.00001829
602870.00	2357440.00	0.00072066	0.0003581	0.00034182	0.00001628	0.00107999	0.00037628	0.0003595	0.00001678
603370.00	2357440.00	0.00068989	0.00033698	0.00032196	0.00001503	0.00102607	0.00035283	0.00033737	0.00001546
603870.00	2357440.00	0.00066096	0.00031789	0.00030398	0.00001392	0.00097587	0.00033185	0.00031755	0.0000143
604370.00	2357440.00	0.0006347	0.00030055	0.00028762	0.00001293	0.00093166	0.00031304	0.00029976	0.00001327
604870.00	2357440.00	0.00061034	0.00028476	0.00027271	0.00001205	0.00089131	0.00029606	0.0002837	0.00001236
605370.00	2357440.00	0.0005877	0.00027032	0.00025906	0.00001126	0.00085443	0.00028069	0.00026916	0.00001153
605870.00	2357440.00	0.00056661	0.00025709	0.00024654	0.00001054	0.00082071	0.00026672	0.00025593	0.00001079
606370.00	2357440.00	0.00054692	0.00024492	0.00023503	0.00000989	0.00078979	0.00025398	0.00024387	0.00001012
606870.00	2357440.00	0.00052852	0.00023371	0.00022441	0.0000093	0.00076135	0.00024233	0.00023282	0.0000095
607370.00	2357440.00	0.00051128	0.00022335	0.00021459	0.00000876	0.00073517	0.00023164	0.00022269	0.00000895
607870.00	2357440.00	0.00049511	0.00021376	0.00020549	0.00000827	0.00071102	0.0002218	0.00021337	0.00000844

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2357440.00	0.00047993	0.00020486	0.00019704	0.00000782	0.00068872	0.00021274	0.00020477	0.00000797
608870.00	2357440.00	0.00046563	0.00019658	0.00018918	0.0000074	0.00066809	0.00020436	0.00019682	0.00000754
609370.00	2357440.00	0.00045215	0.00018886	0.00018185	0.00000701	0.00064897	0.0001966	0.00018946	0.00000714
609870.00	2357440.00	0.00043937	0.00018165	0.000175	0.00000666	0.00063123	0.0001894	0.00018262	0.00000677
610370.00	2357440.00	0.00042738	0.00017491	0.00016859	0.00000633	0.00061474	0.00018269	0.00017626	0.00000643
610870.00	2357440.00	0.00041607	0.0001686	0.00016258	0.00000602	0.00059938	0.00017645	0.00017033	0.00000612
611370.00	2357440.00	0.00040535	0.00016267	0.00015694	0.00000573	0.00058504	0.00017061	0.00016479	0.00000582
611870.00	2357440.00	0.00039519	0.00015709	0.00015163	0.00000546	0.00057163	0.00016515	0.0001596	0.00000555
612370.00	2357440.00	0.00038553	0.00015184	0.00014663	0.00000521	0.00055906	0.00016002	0.00015472	0.00000529
612870.00	2357440.00	0.00037636	0.00014688	0.00014191	0.00000498	0.00054725	0.00015519	0.00015014	0.00000505
613370.00	2357440.00	0.00036764	0.0001422	0.00013744	0.00000476	0.00053612	0.00015064	0.00014581	0.00000483
613870.00	2357440.00	0.00035933	0.00013776	0.00013321	0.00000455	0.0005256	0.00014634	0.00014172	0.00000462
614370.00	2357440.00	0.0003514	0.00013356	0.0001292	0.00000436	0.00051563	0.00014226	0.00013783	0.00000442
614870.00	2357440.00	0.00034382	0.00012957	0.00012539	0.00000418	0.00050616	0.00013838	0.00013414	0.00000424
615370.00	2357440.00	0.00033685	0.0001258	0.00012179	0.00000401	0.00049819	0.0001348	0.00013073	0.00000406
615870.00	2357440.00	0.00032994	0.0001222	0.00011835	0.00000384	0.00048955	0.00013128	0.00012738	0.0000039
616370.00	2357440.00	0.00032308	0.00011875	0.00011505	0.00000369	0.0004804	0.00012783	0.00012408	0.00000375
616870.00	2357440.00	0.0003167	0.00011547	0.00011192	0.00000355	0.00047229	0.0001246	0.000121	0.0000036
617370.00	2357440.00	0.00031063	0.00011235	0.00010894	0.00000341	0.00046463	0.00012151	0.00011805	0.00000346
617870.00	2357440.00	0.00030558	0.00010944	0.00010616	0.00000328	0.00046019	0.00011877	0.00011544	0.00000333
618370.00	2357440.00	0.00030048	0.0001066	0.00010344	0.00000316	0.00045372	0.0001159	0.0001127	0.0000032
618870.00	2357440.00	0.00029402	0.00010388	0.00010085	0.00000303	0.00044379	0.00011312	0.00011007	0.00000305
619370.00	2357440.00	0.0002918	0.00010325	0.00010047	0.00000278	0.00046925	0.00011142	0.00010867	0.00000275
619870.00	2357440.00	0.00028463	0.0001003	0.00009761	0.0000027	0.00044868	0.00010857	0.0001059	0.00000267
590370.00	2357940.00	0.00476759	0.00396115	0.00350584	0.00045531	0.00612675	0.00339554	0.00292285	0.0004727
590870.00	2357940.00	0.00530815	0.00489529	0.00450149	0.0003938	0.00758389	0.00513693	0.00462191	0.00051503
591370.00	2357940.00	0.00639195	0.00569214	0.00536163	0.00033052	0.00868077	0.00652819	0.00608442	0.00044377
591870.00	2357940.00	0.0071296	0.00629797	0.00575405	0.00054393	0.01108066	0.00844482	0.0080399	0.00040491
592370.00	2357940.00	0.00454646	0.00350599	0.00303014	0.00047585	0.01127848	0.00823649	0.00759489	0.0006416
592870.00	2357940.00	0.00535754	0.00393487	0.00361586	0.00031901	0.00918529	0.00602285	0.00553013	0.00049271
593370.00	2357940.00	0.00413346	0.00310942	0.00283297	0.00027646	0.00863829	0.00524805	0.0049339	0.00031414
593870.00	2357940.00	0.00373271	0.0030349	0.00272828	0.00030662	0.00696723	0.00451556	0.00419846	0.00031711
594370.00	2357940.00	0.00311883	0.00264372	0.0023585	0.00028523	0.00564746	0.00385242	0.00353553	0.00031689
594870.00	2357940.00	0.00264727	0.00221609	0.0020015	0.00021459	0.00458136	0.00303049	0.00276768	0.00026282
595370.00	2357940.00	0.00227604	0.0018053	0.00165437	0.00015093	0.00396234	0.00239044	0.00220006	0.00019037
595870.00	2357940.00	0.00192411	0.00141959	0.00130828	0.00011132	0.00341918	0.0018391	0.00170457	0.00013452
596370.00	2357940.00	0.00163628	0.00112574	0.00103657	0.00008917	0.00294916	0.00142195	0.00132045	0.0001015
596870.00	2357940.00	0.00142268	0.00092486	0.00085	0.00007486	0.0025758	0.00113762	0.00105611	0.00008151
597370.00	2357940.00	0.00127095	0.00079035	0.00072636	0.00006399	0.00229328	0.00094897	0.00088122	0.00006776
597870.00	2357940.00	0.00115536	0.000693	0.00063816	0.00005485	0.00206471	0.00081546	0.00075844	0.00005702
598370.00	2357940.00	0.00106788	0.00062108	0.00057384	0.00004724	0.00188512	0.00071841	0.00066985	0.00004856
598870.00	2357940.00	0.00099611	0.00056379	0.00052293	0.00004086	0.00173365	0.00064259	0.00060087	0.00004172
599370.00	2357940.00	0.000935	0.00051637	0.00048083	0.00003554	0.00160266	0.00058115	0.00054499	0.00003616
599870.00	2357940.00	0.00088318	0.00047672	0.00044555	0.00003116	0.00149191	0.00053071	0.00049906	0.00003166
600370.00	2357940.00	0.00083778	0.00044263	0.0004151	0.00002753	0.00139528	0.00048816	0.00046021	0.00002795
600870.00	2357940.00	0.00079926	0.0004134	0.00038885	0.00002455	0.00131402	0.00045215	0.0004272	0.00002495
601370.00	2357940.00	0.0007626	0.00038703	0.00036504	0.00002199	0.00123959	0.0004205	0.00039809	0.00002241
601870.00	2357940.00	0.00072887	0.00036339	0.00034359	0.0000198	0.00116669	0.00039202	0.00037188	0.00002014
602370.00	2357940.00	0.0006965	0.00034253	0.00032454	0.000018	0.00110303	0.00036758	0.00034923	0.00001835
602870.00	2357940.00	0.00066862	0.00032355	0.00030713	0.00001642	0.00104779	0.00034549	0.00032875	0.00001675
603370.00	2357940.00	0.00064245	0.00030633	0.00029128	0.00001505	0.00099689	0.00032569	0.00031033	0.00001536
603870.00	2357940.00	0.00061874	0.00029063	0.00027677	0.00001385	0.00095223	0.00030788	0.00029374	0.00001414
604370.00	2357940.00	0.00059662	0.00027626	0.00026345	0.0000128	0.00091143	0.00029177	0.00027871	0.00001306
604870.00	2357940.00	0.00057561	0.00026305	0.00025118	0.00001188	0.00087293	0.00027711	0.00026499	0.00001212
605370.00	2357940.00	0.00055569	0.00025088	0.00023983	0.00001105	0.00083696	0.00026371	0.00025243	0.00001128
605870.00	2357940.00	0.00053742	0.00023963	0.00022932	0.00001031	0.00080508	0.00025148	0.00024096	0.00001052
606370.00	2357940.00	0.00052013	0.00022921	0.00021956	0.00000965	0.00077536	0.00024025	0.00023041	0.00000984
606870.00	2357940.00	0.00050394	0.00021954	0.00021049	0.00000905	0.00074813	0.00022992	0.00022069	0.00000923
607370.00	2357940.00	0.00048869	0.00021054	0.00020204	0.00000851	0.00072299	0.00022039	0.00021172	0.00000867
607870.00	2357940.00	0.0004743	0.00020215	0.00019414	0.00000801	0.00069974	0.00021159	0.00020342	0.00000816
608370.00	2357940.00	0.00046071	0.00019432	0.00018676	0.00000756	0.00067823	0.00020343	0.00019573	0.0000077
608870.00	2357940.00	0.00044786	0.00018699	0.00017984	0.00000714	0.00065828	0.00019586	0.00018859	0.00000728
609370.00	2357940.00	0.00043568	0.00018012	0.00017336	0.00000676	0.00063977	0.00018882	0.00018194	0.00000689
609870.00	2357940.00	0.00042407	0.00017367	0.00016726	0.00000641	0.00062257	0.00018226	0.00017574	0.00000653
610370.00	2357940.00	0.0004132	0.00016761	0.00016153	0.00000608	0.00060655	0.00017614	0.00016994	0.00000619
610870.00	2357940.00	0.0004032	0.00016192	0.00015614	0.00000578	0.00059272	0.00017051	0.00016462	0.00000588
611370.00	2357940.00	0.00039339	0.00015654	0.00015104	0.0000055	0.00057876	0.00016514	0.00015954	0.0000056
611870.00	2357940.00	0.00038406	0.00015146	0.00014622	0.00000524	0.00056569	0.00016009	0.00015476	0.00000533
612370.00	2357940.00	0.00037485	0.00014664	0.00014164	0.000005	0.00055232	0.00015524	0.00015016	0.00000509
612870.00	2357940.00	0.00036638	0.00014209	0.00013731	0.00000477	0.0005408	0.00015076	0.00014591	0.00000485

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2357940.00	0.00035829	0.00013777	0.00013321	0.00000456	0.00052993	0.00014652	0.00014189	0.00000464
613870.00	2357940.00	0.00035057	0.00013367	0.00012931	0.00000436	0.00051965	0.00014251	0.00013807	0.00000444
614370.00	2357940.00	0.00034317	0.00012977	0.00012559	0.00000418	0.00050992	0.00013869	0.00013444	0.00000425
614870.00	2357940.00	0.00033607	0.00012605	0.00012205	0.000004	0.00050065	0.00013505	0.00013099	0.00000407
615370.00	2357940.00	0.00032929	0.00012251	0.00011867	0.00000384	0.00049183	0.00013158	0.00012768	0.0000039
615870.00	2357940.00	0.0003228	0.00011914	0.00011546	0.00000368	0.00048339	0.00012827	0.00012453	0.00000374
616370.00	2357940.00	0.00031656	0.00011592	0.00011238	0.00000354	0.0004753	0.00012509	0.0001215	0.00000359
616870.00	2357940.00	0.00031102	0.00011287	0.00010948	0.0000034	0.00046922	0.0001222	0.00011875	0.00000345
617370.00	2357940.00	0.00030547	0.00010995	0.00010668	0.00000327	0.00046246	0.00011934	0.00011602	0.00000332
617870.00	2357940.00	0.00029964	0.0001071	0.00010396	0.00000314	0.00045392	0.00011641	0.00011321	0.00000319
618370.00	2357940.00	0.00029448	0.00010441	0.00010139	0.00000303	0.00044755	0.00011374	0.00011066	0.00000308
618870.00	2357940.00	0.00028763	0.00010192	0.00009904	0.00000287	0.00043685	0.00011119	0.00010829	0.00000289
619370.00	2357940.00	0.00028956	0.00010162	0.00009897	0.00000265	0.00047987	0.00010954	0.00010692	0.00000262
619870.00	2357940.00	0.00031373	0.0001014	0.00009888	0.00000252	0.00057578	0.00010631	0.00010383	0.00000248
590370.00	2358440.00	0.00349308	0.00302914	0.00274882	0.00028033	0.00510702	0.00311317	0.00276414	0.00034903
590870.00	2358440.00	0.00379385	0.00321623	0.00298064	0.00023558	0.00561185	0.00368936	0.00337762	0.00031174
591370.00	2358440.00	0.00501593	0.0042121	0.00397733	0.00023478	0.00635314	0.00416127	0.00390627	0.00025501
591870.00	2358440.00	0.00459232	0.00375713	0.00336155	0.00039559	0.00812904	0.0056377	0.00534807	0.00028964
592370.00	2358440.00	0.00323927	0.00236749	0.0020223	0.00034519	0.00722292	0.00451501	0.00408196	0.00043305
592870.00	2358440.00	0.00403865	0.00290575	0.00263953	0.00026621	0.00593727	0.0034392	0.00309119	0.00034802
593370.00	2358440.00	0.00320523	0.00218951	0.00200775	0.00018176	0.00722768	0.00392494	0.00366576	0.00025918
593870.00	2358440.00	0.00283775	0.00204989	0.00185337	0.00019653	0.00503135	0.00281468	0.00261441	0.00020027
594370.00	2358440.00	0.00262215	0.0020153	0.0018115	0.0002038	0.00454529	0.0026772	0.00246951	0.00020769
594870.00	2358440.00	0.00222867	0.00177777	0.00158313	0.00019464	0.00383609	0.00232245	0.00212009	0.00020237
595370.00	2358440.00	0.0019353	0.00153381	0.0013703	0.00016351	0.00325109	0.00191722	0.00173581	0.00018141
595870.00	2358440.00	0.00174116	0.00132995	0.00120371	0.00012624	0.00292529	0.00161654	0.00146907	0.00014747
596370.00	2358440.00	0.00157312	0.00113189	0.00103575	0.00009614	0.00268331	0.00135797	0.00124414	0.00011384
596870.00	2358440.00	0.00139746	0.00094217	0.00086787	0.0000743	0.00241784	0.00112158	0.00103601	0.00008558
597370.00	2358440.00	0.00124243	0.00078599	0.00072546	0.00006054	0.00217256	0.000927	0.00086021	0.00006679
597870.00	2358440.00	0.00112132	0.00067023	0.0006184	0.00005183	0.00196975	0.00078084	0.00072566	0.00005518
598370.00	2358440.00	0.00102936	0.00058698	0.00054146	0.00004552	0.0018104	0.00067554	0.00062826	0.00004728
598870.00	2358440.00	0.00094397	0.00051982	0.00047996	0.00003986	0.00165066	0.00059194	0.00055135	0.0000406
599370.00	2358440.00	0.00088041	0.00047069	0.00043536	0.00003532	0.00152873	0.00053073	0.00049511	0.00003562
599870.00	2358440.00	0.00082793	0.0004318	0.00040039	0.00003141	0.00142514	0.00048267	0.00045116	0.00003151
600370.00	2358440.00	0.00078583	0.00040073	0.00037266	0.00002807	0.0013411	0.00044466	0.00041655	0.00002811
600870.00	2358440.00	0.00074945	0.00037462	0.00034944	0.00002519	0.00127115	0.00041351	0.00038824	0.00002527
601370.00	2358440.00	0.00071499	0.00035128	0.00032865	0.00002263	0.00119876	0.00038533	0.00036261	0.00002273
601870.00	2358440.00	0.00068382	0.00033076	0.00031033	0.00002043	0.00113293	0.00036077	0.00034022	0.00002054
602370.00	2358440.00	0.0006555	0.00031249	0.00029397	0.00001853	0.00107365	0.00033908	0.00032042	0.00001866
602870.00	2358440.00	0.00063064	0.00029608	0.00027922	0.00001686	0.00102308	0.00031982	0.00030281	0.00001701
603370.00	2358440.00	0.00060951	0.00028123	0.00026582	0.00001541	0.00097919	0.00030235	0.00028681	0.00001554
603870.00	2358440.00	0.00058737	0.00026766	0.00025351	0.00001414	0.00093806	0.00028696	0.00027266	0.00001431
604370.00	2358440.00	0.00056581	0.00025518	0.00024214	0.00001303	0.00089446	0.00027268	0.00025948	0.0000132
604870.00	2358440.00	0.00054789	0.00024376	0.00023171	0.00001205	0.00086071	0.00025982	0.0002476	0.00001221
605370.00	2358440.00	0.00052906	0.00023314	0.00022196	0.00001118	0.00082372	0.00024783	0.00023649	0.00001134
605870.00	2358440.00	0.00051236	0.00022332	0.00021292	0.0000104	0.00079247	0.00023693	0.00022637	0.00001056
606370.00	2358440.00	0.00049684	0.00021421	0.00020451	0.0000097	0.00076415	0.00022691	0.00021705	0.00000986
606870.00	2358440.00	0.0004821	0.00020573	0.00019666	0.00000907	0.00073761	0.00021764	0.00020842	0.00000922
607370.00	2358440.00	0.00046827	0.00019782	0.00018932	0.0000085	0.00071328	0.00020909	0.00020044	0.00000865
607870.00	2358440.00	0.00045521	0.00019042	0.00018244	0.00000799	0.00069073	0.00020116	0.00019304	0.00000813
608370.00	2358440.00	0.00044297	0.0001835	0.00017598	0.00000752	0.00067017	0.00019383	0.00018617	0.00000765
608870.00	2358440.00	0.00043113	0.00017698	0.00016989	0.00000709	0.00065039	0.00018695	0.00017973	0.00000722
609370.00	2358440.00	0.00041999	0.00017087	0.00016417	0.0000067	0.00063233	0.00018056	0.00017374	0.00000682
609870.00	2358440.00	0.0004097	0.00016513	0.0001588	0.00000634	0.00061665	0.00017469	0.00016824	0.00000645
610370.00	2358440.00	0.00039947	0.00015969	0.00015368	0.00000601	0.00060007	0.00016904	0.00016292	0.00000612
610870.00	2358440.00	0.00039025	0.00015458	0.00014888	0.0000057	0.00058633	0.00016389	0.00015808	0.0000058
611370.00	2358440.00	0.00038123	0.00014972	0.00014431	0.00000542	0.00057264	0.00015897	0.00015346	0.00000552
611870.00	2358440.00	0.00037231	0.00014511	0.00013995	0.00000515	0.0005587	0.00015424	0.000149	0.00000525
612370.00	2358440.00	0.0003641	0.00014075	0.00013584	0.00000491	0.00054666	0.00014988	0.00014488	0.000005
612870.00	2358440.00	0.00035626	0.00013661	0.00013193	0.00000468	0.00053533	0.00014575	0.00014098	0.00000477
613370.00	2358440.00	0.00034876	0.00013267	0.0001282	0.00000447	0.00052465	0.00014184	0.00013729	0.00000455
613870.00	2358440.00	0.00034158	0.00012892	0.00012465	0.00000427	0.00051455	0.00013812	0.00013377	0.00000435
614370.00	2358440.00	0.00033468	0.00012534	0.00012125	0.00000409	0.00050497	0.00013459	0.00013043	0.00000416
614870.00	2358440.00	0.00032813	0.00012193	0.00011801	0.00000391	0.00049616	0.00013124	0.00012726	0.00000398
615370.00	2358440.00	0.00032228	0.0001187	0.00011495	0.00000375	0.00048933	0.00012819	0.00012437	0.00000382
615870.00	2358440.00	0.00031586	0.00011555	0.00011196	0.00000359	0.00047974	0.00012497	0.00012131	0.00000366
616370.00	2358440.00	0.00030986	0.00011255	0.0001091	0.00000345	0.00047129	0.00012196	0.00011845	0.00000351
616870.00	2358440.00	0.00030435	0.0001097	0.00010638	0.00000331	0.0004641	0.00011915	0.00011578	0.00000337
617370.00	2358440.00	0.00029893	0.00010695	0.00010377	0.00000319	0.00045662	0.00011641	0.00011316	0.00000324
617870.00	2358440.00	0.00029457	0.00010437	0.00010131	0.00000306	0.00045295	0.00011392	0.0001108	0.00000312

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2358440.00	0.00028971	0.00010184	0.00009889	0.00000295	0.00044534	0.00011133	0.00010834	0.000003
618870.00	2358440.00	0.00028167	0.00009941	0.00009662	0.00000279	0.00043222	0.00010883	0.00010601	0.00000281
619370.00	2358440.00	0.00027616	0.00009725	0.00009458	0.00000266	0.0004262	0.00010652	0.00010385	0.00000267
619870.00	2358440.00	0.00027193	0.00009528	0.00009273	0.00000255	0.00042408	0.00010429	0.00010174	0.00000255
590370.00	2358940.00	0.00262133	0.0021192	0.00193172	0.00018749	0.0040721	0.00238758	0.00215427	0.00023332
590870.00	2358940.00	0.00318079	0.00249821	0.0023487	0.00014951	0.00438327	0.00253428	0.00233586	0.00019843
591370.00	2358940.00	0.00389506	0.00308775	0.00289392	0.00019383	0.00513858	0.00315078	0.00298411	0.00016667
591870.00	2358940.00	0.00323282	0.00246946	0.0021644	0.00030506	0.00596025	0.00376739	0.00353529	0.0002321
592370.00	2358940.00	0.00244268	0.00169136	0.00142697	0.00026439	0.00522539	0.00284077	0.00252426	0.00031652
592870.00	2358940.00	0.00300589	0.00209418	0.00187632	0.00021786	0.00438642	0.00223968	0.00197895	0.00026074
593370.00	2358940.00	0.00273789	0.00176906	0.00161387	0.0001552	0.00573106	0.00287882	0.00266326	0.00021556
593870.00	2358940.00	0.00220428	0.00145152	0.00132003	0.0001315	0.00422954	0.00206044	0.00191073	0.00014971
594370.00	2358940.00	0.00211576	0.00146159	0.00131889	0.0001427	0.00349695	0.0018201	0.00167666	0.00014343
594870.00	2358940.00	0.00196479	0.0014313	0.00128797	0.00014333	0.00325636	0.00175627	0.00161289	0.00014338
595370.00	2358940.00	0.00171394	0.00128758	0.00114832	0.00013926	0.00286341	0.0015635	0.00142403	0.00013947
595870.00	2358940.00	0.0015175	0.00113431	0.00100963	0.00012469	0.00251847	0.00134078	0.00121081	0.00012996
596370.00	2358940.00	0.00139035	0.00101126	0.00090694	0.00010432	0.00230984	0.00117065	0.00105682	0.00011383
596870.00	2358940.00	0.00129923	0.00090153	0.00081682	0.0000847	0.00218692	0.00103257	0.00093659	0.00009598
597370.00	2358940.00	0.00119222	0.00078723	0.00072131	0.00006592	0.00201656	0.00089894	0.00082419	0.00007474
597870.00	2358940.00	0.00109394	0.00068171	0.00062883	0.00005288	0.00186725	0.00077666	0.00071784	0.00005882
598370.00	2358940.00	0.00100309	0.0005904	0.00054639	0.00004401	0.00172267	0.00067032	0.00062281	0.00004751
598870.00	2358940.00	0.00092548	0.00051722	0.00047927	0.00003795	0.00159403	0.00058423	0.00054439	0.00003983
599370.00	2358940.00	0.00085853	0.00045961	0.0004262	0.00003341	0.00147897	0.00051631	0.00048203	0.00003428
599870.00	2358940.00	0.00080376	0.0004151	0.0003852	0.00002989	0.00138247	0.00046371	0.00043349	0.00003023
600370.00	2358940.00	0.00075966	0.00038068	0.00035366	0.00002703	0.0013035	0.00042301	0.0003959	0.00002711
600870.00	2358940.00	0.00072119	0.00035245	0.00032796	0.00002449	0.00123128	0.00038968	0.00036521	0.00002447
601370.00	2358940.00	0.00068673	0.00032878	0.00030653	0.00002224	0.00116685	0.00036212	0.00033991	0.00002221
601870.00	2358940.00	0.00065506	0.00030808	0.00028786	0.00002022	0.00109943	0.00033715	0.00031702	0.00002013
602370.00	2358940.00	0.00063041	0.00029147	0.00027295	0.00001851	0.00105171	0.0003178	0.00029934	0.00001846
602870.00	2358940.00	0.00060527	0.0002762	0.00025925	0.00001695	0.00100384	0.00030032	0.00028337	0.00001695
603370.00	2358940.00	0.00058325	0.00026255	0.00024699	0.00001556	0.0009598	0.00028447	0.00026888	0.00001559
603870.00	2358940.00	0.00056291	0.00025019	0.00023587	0.00001433	0.00091941	0.00027022	0.00025584	0.00001438
604370.00	2358940.00	0.00054381	0.0002389	0.00022568	0.00001322	0.00088147	0.00025729	0.000244	0.00001329
604870.00	2358940.00	0.00052619	0.00022854	0.0002163	0.00001224	0.00084685	0.00024552	0.00023319	0.00001232
605370.00	2358940.00	0.00051016	0.00021899	0.00020764	0.00001135	0.00081647	0.00023474	0.00022328	0.00001145
605870.00	2358940.00	0.00049346	0.00021006	0.00019949	0.00001056	0.00078326	0.00022469	0.00021402	0.00001067
606370.00	2358940.00	0.00047847	0.00020178	0.00019193	0.00000985	0.00075467	0.00021546	0.0002055	0.00000996
606870.00	2358940.00	0.00046477	0.0001941	0.00018489	0.0000092	0.00072936	0.00020699	0.00019767	0.00000932
607370.00	2358940.00	0.00045184	0.00018691	0.0001783	0.00000862	0.00070584	0.00019915	0.00019041	0.00000873
607870.00	2358940.00	0.00044	0.00018021	0.00017213	0.00000808	0.0006852	0.00019195	0.00018375	0.0000082
608370.00	2358940.00	0.00042805	0.00017389	0.00016628	0.0000076	0.00066364	0.00018509	0.00017738	0.00000772
608870.00	2358940.00	0.00041707	0.00016796	0.0001608	0.00000716	0.0006447	0.00017878	0.00017151	0.00000727
609370.00	2358940.00	0.00040661	0.00016239	0.00015564	0.00000675	0.00062704	0.0001729	0.00016603	0.00000687
609870.00	2358940.00	0.00039667	0.00015714	0.00015076	0.00000638	0.00061058	0.0001674	0.0001609	0.00000649
610370.00	2358940.00	0.0003879	0.00015223	0.00014619	0.00000604	0.00059707	0.00016241	0.00015626	0.00000614
610870.00	2358940.00	0.00037848	0.0001475	0.00014178	0.00000572	0.0005808	0.00015741	0.00015158	0.00000583
611370.00	2358940.00	0.00037003	0.00014306	0.00013763	0.00000543	0.00056732	0.00015286	0.00014733	0.00000553
611870.00	2358940.00	0.00036198	0.00013886	0.00013369	0.00000516	0.00055467	0.00014857	0.00014332	0.00000526
612370.00	2358940.00	0.00035429	0.00013486	0.00012995	0.00000491	0.00054278	0.00014453	0.00013953	0.000005
612870.00	2358940.00	0.00034711	0.00013108	0.0001264	0.00000468	0.00053223	0.00014077	0.000136	0.00000477
613370.00	2358940.00	0.0003405	0.0001275	0.00012304	0.00000446	0.0005233	0.0001373	0.00013276	0.00000455
613870.00	2358940.00	0.00033314	0.000124	0.00011974	0.00000426	0.00051102	0.00013363	0.00012929	0.00000434
614370.00	2358940.00	0.00032664	0.0001207	0.00011663	0.00000407	0.00050154	0.00013035	0.0001262	0.00000415
614870.00	2358940.00	0.00032127	0.00011763	0.00011374	0.00000389	0.00049594	0.00012752	0.00012355	0.00000397
615370.00	2358940.00	0.00031574	0.00011462	0.0001109	0.00000373	0.00048834	0.00012451	0.00012071	0.0000038
615870.00	2358940.00	0.00030939	0.00011171	0.00010814	0.00000357	0.00047841	0.0001216	0.00011796	0.00000364
616370.00	2358940.00	0.00030442	0.00010897	0.00010554	0.00000342	0.00047212	0.00011885	0.00011536	0.00000349
616870.00	2358940.00	0.00029805	0.00010624	0.00010295	0.00000329	0.00046096	0.00011599	0.00011263	0.00000335
617370.00	2358940.00	0.00029378	0.00010375	0.00010059	0.00000316	0.00045722	0.0001136	0.00011038	0.00000322
617870.00	2358940.00	0.00028768	0.0001012	0.00009818	0.00000302	0.00044631	0.00011099	0.00010792	0.00000306
618370.00	2358940.00	0.00028054	0.00009877	0.0000959	0.00000287	0.00043552	0.00010852	0.00010563	0.0000029
618870.00	2358940.00	0.00027534	0.00009654	0.00009379	0.00000275	0.00042888	0.0001062	0.00010344	0.00000277
619370.00	2358940.00	0.00027125	0.00009475	0.00009214	0.00000261	0.00043168	0.00010411	0.0001015	0.00000261
619870.00	2358940.00	0.00029388	0.0000956	0.00009314	0.00000246	0.00054985	0.00010186	0.00009943	0.00000243
590370.00	2359440.00	0.00222319	0.00165639	0.00153162	0.00012477	0.0033504	0.00175112	0.00159034	0.00016077
590870.00	2359440.00	0.00277376	0.00206856	0.00195617	0.00011239	0.00364617	0.00197437	0.00184322	0.00013115
591370.00	2359440.00	0.00303221	0.00226599	0.00209569	0.00017029	0.00426793	0.00249289	0.00236546	0.00012742
591870.00	2359440.00	0.0024528	0.00175228	0.0015099	0.00024236	0.00455601	0.00259629	0.00240047	0.00019581
592370.00	2359440.00	0.00191294	0.00124984	0.00104267	0.00020717	0.00402397	0.00193588	0.00169406	0.00024182
592870.00	2359440.00	0.00227643	0.00152039	0.00134382	0.00017657	0.00352324	0.00159555	0.00139174	0.00020381

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2359440.00	0.00243216	0.00152875	0.00138731	0.00014145	0.0044187	0.00205775	0.00188201	0.00017574
593870.00	2359440.00	0.00187532	0.0011476	0.00104724	0.00010036	0.00401006	0.00173823	0.00160683	0.0001314
594370.00	2359440.00	0.00171226	0.00108962	0.00098593	0.00010369	0.00291198	0.00135019	0.00124511	0.00010508
594870.00	2359440.00	0.00167036	0.00110615	0.0009988	0.00010734	0.00266602	0.00129899	0.00119145	0.00010755
595370.00	2359440.00	0.00156442	0.00108221	0.00097565	0.00010656	0.00252551	0.00125662	0.00115155	0.00010507
595870.00	2359440.00	0.00138716	0.00098401	0.0008802	0.00010381	0.00227276	0.00113655	0.00103518	0.00010137
596370.00	2359440.00	0.0012442	0.00087894	0.00078277	0.00009617	0.00204681	0.00100132	0.00090502	0.00009629
596870.00	2359440.00	0.00115476	0.00079775	0.00071275	0.000085	0.001913	0.00089667	0.00080843	0.00008824
597370.00	2359440.00	0.00108454	0.00072603	0.00065407	0.00007196	0.00180741	0.00081044	0.00073306	0.00007737
597870.00	2359440.00	0.0010274	0.00065879	0.00059924	0.00005954	0.00172499	0.00073329	0.00066778	0.00006552
598370.00	2359440.00	0.00096686	0.00059096	0.00054232	0.00004864	0.00163233	0.0006573	0.0006036	0.0000537
598870.00	2359440.00	0.00090577	0.00052616	0.00048599	0.00004017	0.00153599	0.00058507	0.00054129	0.00004378
599370.00	2359440.00	0.00084575	0.00046804	0.00043425	0.00003379	0.00143804	0.00052017	0.00048415	0.00003602
599870.00	2359440.00	0.0007924	0.00041891	0.00038966	0.00002925	0.001349	0.00046483	0.00043433	0.0000305
600370.00	2359440.00	0.0007454	0.0003786	0.00035274	0.00002587	0.00126916	0.00041913	0.00039264	0.00002649
600870.00	2359440.00	0.0007055	0.00034618	0.00032288	0.0000233	0.0012003	0.00038216	0.0003586	0.00002357
601370.00	2359440.00	0.00066932	0.00031922	0.00029808	0.00002114	0.00113452	0.00035126	0.00033006	0.0000212
601870.00	2359440.00	0.00063917	0.00029765	0.00027825	0.0000194	0.00108295	0.00032689	0.00030748	0.00001941
602370.00	2359440.00	0.00061234	0.00027909	0.00026126	0.00001783	0.00103057	0.00030537	0.00028758	0.00001779
602870.00	2359440.00	0.0005868	0.00026327	0.00024681	0.00001645	0.00098241	0.00028726	0.00027086	0.00001641
603370.00	2359440.00	0.00056508	0.00024957	0.00023435	0.00001522	0.00094056	0.00027148	0.0002563	0.00001518
603870.00	2359440.00	0.00054621	0.00023749	0.00022339	0.0000141	0.00090194	0.00025732	0.00024325	0.00001407
604370.00	2359440.00	0.00052698	0.00022643	0.00021335	0.00001308	0.00086405	0.00024462	0.00023156	0.00001306
604870.00	2359440.00	0.00051096	0.00021687	0.00020469	0.00001218	0.00083358	0.00023384	0.00022165	0.00001219
605370.00	2359440.00	0.00049437	0.00020789	0.00019654	0.00001135	0.00080367	0.00022396	0.00021257	0.00001139
605870.00	2359440.00	0.00047914	0.00019959	0.000189	0.00001059	0.00077417	0.00021464	0.00020399	0.00001065
606370.00	2359440.00	0.00046441	0.00019187	0.00018197	0.00000991	0.00074549	0.00020597	0.00019599	0.00000997
606870.00	2359440.00	0.00045138	0.00018474	0.00017546	0.00000928	0.00072131	0.00019809	0.00018873	0.00000935
607370.00	2359440.00	0.00043907	0.00017808	0.00016938	0.0000087	0.0006988	0.00019079	0.000182	0.00000879
607870.00	2359440.00	0.00042782	0.00017186	0.00016369	0.00000817	0.00067904	0.00018409	0.00017583	0.00000826
608370.00	2359440.00	0.0004164	0.00016597	0.00015828	0.00000769	0.00065824	0.00017769	0.00016991	0.00000778
608870.00	2359440.00	0.00040593	0.00016046	0.00015322	0.00000724	0.00063996	0.0001718	0.00016446	0.00000734
609370.00	2359440.00	0.00039635	0.00015531	0.00014847	0.00000683	0.00062429	0.00016641	0.00015948	0.00000693
609870.00	2359440.00	0.00038664	0.00015039	0.00014393	0.00000646	0.00060747	0.0001612	0.00015464	0.00000656
610370.00	2359440.00	0.00037791	0.00014578	0.00013967	0.00000611	0.00059311	0.00015643	0.00015022	0.00000621
610870.00	2359440.00	0.00036931	0.00014139	0.0001356	0.00000579	0.00057861	0.00015186	0.00014597	0.00000589
611370.00	2359440.00	0.00036137	0.00013726	0.00013177	0.00000549	0.00056588	0.00014764	0.00014205	0.00000559
611870.00	2359440.00	0.00035368	0.00013333	0.00012811	0.00000522	0.00055348	0.00014362	0.00013831	0.00000531
612370.00	2359440.00	0.00034633	0.00012959	0.00012463	0.00000496	0.0005418	0.00013983	0.00013478	0.00000505
612870.00	2359440.00	0.0003393	0.00012604	0.00012132	0.00000473	0.00053077	0.00013624	0.00013143	0.00000481
613370.00	2359440.00	0.00033226	0.00012263	0.00011813	0.0000045	0.00051919	0.00013272	0.00012813	0.00000459
613870.00	2359440.00	0.00032673	0.00011949	0.0001152	0.00000429	0.00051292	0.00012982	0.00012544	0.00000438
614370.00	2359440.00	0.00031959	0.00011633	0.00011222	0.0000041	0.00049993	0.00012641	0.00012222	0.00000418
614870.00	2359440.00	0.0003137	0.00011339	0.00010946	0.00000392	0.00049119	0.00012349	0.00011948	0.000004
615370.00	2359440.00	0.00030813	0.00011058	0.00010683	0.00000375	0.00048315	0.00012072	0.00011689	0.00000383
615870.00	2359440.00	0.0003036	0.00010795	0.00010436	0.00000359	0.00047888	0.00011826	0.00011459	0.00000367
616370.00	2359440.00	0.0002985	0.00010536	0.00010191	0.00000344	0.00047007	0.0001156	0.0001121	0.00000351
616870.00	2359440.00	0.00029204	0.00010271	0.00009942	0.00000329	0.00045946	0.00011294	0.0001096	0.00000334
617370.00	2359440.00	0.00028815	0.00010046	0.00009729	0.00000317	0.00045586	0.00011072	0.00010748	0.00000324
617870.00	2359440.00	0.00028081	0.00009788	0.00009487	0.00000301	0.00044216	0.00010805	0.000105	0.00000305
618370.00	2359440.00	0.00027387	0.00009559	0.00009273	0.00000285	0.00043578	0.0001058	0.00010293	0.00000287
618870.00	2359440.00	0.00027062	0.00009375	0.00009104	0.00000272	0.00044055	0.00010365	0.00010094	0.00000272
619370.00	2359440.00	0.00026872	0.00009208	0.00008947	0.0000026	0.00044641	0.0001014	0.0000988	0.0000026
619870.00	2359440.00	0.00026647	0.00009037	0.00008787	0.0000025	0.00044754	0.00009915	0.00009665	0.00000249
590370.00	2359940.00	0.00201558	0.00142	0.00133261	0.00008739	0.00284539	0.00138713	0.00127465	0.00011247
590870.00	2359940.00	0.00241026	0.00171952	0.00162442	0.00009509	0.00316792	0.00166087	0.00156732	0.00009355
591370.00	2359940.00	0.00241019	0.00170148	0.00154861	0.00015287	0.00356674	0.00197616	0.00186799	0.00010817
591870.00	2359940.00	0.00194749	0.00130541	0.00110877	0.00019663	0.00362847	0.00186752	0.0017009	0.00016662
592370.00	2359940.00	0.0015945	0.00098666	0.00081778	0.00016888	0.00332743	0.00143867	0.00124581	0.00019286
592870.00	2359940.00	0.00178593	0.00113716	0.000992	0.00014516	0.00297179	0.00120614	0.00104208	0.00016406
593370.00	2359940.00	0.00213344	0.00131992	0.00119258	0.00012734	0.00351437	0.00149775	0.00135278	0.00014496
593870.00	2359940.00	0.00174315	0.00100943	0.00091868	0.00009075	0.00376475	0.00151741	0.00139762	0.0001198
594370.00	2359940.00	0.00144807	0.00085928	0.00078251	0.00007677	0.00269912	0.00111291	0.00102625	0.00008666
594870.00	2359940.00	0.00140811	0.00086762	0.00078395	0.00008368	0.00226958	0.00100543	0.00092336	0.00008207
595370.00	2359940.00	0.00137641	0.00087619	0.00079264	0.00008355	0.00215557	0.0009887	0.00090543	0.00008327
595870.00	2359940.00	0.00128795	0.00084966	0.00076812	0.00008154	0.00204222	0.00095097	0.00087188	0.00007909
596370.00	2359940.00	0.00116313	0.00078199	0.00070214	0.00007985	0.00187968	0.00087364	0.00079707	0.00007656
596870.00	2359940.00	0.00105689	0.00070799	0.00063245	0.00007554	0.00172736	0.00078646	0.00071284	0.00007362
597370.00	2359940.00	0.00098157	0.0006473	0.00057841	0.00006889	0.00161749	0.00071411	0.00064514	0.00006897
597870.00	2359940.00	0.00093403	0.00060019	0.00053908	0.00006111	0.00155502	0.00065937	0.00059619	0.00006318

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2359940.00	0.00089495	0.00055643	0.00050369	0.00005275	0.00150048	0.00061039	0.00055428	0.00005611
598870.00	2359940.00	0.00085594	0.00051236	0.00046782	0.00004454	0.00144059	0.00056191	0.00051376	0.00004815
599370.00	2359940.00	0.00081588	0.0004679	0.00043055	0.00003735	0.00137663	0.00051346	0.00047298	0.00004049
599870.00	2359940.00	0.00077418	0.00042481	0.00039338	0.00003144	0.00130858	0.00046658	0.00043281	0.00003376
600370.00	2359940.00	0.00073384	0.00038535	0.00035846	0.00002689	0.00124169	0.00042335	0.0003949	0.00002845
600870.00	2359940.00	0.00069513	0.00035068	0.0003273	0.00002338	0.00117575	0.00038515	0.00036084	0.00002431
601370.00	2359940.00	0.00065968	0.00032104	0.00030032	0.00002071	0.00111429	0.00035225	0.00033105	0.00002121
601870.00	2359940.00	0.00062863	0.00029626	0.00027758	0.00001868	0.00106003	0.00032457	0.00030565	0.00001892
602370.00	2359940.00	0.00059978	0.0002751	0.00025809	0.00001701	0.00100759	0.00030078	0.0002837	0.00001707
602870.00	2359940.00	0.00057661	0.000258	0.00024228	0.00001571	0.00096679	0.00028155	0.00026583	0.00001573
603370.00	2359940.00	0.00055405	0.00024291	0.00022836	0.00001455	0.00092547	0.00026455	0.00025003	0.00001453
603870.00	2359940.00	0.00053345	0.00022992	0.00021639	0.00001353	0.00088881	0.00025002	0.00023651	0.00001351
604370.00	2359940.00	0.00051454	0.00021858	0.00020595	0.00001263	0.00085258	0.00023717	0.00022456	0.00001261
604870.00	2359940.00	0.00049818	0.00020858	0.00019677	0.00001181	0.000822	0.00022584	0.00021404	0.0000118
605370.00	2359940.00	0.00048303	0.00019962	0.00018856	0.00001107	0.00079103	0.0002155	0.00020445	0.00001106
605870.00	2359940.00	0.00046789	0.00019151	0.00018113	0.00001038	0.00076436	0.00020664	0.00019624	0.0000104
606370.00	2359940.00	0.00045353	0.00018404	0.00017428	0.00000976	0.00073647	0.00019825	0.00018846	0.00000979
606870.00	2359940.00	0.0004406	0.00017719	0.000168	0.00000918	0.0007122	0.00019063	0.00018141	0.00000923
607370.00	2359940.00	0.00043009	0.00017096	0.00016232	0.00000864	0.00069474	0.0001839	0.00017521	0.0000087
607870.00	2359940.00	0.0004184	0.00016502	0.00015688	0.00000815	0.00067305	0.00017743	0.00016922	0.00000821
608370.00	2359940.00	0.0004074	0.00015947	0.00015178	0.00000769	0.00065306	0.00017139	0.00016363	0.00000776
608870.00	2359940.00	0.00039729	0.00015427	0.00014701	0.00000726	0.00063541	0.00016583	0.00015849	0.00000734
609370.00	2359940.00	0.00038768	0.00014939	0.00014252	0.00000687	0.00061924	0.00016067	0.00015373	0.00000695
609870.00	2359940.00	0.00037845	0.00014476	0.00013826	0.0000065	0.00060332	0.00015579	0.0001492	0.00000658
610370.00	2359940.00	0.00037006	0.00014041	0.00013425	0.00000616	0.00058959	0.0001513	0.00014505	0.00000625
610870.00	2359940.00	0.00036187	0.00013627	0.00013043	0.00000584	0.00057603	0.00014703	0.0001411	0.00000593
611370.00	2359940.00	0.00035413	0.00013236	0.00012681	0.00000555	0.00056346	0.00014303	0.00013739	0.00000564
611870.00	2359940.00	0.00034708	0.00012867	0.0001234	0.00000527	0.0005529	0.00013938	0.00013402	0.00000536
612370.00	2359940.00	0.0003393	0.00012506	0.00012005	0.00000502	0.00053907	0.00013555	0.00013044	0.00000511
612870.00	2359940.00	0.00033293	0.00012173	0.00011695	0.00000478	0.00052999	0.00013232	0.00012746	0.00000486
613370.00	2359940.00	0.00032671	0.00011855	0.000114	0.00000456	0.00052102	0.00012923	0.00012459	0.00000464
613870.00	2359940.00	0.00032044	0.00011548	0.00011114	0.00000435	0.00051138	0.00012617	0.00012174	0.00000443
614370.00	2359940.00	0.00031433	0.00011255	0.0001084	0.00000415	0.00050197	0.00012323	0.000119	0.00000423
614870.00	2359940.00	0.00030806	0.0001097	0.00010573	0.00000397	0.00049107	0.00012023	0.00011618	0.00000405
615370.00	2359940.00	0.00030249	0.00010701	0.00010321	0.0000038	0.00048245	0.00011754	0.00011366	0.00000387
615870.00	2359940.00	0.00029765	0.00010449	0.00010085	0.00000364	0.00047625	0.00011519	0.00011148	0.00000371
616370.00	2359940.00	0.00029011	0.00010162	0.00009817	0.00000345	0.00046369	0.00011236	0.00010887	0.00000349
616870.00	2359940.00	0.0002842	0.00009915	0.00009586	0.00000329	0.00045509	0.00010994	0.00010661	0.00000333
617370.00	2359940.00	0.00027973	0.00009693	0.00009376	0.00000316	0.00044818	0.00010765	0.00010445	0.0000032
617870.00	2359940.00	0.00027383	0.00009462	0.0000916	0.00000302	0.0004413	0.00010541	0.00010237	0.00000304
618370.00	2359940.00	0.00028993	0.00009468	0.00009185	0.00000283	0.00054955	0.00010329	0.00010047	0.00000282
618870.00	2359940.00	0.00030261	0.00009389	0.00009118	0.00000271	0.0006118	0.00010073	0.00009804	0.00000269
619370.00	2359940.00	0.00027114	0.00008986	0.00008723	0.00000263	0.00048091	0.00009869	0.00009607	0.00000262
619870.00	2359940.00	0.00027054	0.00008835	0.00008583	0.00000252	0.00048611	0.00009642	0.00009391	0.00000251
590370.00	2360440.00	0.00184562	0.0012529	0.00118504	0.00006786	0.00250714	0.00119008	0.00110955	0.00008053
590870.00	2360440.00	0.00208385	0.00142494	0.00133777	0.00008717	0.00280096	0.00142581	0.0013516	0.0000742
591370.00	2360440.00	0.00196021	0.001317	0.00117931	0.00013768	0.00301012	0.00157195	0.00147414	0.00009781
591870.00	2360440.00	0.00162482	0.00102848	0.00086506	0.00016342	0.00304183	0.00141599	0.00127069	0.0001453
592370.00	2360440.00	0.0013528	0.00079288	0.00065361	0.00013927	0.00282282	0.00110921	0.00095201	0.00015721
592870.00	2360440.00	0.00145504	0.00087989	0.00075881	0.00012109	0.00258882	0.00095059	0.00081575	0.00013484
593370.00	2360440.00	0.00181283	0.00110081	0.00098932	0.00011148	0.00292213	0.00112661	0.00100689	0.00011971
593870.00	2360440.00	0.0016607	0.0009246	0.00083902	0.00008558	0.00335678	0.00128077	0.00117457	0.00010619
594370.00	2360440.00	0.00129612	0.00071573	0.00065431	0.00006142	0.00280161	0.00096951	0.0008938	0.00007571
594870.00	2360440.00	0.0011899	0.00068559	0.00062302	0.00006257	0.00204302	0.0008069	0.00074446	0.00006244
595370.00	2360440.00	0.00119206	0.00071184	0.00064369	0.00006814	0.00186948	0.00079303	0.0007267	0.00006633
595870.00	2360440.00	0.00116114	0.00071151	0.00064541	0.0000661	0.00179662	0.00078101	0.00071576	0.00006524
596370.00	2360440.00	0.00109746	0.00069171	0.00062717	0.00006455	0.00172098	0.00075399	0.00069205	0.00006195
596870.00	2360440.00	0.00100598	0.0006425	0.00057929	0.00006321	0.00161183	0.0007003	0.00064038	0.00005992
597370.00	2360440.00	0.00092193	0.00058796	0.00052752	0.00006043	0.00149919	0.00064168	0.00058383	0.00005785
597870.00	2360440.00	0.00086332	0.00054328	0.00048682	0.00005646	0.00142175	0.00059183	0.00053664	0.00005518
598370.00	2360440.00	0.00082213	0.00050752	0.00045593	0.00005159	0.00136799	0.00055208	0.0005003	0.00005178
598870.00	2360440.00	0.00079158	0.00047666	0.00043056	0.00004611	0.00132729	0.00051834	0.00047075	0.00004759
599370.00	2360440.00	0.00076488	0.00044681	0.00040646	0.00004035	0.00128846	0.00048614	0.00044354	0.0000426
599870.00	2360440.00	0.00073803	0.00041617	0.0003814	0.00003477	0.00124629	0.00045325	0.00041607	0.00003718
600370.00	2360440.00	0.00070996	0.00038498	0.0003552	0.00002979	0.00120033	0.00041972	0.00038779	0.00003194
600870.00	2360440.00	0.00067922	0.0003546	0.00032915	0.00002545	0.0011475	0.00038691	0.00035983	0.00002708
601370.00	2360440.00	0.00064924	0.00032624	0.00030427	0.00002198	0.00109582	0.00035614	0.00033302	0.00002312
601870.00	2360440.00	0.00062048	0.00030074	0.00028149	0.00001924	0.00104561	0.00032829	0.00030831	0.00001998
602370.00	2360440.00	0.00059386	0.0002784	0.00026128	0.00001712	0.00099895	0.00030376	0.0002862	0.00001757
602870.00	2360440.00	0.00056911	0.00025907	0.00024361	0.00001546	0.00095741	0.00028263	0.00026688	0.00001575

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2360440.00	0.00054616	0.00024224	0.00022814	0.0000141	0.00091581	0.00026398	0.00024973	0.00001426
603870.00	2360440.00	0.0005248	0.00022751	0.00021453	0.00001297	0.00087383	0.00024731	0.00023431	0.000013
604370.00	2360440.00	0.0005068	0.00021518	0.0002031	0.00001208	0.0008421	0.00023371	0.00022161	0.0000121
604870.00	2360440.00	0.00048964	0.00020425	0.00019295	0.00001129	0.00080937	0.00022134	0.00021006	0.00001128
605370.00	2360440.00	0.00047367	0.00019464	0.00018404	0.0000106	0.00078187	0.00021081	0.0002002	0.00001061
605870.00	2360440.00	0.00045853	0.0001861	0.00017612	0.00000998	0.00075312	0.00020126	0.00019127	0.00000999
606370.00	2360440.00	0.00044417	0.00017839	0.00016896	0.00000942	0.00072543	0.00019259	0.00018315	0.00000943
606870.00	2360440.00	0.00043181	0.00017148	0.00016258	0.0000089	0.00070277	0.00018492	0.000176	0.00000892
607370.00	2360440.00	0.00042214	0.0001653	0.00015688	0.00000842	0.00068602	0.00017811	0.00016966	0.00000844
607870.00	2360440.00	0.00041016	0.00015946	0.00015148	0.00000797	0.0006647	0.0001718	0.00016379	0.00000801
608370.00	2360440.00	0.00039934	0.00015404	0.00014649	0.00000756	0.00064488	0.00016587	0.00015827	0.0000076
608870.00	2360440.00	0.00038961	0.00014904	0.00014188	0.00000717	0.00062808	0.00016052	0.0001533	0.00000722
609370.00	2360440.00	0.00038066	0.00014439	0.00013759	0.0000068	0.00061359	0.00015565	0.00014879	0.00000686
609870.00	2360440.00	0.00037174	0.00013997	0.00013351	0.00000646	0.0005982	0.00015097	0.00014445	0.00000652
610370.00	2360440.00	0.00036405	0.00013587	0.00012973	0.00000614	0.00058651	0.00014684	0.00014063	0.00000621
610870.00	2360440.00	0.00035593	0.00013192	0.00012608	0.00000584	0.00057285	0.00014274	0.00013683	0.00000591
611370.00	2360440.00	0.0003483	0.00012818	0.00012263	0.00000555	0.00056039	0.00013891	0.00013328	0.00000563
611870.00	2360440.00	0.00034141	0.00012467	0.00011938	0.00000529	0.00055013	0.00013546	0.00013009	0.00000537
612370.00	2360440.00	0.00033498	0.00012133	0.00011629	0.00000504	0.00054126	0.00013214	0.00012702	0.00000512
612870.00	2360440.00	0.00032625	0.00011768	0.00011289	0.00000478	0.00052466	0.00012837	0.00012353	0.00000484
613370.00	2360440.00	0.00032079	0.00011477	0.0001102	0.00000457	0.0005172	0.00012552	0.00012089	0.00000464
613870.00	2360440.00	0.00031627	0.00011212	0.00010774	0.00000438	0.00051225	0.00012302	0.00011856	0.00000446
614370.00	2360440.00	0.0003091	0.00010923	0.00010503	0.00000419	0.00049973	0.00012004	0.00011577	0.00000427
614870.00	2360440.00	0.00030327	0.00010652	0.00010251	0.00000401	0.00049024	0.00011731	0.00011323	0.00000409
615370.00	2360440.00	0.00029916	0.00010402	0.00010018	0.00000384	0.00048618	0.00011506	0.00011116	0.0000039
615870.00	2360440.00	0.00029109	0.0001011	0.00009745	0.00000365	0.00047237	0.00011221	0.00010852	0.00000369
616370.00	2360440.00	0.00028457	0.00009852	0.00009505	0.00000348	0.00046325	0.00010983	0.00010632	0.00000351
616870.00	2360440.00	0.00027855	0.00009608	0.00009277	0.00000331	0.00045888	0.00010777	0.00010443	0.00000334
617370.00	2360440.00	0.00027393	0.00009391	0.00009074	0.00000317	0.00045454	0.0001056	0.00010241	0.00000319
617870.00	2360440.00	0.00028353	0.0000933	0.00009029	0.000003	0.00053131	0.0001036	0.00010061	0.000003
618370.00	2360440.00	0.00030687	0.00009336	0.00009049	0.00000287	0.00064623	0.0001009	0.00009805	0.00000286
618870.00	2360440.00	0.00044388	0.00009532	0.00009259	0.00000273	0.00097797	0.00009736	0.00009465	0.00000271
619370.00	2360440.00	0.00032788	0.00009088	0.00008823	0.00000264	0.00074289	0.00009607	0.00009344	0.00000263
619870.00	2360440.00	0.00027352	0.00008636	0.0000838	0.00000256	0.00051488	0.00009416	0.00009161	0.00000255
590370.00	2360940.00	0.00168582	0.00110981	0.00105169	0.00005812	0.00227133	0.00105919	0.00099815	0.00006103
590870.00	2360940.00	0.00179424	0.00118213	0.00109932	0.00008281	0.00248126	0.00122714	0.00116282	0.00006431
591370.00	2360940.00	0.00162677	0.00104523	0.00092197	0.00012326	0.00257341	0.00126261	0.00117325	0.00008936
591870.00	2360940.00	0.00135997	0.00081501	0.00067847	0.00013655	0.00258152	0.00110011	0.00097428	0.00012583
592370.00	2360940.00	0.0011657	0.00063716	0.00052274	0.00011442	0.00261908	0.00087349	0.00074534	0.00012815
592870.00	2360940.00	0.00120047	0.00067619	0.00057725	0.00009895	0.00256051	0.0007492	0.00064123	0.00010797
593370.00	2360940.00	0.00152652	0.00090111	0.00080529	0.00009582	0.00260819	0.00087256	0.00077393	0.00009862
593870.00	2360940.00	0.00157127	0.00084936	0.00076915	0.00008021	0.00305997	0.00106258	0.00097057	0.00009201
594370.00	2360940.00	0.00144922	0.00065185	0.00059626	0.00005559	0.00477631	0.00095544	0.00088453	0.00007091
594870.00	2360940.00	0.00107358	0.00057837	0.00052939	0.00004899	0.00213722	0.00071298	0.00065938	0.00005361
595370.00	2360940.00	0.00102986	0.00057961	0.00052611	0.00005351	0.00169407	0.00065046	0.00059954	0.00005092
595870.00	2360940.00	0.00103167	0.0005978	0.00054176	0.00005604	0.00159432	0.00064957	0.00059506	0.00005451
596370.00	2360940.00	0.00100903	0.00059692	0.00054305	0.00005387	0.00154913	0.00064188	0.00058908	0.0000528
596870.00	2360940.00	0.0009563	0.00057786	0.00052566	0.0000522	0.00148903	0.00061859	0.00056887	0.00004971
597370.00	2360940.00	0.0008818	0.00054004	0.00048919	0.00005085	0.00140069	0.00058083	0.00053309	0.00004774
597870.00	2360940.00	0.00081408	0.0004983	0.00044929	0.00004901	0.001314	0.00053826	0.00049195	0.00004631
598370.00	2360940.00	0.00076726	0.0004641	0.00041757	0.00004653	0.00125718	0.0005014	0.00045671	0.00004469
598870.00	2360940.00	0.00073478	0.0004372	0.0003937	0.0000435	0.00122022	0.00047247	0.00042977	0.0000427
599370.00	2360940.00	0.00071052	0.00041442	0.00037443	0.00003999	0.00119198	0.00044833	0.00040806	0.00004027
599870.00	2360940.00	0.00069043	0.00039308	0.00035698	0.00003609	0.00116557	0.00042579	0.00038855	0.00003724
600370.00	2360940.00	0.00067219	0.00037144	0.00033937	0.00003207	0.00113909	0.00040291	0.00036918	0.00003373
600870.00	2360940.00	0.00065119	0.00034881	0.00032079	0.00002802	0.0011036	0.00037872	0.00034897	0.00002974
601370.00	2360940.00	0.00062888	0.00032585	0.00030158	0.00002427	0.00106403	0.00035405	0.00032825	0.00002579
601870.00	2360940.00	0.00060808	0.00030343	0.00028224	0.00002119	0.00102906	0.00032994	0.00030747	0.00002247
602370.00	2360940.00	0.00058433	0.00028221	0.00026377	0.00001844	0.000988	0.000307	0.00028758	0.00001942
602870.00	2360940.00	0.00056097	0.00026268	0.00024648	0.00001621	0.00094492	0.00028578	0.0002689	0.00001688
603370.00	2360940.00	0.00053874	0.00024508	0.00023065	0.00001442	0.00090374	0.00026655	0.0002517	0.00001486
603870.00	2360940.00	0.00051841	0.00022947	0.00021646	0.00001301	0.00086669	0.00024946	0.00023618	0.00001327
604370.00	2360940.00	0.00049975	0.00021574	0.00020386	0.00001188	0.00083268	0.00023436	0.00022233	0.00001203
604870.00	2360940.00	0.00048223	0.00020341	0.00019249	0.00001092	0.0007985	0.00022051	0.00020954	0.00001097
605370.00	2360940.00	0.00046706	0.00019312	0.00018292	0.0000102	0.00077347	0.00020935	0.0001991	0.00001025
605870.00	2360940.00	0.00045087	0.00018368	0.00017411	0.00000957	0.00074185	0.00019884	0.00018924	0.0000096
606370.00	2360940.00	0.0004374	0.00017541	0.00016639	0.00000902	0.00071724	0.00018967	0.00018063	0.00000904
606870.00	2360940.00	0.00042495	0.00016803	0.00015951	0.00000852	0.00069456	0.0001815	0.00017296	0.00000854
607370.00	2360940.00	0.00041338	0.0001614	0.00015332	0.00000808	0.00067364	0.00017419	0.00016608	0.0000081
607870.00	2360940.00	0.00040401	0.00015551	0.00014784	0.00000767	0.00065866	0.0001678	0.0001601	0.0000077

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2360940.00	0.00039345	0.00015001	0.00014271	0.0000073	0.00063941	0.00016183	0.0001545	0.00000733
608870.00	2360940.00	0.00038389	0.00014498	0.00013803	0.00000695	0.00062284	0.0001564	0.00014942	0.00000699
609370.00	2360940.00	0.00037455	0.0001403	0.00013368	0.00000662	0.00060672	0.00015139	0.00014472	0.00000666
609870.00	2360940.00	0.00036627	0.00013598	0.00012967	0.00000631	0.00059302	0.00014687	0.00014051	0.00000636
610370.00	2360940.00	0.00035856	0.00013196	0.00012595	0.00000602	0.00058089	0.00014268	0.0001366	0.00000607
610870.00	2360940.00	0.00034939	0.00012776	0.00012203	0.00000572	0.00056304	0.00013814	0.00013238	0.00000576
611370.00	2360940.00	0.00034272	0.0001243	0.00011882	0.00000547	0.00055315	0.00013467	0.00012915	0.00000552
611870.00	2360940.00	0.0003355	0.00012085	0.00011563	0.00000522	0.00054187	0.00013124	0.00012597	0.00000527
612370.00	2360940.00	0.00032501	0.00011698	0.00011202	0.00000495	0.00052377	0.0001276	0.00012263	0.00000497
612870.00	2360940.00	0.0003183	0.00011387	0.00010914	0.00000473	0.00051457	0.00012471	0.00011996	0.00000475
613370.00	2360940.00	0.00031287	0.00011106	0.00010653	0.00000453	0.00050657	0.00012187	0.00011731	0.00000456
613870.00	2360940.00	0.00030858	0.00010853	0.00010418	0.00000435	0.00050097	0.00011929	0.0001149	0.00000439
614370.00	2360940.00	0.00030576	0.00010643	0.00010223	0.0000042	0.00050076	0.00011747	0.0001132	0.00000427
614870.00	2360940.00	0.0003003	0.00010385	0.00009983	0.00000402	0.00049299	0.00011502	0.00011093	0.00000409
615370.00	2360940.00	0.00029423	0.00010129	0.00009744	0.00000386	0.00048179	0.00011232	0.00010839	0.00000393
615870.00	2360940.00	0.00028569	0.00009824	0.00009459	0.00000365	0.00047005	0.00010978	0.0001061	0.00000368
616370.00	2360940.00	0.00027985	0.00009581	0.00009232	0.00000349	0.000467	0.00010793	0.00010442	0.00000351
616870.00	2360940.00	0.00027518	0.00009362	0.00009028	0.00000334	0.00046212	0.00010582	0.00010246	0.00000336
617370.00	2360940.00	0.00027115	0.00009157	0.00008837	0.0000032	0.00046205	0.00010383	0.00010062	0.00000321
617870.00	2360940.00	0.00028027	0.00009095	0.0000879	0.00000305	0.00053145	0.00010173	0.00009869	0.00000304
618370.00	2360940.00	0.00048984	0.00009589	0.00009301	0.00000288	0.00103527	0.00009724	0.00009438	0.00000286
618870.00	2360940.00	0.00077484	0.00009447	0.00009171	0.00000275	0.00064603	0.00008872	0.00008598	0.00000274
619370.00	2360940.00	0.00075683	0.0000892	0.00008656	0.00000264	0.00040484	0.00008381	0.00008117	0.00000264
619870.00	2360940.00	0.00041059	0.00008898	0.00008641	0.00000257	0.00093953	0.0000914	0.00008885	0.00000256
590370.00	2361440.00	0.00152345	0.00097679	0.00092457	0.00005222	0.00205924	0.00094858	0.00090045	0.00004812
590870.00	2361440.00	0.00152981	0.00097566	0.00089976	0.0000759	0.00217104	0.00105098	0.00099706	0.00005392
591370.00	2361440.00	0.00136708	0.00083571	0.00072641	0.0001093	0.00230985	0.00102837	0.0009488	0.00007957
591870.00	2361440.00	0.00119978	0.00066688	0.00055164	0.00011524	0.00245383	0.00088759	0.00077865	0.00010894
592370.00	2361440.00	0.00111448	0.00054136	0.00044495	0.00009641	0.00344098	0.00076438	0.00065799	0.00010639
592870.00	2361440.00	0.00117995	0.00055132	0.00046847	0.00008285	0.00464449	0.00070442	0.00061555	0.00008886
593370.00	2361440.00	0.00140245	0.00072659	0.00064579	0.0000808	0.00412923	0.00075334	0.00067274	0.0000806
593870.00	2361440.00	0.00149605	0.00076913	0.00069514	0.00007399	0.00345819	0.00090094	0.00082162	0.00007932
594370.00	2361440.00	0.00138349	0.00062062	0.00056589	0.00005472	0.00421172	0.0008878	0.00082003	0.00006777
594870.00	2361440.00	0.0011135	0.00052003	0.00047802	0.00004201	0.00321155	0.00069352	0.00064375	0.00004977
595370.00	2361440.00	0.00092899	0.00049586	0.00045337	0.00004248	0.00162744	0.00057234	0.00052961	0.00004273
595870.00	2361440.00	0.00090967	0.00050001	0.00045407	0.00004594	0.00148186	0.00054682	0.00050371	0.00004311
596370.00	2361440.00	0.00090934	0.00051221	0.0004656	0.00004661	0.00139496	0.00054772	0.0005023	0.00004543
596870.00	2361440.00	0.00089146	0.00051008	0.00046552	0.00004455	0.00136255	0.00054072	0.00049732	0.0000434
597370.00	2361440.00	0.00084635	0.00049293	0.00045008	0.00004285	0.00131127	0.00052175	0.00048119	0.00004056
597870.00	2361440.00	0.00078839	0.00046381	0.00042203	0.00004178	0.00124597	0.00049361	0.00045458	0.00003902
598370.00	2361440.00	0.0007343	0.00043182	0.00039134	0.00004049	0.00118061	0.00046241	0.00042444	0.00003797
598870.00	2361440.00	0.000694	0.00040444	0.00036563	0.00003882	0.00113358	0.00043441	0.00039756	0.00003685
599370.00	2361440.00	0.00066549	0.00038277	0.00034594	0.00003683	0.00110263	0.0004119	0.00037632	0.00003558
599870.00	2361440.00	0.00064595	0.00036526	0.00033066	0.0000346	0.00108389	0.00039387	0.00035969	0.00003418
600370.00	2361440.00	0.00062964	0.00034917	0.00031716	0.00003201	0.00106497	0.00037723	0.00034486	0.00003237
600870.00	2361440.00	0.00061522	0.00033324	0.00030409	0.00002914	0.00104505	0.00036058	0.00033048	0.0000301
601370.00	2361440.00	0.00060099	0.00031664	0.00029049	0.00002616	0.0010227	0.00034305	0.0003156	0.00002744
601870.00	2361440.00	0.00058318	0.00029927	0.00027624	0.00002303	0.00098928	0.00032434	0.00030004	0.0000243
602370.00	2361440.00	0.00056535	0.00028167	0.00026151	0.00002016	0.00095599	0.00030538	0.0002841	0.00002128
602870.00	2361440.00	0.00054959	0.00026443	0.00024664	0.00001779	0.00092883	0.00028685	0.00026809	0.00001877
603370.00	2361440.00	0.00053098	0.0002479	0.00023229	0.00001561	0.0008939	0.00026891	0.00025257	0.00001634
603870.00	2361440.00	0.00051082	0.00023241	0.00021861	0.00001381	0.00085608	0.00025211	0.00023776	0.00001435
604370.00	2361440.00	0.00049382	0.00021834	0.00020601	0.00001233	0.00082524	0.00023683	0.00022414	0.00001269
604870.00	2361440.00	0.00047719	0.00020561	0.00019448	0.00001113	0.00079462	0.00022295	0.00021158	0.00001137
605370.00	2361440.00	0.00046149	0.00019422	0.00018405	0.00001017	0.00076569	0.00021048	0.00020016	0.00001032
605870.00	2361440.00	0.00044598	0.000184	0.0001746	0.0000094	0.00073612	0.00019922	0.00018973	0.00000949
606370.00	2361440.00	0.0004325	0.00017497	0.00016622	0.00000875	0.0007116	0.00018931	0.0001805	0.00000881
606870.00	2361440.00	0.00041983	0.00016691	0.0001587	0.00000822	0.00068844	0.00018045	0.0001722	0.00000825
607370.00	2361440.00	0.00040941	0.00015983	0.00015207	0.00000775	0.00067111	0.00017273	0.00016495	0.00000778
607870.00	2361440.00	0.00039843	0.00015336	0.00014601	0.00000735	0.00065124	0.00016565	0.00015828	0.00000737
608370.00	2361440.00	0.00038878	0.00014754	0.00014055	0.00000699	0.00063419	0.00015929	0.00015228	0.00000701
608870.00	2361440.00	0.00037845	0.00014206	0.0001354	0.00000665	0.00061409	0.00015314	0.00014648	0.00000666
609370.00	2361440.00	0.00037028	0.0001374	0.00013104	0.00000637	0.00060072	0.00014819	0.00014181	0.00000638
609870.00	2361440.00	0.00036182	0.00013295	0.00012686	0.00000608	0.00058619	0.00014344	0.00013733	0.00000611
610370.00	2361440.00	0.00035276	0.00012859	0.00012278	0.00000581	0.00057023	0.00013881	0.00013298	0.00000583
610870.00	2361440.00	0.00034263	0.00012427	0.00011874	0.00000553	0.00055132	0.00013427	0.00012874	0.00000554
611370.00	2361440.00	0.00033547	0.00012072	0.00011542	0.0000053	0.00054008	0.00013068	0.00012537	0.00000531
611870.00	2361440.00	0.00032688	0.00011708	0.00011202	0.00000506	0.00052596	0.00012719	0.00012213	0.00000506
612370.00	2361440.00	0.00032	0.00011388	0.00010903	0.00000484	0.00051623	0.00012418	0.00011934	0.00000484
612870.00	2361440.00	0.00031941	0.00011197	0.00010726	0.00000471	0.00052087	0.00012229	0.00011753	0.00000477

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2361440.00	0.00031247	0.00010903	0.00010451	0.00000452	0.00050871	0.00011928	0.0001147	0.00000458
613870.00	2361440.00	0.00030479	0.00010582	0.00010152	0.00000431	0.00049586	0.00011622	0.00011189	0.00000434
614370.00	2361440.00	0.00030167	0.00010378	0.00009962	0.00000416	0.00049479	0.00011447	0.00011024	0.00000423
614870.00	2361440.00	0.00029716	0.00010133	0.00009733	0.000004	0.00048904	0.00011214	0.00010809	0.00000405
615370.00	2361440.00	0.00028668	0.00009806	0.00009428	0.00000379	0.00047432	0.00010962	0.00010582	0.0000038
615870.00	2361440.00	0.00028168	0.00009577	0.00009214	0.00000363	0.00046891	0.00010758	0.00010393	0.00000365
616370.00	2361440.00	0.00027925	0.00009379	0.00009032	0.00000346	0.00049218	0.00010669	0.00010322	0.00000346
616870.00	2361440.00	0.00031088	0.00009478	0.00009148	0.0000033	0.0006722	0.0001046	0.00010131	0.00000328
617370.00	2361440.00	0.00027083	0.00008974	0.00008654	0.0000032	0.00047899	0.00010213	0.00009893	0.0000032
617870.00	2361440.00	0.0002656	0.0000877	0.00008461	0.00000309	0.00046415	0.00009989	0.0000968	0.00000309
618370.00	2361440.00	0.00028381	0.00008795	0.000085	0.00000295	0.00056689	0.00009743	0.00009449	0.00000294
618870.00	2361440.00	0.00076636	0.00009284	0.00009006	0.00000278	0.00068658	0.00008731	0.00008454	0.00000277
619370.00	2361440.00	0.00068877	0.00009097	0.00008828	0.00000269	0.00079496	0.00008688	0.00008421	0.00000267
619870.00	2361440.00	0.00044004	0.00007941	0.00007684	0.00000258	0.00028788	0.0000783	0.00007573	0.00000257
590370.00	2361940.00	0.00135932	0.00085371	0.00080615	0.00004756	0.00186556	0.0008516	0.00081256	0.00003905
590870.00	2361940.00	0.00133503	0.00081256	0.00074191	0.00007065	0.00207686	0.00090847	0.00086053	0.00004794
591370.00	2361940.00	0.00126899	0.00069517	0.0005982	0.00009697	0.00269654	0.00087636	0.00080316	0.0000732
591870.00	2361940.00	0.00124208	0.00057221	0.00047407	0.00009814	0.00362777	0.00078654	0.00069173	0.00009482
592370.00	2361940.00	0.0012173	0.00047977	0.00039703	0.00008274	0.00478016	0.0006987	0.000608	0.0000907
592870.00	2361940.00	0.00203943	0.00050335	0.00043286	0.00007049	0.0067964	0.00063942	0.00056361	0.00007581
593370.00	2361940.00	0.00220863	0.00063175	0.00056304	0.00006871	0.00620101	0.00066036	0.00059204	0.00006832
593870.00	2361940.00	0.00203749	0.00070259	0.00063608	0.00006652	0.00571139	0.00080324	0.00073497	0.00006827
594370.00	2361940.00	0.00232516	0.0006274	0.00057449	0.00005291	0.00507282	0.0008121	0.00074905	0.00006305
594870.00	2361940.00	0.00109949	0.0004895	0.00044959	0.00003991	0.00320516	0.00066787	0.00061903	0.00004884
595370.00	2361940.00	0.00092664	0.00043912	0.00040453	0.00003459	0.00235291	0.00054592	0.0005085	0.00003743
595870.00	2361940.00	0.00082863	0.00043148	0.00039436	0.00003711	0.0014713	0.00048385	0.00044857	0.00003528
596370.00	2361940.00	0.00082673	0.00043581	0.00039661	0.0000392	0.00151863	0.00047875	0.00044189	0.00003685
596870.00	2361940.00	0.00081288	0.0004458	0.00040663	0.00003917	0.00124307	0.00047189	0.00043367	0.00003822
597370.00	2361940.00	0.00079724	0.00044254	0.00040529	0.00003725	0.00121494	0.00046489	0.00042881	0.00003609
597870.00	2361940.00	0.0007599	0.00042796	0.00039221	0.00003575	0.00117329	0.00044963	0.00041593	0.0000337
598370.00	2361940.00	0.00071178	0.00040492	0.00037014	0.00003478	0.00112005	0.00042852	0.00039616	0.00003236
598870.00	2361940.00	0.00066733	0.00037943	0.0003456	0.00003384	0.00106801	0.00040429	0.00037272	0.00003156
599370.00	2361940.00	0.00063397	0.00035741	0.0003247	0.00003271	0.00103202	0.00038235	0.00035154	0.00003081
599870.00	2361940.00	0.0006101	0.00033987	0.00030847	0.0000314	0.00100891	0.00036464	0.00033465	0.00003
600370.00	2361940.00	0.00059286	0.00032563	0.0002957	0.00002993	0.00099365	0.00035029	0.00032116	0.00002913
600870.00	2361940.00	0.00058105	0.00031336	0.00028506	0.0000283	0.00098511	0.000338	0.00030982	0.00002818
601370.00	2361940.00	0.0005703	0.00030133	0.00027491	0.00002642	0.00097579	0.00032587	0.00029891	0.00002697
601870.00	2361940.00	0.00055684	0.0002884	0.00026429	0.0000241	0.0009503	0.000312	0.00028705	0.00002495
602370.00	2361940.00	0.00054268	0.00027506	0.00025341	0.00002166	0.00092339	0.00029768	0.00027504	0.00002264
602870.00	2361940.00	0.0005309	0.00026142	0.00024202	0.0000194	0.00090259	0.0002831	0.00026267	0.00002043
603370.00	2361940.00	0.00051586	0.00024749	0.0002303	0.00001719	0.00087461	0.0002681	0.00024994	0.00001817
603870.00	2361940.00	0.000502	0.00023377	0.0002186	0.00001516	0.00084676	0.00025315	0.00023723	0.00001593
604370.00	2361940.00	0.00048541	0.00022048	0.00020708	0.00001341	0.00081498	0.00023876	0.00022474	0.00001402
604870.00	2361940.00	0.00046988	0.00020798	0.00019606	0.00001192	0.0007848	0.00022514	0.00021277	0.00001236
605370.00	2361940.00	0.00045535	0.00019644	0.00018576	0.00001068	0.00075748	0.00021259	0.0002016	0.00001099
605870.00	2361940.00	0.00044182	0.00018591	0.00017624	0.00000966	0.00073274	0.00020117	0.0001913	0.00000987
606370.00	2361940.00	0.00042982	0.00017641	0.00016757	0.00000883	0.00071185	0.00019084	0.00018188	0.00000897
606870.00	2361940.00	0.00041576	0.00016765	0.00015949	0.00000816	0.00068412	0.00018125	0.000173	0.00000825
607370.00	2361940.00	0.00040447	0.00015991	0.0001523	0.0000076	0.00066396	0.00017283	0.00016517	0.00000766
607870.00	2361940.00	0.00039317	0.00015287	0.00014573	0.00000714	0.00064305	0.00016513	0.00015795	0.00000718
608370.00	2361940.00	0.00038469	0.00014668	0.00013993	0.00000674	0.0006286	0.00015839	0.00015162	0.00000676
608870.00	2361940.00	0.00037405	0.00014092	0.00013452	0.0000064	0.00060991	0.0001522	0.00014578	0.00000643
609370.00	2361940.00	0.00036453	0.0001357	0.00012959	0.00000611	0.00059262	0.0001465	0.00014037	0.00000613
609870.00	2361940.00	0.00035665	0.00013104	0.00012521	0.00000583	0.00057961	0.00014155	0.00013569	0.00000586
610370.00	2361940.00	0.00034739	0.00012628	0.00012073	0.00000555	0.00056123	0.00013626	0.00013071	0.00000555
610870.00	2361940.00	0.00033707	0.00012179	0.0001165	0.00000529	0.00054183	0.00013154	0.00012628	0.00000527
611370.00	2361940.00	0.0003282	0.00011781	0.00011275	0.00000505	0.00052763	0.00012775	0.00012273	0.00000502
611870.00	2361940.00	0.00032149	0.00011429	0.00010948	0.00000481	0.00053393	0.00012606	0.0001213	0.00000476
612370.00	2361940.00	0.00031624	0.00011145	0.00010676	0.00000469	0.00050957	0.00012128	0.0001166	0.00000467
612870.00	2361940.00	0.00031519	0.00010949	0.00010492	0.00000457	0.00051298	0.00011935	0.00011473	0.00000462
613370.00	2361940.00	0.00030914	0.00010665	0.00010224	0.0000044	0.00050391	0.00011655	0.0001121	0.00000445
613870.00	2361940.00	0.00030351	0.00010397	0.00009974	0.00000424	0.00049605	0.00011401	0.00010972	0.00000429
614370.00	2361940.00	0.0002931	0.00010043	0.00009642	0.00000401	0.00048138	0.00011134	0.00010733	0.00000401
614870.00	2361940.00	0.00029046	0.00009845	0.00009455	0.0000039	0.00047508	0.00010875	0.00010483	0.00000392
615370.00	2361940.00	0.0002832	0.00009573	0.00009202	0.00000371	0.00047632	0.00010761	0.00010391	0.0000037
615870.00	2361940.00	0.00027851	0.00009355	0.00008998	0.00000358	0.00046958	0.00010546	0.00010189	0.00000357
616370.00	2361940.00	0.00028955	0.00009296	0.00008955	0.00000341	0.00055704	0.00010449	0.0001011	0.00000339
616870.00	2361940.00	0.00042642	0.00009703	0.00009377	0.00000325	0.00103831	0.00010142	0.0000982	0.00000322
617370.00	2361940.00	0.00043266	0.0000952	0.00009206	0.00000314	0.00103681	0.00009897	0.00009587	0.00000311
617870.00	2361940.00	0.00027661	0.00008718	0.00008412	0.00000306	0.00052888	0.00009771	0.00009467	0.00000305

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2361940.00	0.00027269	0.0000854	0.00008245	0.00000295	0.00052016	0.00009558	0.00009264	0.00000294
618870.00	2361940.00	0.0005095	0.00009045	0.00008764	0.0000028	0.00100807	0.000091	0.00008821	0.00000278
619370.00	2361940.00	0.00063908	0.00008933	0.00008664	0.0000027	0.00088224	0.00008666	0.00008398	0.00000268
619870.00	2361940.00	0.00038401	0.00007695	0.00007436	0.00000259	0.00027664	0.00007648	0.0000739	0.00000258
590370.00	2362440.00	0.00125242	0.00075881	0.00070978	0.00004903	0.00174667	0.00077212	0.00073324	0.00003888
590870.00	2362440.00	0.00118675	0.0007046	0.00063482	0.00006978	0.00178907	0.0007884	0.00073891	0.00004949
591370.00	2362440.00	0.00113026	0.00059731	0.00050992	0.00008739	0.00239205	0.00074669	0.00067719	0.0000695
591870.00	2362440.00	0.00245905	0.00054488	0.00046079	0.00008408	0.00485924	0.00068794	0.00060372	0.00008422
592370.00	2362440.00	0.00139231	0.00043635	0.00036433	0.00007202	0.00534525	0.00062395	0.00054534	0.00007861
592870.00	2362440.00	0.00320352	0.00047986	0.00041864	0.00006123	0.00509516	0.00052487	0.00045866	0.00006621
593370.00	2362440.00	0.00310143	0.00056681	0.00050722	0.00005958	0.00483442	0.00053718	0.00047777	0.00005941
593870.00	2362440.00	0.00295227	0.00065167	0.0005921	0.00005957	0.00466304	0.00065405	0.00059471	0.00005934
594370.00	2362440.00	0.00249472	0.00060686	0.00055556	0.0000513	0.00456825	0.00071948	0.00066182	0.00005766
594870.00	2362440.00	0.0025433	0.00050979	0.00047172	0.00003807	0.0033928	0.00062108	0.00057404	0.00004704
595370.00	2362440.00	0.00107305	0.00041348	0.00038257	0.00003092	0.00316606	0.00053299	0.00049735	0.00003564
595870.00	2362440.00	0.00094808	0.00038768	0.000358	0.00002968	0.00259106	0.0004665	0.00043679	0.00002971
596370.00	2362440.00	0.00085774	0.00038401	0.0003517	0.00003231	0.00214948	0.00044024	0.0004103	0.00002994
596870.00	2362440.00	0.00074505	0.00038907	0.00035488	0.00003419	0.00127397	0.00041973	0.00038723	0.00003249
597370.00	2362440.00	0.00073841	0.00039471	0.00036124	0.00003347	0.00112142	0.00041407	0.00038136	0.00003272
597870.00	2362440.00	0.00072025	0.0003891	0.00035765	0.00003145	0.00109619	0.00040671	0.00037638	0.00003033
598370.00	2362440.00	0.00068917	0.00037694	0.00034678	0.00003016	0.00106212	0.00039448	0.00036613	0.00002835
598870.00	2362440.00	0.00064991	0.00035836	0.00032899	0.00002937	0.00102002	0.00037771	0.00035044	0.00002728
599370.00	2362440.00	0.00061291	0.00033776	0.00030911	0.00002865	0.00097761	0.00035852	0.00033187	0.00002665
599870.00	2362440.00	0.00058482	0.00031969	0.00029184	0.00002785	0.00094919	0.00034095	0.00031484	0.00002611
600370.00	2362440.00	0.00056824	0.00030594	0.00027889	0.00002706	0.00094204	0.00032757	0.00030185	0.00002571
600870.00	2362440.00	0.00055198	0.00029387	0.00026781	0.00002606	0.00092702	0.00031571	0.00029056	0.00002515
601370.00	2362440.00	0.00054006	0.00028378	0.00025876	0.00002502	0.00091798	0.00030588	0.00028121	0.00002467
601870.00	2362440.00	0.00052874	0.0002738	0.00025015	0.00002365	0.00090325	0.00029568	0.00027189	0.00002379
602370.00	2362440.00	0.0005197	0.00026387	0.00024181	0.00002205	0.00088996	0.00028526	0.0002627	0.00002256
602870.00	2362440.00	0.00050764	0.00025347	0.00023318	0.00002028	0.00086763	0.00027422	0.00025315	0.00002107
603370.00	2362440.00	0.00049648	0.00024263	0.00022422	0.00001841	0.00084561	0.00026252	0.00024322	0.0000193
603870.00	2362440.00	0.00048505	0.00023145	0.00021492	0.00001652	0.00082267	0.0002504	0.00023301	0.0000174
604370.00	2362440.00	0.00047304	0.00022013	0.0002054	0.00001473	0.00079899	0.00023813	0.00022262	0.00001551
604870.00	2362440.00	0.0004619	0.00020905	0.00019596	0.00001309	0.0007788	0.00022615	0.00021242	0.00001373
605370.00	2362440.00	0.00044931	0.00019823	0.00018659	0.00001164	0.00075406	0.0002144	0.00020226	0.00001214
605870.00	2362440.00	0.00043708	0.00018797	0.00017757	0.0000104	0.00073066	0.00020325	0.00019248	0.00001077
606370.00	2362440.00	0.00042359	0.00017827	0.00016891	0.00000936	0.0007032	0.00019267	0.00018306	0.00000961
606870.00	2362440.00	0.00041165	0.00016937	0.00016089	0.00000848	0.00068048	0.000183	0.00017434	0.00000866
607370.00	2362440.00	0.00040113	0.00016129	0.00015353	0.00000776	0.00066173	0.0001743	0.00016642	0.00000788
607870.00	2362440.00	0.00038968	0.0001538	0.00014662	0.00000717	0.0006397	0.00016611	0.00015886	0.00000725
608370.00	2362440.00	0.00037954	0.00014704	0.00014036	0.00000668	0.00062124	0.00015879	0.00015206	0.00000673
608870.00	2362440.00	0.00036995	0.00014092	0.00013464	0.00000628	0.00060403	0.00015215	0.00014584	0.0000063
609370.00	2362440.00	0.00036096	0.00013535	0.00012942	0.00000593	0.00058803	0.00014613	0.00014018	0.00000595
609870.00	2362440.00	0.00035308	0.00013034	0.00012471	0.00000563	0.00057479	0.00014079	0.00013514	0.00000565
610370.00	2362440.00	0.0003432	0.00012518	0.00011986	0.00000532	0.00055468	0.00013504	0.00012974	0.0000053
610870.00	2362440.00	0.00033626	0.00012106	0.00011596	0.0000051	0.00054331	0.00013068	0.00012559	0.00000509
611370.00	2362440.00	0.00032649	0.00011669	0.00011183	0.00000486	0.00052513	0.00012612	0.0001213	0.00000483
611870.00	2362440.00	0.00031904	0.00011268	0.00010812	0.00000457	0.00053624	0.00012421	0.00011971	0.00000449
612370.00	2362440.00	0.00031559	0.00010963	0.00010523	0.00000439	0.00054567	0.00012141	0.00011709	0.00000432
612870.00	2362440.00	0.00030561	0.00010635	0.00010207	0.00000429	0.00050085	0.00011696	0.00011271	0.00000424
613370.00	2362440.00	0.00030571	0.00010472	0.00010048	0.00000424	0.0004975	0.00011416	0.00010988	0.00000428
613870.00	2362440.00	0.00029659	0.00010123	0.00009718	0.00000404	0.0004798	0.00011065	0.00010661	0.00000404
614370.00	2362440.00	0.00029219	0.00009883	0.00009492	0.00000392	0.00047433	0.00010833	0.0001044	0.00000392
614870.00	2362440.00	0.00028639	0.00009609	0.00009238	0.00000372	0.000489	0.00010771	0.00010402	0.00000369
615370.00	2362440.00	0.00028177	0.00009385	0.00009026	0.00000359	0.0004829	0.00010547	0.0001019	0.00000357
615870.00	2362440.00	0.00027836	0.00009182	0.00008835	0.00000347	0.00048387	0.00010346	0.00010002	0.00000345
616370.00	2362440.00	0.00029213	0.0000914	0.00008807	0.00000333	0.0005679	0.00010159	0.00009829	0.0000033
616870.00	2362440.00	0.00038978	0.00009402	0.00009082	0.00000319	0.00093846	0.00009923	0.00009608	0.00000315
617370.00	2362440.00	0.00083319	0.00009389	0.00009084	0.00000305	0.00056416	0.00008775	0.00008472	0.00000302
617870.00	2362440.00	0.00083759	0.00009285	0.00008989	0.00000295	0.00062646	0.00008673	0.0000838	0.00000293
618370.00	2362440.00	0.00028316	0.00008466	0.00008175	0.00000291	0.000568	0.00009312	0.00009023	0.00000289
618870.00	2362440.00	0.0003663	0.00008654	0.00008374	0.00000279	0.0008878	0.00009084	0.00008807	0.00000277
619370.00	2362440.00	0.00071568	0.00008302	0.00008036	0.00000266	0.00038371	0.00007833	0.00007568	0.00000265
619870.00	2362440.00	0.00080996	0.00008422	0.00008164	0.00000258	0.00048989	0.00007817	0.0000756	0.00000257
590370.00	2362940.00	0.00113031	0.00066764	0.0006204	0.00004724	0.00160047	0.00069472	0.00065896	0.00003577
590870.00	2362940.00	0.00106775	0.00060424	0.00053916	0.00006509	0.00175662	0.00069266	0.00064647	0.00004618
591370.00	2362940.00	0.00338867	0.00058241	0.00050561	0.00007679	0.00281774	0.00064148	0.00057676	0.00006473
591870.00	2362940.00	0.00389124	0.00050864	0.00043489	0.00007375	0.00214506	0.00054282	0.00046627	0.00007655
592370.00	2362940.00	0.00428753	0.00046506	0.00040325	0.00006181	0.002765	0.00047761	0.00040786	0.00006975
592870.00	2362940.00	0.00441167	0.0004505	0.00039701	0.00005349	0.00261246	0.00041765	0.00035917	0.00005848

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2362940.00	0.00373485	0.00048794	0.00043638	0.00005156	0.00168099	0.00039563	0.00034352	0.0000521
593870.00	2362940.00	0.00392034	0.00059436	0.00054135	0.00005301	0.00255485	0.00051315	0.00046123	0.00005193
594370.00	2362940.00	0.00360151	0.00058927	0.00054052	0.00004876	0.00257269	0.00059366	0.00054125	0.00005241
594870.00	2362940.00	0.00301911	0.0004999	0.0004622	0.0000377	0.00230197	0.00056416	0.00051831	0.00004585
595370.00	2362940.00	0.00170905	0.00041345	0.00038433	0.00002912	0.00314547	0.00050306	0.00046837	0.00003469
595870.00	2362940.00	0.00213449	0.00038136	0.0003566	0.00002476	0.00160884	0.00040143	0.00037452	0.00002691
596370.00	2362940.00	0.00110756	0.000354	0.00032763	0.00002637	0.00249148	0.00040235	0.00037729	0.00002506
596870.00	2362940.00	0.00070795	0.0003457	0.00031638	0.00002932	0.00142806	0.00038308	0.00035591	0.00002717
597370.00	2362940.00	0.00068201	0.00035348	0.00032313	0.00003034	0.00104395	0.00037098	0.00034179	0.00002919
597870.00	2362940.00	0.00067328	0.00035154	0.00032292	0.00002863	0.00102299	0.00036749	0.00033952	0.00002797
598370.00	2362940.00	0.00065719	0.00034622	0.00031937	0.00002684	0.00100123	0.00036096	0.00033516	0.00002581
598870.00	2362940.00	0.00063129	0.00033592	0.00031014	0.00002578	0.00097212	0.00035065	0.00032644	0.00002421
599370.00	2362940.00	0.00059936	0.00032055	0.00029542	0.00002514	0.00093662	0.00033655	0.00031318	0.00002337
599870.00	2362940.00	0.00056827	0.00030381	0.00027926	0.00002455	0.00090415	0.00032141	0.00029858	0.00002283
600370.00	2362940.00	0.00055065	0.00028976	0.00026566	0.0000241	0.00089923	0.00030806	0.00028542	0.00002264
600870.00	2362940.00	0.0005316	0.00027772	0.00025422	0.0000235	0.00088335	0.00029691	0.0002746	0.00002232
601370.00	2362940.00	0.00051551	0.00026734	0.00024453	0.00002281	0.00086595	0.00028689	0.00026497	0.00002192
601870.00	2362940.00	0.00050336	0.00025841	0.00023638	0.00002203	0.0008531	0.0002781	0.00025659	0.0000215
602370.00	2362940.00	0.0004933	0.00025024	0.00022913	0.00002111	0.00084101	0.00026986	0.00024889	0.00002097
602870.00	2362940.00	0.00048436	0.00024225	0.00022225	0.00002	0.00082814	0.00026163	0.0002414	0.00002023
603370.00	2362940.00	0.00047577	0.00023406	0.00021535	0.00001871	0.0008134	0.00025299	0.00023377	0.00001921
603870.00	2362940.00	0.00046847	0.00022553	0.00020828	0.00001724	0.00080038	0.00024385	0.00022598	0.00001787
604370.00	2362940.00	0.00045823	0.00021652	0.00020077	0.00001575	0.00078034	0.00023418	0.0002177	0.00001648
604870.00	2362940.00	0.00044816	0.00020723	0.00019301	0.00001423	0.00075943	0.00022406	0.00020913	0.00001493
605370.00	2362940.00	0.00043919	0.00019797	0.00018521	0.00001276	0.00074283	0.00021405	0.00020067	0.00001339
605870.00	2362940.00	0.00042914	0.00018872	0.0001773	0.00001142	0.0007228	0.00020397	0.00019204	0.00001193
606370.00	2362940.00	0.00041699	0.00017961	0.00016939	0.00001022	0.00069673	0.00019401	0.00018339	0.00001062
606870.00	2362940.00	0.00040644	0.00017101	0.00016184	0.00000917	0.00067602	0.00018467	0.00017521	0.00000947
607370.00	2362940.00	0.0003977	0.000163	0.00015473	0.00000827	0.00065899	0.00017595	0.0001675	0.00000845
607870.00	2362940.00	0.00038636	0.00015537	0.00014785	0.00000752	0.00063796	0.00016777	0.00016011	0.00000766
608370.00	2362940.00	0.00037625	0.00014834	0.00014145	0.00000689	0.00061857	0.00016013	0.00015315	0.00000698
608870.00	2362940.00	0.00036691	0.0001419	0.00013554	0.00000637	0.00060139	0.00015318	0.00014675	0.00000642
609370.00	2362940.00	0.00035863	0.00013606	0.00013013	0.00000593	0.0005869	0.00014692	0.00014096	0.00000596
609870.00	2362940.00	0.00035086	0.00013072	0.00012516	0.00000556	0.00057366	0.0001412	0.00013561	0.00000558
610370.00	2362940.00	0.00033891	0.00012497	0.00011981	0.00000516	0.00054798	0.00013482	0.0001297	0.00000512
610870.00	2362940.00	0.000333	0.00012071	0.00011578	0.00000494	0.00053869	0.00013028	0.00012537	0.00000491
611370.00	2362940.00	0.00032196	0.00011587	0.00011124	0.00000464	0.00051816	0.00012531	0.00012073	0.00000458
611870.00	2362940.00	0.00031467	0.00011194	0.00010752	0.00000442	0.00050835	0.00012161	0.00011725	0.00000436
612370.00	2362940.00	0.00031173	0.00010904	0.00010472	0.00000433	0.00050215	0.000118	0.0001137	0.0000043
612870.00	2362940.00	0.00030626	0.00010589	0.00010171	0.00000418	0.00049383	0.00011477	0.0001106	0.00000416
613370.00	2362940.00	0.00030077	0.00010291	0.00009888	0.00000403	0.00048554	0.00011176	0.00010773	0.00000403
613870.00	2362940.00	0.00029162	0.00009943	0.00009559	0.00000383	0.00047388	0.00010903	0.00010523	0.0000038
614370.00	2362940.00	0.00028809	0.00009687	0.00009319	0.00000368	0.00048506	0.00010755	0.00010392	0.00000363
614870.00	2362940.00	0.00030046	0.00009584	0.00009231	0.00000353	0.00056459	0.00010595	0.00010248	0.00000347
615370.00	2362940.00	0.00033755	0.00009596	0.00009256	0.0000034	0.0007318	0.00010346	0.00010012	0.00000334
615870.00	2362940.00	0.00035367	0.00009466	0.00009137	0.00000329	0.00079599	0.00010104	0.00009781	0.00000323
616370.00	2362940.00	0.0002818	0.000089	0.00008578	0.00000322	0.00051758	0.00009887	0.00009568	0.00000319
616870.00	2362940.00	0.00060126	0.00009455	0.00009148	0.00000307	0.00089849	0.00009315	0.00009014	0.00000302
617370.00	2362940.00	0.00080068	0.00009269	0.00008973	0.00000296	0.00063321	0.00008719	0.00008427	0.00000292
617870.00	2362940.00	0.000614	0.00008424	0.00008138	0.00000286	0.00034528	0.00008115	0.00007831	0.00000283
618370.00	2362940.00	0.00060297	0.00008889	0.00008609	0.0000028	0.00086625	0.00008699	0.00008423	0.00000276
618870.00	2362940.00	0.00029797	0.00008251	0.00007976	0.00000275	0.00063831	0.00008876	0.00008604	0.00000272
619370.00	2362940.00	0.00047191	0.00008459	0.00008195	0.00000264	0.00092614	0.0000853	0.00008269	0.00000261
619870.00	2362940.00	0.00078097	0.00008182	0.00007928	0.00000254	0.00044031	0.00007616	0.00007365	0.00000252
590370.00	2363440.00	0.00102043	0.00058548	0.0005418	0.00004368	0.00153757	0.00063045	0.00059923	0.00003122
590870.00	2363440.00	0.0021084	0.00056007	0.00050099	0.00005908	0.00308798	0.00063507	0.00059237	0.0000427
591370.00	2363440.00	0.00256867	0.00048947	0.00041918	0.00007029	0.00143117	0.00053044	0.0004689	0.00006154
591870.00	2363440.00	0.00353041	0.00045292	0.00038756	0.00006536	0.00186774	0.00047601	0.00040768	0.00006833
592370.00	2363440.00	0.00185688	0.00034936	0.00029376	0.0000556	0.00105725	0.00038551	0.00032281	0.0000627
592870.00	2363440.00	0.00169996	0.00032654	0.00027899	0.00004754	0.00095712	0.00033356	0.00028148	0.00005207
593370.00	2363440.00	0.00229321	0.00039069	0.00034502	0.00004567	0.00110569	0.00033585	0.00028963	0.00004621
593870.00	2363440.00	0.00328584	0.00050732	0.0004602	0.00004712	0.00161733	0.00041944	0.00037352	0.00004592
594370.00	2363440.00	0.00316401	0.00053101	0.00048532	0.00004569	0.00180209	0.00050379	0.00045646	0.00004732
594870.00	2363440.00	0.00287854	0.00048063	0.00044323	0.0000374	0.00194248	0.00051757	0.00047377	0.0000438
595370.00	2363440.00	0.00240156	0.00041391	0.0003855	0.00002841	0.00232592	0.00046897	0.00043467	0.0000343
595870.00	2363440.00	0.0013558	0.00035305	0.00032951	0.00002354	0.00269763	0.00041793	0.00039146	0.00002647
596370.00	2363440.00	0.0008287	0.00032026	0.0002975	0.00002275	0.00220795	0.0003807	0.00035783	0.00002287
596870.00	2363440.00	0.00065837	0.00031236	0.00028754	0.00002481	0.00131881	0.00034961	0.00032651	0.00002311
597370.00	2363440.00	0.00063167	0.00031734	0.00029053	0.00002681	0.00099483	0.00033556	0.00031043	0.00002513
597870.00	2363440.00	0.00062832	0.00031911	0.00029263	0.00002648	0.00095855	0.00033354	0.0003079	0.00002564

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2363440.00	0.00062049	0.00031666	0.00029186	0.00002481	0.00094039	0.00032984	0.00030559	0.00002425
598870.00	2363440.00	0.000606	0.00031135	0.00028808	0.00002326	0.00092128	0.00032358	0.00030123	0.00002234
599370.00	2363440.00	0.00058269	0.00030226	0.00028001	0.00002226	0.00089718	0.00031509	0.00029418	0.00002091
599870.00	2363440.00	0.0005554	0.00028948	0.00026779	0.00002169	0.0008683	0.00030357	0.00028339	0.00002018
600370.00	2363440.00	0.00053767	0.00027604	0.00025456	0.00002148	0.00086363	0.00029079	0.00027063	0.00002016
600870.00	2363440.00	0.00051543	0.0002639	0.00024293	0.00002097	0.00084145	0.00028004	0.00026029	0.00001975
601370.00	2363440.00	0.00049736	0.00025337	0.0002329	0.00002047	0.00082356	0.00027038	0.00025098	0.0000194
601870.00	2363440.00	0.00048356	0.00024448	0.00022451	0.00001997	0.0008106	0.000262	0.0002429	0.00001909
602370.00	2363440.00	0.00047221	0.00023683	0.0002174	0.00001944	0.00079841	0.00025454	0.00023572	0.00001882
602870.00	2363440.00	0.00046316	0.00022997	0.00021115	0.00001882	0.00078821	0.00024772	0.00022921	0.00001851
603370.00	2363440.00	0.00045596	0.00022333	0.00020531	0.00001801	0.00077911	0.00024086	0.00022289	0.00001797
603870.00	2363440.00	0.00044949	0.00021688	0.00019974	0.00001713	0.00077198	0.00023434	0.00021693	0.00001741
604370.00	2363440.00	0.00044209	0.00020998	0.00019391	0.00001606	0.00075871	0.00022703	0.0002105	0.00001653
604870.00	2363440.00	0.00043357	0.00020265	0.00018777	0.00001488	0.00074038	0.00021912	0.00020366	0.00001546
605370.00	2363440.00	0.00042627	0.00019513	0.0001815	0.00001363	0.00072637	0.00021101	0.00019678	0.00001423
605870.00	2363440.00	0.00041785	0.00018731	0.00017497	0.00001234	0.0007074	0.00020238	0.00018951	0.00001287
606370.00	2363440.00	0.00040832	0.0001794	0.00016822	0.00001117	0.00068776	0.00019379	0.00018211	0.00001168
606870.00	2363440.00	0.00039939	0.0001716	0.00016155	0.00001005	0.00066943	0.0001853	0.00017483	0.00001047
607370.00	2363440.00	0.00039071	0.00016403	0.00015499	0.00000904	0.00065227	0.0001771	0.00016774	0.00000936
607870.00	2363440.00	0.00038238	0.0001568	0.00014866	0.00000814	0.00063657	0.0001693	0.00016092	0.00000838
608370.00	2363440.00	0.00037327	0.00014986	0.00014249	0.00000737	0.00061857	0.0001618	0.00015426	0.00000754
608870.00	2363440.00	0.0003636	0.00014327	0.00013655	0.00000672	0.00059905	0.0001546	0.00014777	0.00000683
609370.00	2363440.00	0.00035515	0.0001372	0.00013105	0.00000616	0.00058314	0.00014807	0.00014184	0.00000623
609870.00	2363440.00	0.0003472	0.0001316	0.00012591	0.00000569	0.00056858	0.00014206	0.00013632	0.00000574
610370.00	2363440.00	0.00034078	0.00012651	0.00012121	0.0000053	0.00055783	0.00013664	0.00013132	0.00000533
610870.00	2363440.00	0.00033281	0.00012171	0.00011674	0.00000497	0.00054338	0.00013152	0.00012653	0.00000499
611370.00	2363440.00	0.00032158	0.0001165	0.00011191	0.00000459	0.00051947	0.00012581	0.00012126	0.00000455
611870.00	2363440.00	0.0003128	0.00011208	0.00010777	0.00000431	0.00050498	0.0001214	0.00011716	0.00000424
612370.00	2363440.00	0.00030601	0.00010818	0.0001041	0.00000408	0.0004987	0.00011788	0.00011388	0.000004
612870.00	2363440.00	0.00030246	0.00010486	0.00010098	0.00000387	0.0005099	0.00011531	0.00011152	0.00000379
613370.00	2363440.00	0.00031096	0.00010271	0.00009903	0.00000368	0.00057528	0.00011296	0.00010937	0.00000359
613870.00	2363440.00	0.00029073	0.00009863	0.00009501	0.00000362	0.00048638	0.00010867	0.00010512	0.00000355
614370.00	2363440.00	0.00028392	0.00009586	0.00009232	0.00000355	0.00046009	0.0001049	0.0001014	0.0000035
614870.00	2363440.00	0.00028805	0.00009391	0.00009054	0.00000337	0.00050795	0.00010377	0.00010047	0.0000033
615370.00	2363440.00	0.00039209	0.00009629	0.00009309	0.00000321	0.00083865	0.00010105	0.00009792	0.00000313
615870.00	2363440.00	0.00057953	0.00009654	0.00009346	0.00000309	0.00084633	0.00009574	0.00009272	0.00000302
616370.00	2363440.00	0.00061284	0.0000946	0.0000916	0.000003	0.0008182	0.00009291	0.00008997	0.00000294
616870.00	2363440.00	0.00031658	0.000088	0.00008503	0.00000297	0.00066428	0.00009429	0.00009137	0.00000292
617370.00	2363440.00	0.00076459	0.00008817	0.00008535	0.00000282	0.00044283	0.00008322	0.00008044	0.00000278
617870.00	2363440.00	0.00073945	0.00008869	0.00008593	0.00000276	0.00063218	0.00008404	0.00008132	0.00000271
618370.00	2363440.00	0.00056808	0.00008023	0.00007756	0.00000267	0.00032908	0.0000777	0.00007507	0.00000264
618870.00	2363440.00	0.00074698	0.00008266	0.00008006	0.0000026	0.00042065	0.00007763	0.00007506	0.00000257
619370.00	2363440.00	0.00043381	0.00008237	0.00007981	0.00000257	0.0008731	0.00008363	0.0000811	0.00000253
619870.00	2363440.00	0.00039275	0.00008034	0.00007784	0.0000025	0.00085161	0.00008246	0.00007999	0.00000246
590370.00	2363940.00	0.00231487	0.00055364	0.00051407	0.00003957	0.00229564	0.00058322	0.00055544	0.00002779
590870.00	2363940.00	0.00274943	0.00051536	0.00045974	0.00005563	0.00236407	0.00055151	0.00050962	0.00004189
591370.00	2363940.00	0.00205588	0.00042832	0.00036406	0.00006427	0.00108466	0.00046176	0.00040388	0.00005787
591870.00	2363940.00	0.00192843	0.00036823	0.00030871	0.00005951	0.0009974	0.00040273	0.0003403	0.00006244
592370.00	2363940.00	0.00124728	0.00030161	0.00025155	0.00005006	0.00082523	0.0003394	0.0002834	0.000056
592870.00	2363940.00	0.00110625	0.00027756	0.00023492	0.00004264	0.00074553	0.00029373	0.00024731	0.00004642
593370.00	2363940.00	0.0013972	0.0003175	0.00027686	0.00004064	0.00076388	0.00028748	0.00024644	0.00004103
593870.00	2363940.00	0.00212706	0.00041766	0.00037571	0.00004195	0.00102062	0.00034646	0.00030566	0.0000408
594370.00	2363940.00	0.00301632	0.00048624	0.00044421	0.00004203	0.00167053	0.00044375	0.00040154	0.00004221
594870.00	2363940.00	0.00257347	0.00045419	0.00041757	0.00003662	0.00160093	0.00046732	0.00042616	0.00004116
595370.00	2363940.00	0.00143382	0.00038884	0.00035992	0.00002892	0.00333665	0.0004811	0.00044724	0.00003386
595870.00	2363940.00	0.00108414	0.00033483	0.0003119	0.00002293	0.00279758	0.00041456	0.00038807	0.0000265
596370.00	2363940.00	0.000741	0.00029964	0.00027916	0.00002049	0.00194541	0.00036338	0.00034158	0.0000218
596870.00	2363940.00	0.00060939	0.00028792	0.0002666	0.00002131	0.00109038	0.00032129	0.00030063	0.00002066
597370.00	2363940.00	0.00059249	0.00028784	0.00026473	0.00002311	0.00096377	0.00030826	0.0002868	0.00002146
597870.00	2363940.00	0.00058682	0.00029027	0.00026625	0.00002402	0.00091035	0.00030463	0.0002819	0.00002273
598370.00	2363940.00	0.00058219	0.00028996	0.00026676	0.00002319	0.00088848	0.00030259	0.00028001	0.00002258
598870.00	2363940.00	0.00057475	0.00028715	0.00026554	0.00002161	0.00087154	0.0002987	0.00027757	0.00002112
599370.00	2363940.00	0.00056146	0.00028209	0.00026183	0.00002026	0.00085425	0.00029294	0.0002735	0.00001944
599870.00	2363940.00	0.00054719	0.00027342	0.00025374	0.00001968	0.00084591	0.00028385	0.0002652	0.00001865
600370.00	2363940.00	0.00052617	0.0002629	0.00024375	0.00001915	0.00082863	0.00027454	0.00025653	0.00001801
600870.00	2363940.00	0.00049962	0.00025167	0.00023306	0.00001861	0.00079504	0.0002649	0.0002475	0.00001741
601370.00	2363940.00	0.00048349	0.00024154	0.00022372	0.00001782	0.00090642	0.00026413	0.0002475	0.00001663
601870.00	2363940.00	0.00045694	0.00023075	0.0002132	0.00001755	0.00077583	0.00024835	0.00023193	0.00001642
602370.00	2363940.00	0.00045706	0.00022406	0.00020703	0.00001703	0.00088264	0.00024546	0.00022943	0.00001602
602870.00	2363940.00	0.00044519	0.00021727	0.00020062	0.00001664	0.00084975	0.00023795	0.00022215	0.00001579

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2363940.00	0.0004285	0.00021067	0.00019435	0.00001632	0.00075483	0.00022841	0.00021272	0.00001569
603870.00	2363940.00	0.0004393	0.00020726	0.0001916	0.00001566	0.0008884	0.00022843	0.00021319	0.00001524
604370.00	2363940.00	0.00043001	0.00020208	0.00018704	0.00001505	0.0008487	0.00022271	0.00020785	0.00001486
604870.00	2363940.00	0.00041313	0.00019576	0.00018138	0.00001438	0.00074488	0.00021397	0.00019954	0.00001442
605370.00	2363940.00	0.00042257	0.00019206	0.00017868	0.00001338	0.00083734	0.00021199	0.00019846	0.00001353
605870.00	2363940.00	0.00041362	0.00018599	0.00017358	0.00001241	0.00079539	0.00020496	0.00019232	0.00001264
606370.00	2363940.00	0.0003957	0.00017838	0.00016689	0.00001149	0.0007001	0.00019509	0.00018331	0.00001178
606870.00	2363940.00	0.00040339	0.00017359	0.00016327	0.00001033	0.00077167	0.00019116	0.0001806	0.00001056
607370.00	2363940.00	0.00039292	0.00016655	0.00015721	0.00000934	0.00073358	0.00018315	0.00017362	0.00000953
607870.00	2363940.00	0.00037366	0.00015835	0.00014983	0.00000851	0.00064666	0.00017299	0.00016431	0.00000868
608370.00	2363940.00	0.00037944	0.00015309	0.00014555	0.00000754	0.00070638	0.0001682	0.00016059	0.00000761
608870.00	2363940.00	0.00036912	0.00014633	0.00013953	0.0000068	0.00068061	0.0001608	0.00015398	0.00000682
609370.00	2363940.00	0.00034955	0.0001388	0.00013255	0.00000626	0.00059513	0.00015148	0.00014523	0.00000625
609870.00	2363940.00	0.00035569	0.00013416	0.00012858	0.00000558	0.00065914	0.00014731	0.0001418	0.00000551
610370.00	2363940.00	0.00035339	0.00012887	0.00012378	0.00000509	0.00066818	0.00014134	0.00013635	0.00000499
610870.00	2363940.00	0.00032647	0.0001221	0.00011728	0.00000482	0.00055017	0.00013332	0.00012859	0.00000473
611370.00	2363940.00	0.0003345	0.00011847	0.00011408	0.00000439	0.0006181	0.00012993	0.00012565	0.00000427
611870.00	2363940.00	0.00033257	0.00011431	0.0001102	0.00000411	0.00062543	0.00012512	0.00012113	0.00000398
612370.00	2363940.00	0.00030781	0.00010895	0.00010499	0.00000396	0.00052344	0.00011939	0.00011553	0.00000386
612870.00	2363940.00	0.00032577	0.00010678	0.00010309	0.00000368	0.00062302	0.00011642	0.00011285	0.00000357
613370.00	2363940.00	0.00034265	0.00010434	0.00010084	0.0000035	0.00068387	0.00011239	0.00010901	0.00000338
613870.00	2363940.00	0.00036432	0.00010203	0.00009869	0.00000334	0.00072897	0.00010835	0.00010513	0.00000323
614370.00	2363940.00	0.00032762	0.00009813	0.00009487	0.00000326	0.00064641	0.0001058	0.00010264	0.00000316
614870.00	2363940.00	0.00027789	0.0000927	0.00008946	0.00000325	0.00046097	0.00010191	0.00009873	0.00000318
615370.00	2363940.00	0.00027414	0.00009023	0.00008709	0.00000314	0.00045886	0.00009942	0.00009634	0.00000308
615870.00	2363940.00	0.00047046	0.00009423	0.0000913	0.00000293	0.00083412	0.00009589	0.00009305	0.00000284
616370.00	2363940.00	0.00071321	0.00009019	0.0000874	0.00000279	0.0004315	0.00008622	0.00008349	0.00000272
616870.00	2363940.00	0.00069819	0.00008753	0.00008481	0.00000272	0.00041116	0.00008367	0.000081	0.00000266
617370.00	2363940.00	0.00075212	0.00008685	0.00008419	0.00000266	0.00044169	0.00008219	0.00007958	0.00000261
617870.00	2363940.00	0.00077107	0.00008608	0.00008347	0.00000261	0.00049009	0.00008104	0.00007848	0.00000256
618370.00	2363940.00	0.00033092	0.00007511	0.00007258	0.00000254	0.00026934	0.00007523	0.00007275	0.00000248
618870.00	2363940.00	0.00055627	0.00007731	0.00007484	0.00000248	0.00032678	0.00007479	0.00007235	0.00000244
619370.00	2363940.00	0.00046456	0.00007423	0.00007181	0.00000242	0.00029675	0.00007258	0.0000702	0.00000238
619870.00	2363940.00	0.00072943	0.00007779	0.00007543	0.00000237	0.00039907	0.00007298	0.00007064	0.00000233
590370.00	2364440.00	0.0023143	0.00049227	0.00045354	0.00003873	0.00132681	0.00050648	0.00047931	0.00002717
590870.00	2364440.00	0.00215831	0.000442	0.00038906	0.00005294	0.00116295	0.00046496	0.00042391	0.00004105
591370.00	2364440.00	0.0018774	0.000386	0.00032783	0.00005817	0.00099374	0.00041293	0.00035916	0.00005378
591870.00	2364440.00	0.00083486	0.00030602	0.00025163	0.00005439	0.00075456	0.00035394	0.00029694	0.000057
592370.00	2364440.00	0.00099446	0.0002717	0.00022658	0.00004512	0.00074704	0.00030704	0.00025697	0.00005007
592870.00	2364440.00	0.00062532	0.00023853	0.00020016	0.00003837	0.00063191	0.00026297	0.00022145	0.00004152
593370.00	2364440.00	0.00060515	0.00025508	0.00021863	0.00003645	0.00059699	0.00024996	0.00021365	0.00003631
593870.00	2364440.00	0.00139405	0.00034851	0.00031093	0.00003757	0.00076359	0.00029559	0.00025927	0.00003632
594370.00	2364440.00	0.00230162	0.00042527	0.00038684	0.00003843	0.00119164	0.00037891	0.00034097	0.00003794
594870.00	2364440.00	0.00284718	0.00044311	0.00040799	0.00003511	0.00182729	0.00043619	0.0003987	0.00003749
595370.00	2364440.00	0.00209641	0.00038073	0.00035254	0.00002819	0.001395	0.00040992	0.00037636	0.00003357
595870.00	2364440.00	0.00204932	0.00034552	0.00032344	0.00002209	0.00195068	0.00037934	0.00035338	0.00002595
596370.00	2364440.00	0.00150064	0.00030636	0.00028779	0.00001857	0.00200788	0.00033854	0.00031808	0.00002046
596870.00	2364440.00	0.00068846	0.00027129	0.00025316	0.00001812	0.00175988	0.00032004	0.00030177	0.00001827
597370.00	2364440.00	0.0005627	0.00026457	0.00024485	0.00001972	0.00094873	0.00028828	0.00026968	0.0000186
597870.00	2364440.00	0.00055241	0.00026463	0.00024354	0.00002109	0.0009036	0.00028215	0.0002626	0.00001956
598370.00	2364440.00	0.00054741	0.00026639	0.00024491	0.00002148	0.0008458	0.00027876	0.00025825	0.0000205
598870.00	2364440.00	0.00054275	0.00026517	0.00024474	0.00002044	0.00082823	0.0002765	0.00025651	0.00001999
599370.00	2364440.00	0.00053572	0.00026219	0.0002432	0.00001899	0.00081193	0.00027243	0.00025386	0.00001856
599870.00	2364440.00	0.00052423	0.00025734	0.00023947	0.00001786	0.00079639	0.00026678	0.00024962	0.00001716
600370.00	2364440.00	0.00050774	0.00024993	0.00023276	0.00001716	0.00078012	0.00025956	0.00024334	0.00001622
600870.00	2364440.00	0.00048881	0.00024073	0.00022401	0.00001672	0.00076336	0.00025136	0.00023567	0.00001569
601370.00	2364440.00	0.00066903	0.0002401	0.00022432	0.00001578	0.00122004	0.00025286	0.00023793	0.00001493
601870.00	2364440.00	0.00060037	0.00022913	0.00021362	0.00001551	0.00121483	0.00024387	0.00022926	0.00001461
602370.00	2364440.00	0.00059456	0.00022089	0.00020569	0.0000152	0.00119277	0.00023424	0.00021994	0.0000143
602870.00	2364440.00	0.00062258	0.00021471	0.00019983	0.00001487	0.00115018	0.00022527	0.00021126	0.00001401
603370.00	2364440.00	0.00058281	0.00020817	0.00019357	0.0000146	0.0011715	0.00022017	0.00020639	0.00001378
603870.00	2364440.00	0.00057479	0.00020308	0.00018879	0.00001429	0.00115615	0.00021497	0.00020139	0.00001358
604370.00	2364440.00	0.00061129	0.00019966	0.00018574	0.00001392	0.00113331	0.00020939	0.00019604	0.00001335
604870.00	2364440.00	0.0005717	0.00019474	0.00018123	0.00001351	0.00113654	0.00020623	0.00019312	0.00001311
605370.00	2364440.00	0.00056201	0.00019052	0.00017755	0.00001297	0.00112019	0.0002021	0.00018937	0.00001273
605870.00	2364440.00	0.00059478	0.00018713	0.00017484	0.00001229	0.00108528	0.0001966	0.00018442	0.00001217
606370.00	2364440.00	0.00054888	0.00018152	0.00016997	0.00001155	0.00106753	0.00019249	0.00018094	0.00001155
606870.00	2364440.00	0.00054081	0.00017643	0.00016571	0.00001072	0.0010351	0.00018694	0.00017617	0.00001077
607370.00	2364440.00	0.00056616	0.0001717	0.00016189	0.00000982	0.00098785	0.00018014	0.00017028	0.00000987
607870.00	2364440.00	0.00052165	0.00016506	0.0001561	0.00000896	0.00096636	0.00017452	0.0001655	0.00000901

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2364440.00	0.0005114	0.00015897	0.00015087	0.0000081	0.00093254	0.00016786	0.00015973	0.00000813
608870.00	2364440.00	0.00053225	0.00015342	0.00014614	0.00000728	0.00088939	0.00016045	0.00015319	0.00000725
609370.00	2364440.00	0.00049115	0.00014662	0.00014006	0.00000657	0.00087513	0.0001544	0.00014788	0.00000652
609870.00	2364440.00	0.0004836	0.00014099	0.00013507	0.00000592	0.00089583	0.00014852	0.00014268	0.00000583
610370.00	2364440.00	0.00050464	0.00013558	0.00013025	0.00000533	0.0008427	0.0001412	0.00013599	0.0000052
610870.00	2364440.00	0.00047269	0.00012963	0.00012477	0.00000486	0.00082899	0.00013558	0.00013086	0.00000472
611370.00	2364440.00	0.00042295	0.00012362	0.00011914	0.00000448	0.00081072	0.0001309	0.00012656	0.00000434
611870.00	2364440.00	0.0004895	0.00011966	0.00011559	0.00000407	0.00074085	0.00012326	0.00011935	0.00000391
612370.00	2364440.00	0.00047876	0.00011515	0.00011136	0.00000379	0.0007339	0.00011848	0.00011484	0.00000363
612870.00	2364440.00	0.00042051	0.00011056	0.00010696	0.00000359	0.0007634	0.00011562	0.00011218	0.00000344
613370.00	2364440.00	0.00051869	0.00010759	0.00010426	0.00000333	0.00067552	0.00010873	0.00010554	0.00000319
613870.00	2364440.00	0.00039324	0.00010343	0.00010018	0.00000325	0.00077521	0.00010894	0.00010581	0.00000312
614370.00	2364440.00	0.00028724	0.00009602	0.00009279	0.00000323	0.00049558	0.00010515	0.00010201	0.00000314
614870.00	2364440.00	0.0003654	0.00009679	0.00009378	0.00000301	0.00072856	0.00010215	0.00009926	0.00000289
615370.00	2364440.00	0.00036292	0.00009413	0.00009123	0.0000029	0.00072505	0.0000991	0.00009631	0.0000028
615870.00	2364440.00	0.00027282	0.00008788	0.00008498	0.0000029	0.00046904	0.00009633	0.00009351	0.00000282
616370.00	2364440.00	0.00034479	0.000089	0.00008626	0.00000274	0.00069559	0.00009373	0.00009108	0.00000265
616870.00	2364440.00	0.00071283	0.00008973	0.00008714	0.00000259	0.0005689	0.00008585	0.00008334	0.00000251
617370.00	2364440.00	0.00072105	0.00008574	0.00008324	0.0000025	0.00043179	0.00008147	0.00007903	0.00000244
617870.00	2364440.00	0.00051304	0.00007944	0.000077	0.00000243	0.0003286	0.00007748	0.00007511	0.00000237
618370.00	2364440.00	0.00068358	0.00008365	0.00008123	0.00000242	0.00057554	0.00007984	0.00007749	0.00000236
618870.00	2364440.00	0.00029809	0.000072	0.00006967	0.00000233	0.00025397	0.0000723	0.00007003	0.00000227
619370.00	2364440.00	0.00025583	0.00006955	0.00006727	0.00000229	0.00023732	0.00007034	0.00006811	0.00000223
619870.00	2364440.00	0.00027971	0.00006864	0.00006639	0.00000224	0.00024302	0.00006897	0.00006678	0.00000219
590370.00	2364940.00	0.00204774	0.0004542	0.00041559	0.0000386	0.0021487	0.00048202	0.00045414	0.00002788
590870.00	2364940.00	0.00135125	0.00038141	0.00033104	0.00005037	0.00084736	0.00041007	0.00036994	0.00004013
591370.00	2364940.00	0.0008951	0.0003269	0.00027285	0.00005405	0.00074553	0.00036489	0.00031427	0.00005062
591870.00	2364940.00	0.00070255	0.00027768	0.0002286	0.00004907	0.00069231	0.00032068	0.00026918	0.0000515
592370.00	2364940.00	0.00051629	0.00023425	0.00019329	0.00004097	0.00061516	0.00027428	0.00022902	0.00004527
592870.00	2364940.00	0.00050517	0.0002162	0.00018147	0.00003473	0.00057424	0.00024039	0.00020299	0.0000374
593370.00	2364940.00	0.0006374	0.00023433	0.00020143	0.00003289	0.00057689	0.00023128	0.00019838	0.0000329
593870.00	2364940.00	0.00129049	0.00030924	0.00027556	0.00003367	0.00070966	0.00026443	0.00023186	0.00003257
594370.00	2364940.00	0.00099606	0.00034434	0.00030877	0.00003557	0.00071799	0.00031326	0.00027917	0.00003409
594870.00	2364940.00	0.00164413	0.00038069	0.000347	0.0000337	0.00099152	0.00036858	0.00033341	0.00003517
595370.00	2364940.00	0.00203822	0.00036952	0.00034153	0.00002799	0.00131203	0.00038555	0.00035334	0.00003221
595870.00	2364940.00	0.00206705	0.00033366	0.00031179	0.00002187	0.0014717	0.0003586	0.00033252	0.00002607
596370.00	2364940.00	0.00151263	0.00029884	0.00028083	0.00001801	0.00200629	0.00033143	0.0003111	0.00002033
596870.00	2364940.00	0.00089956	0.00026555	0.00024928	0.00001628	0.00207456	0.00030796	0.00029089	0.00001706
597370.00	2364940.00	0.00055513	0.00024629	0.00022948	0.00001681	0.00111523	0.00027975	0.00026341	0.00001634
597870.00	2364940.00	0.00053121	0.00024374	0.00022562	0.00001812	0.0009626	0.0002668	0.00025003	0.00001676
598370.00	2364940.00	0.00051807	0.0002447	0.00022544	0.00001926	0.00084977	0.00026025	0.0002423	0.00001795
598870.00	2364940.00	0.00051378	0.00024585	0.00022656	0.00001929	0.0007857	0.00025631	0.00023773	0.00001858
599370.00	2364940.00	0.00050854	0.00024383	0.00022572	0.00001811	0.00077495	0.00025408	0.00023631	0.00001778
599870.00	2364940.00	0.00050164	0.00024072	0.00022393	0.00001679	0.00076058	0.00025006	0.00023364	0.00001642
600370.00	2364940.00	0.00049252	0.00023606	0.00022018	0.00001588	0.00074883	0.00024445	0.00022915	0.0000153
600870.00	2364940.00	0.00047795	0.0002294	0.00021416	0.00001524	0.00073578	0.00023812	0.00022365	0.00001447
601370.00	2364940.00	0.00062666	0.00023001	0.00021575	0.00001426	0.00117607	0.0002416	0.00022809	0.00001351
601870.00	2364940.00	0.00060894	0.00022198	0.00020797	0.00001401	0.0012049	0.0002344	0.00022117	0.00001323
602370.00	2364940.00	0.0006159	0.00021405	0.00020031	0.00001374	0.00116557	0.00022474	0.00021178	0.00001297
602870.00	2364940.00	0.0005929	0.00020607	0.00019258	0.00001349	0.00110737	0.00021616	0.00020347	0.0000127
603370.00	2364940.00	0.00059123	0.00019987	0.00018663	0.00001324	0.00108011	0.00020884	0.00019639	0.00001245
603870.00	2364940.00	0.00060211	0.00019502	0.00018201	0.00001301	0.0010707	0.00020293	0.00019069	0.00001224
604370.00	2364940.00	0.00058398	0.00019022	0.00017743	0.00001279	0.00106784	0.00019856	0.00018647	0.00001208
604870.00	2364940.00	0.00058117	0.00018632	0.00017376	0.00001255	0.00106277	0.0001946	0.00018266	0.00001194
605370.00	2364940.00	0.00057789	0.00018271	0.00017045	0.00001226	0.00105555	0.000191	0.00017923	0.00001178
605870.00	2364940.00	0.00057364	0.00017919	0.0001673	0.00001189	0.00104389	0.00018747	0.00017592	0.00001154
606370.00	2364940.00	0.00056818	0.00017555	0.00016413	0.00001142	0.00102705	0.00018376	0.00017256	0.0000112
606870.00	2364940.00	0.00056147	0.00017166	0.00016081	0.00001085	0.00100533	0.00017972	0.00016898	0.00001073
607370.00	2364940.00	0.0005536	0.00016744	0.00015725	0.00001019	0.00097963	0.00017527	0.00016512	0.00001015
607870.00	2364940.00	0.00054477	0.00016286	0.00015339	0.00000947	0.00095128	0.00017039	0.00016092	0.00000947
608370.00	2364940.00	0.00053522	0.00015794	0.00014922	0.00000872	0.00092155	0.00016513	0.0001564	0.00000873
608870.00	2364940.00	0.0005252	0.00015275	0.00014479	0.00000797	0.00089177	0.00015956	0.0001516	0.00000797
609370.00	2364940.00	0.0005056	0.0001472	0.00013996	0.00000724	0.00086647	0.00015397	0.00014675	0.00000722
609870.00	2364940.00	0.00053616	0.00014286	0.00013634	0.00000652	0.00087033	0.00014803	0.00014157	0.00000646
610370.00	2364940.00	0.00046763	0.00013636	0.00013043	0.00000593	0.00086988	0.00014342	0.00013755	0.00000586
610870.00	2364940.00	0.00046728	0.00013122	0.00012586	0.00000535	0.00084034	0.00013736	0.00013211	0.00000525
611370.00	2364940.00	0.00053222	0.00012699	0.00012219	0.0000048	0.00075877	0.00013	0.00012534	0.00000466
611870.00	2364940.00	0.00050838	0.00012184	0.00011746	0.00000438	0.00075092	0.00012496	0.00012073	0.00000423
612370.00	2364940.00	0.00040193	0.00011569	0.00011161	0.00000408	0.00076545	0.00012214	0.0001182	0.00000394
612870.00	2364940.00	0.00039132	0.00011129	0.00010752	0.00000377	0.0007455	0.0001175	0.00011388	0.00000362

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2364940.00	0.00044116	0.00010818	0.00010472	0.00000346	0.0007283	0.00011166	0.00010835	0.00000331
613870.00	2364940.00	0.00052756	0.00010614	0.00010292	0.00000321	0.00074688	0.00010723	0.00010417	0.00000306
614370.00	2364940.00	0.00033396	0.00009914	0.000096	0.00000314	0.00064905	0.00010603	0.00010301	0.00000302
614870.00	2364940.00	0.000353	0.00009681	0.00009384	0.00000296	0.00069159	0.00010243	0.00009959	0.00000284
615370.00	2364940.00	0.00029272	0.00009169	0.0000888	0.00000289	0.00053526	0.00009923	0.00009645	0.00000278
615870.00	2364940.00	0.00042612	0.00009283	0.00009014	0.00000269	0.00075119	0.00009531	0.00009274	0.00000257
616370.00	2364940.00	0.0007184	0.00009095	0.00008845	0.0000025	0.00049022	0.00008714	0.00008474	0.00000241
616870.00	2364940.00	0.00031674	0.00008575	0.0000832	0.00000256	0.00061944	0.00009077	0.00008831	0.00000246
617370.00	2364940.00	0.00030507	0.00008332	0.00008083	0.00000249	0.00059276	0.00008836	0.00008596	0.0000024
617870.00	2364940.00	0.0006912	0.00008435	0.00008202	0.00000233	0.00050984	0.00008053	0.00007828	0.00000225
618370.00	2364940.00	0.00043313	0.00007585	0.00007362	0.00000223	0.00029431	0.00007445	0.00007229	0.00000216
618870.00	2364940.00	0.00060828	0.0000773	0.0000751	0.0000022	0.0003574	0.00007406	0.00007192	0.00000214
619370.00	2364940.00	0.00052786	0.00007401	0.00007186	0.00000215	0.00031998	0.00007157	0.00006947	0.0000021
619870.00	2364940.00	0.0004618	0.00007126	0.00006915	0.00000211	0.00029356	0.00006938	0.00006732	0.00000206
590370.00	2365440.00	0.00075399	0.00038677	0.00034693	0.00003985	0.00116611	0.00042474	0.00039445	0.00003029
590870.00	2365440.00	0.0022151	0.00038795	0.00034222	0.00004573	0.00220105	0.00040974	0.00037163	0.00003811
591370.00	2365440.00	0.00234949	0.00034018	0.00029286	0.00004732	0.00112305	0.00034742	0.00030194	0.00004548
591870.00	2365440.00	0.00113514	0.00027139	0.00022774	0.00004365	0.00073993	0.00029867	0.00025273	0.00004594
592370.00	2365440.00	0.00041247	0.00021242	0.00017524	0.00003718	0.00051511	0.00024711	0.00020614	0.00004097
592870.00	2365440.00	0.00037495	0.00019307	0.00016196	0.00003111	0.00047406	0.00021572	0.00018212	0.0000336
593370.00	2365440.00	0.00045189	0.00020612	0.00017644	0.00002969	0.00050957	0.00020954	0.00017997	0.00002957
593870.00	2365440.00	0.00053332	0.00024667	0.00021609	0.00003057	0.00052897	0.00022533	0.00019641	0.00002892
594370.00	2365440.00	0.00067412	0.00029808	0.00026565	0.00003243	0.00060363	0.00027192	0.00024141	0.0000305
594870.00	2365440.00	0.00097841	0.00033232	0.00030016	0.00003217	0.00074433	0.00032188	0.0002897	0.00003219
595370.00	2365440.00	0.00145325	0.00034013	0.00031243	0.0000277	0.00095555	0.00034763	0.00031674	0.00003089
595870.00	2365440.00	0.00214292	0.00033489	0.00031279	0.0000221	0.00181312	0.00035622	0.0003308	0.00002542
596370.00	2365440.00	0.00114015	0.00028634	0.00026831	0.00001803	0.00235819	0.00033503	0.00031452	0.00002052
596870.00	2365440.00	0.00080031	0.00025449	0.00023902	0.00001547	0.00202279	0.00030222	0.0002854	0.00001682
597370.00	2365440.00	0.0005826	0.00023476	0.00021994	0.00001482	0.00138092	0.00027454	0.00025956	0.00001497
597870.00	2365440.00	0.00050565	0.00022793	0.00021217	0.00001576	0.00088537	0.00025066	0.00023573	0.00001493
598370.00	2365440.00	0.00050596	0.00022657	0.00020977	0.0000168	0.00095802	0.00024796	0.00023251	0.00001545
598870.00	2365440.00	0.0004866	0.00022768	0.00021001	0.00001767	0.00076649	0.00023951	0.00022288	0.00001664
599370.00	2365440.00	0.00048388	0.00022681	0.00020966	0.00001715	0.00077695	0.00023972	0.0002231	0.00001662
599870.00	2365440.00	0.00047828	0.00022492	0.00020889	0.00001603	0.00074444	0.00023603	0.00022025	0.00001577
600370.00	2365440.00	0.00047138	0.00022205	0.00020716	0.0000149	0.00071801	0.0002311	0.00021654	0.00001456
600870.00	2365440.00	0.00046217	0.0002178	0.00020372	0.00001408	0.00070269	0.0002258	0.00021225	0.00001355
601370.00	2365440.00	0.00057829	0.00021883	0.00020579	0.00001303	0.00121094	0.00023105	0.00021864	0.00001242
601870.00	2365440.00	0.00053923	0.00021226	0.0001995	0.00001276	0.00117258	0.00022621	0.00021416	0.00001205
602370.00	2365440.00	0.00056999	0.00020618	0.00019368	0.0000125	0.00113797	0.00021722	0.00020542	0.0000118
602870.00	2365440.00	0.00055845	0.00019855	0.00018627	0.00001228	0.00106001	0.00020853	0.00019696	0.00001157
603370.00	2365440.00	0.00056993	0.00019245	0.0001804	0.00001205	0.00104028	0.00020083	0.00018949	0.00001134
603870.00	2365440.00	0.00055004	0.00018662	0.00017476	0.00001185	0.00104954	0.00019526	0.00018414	0.00001112
604370.00	2365440.00	0.00055921	0.00018203	0.00017036	0.00001167	0.00101024	0.00018937	0.00017842	0.00001095
604870.00	2365440.00	0.00055647	0.000178	0.0001665	0.0000115	0.00100598	0.00018516	0.00017434	0.00001081
605370.00	2365440.00	0.00055479	0.00017454	0.00016321	0.00001133	0.00101157	0.0001817	0.00017099	0.00001072
605870.00	2365440.00	0.00055224	0.00017132	0.00016019	0.00001114	0.00100647	0.0001785	0.00016789	0.00001062
606370.00	2365440.00	0.0005414	0.00016804	0.00015715	0.00001089	0.00099456	0.00017551	0.00016503	0.00001048
606870.00	2365440.00	0.00054408	0.00016506	0.00015451	0.00001056	0.00097754	0.00017221	0.00016195	0.00001026
607370.00	2365440.00	0.00053869	0.00016179	0.00015165	0.00001014	0.00096073	0.00016887	0.00015892	0.00000995
607870.00	2365440.00	0.00052956	0.00015822	0.00014858	0.00000964	0.00094085	0.00016525	0.00015572	0.00000953
608370.00	2365440.00	0.00053261	0.00015465	0.00014559	0.00000906	0.00091822	0.0001611	0.0001521	0.000009
608870.00	2365440.00	0.00054251	0.00015126	0.00014283	0.00000844	0.00094055	0.00015709	0.00014869	0.0000084
609370.00	2365440.00	0.00048869	0.00014602	0.00013821	0.00000781	0.0009342	0.00015344	0.00014564	0.0000078
609870.00	2365440.00	0.00049973	0.00014182	0.00013467	0.00000715	0.00089617	0.00014802	0.0001409	0.00000712
610370.00	2365440.00	0.00055536	0.00013796	0.00013149	0.00000647	0.0008075	0.00014134	0.00013494	0.0000064
610870.00	2365440.00	0.00040844	0.00013054	0.00012457	0.00000597	0.00082552	0.0001391	0.00013317	0.00000593
611370.00	2365440.00	0.00054509	0.00012829	0.00012298	0.00000531	0.00074397	0.00013078	0.00012559	0.0000052
611870.00	2365440.00	0.00033235	0.00011866	0.00011366	0.00000499	0.00063706	0.00012897	0.00012403	0.00000495
612370.00	2365440.00	0.00060359	0.00011889	0.0001146	0.00000429	0.00057489	0.00011875	0.00011459	0.00000416
612870.00	2365440.00	0.00042407	0.00011387	0.00010981	0.00000406	0.0008074	0.00011943	0.00011551	0.00000392
613370.00	2365440.00	0.00054341	0.00011005	0.00010644	0.00000362	0.00060668	0.00011055	0.00010709	0.00000346
613870.00	2365440.00	0.00036822	0.00010472	0.00010125	0.00000346	0.00071827	0.00011089	0.00010756	0.00000333
614370.00	2365440.00	0.00050096	0.00010361	0.00010046	0.00000315	0.00075837	0.00010539	0.00010239	0.000003
614870.00	2365440.00	0.00044821	0.00009955	0.00009659	0.00000297	0.00075311	0.00010224	0.00009942	0.00000282
615370.00	2365440.00	0.00069336	0.00009636	0.00009369	0.00000266	0.00046988	0.00009325	0.00009071	0.00000254
615870.00	2365440.00	0.00070357	0.000094	0.00009146	0.00000254	0.0004908	0.00009063	0.0000882	0.00000243
616370.00	2365440.00	0.00040083	0.00009013	0.00008758	0.00000255	0.00071463	0.00009285	0.00009043	0.00000242
616870.00	2365440.00	0.00048525	0.00008348	0.0000812	0.00000228	0.00032797	0.00008182	0.00007963	0.00000219
617370.00	2365440.00	0.00056082	0.00008255	0.00008033	0.00000222	0.00035668	0.00008011	0.00007797	0.00000214
617870.00	2365440.00	0.00042417	0.00008336	0.00008108	0.00000228	0.00069704	0.00008458	0.0000824	0.00000218

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2365440.00	0.00049612	0.00008181	0.00007961	0.0000022	0.00066219	0.00008133	0.00007923	0.0000021
618870.00	2365440.00	0.00058626	0.00007689	0.00007482	0.00000207	0.0003564	0.0000739	0.0000719	0.000002
619370.00	2365440.00	0.00038809	0.00007129	0.00006928	0.00000201	0.00027308	0.00007027	0.00006833	0.00000194
619870.00	2365440.00	0.00026571	0.00006708	0.00006512	0.00000197	0.0002291	0.00006753	0.00006564	0.00000189
590370.00	2365940.00	0.00070894	0.00035381	0.00031566	0.00003815	0.00111011	0.00038931	0.00035968	0.00002964
590870.00	2365940.00	0.00070441	0.00031992	0.00027659	0.00004333	0.00140572	0.00037581	0.00033905	0.00003676
591370.00	2365940.00	0.00137383	0.00031312	0.00027023	0.00004289	0.00290186	0.00036213	0.00032125	0.00004088
591870.00	2365940.00	0.00258539	0.00029145	0.00025278	0.00003867	0.00116808	0.00028851	0.00024778	0.00004073
592370.00	2365940.00	0.00077019	0.0002159	0.00018212	0.00003378	0.00062166	0.00023972	0.00020303	0.00003669
592870.00	2365940.00	0.00034765	0.00017859	0.00015037	0.00002822	0.0004429	0.00019957	0.00016912	0.00003045
593370.00	2365940.00	0.00036137	0.00018441	0.00015763	0.00002678	0.00043058	0.0001894	0.00016274	0.00002665
593870.00	2365940.00	0.00037808	0.00021025	0.00018298	0.00002727	0.0004365	0.00019717	0.00017166	0.00002551
594370.00	2365940.00	0.00056575	0.00026601	0.00023666	0.00002934	0.00054466	0.00024193	0.00021453	0.0000274
594870.00	2365940.00	0.00098897	0.00031034	0.00028068	0.00002966	0.0007071	0.00029347	0.00026434	0.00002914
595370.00	2365940.00	0.00169464	0.00033293	0.00030632	0.00002661	0.00103796	0.00032855	0.00029986	0.00002869
595870.00	2365940.00	0.00209806	0.0003224	0.00030048	0.00002192	0.00143513	0.00033394	0.00030892	0.00002502
596370.00	2365940.00	0.00145326	0.00028845	0.00027059	0.00001785	0.0021146	0.00032095	0.00030066	0.00002029
596870.00	2365940.00	0.00091524	0.00025207	0.00023711	0.00001496	0.0020724	0.00029425	0.00027769	0.00001657
597370.00	2365940.00	0.00064646	0.00022829	0.00021473	0.00001356	0.00164361	0.00026902	0.00025484	0.00001418
597870.00	2365940.00	0.00050234	0.00021538	0.00020165	0.00001372	0.00100249	0.00024445	0.00023104	0.00001341
598370.00	2365940.00	0.00049486	0.00021216	0.00019759	0.00001457	0.00099797	0.00023587	0.00022239	0.00001348
598870.00	2365940.00	0.00047902	0.00021157	0.00019594	0.00001563	0.00090379	0.00023039	0.00021599	0.0000144
599370.00	2365940.00	0.00046867	0.00021172	0.00019576	0.00001596	0.00083017	0.00022758	0.00021246	0.00001513
599870.00	2365940.00	0.00046091	0.0002108	0.00019543	0.00001536	0.00077197	0.00022479	0.00020979	0.00001499
600370.00	2365940.00	0.00045284	0.0002086	0.00019432	0.00001429	0.00072019	0.00022031	0.00020622	0.00001409
600870.00	2365940.00	0.00044516	0.00020582	0.00019247	0.00001334	0.00067665	0.00021407	0.00020101	0.00001306
601370.00	2365940.00	0.00060394	0.00020816	0.00019607	0.00001209	0.00117015	0.00021664	0.00020493	0.00001171
601870.00	2365940.00	0.00057689	0.00020426	0.00019258	0.00001168	0.0011622	0.00021351	0.00020236	0.00001115
602370.00	2365940.00	0.00056801	0.00019866	0.00018724	0.00001142	0.00104127	0.0002068	0.00019597	0.00001083
602870.00	2365940.00	0.0005291	0.00019177	0.00018054	0.00001123	0.00102603	0.00020138	0.00019078	0.0000106
603370.00	2365940.00	0.00055221	0.00018607	0.00017505	0.00001102	0.0009919	0.00019373	0.00018334	0.0000104
603870.00	2365940.00	0.00055148	0.00018035	0.00016952	0.00001082	0.00097507	0.00018723	0.00017704	0.00001019
604370.00	2365940.00	0.00054614	0.00017531	0.00016466	0.00001065	0.00096902	0.00018174	0.00017175	0.00000999
604870.00	2365940.00	0.00048591	0.00016977	0.00015925	0.00001052	0.00097987	0.00017859	0.00016874	0.00000985
605370.00	2365940.00	0.00042147	0.0001643	0.00015387	0.00001043	0.00092565	0.00017655	0.00016676	0.00000979
605870.00	2365940.00	0.00052964	0.00016387	0.00015362	0.00001025	0.00094833	0.00017001	0.00016036	0.00000965
606370.00	2365940.00	0.00052764	0.00016097	0.00015085	0.00001012	0.00094519	0.00016713	0.00015755	0.00000958
606870.00	2365940.00	0.00052515	0.00015824	0.00014828	0.00000995	0.0009398	0.00016443	0.00015493	0.00000951
607370.00	2365940.00	0.00052184	0.00015553	0.0001458	0.00000973	0.00093104	0.00016175	0.00015237	0.00000938
607870.00	2365940.00	0.00051835	0.00015281	0.00014338	0.00000943	0.00092794	0.00015906	0.00014988	0.00000918
608370.00	2365940.00	0.00048623	0.00014971	0.00014064	0.00000908	0.00098556	0.00015765	0.00014873	0.00000892
608870.00	2365940.00	0.00051428	0.00014717	0.00013855	0.00000862	0.00094741	0.00015334	0.00014484	0.00000851
609370.00	2365940.00	0.00047663	0.0001431	0.00013497	0.00000813	0.0009343	0.00015034	0.00014227	0.00000808
609870.00	2365940.00	0.00045003	0.00013895	0.00013135	0.0000076	0.00090599	0.00014676	0.00013918	0.00000758
610370.00	2365940.00	0.00037933	0.000133	0.00012592	0.00000708	0.00080163	0.00014347	0.00013637	0.00000711
610870.00	2365940.00	0.00054701	0.00013269	0.00012629	0.0000064	0.00077503	0.00013539	0.00012907	0.00000632
611370.00	2365940.00	0.000631	0.00012878	0.00012301	0.00000577	0.00059768	0.00012855	0.00012287	0.00000568
611870.00	2365940.00	0.00035441	0.00012046	0.00011502	0.00000545	0.00071545	0.00012967	0.00012425	0.00000542
612370.00	2365940.00	0.00049269	0.00011951	0.00011466	0.00000485	0.00073514	0.00012237	0.00011764	0.00000473
612870.00	2365940.00	0.00047543	0.000116	0.00011157	0.00000444	0.00082349	0.00012002	0.0001157	0.00000432
613370.00	2365940.00	0.00039543	0.00011038	0.0001063	0.00000408	0.00076559	0.00011624	0.00011227	0.00000397
613870.00	2365940.00	0.00033883	0.00010491	0.00010114	0.00000377	0.00065952	0.00011208	0.00010842	0.00000366
614370.00	2365940.00	0.00027658	0.000098	0.00009438	0.00000362	0.00045917	0.00010652	0.00010297	0.00000355
614870.00	2365940.00	0.00070321	0.00010206	0.00009905	0.00000301	0.00054169	0.00009926	0.00009639	0.00000287
615370.00	2365940.00	0.00061446	0.00009585	0.00009312	0.00000273	0.00041956	0.00009362	0.00009099	0.00000262
615870.00	2365940.00	0.00058019	0.00009199	0.00008945	0.00000253	0.00038582	0.00008972	0.00008729	0.00000244
616370.00	2365940.00	0.00064937	0.00009058	0.00008816	0.00000242	0.00042917	0.00008756	0.00008525	0.00000231
616870.00	2365940.00	0.0004771	0.00008884	0.00008643	0.00000241	0.00067691	0.00008941	0.00008713	0.00000228
617370.00	2365940.00	0.00046722	0.00008148	0.00007933	0.00000215	0.00031986	0.00007995	0.00007789	0.00000206
617870.00	2365940.00	0.00034209	0.00007643	0.00007438	0.00000205	0.00026512	0.00007634	0.00007438	0.00000195
618370.00	2365940.00	0.00064686	0.00008142	0.00007935	0.00000207	0.00045643	0.00007811	0.00007614	0.00000197
618870.00	2365940.00	0.00050503	0.00007965	0.0000776	0.00000205	0.000616	0.00007874	0.00007678	0.00000196
619370.00	2365940.00	0.00062834	0.00007745	0.00007549	0.00000196	0.00046997	0.00007422	0.00007234	0.00000188
619870.00	2365940.00	0.00058033	0.00007338	0.00007149	0.00000189	0.00035818	0.00007037	0.00006855	0.00000182
590370.00	2366440.00	0.0006715	0.0003243	0.00028822	0.00003608	0.0011352	0.00036448	0.0003361	0.00002838
590870.00	2366440.00	0.00065888	0.00029505	0.00025479	0.00004026	0.00126607	0.00034424	0.00030937	0.00003487
591370.00	2366440.00	0.00149474	0.00029644	0.00025727	0.00003917	0.00270499	0.00033191	0.00029414	0.00003777
591870.00	2366440.00	0.00162274	0.0002502	0.00021459	0.00003561	0.0007993	0.00025934	0.00022185	0.00003748
592370.00	2366440.00	0.00053012	0.00019477	0.00016378	0.00003099	0.00055129	0.00022037	0.00018688	0.00003349
592870.00	2366440.00	0.00032951	0.00016702	0.00014121	0.00002581	0.00041445	0.00018586	0.0001581	0.00002776

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2366440.00	0.00032834	0.00016887	0.00014464	0.00002424	0.00039321	0.00017456	0.00015042	0.00002414
593870.00	2366440.00	0.00036288	0.00019301	0.00016811	0.0000249	0.00040845	0.00018247	0.00015903	0.00002345
594370.00	2366440.00	0.000557	0.0002432	0.00021669	0.00002651	0.00051874	0.00022005	0.00019528	0.00002477
594870.00	2366440.00	0.00083693	0.00028309	0.0002557	0.00002739	0.00063871	0.00026482	0.0002384	0.00002641
595370.00	2366440.00	0.00114942	0.00030011	0.00027429	0.00002583	0.00077366	0.000294	0.00026708	0.00002692
595870.00	2366440.00	0.00120398	0.0002884	0.00026648	0.00002192	0.00084391	0.00029897	0.00027409	0.00002488
596370.00	2366440.00	0.00182285	0.00028801	0.00027031	0.00001769	0.00166698	0.0003038	0.00028372	0.00002007
596870.00	2366440.00	0.00103886	0.00025096	0.00023623	0.00001472	0.00204213	0.00028649	0.00027005	0.00001644
597370.00	2366440.00	0.00055523	0.00021878	0.00020572	0.00001306	0.00127057	0.00026025	0.00024608	0.00001417
597870.00	2366440.00	0.00057933	0.00020917	0.00019697	0.0000122	0.00142559	0.00024248	0.00023021	0.00001227
598370.00	2366440.00	0.0005063	0.00020141	0.00018874	0.00001267	0.00113398	0.00022784	0.00021588	0.00001195
598870.00	2366440.00	0.00048144	0.00019898	0.00018531	0.00001367	0.00101199	0.00022003	0.00020751	0.00001251
599370.00	2366440.00	0.00046026	0.00019841	0.00018391	0.00001451	0.00088928	0.00021572	0.00020228	0.00001344
599870.00	2366440.00	0.00045107	0.00019821	0.00018367	0.00001454	0.00082871	0.00021369	0.00019978	0.00001391
600370.00	2366440.00	0.00043498	0.00019656	0.00018268	0.00001388	0.00070901	0.0002088	0.00019518	0.00001362
600870.00	2366440.00	0.00042749	0.00019411	0.00018126	0.00001286	0.00066312	0.00020366	0.00019096	0.0000127
601370.00	2366440.00	0.00043366	0.00019213	0.00018038	0.00001176	0.0007681	0.000206	0.00019452	0.00001148
601870.00	2366440.00	0.00055039	0.00019372	0.0001828	0.00001092	0.00111312	0.00020229	0.00019174	0.00001055
602370.00	2366440.00	0.0004749	0.00018848	0.0001779	0.00001059	0.00102744	0.00020079	0.00019072	0.00001006
602870.00	2366440.00	0.0005207	0.00018512	0.00017481	0.00001031	0.0009887	0.00019306	0.00018329	0.00000977
603370.00	2366440.00	0.00052736	0.00018002	0.0001699	0.00001012	0.00096597	0.00018728	0.00017771	0.00000957
603870.00	2366440.00	0.00052311	0.00017441	0.00016447	0.00000994	0.00094375	0.00018128	0.0001719	0.00000939
604370.00	2366440.00	0.00052493	0.00016937	0.0001596	0.00000977	0.00093315	0.00017551	0.00016631	0.0000092
604870.00	2366440.00	0.00052419	0.00016534	0.00015572	0.00000962	0.00099849	0.00017153	0.0001625	0.00000903
605370.00	2366440.00	0.00052475	0.00016106	0.00015158	0.00000949	0.00092326	0.00016624	0.00015736	0.00000888
605870.00	2366440.00	0.000524	0.00015761	0.00014823	0.00000938	0.00090165	0.0001624	0.00015363	0.00000877
606370.00	2366440.00	0.00050221	0.00015429	0.00014499	0.0000093	0.00090814	0.00015987	0.00015115	0.00000872
606870.00	2366440.00	0.00048348	0.00015153	0.00014231	0.00000922	0.00094779	0.00015825	0.00014956	0.00000869
607370.00	2366440.00	0.00050674	0.0001495	0.00014041	0.0000091	0.00092643	0.00015501	0.00014638	0.00000863
607870.00	2366440.00	0.00043758	0.00014565	0.00013666	0.00000898	0.00091926	0.00015427	0.00014565	0.00000862
608370.00	2366440.00	0.00050386	0.00014493	0.00013618	0.00000875	0.00093887	0.00015061	0.00014217	0.00000844
608870.00	2366440.00	0.00043057	0.00014094	0.00013243	0.00000851	0.00093499	0.0001499	0.00014157	0.00000832
609370.00	2366440.00	0.00049651	0.00013974	0.0001316	0.00000814	0.00091269	0.00014522	0.00013724	0.00000798
609870.00	2366440.00	0.00060984	0.00013801	0.00013033	0.00000769	0.00073897	0.00013886	0.00013133	0.00000753
610370.00	2366440.00	0.00046615	0.00013332	0.00012601	0.00000731	0.00087652	0.00013916	0.00013192	0.00000724
610870.00	2366440.00	0.00039451	0.00012838	0.00012151	0.00000687	0.00082714	0.00013687	0.00013002	0.00000685
611370.00	2366440.00	0.00054136	0.00012751	0.00012122	0.00000629	0.00074147	0.00012952	0.00012333	0.0000062
611870.00	2366440.00	0.00053748	0.0001238	0.00011802	0.00000578	0.00071241	0.00012549	0.00011981	0.00000569
612370.00	2366440.00	0.00049627	0.00012054	0.0001152	0.00000534	0.00084233	0.00012409	0.00011884	0.00000525
612870.00	2366440.00	0.0004466	0.00011599	0.00011109	0.0000049	0.00082416	0.00012073	0.00011592	0.00000481
613370.00	2366440.00	0.00038419	0.00011084	0.00010635	0.0000045	0.00075638	0.00011699	0.00011258	0.00000441
613870.00	2366440.00	0.00031003	0.00010455	0.00010038	0.00000417	0.00058366	0.00011276	0.00010866	0.0000041
614370.00	2366440.00	0.00044238	0.00010504	0.00010133	0.00000371	0.0007594	0.00010833	0.00010475	0.00000358
614870.00	2366440.00	0.00032455	0.00009878	0.00009531	0.00000347	0.00062445	0.00010525	0.00010189	0.00000336
615370.00	2366440.00	0.00068059	0.00009889	0.00009592	0.00000297	0.00047286	0.00009596	0.00009311	0.00000285
615870.00	2366440.00	0.00056151	0.00009309	0.00009041	0.00000268	0.00038248	0.00009106	0.00008846	0.0000026
616370.00	2366440.00	0.00046606	0.00008812	0.00008566	0.00000246	0.00033019	0.0000869	0.00008452	0.00000238
616870.00	2366440.00	0.0003948	0.00008367	0.00008139	0.00000228	0.00029344	0.00008324	0.00008104	0.0000022
617370.00	2366440.00	0.00061713	0.00008732	0.00008503	0.00000228	0.00052892	0.00008493	0.00008278	0.00000215
617870.00	2366440.00	0.00061044	0.00008301	0.0000809	0.00000211	0.00040207	0.00008007	0.00007807	0.00000201
618370.00	2366440.00	0.00036024	0.00007543	0.00007348	0.00000195	0.00027007	0.00007499	0.00007313	0.00000186
618870.00	2366440.00	0.00051696	0.00007642	0.00007451	0.00000191	0.00033638	0.00007418	0.00007236	0.00000183
619370.00	2366440.00	0.00061772	0.00007706	0.00007517	0.00000189	0.0004254	0.0000739	0.0000721	0.0000018
619870.00	2366440.00	0.00058565	0.00007397	0.00007216	0.00000182	0.00037345	0.00007094	0.0000692	0.00000173
590370.00	2366940.00	0.00103874	0.00031485	0.0002812	0.00003364	0.00219796	0.00035386	0.00032703	0.00002683
590870.00	2366940.00	0.00071251	0.00027772	0.00024055	0.00003717	0.00172648	0.00033067	0.0002979	0.00003277
591370.00	2366940.00	0.00132453	0.00027457	0.00023863	0.00003594	0.00263904	0.00031002	0.00027515	0.00003487
591870.00	2366940.00	0.0014942	0.00023272	0.00020015	0.00003257	0.00074474	0.00024081	0.00020658	0.00003423
592370.00	2366940.00	0.00080432	0.00019334	0.00016506	0.00002828	0.00058362	0.00020968	0.00017931	0.00003036
592870.00	2366940.00	0.00035594	0.00016216	0.00013782	0.00002435	0.00043421	0.00017937	0.00015363	0.00002574
593370.00	2366940.00	0.00030706	0.00015618	0.00013425	0.00002193	0.00036599	0.00016174	0.00013987	0.00002188
593870.00	2366940.00	0.0003478	0.00017756	0.00015485	0.00002271	0.00039376	0.00017011	0.00014868	0.00002143
594370.00	2366940.00	0.00057629	0.00022422	0.00020019	0.00002402	0.00050198	0.00020215	0.00017965	0.0000225
594870.00	2366940.00	0.00076809	0.00026026	0.00023514	0.00002512	0.00059345	0.00024061	0.00021665	0.00002396
595370.00	2366940.00	0.00130347	0.00028859	0.00026441	0.00002418	0.00080189	0.00027506	0.00025033	0.00002473
595870.00	2366940.00	0.00179506	0.0002953	0.00027407	0.00002124	0.00112314	0.0002935	0.00027024	0.00002327
596370.00	2366940.00	0.0016869	0.00028311	0.00026534	0.00001777	0.00184746	0.00029797	0.00027824	0.00001973
596870.00	2366940.00	0.00102124	0.00024723	0.00023253	0.0000147	0.00206361	0.00028201	0.00026557	0.00001644
597370.00	2366940.00	0.0006879	0.00021914	0.0002066	0.00001254	0.0017269	0.00025871	0.00024498	0.00001373
597870.00	2366940.00	0.00063834	0.00020476	0.00019344	0.00001131	0.00156244	0.00023667	0.00022496	0.00001172

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2366940.00	0.00056153	0.00019475	0.00018355	0.00001119	0.00135624	0.00022144	0.00021059	0.00001085
598870.00	2366940.00	0.00049504	0.00018911	0.00017719	0.00001191	0.00112417	0.00021125	0.00020024	0.000011
599370.00	2366940.00	0.00044318	0.00018642	0.00017348	0.00001293	0.00086544	0.00020397	0.00019213	0.00001184
599870.00	2366940.00	0.00043851	0.00018645	0.00017298	0.00001346	0.00084029	0.00020199	0.00018941	0.00001258
600370.00	2366940.00	0.00042632	0.00018572	0.00017243	0.00001329	0.00076192	0.00019964	0.00018682	0.00001282
600870.00	2366940.00	0.00041758	0.00018373	0.00017124	0.00001249	0.00070161	0.00019552	0.00018321	0.00001231
601370.00	2366940.00	0.00053151	0.00018586	0.00017458	0.00001128	0.00106911	0.00019482	0.00018361	0.00001121
601870.00	2366940.00	0.00058142	0.00018458	0.00017417	0.00001041	0.00103512	0.00018986	0.00017962	0.00001024
602370.00	2366940.00	0.00057665	0.00018226	0.0001724	0.00000986	0.00102334	0.00018696	0.00017742	0.00000954
602870.00	2366940.00	0.00051488	0.00017774	0.00016819	0.00000955	0.00095659	0.00018409	0.00017498	0.00000911
603370.00	2366940.00	0.000487	0.00017336	0.00016401	0.00000935	0.00095494	0.000181	0.00017214	0.00000886
603870.00	2366940.00	0.00049706	0.00016908	0.00015991	0.00000918	0.00095827	0.0001761	0.00016742	0.00000868
604370.00	2366940.00	0.00057594	0.00016538	0.00015638	0.000009	0.00085321	0.00016844	0.00015991	0.00000853
604870.00	2366940.00	0.00049648	0.00015986	0.00015099	0.00000887	0.0009682	0.00016621	0.00015786	0.00000835
605370.00	2366940.00	0.00048028	0.00015544	0.00014671	0.00000873	0.00096121	0.00016197	0.00015377	0.0000082
605870.00	2366940.00	0.00051605	0.00015247	0.00014386	0.00000861	0.00092073	0.00015679	0.00014873	0.00000806
606370.00	2366940.00	0.00048433	0.00014837	0.00013985	0.00000852	0.00085855	0.00015322	0.00014526	0.00000796
606870.00	2366940.00	0.00048467	0.00014571	0.00013726	0.00000845	0.00085888	0.00015045	0.00014255	0.0000079
607370.00	2366940.00	0.00043867	0.00014265	0.00013424	0.00000841	0.0009067	0.0001498	0.0001419	0.0000079
607870.00	2366940.00	0.00046719	0.00014119	0.00013286	0.00000833	0.00092445	0.00014714	0.00013928	0.00000786
608370.00	2366940.00	0.00047198	0.00013917	0.00013093	0.00000823	0.00091662	0.00014483	0.000137	0.00000783
608870.00	2366940.00	0.00044517	0.00013659	0.00012848	0.00000811	0.00091911	0.00014343	0.00013565	0.00000779
609370.00	2366940.00	0.00046782	0.00013487	0.00012696	0.00000791	0.00090065	0.00014047	0.00013282	0.00000765
609870.00	2366940.00	0.00043782	0.00013205	0.00012438	0.00000767	0.00089368	0.00013877	0.00013128	0.00000749
610370.00	2366940.00	0.00034953	0.0001269	0.00011948	0.00000742	0.00074985	0.00013748	0.00013013	0.00000736
610870.00	2366940.00	0.00057349	0.00012858	0.00012164	0.00000694	0.00071215	0.00012937	0.00012258	0.00000679
611370.00	2366940.00	0.00057421	0.00012569	0.00011915	0.00000654	0.00068136	0.00012621	0.00011979	0.00000641
611870.00	2366940.00	0.00058943	0.00012262	0.00011653	0.0000061	0.00062277	0.00012241	0.00011642	0.00000599
612370.00	2366940.00	0.00028807	0.00011194	0.000106	0.00000594	0.00049176	0.00012168	0.00011566	0.00000602
612870.00	2366940.00	0.0005971	0.00011775	0.00011249	0.00000526	0.00076609	0.00011826	0.00011311	0.00000515
613370.00	2366940.00	0.00069456	0.00011484	0.00011006	0.00000478	0.00062593	0.00011288	0.00010821	0.00000466
613870.00	2366940.00	0.00046583	0.0001094	0.00010494	0.00000446	0.00078308	0.00011245	0.00010809	0.00000435
614370.00	2366940.00	0.00066279	0.00010619	0.00010227	0.00000392	0.00047648	0.00010388	0.00010004	0.00000385
614870.00	2366940.00	0.00065965	0.00010426	0.00010062	0.00000364	0.00059075	0.00010225	0.00009874	0.0000035
615370.00	2366940.00	0.0003222	0.00009651	0.00009304	0.00000348	0.00062022	0.00010249	0.00009912	0.00000338
615870.00	2366940.00	0.00042172	0.00009577	0.00009264	0.00000313	0.00070573	0.00009832	0.00009533	0.00000299
616370.00	2366940.00	0.00055209	0.00009117	0.00008849	0.00000268	0.00037775	0.00008911	0.0000865	0.00000261
616870.00	2366940.00	0.00036145	0.00008412	0.0000817	0.00000243	0.0002789	0.00008435	0.00008199	0.00000236
617370.00	2366940.00	0.00030095	0.00007989	0.00007765	0.00000224	0.0002545	0.00008092	0.00007877	0.00000215
617870.00	2366940.00	0.00041058	0.00007994	0.00007782	0.00000212	0.00029632	0.00007908	0.00007704	0.00000204
618370.00	2366940.00	0.00048947	0.0000791	0.00007708	0.00000202	0.0003319	0.00007723	0.00007529	0.00000193
618870.00	2366940.00	0.00025573	0.00007151	0.00006965	0.00000186	0.00023076	0.00007266	0.0000709	0.00000176
619370.00	2366940.00	0.00039873	0.00007276	0.00007095	0.00000181	0.00028316	0.00007168	0.00006995	0.00000173
619870.00	2366940.00	0.00037981	0.00007035	0.00006861	0.00000174	0.00027235	0.00006939	0.00006774	0.00000165
590370.00	2367440.00	0.00198253	0.0003041	0.0002723	0.00003179	0.00112307	0.00030407	0.00027803	0.00002603
590870.00	2367440.00	0.00080874	0.00026487	0.00023044	0.00003442	0.00207642	0.0003116	0.00028073	0.00003087
591370.00	2367440.00	0.002084	0.00027209	0.00023918	0.00003291	0.00195213	0.00027492	0.00024252	0.0000324
591870.00	2367440.00	0.00243456	0.00024491	0.00021541	0.0000295	0.00114425	0.00023491	0.00020403	0.00003088
592370.00	2367440.00	0.00131885	0.00019642	0.00017062	0.0000258	0.00066191	0.0002009	0.00017329	0.00002761
592870.00	2367440.00	0.00049092	0.00016103	0.00013838	0.00002265	0.0004788	0.00017441	0.00015065	0.00002376
593370.00	2367440.00	0.00029143	0.00014623	0.000126	0.00002024	0.00034473	0.000152	0.00013181	0.00002019
593870.00	2367440.00	0.00032291	0.00016284	0.00014213	0.00002071	0.0003698	0.00015792	0.00013837	0.00001955
594370.00	2367440.00	0.00046339	0.00020026	0.00017834	0.00002193	0.00045348	0.00018293	0.00016251	0.00002042
594870.00	2367440.00	0.00080841	0.00024289	0.00021999	0.0000229	0.0005744	0.0002211	0.00019932	0.00002178
595370.00	2367440.00	0.00122257	0.00026966	0.00024698	0.00002268	0.00074251	0.00025331	0.00023055	0.00002276
595870.00	2367440.00	0.00201166	0.00029087	0.00027028	0.00002059	0.00126519	0.00027993	0.00025821	0.00002171
596370.00	2367440.00	0.00156842	0.00027647	0.00025878	0.00001769	0.001946	0.00028897	0.00026975	0.00001922
596870.00	2367440.00	0.00102336	0.00024419	0.00022948	0.00001471	0.00206516	0.0002762	0.00025985	0.00001635
597370.00	2367440.00	0.0008341	0.00022012	0.00020783	0.0000123	0.00183809	0.00025229	0.00023876	0.00001353
597870.00	2367440.00	0.00072937	0.00020276	0.00019199	0.00001077	0.00163284	0.00023072	0.00021933	0.00001138
598370.00	2367440.00	0.00058759	0.00018905	0.00017883	0.00001022	0.00141054	0.00021538	0.00020517	0.00001022
598870.00	2367440.00	0.00047468	0.00018	0.00016945	0.00001055	0.00106846	0.00020318	0.00019318	0.00000999
599370.00	2367440.00	0.00047728	0.00017807	0.00016678	0.0000113	0.00107535	0.00019668	0.00018637	0.00001031
599870.00	2367440.00	0.00043407	0.00017611	0.00016395	0.00001215	0.00088176	0.00019201	0.00018086	0.00001115
600370.00	2367440.00	0.00041979	0.00017564	0.00016316	0.00001248	0.00080141	0.00018978	0.00017802	0.00001177
600870.00	2367440.00	0.00040819	0.00017424	0.00016212	0.00001212	0.00072002	0.00018609	0.00017431	0.00001178
601370.00	2367440.00	0.00049521	0.00017619	0.00016504	0.00001116	0.00101373	0.00018553	0.00017446	0.00001107
601870.00	2367440.00	0.00050808	0.00017449	0.00016427	0.00001022	0.001015	0.00018232	0.00017217	0.00001015
602370.00	2367440.00	0.00049926	0.00017225	0.00016277	0.00000948	0.00100813	0.00017967	0.00017038	0.00000929
602870.00	2367440.00	0.00051388	0.00017025	0.00016127	0.00000899	0.00096622	0.0001757	0.00016703	0.00000867

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2367440.00	0.00050374	0.0001674	0.0001587	0.0000087	0.00095005	0.00017285	0.00016455	0.0000083
603870.00	2367440.00	0.00049513	0.00016347	0.00015496	0.0000085	0.00088994	0.00016865	0.00016057	0.00000808
604370.00	2367440.00	0.00046223	0.0001591	0.00015074	0.00000836	0.0009547	0.00016641	0.0001585	0.00000791
604870.00	2367440.00	0.00045479	0.0001546	0.00014638	0.00000822	0.00093985	0.00016179	0.00015403	0.00000776
605370.00	2367440.00	0.00050196	0.00015134	0.00014327	0.00000807	0.00090391	0.00015572	0.00014811	0.00000761
605870.00	2367440.00	0.00045337	0.00014673	0.00013877	0.00000796	0.00091711	0.0001529	0.00014543	0.00000747
606370.00	2367440.00	0.00045896	0.0001436	0.00013575	0.00000785	0.00090894	0.00014912	0.00014177	0.00000735
606870.00	2367440.00	0.00044525	0.00014026	0.00013249	0.00000778	0.00086884	0.00014579	0.00013853	0.00000726
607370.00	2367440.00	0.000475	0.00013844	0.00013074	0.00000771	0.00087581	0.00014269	0.0001355	0.00000719
607870.00	2367440.00	0.00054821	0.00013698	0.00012935	0.00000764	0.00077747	0.00013818	0.00013105	0.00000713
608370.00	2367440.00	0.00045219	0.00013387	0.00012625	0.00000762	0.00089163	0.00013909	0.00013193	0.00000716
608870.00	2367440.00	0.00044765	0.00013186	0.0001243	0.00000757	0.00088768	0.00013724	0.00013008	0.00000716
609370.00	2367440.00	0.00049964	0.0001307	0.00012325	0.00000746	0.00084021	0.00013374	0.00012665	0.00000709
609870.00	2367440.00	0.00053874	0.00012909	0.00012177	0.00000731	0.00076799	0.00013055	0.00012356	0.00000699
610370.00	2367440.00	0.00045811	0.00012625	0.00011909	0.00000717	0.00085155	0.00013082	0.00012388	0.00000693
610870.00	2367440.00	0.00034125	0.00012115	0.00011414	0.000007	0.00073295	0.00013084	0.00012394	0.0000069
611370.00	2367440.00	0.00030755	0.00011715	0.00011038	0.00000677	0.00059539	0.00012769	0.00012095	0.00000674
611870.00	2367440.00	0.00060009	0.0001202	0.00011395	0.00000625	0.00057368	0.00011922	0.0001131	0.00000612
612370.00	2367440.00	0.00050751	0.00011823	0.00011226	0.00000597	0.00083641	0.00012089	0.00011502	0.00000587
612870.00	2367440.00	0.00056576	0.0001163	0.00011072	0.00000558	0.00079044	0.00011732	0.00011185	0.00000547
613370.00	2367440.00	0.00028033	0.00010547	0.0001001	0.00000537	0.00049123	0.0001148	0.00010938	0.00000541
613870.00	2367440.00	0.00056816	0.00011037	0.00010558	0.00000479	0.00073324	0.00011073	0.00010605	0.00000468
614370.00	2367440.00	0.00049777	0.00010301	0.00009878	0.00000424	0.00037939	0.00010256	0.00009825	0.00000431
614870.00	2367440.00	0.00042284	0.00009856	0.00009469	0.00000387	0.0003423	0.00009897	0.00009505	0.00000393
615370.00	2367440.00	0.00053836	0.00009797	0.00009445	0.00000352	0.00037735	0.00009623	0.00009268	0.00000355
615870.00	2367440.00	0.00065265	0.00009815	0.00009482	0.00000333	0.00053525	0.00009568	0.00009247	0.00000321
616370.00	2367440.00	0.00033953	0.00009204	0.00008885	0.00000319	0.0006445	0.00009648	0.00009341	0.00000307
616870.00	2367440.00	0.00063837	0.00009134	0.00008858	0.00000276	0.00045247	0.0000885	0.00008585	0.00000265
617370.00	2367440.00	0.0003852	0.00008317	0.00008073	0.00000244	0.00028809	0.0000829	0.0000805	0.0000024
617870.00	2367440.00	0.00027866	0.000078	0.00007575	0.00000224	0.00024501	0.00007929	0.00007712	0.00000216
618370.00	2367440.00	0.00031774	0.00007637	0.00007429	0.00000209	0.00025419	0.00007686	0.00007486	0.00000201
618870.00	2367440.00	0.0002566	0.00007257	0.00007063	0.00000194	0.00023196	0.00007383	0.00007199	0.00000184
619370.00	2367440.00	0.0002719	0.0000707	0.00006887	0.00000183	0.00023245	0.00007154	0.0000698	0.00000173
619870.00	2367440.00	0.00018416	0.00006633	0.00006463	0.0000017	0.00020178	0.00006814	0.00006656	0.00000159
590370.00	2367940.00	0.00177679	0.00028004	0.00024976	0.00003027	0.00095391	0.00027979	0.00025446	0.00002533
590870.00	2367940.00	0.00215732	0.00027143	0.00023959	0.00003184	0.00127848	0.00026635	0.00023698	0.00002937
591370.00	2367940.00	0.00216431	0.00024686	0.00021644	0.00003042	0.00105145	0.0002404	0.00021003	0.00003037
591870.00	2367940.00	0.00191111	0.00021828	0.00019103	0.00002725	0.00085445	0.00021467	0.00018612	0.00002855
592370.00	2367940.00	0.00071862	0.00017185	0.00014786	0.00002399	0.00053458	0.00018497	0.00015946	0.00002551
592870.00	2367940.00	0.00042923	0.00015105	0.00013012	0.00002093	0.0004521	0.00016409	0.00014221	0.00002187
593370.00	2367940.00	0.00027905	0.00013756	0.00011892	0.00001864	0.00032892	0.00014335	0.00012475	0.0000186
593870.00	2367940.00	0.00030833	0.00015127	0.00013228	0.00001899	0.00035577	0.00014826	0.0001303	0.00001796
594370.00	2367940.00	0.00045309	0.00018466	0.00016463	0.00002002	0.00043656	0.00016951	0.00015085	0.00001866
594870.00	2367940.00	0.00089806	0.00022821	0.00020734	0.00002086	0.00057071	0.00020448	0.00018462	0.00001986
595370.00	2367940.00	0.00149695	0.00026045	0.00023948	0.00002097	0.00083796	0.00023856	0.00021779	0.00002077
595870.00	2367940.00	0.00202955	0.00028146	0.00026167	0.00001979	0.00137741	0.00026495	0.00024472	0.00002023
596370.00	2367940.00	0.00166495	0.00027038	0.00025298	0.00001741	0.00178065	0.00027323	0.00025466	0.00001857
596870.00	2367940.00	0.00129611	0.00024592	0.00023132	0.0000146	0.00185595	0.00026349	0.00024744	0.00001606
597370.00	2367940.00	0.00097706	0.00022061	0.00020842	0.00001218	0.00179807	0.00024522	0.0002318	0.00001342
597870.00	2367940.00	0.00077468	0.00020045	0.00018997	0.00001048	0.00163805	0.00022609	0.00021483	0.00001126
598370.00	2367940.00	0.00060889	0.00018481	0.00017522	0.00000959	0.00143617	0.00021056	0.00020072	0.00000985
598870.00	2367940.00	0.000542	0.00017583	0.0001664	0.00000944	0.00127976	0.0001979	0.00018876	0.00000914
599370.00	2367940.00	0.00050207	0.00017099	0.00016106	0.00000992	0.00116275	0.00018927	0.00018012	0.00000916
599870.00	2367940.00	0.00046574	0.00016844	0.0001577	0.00001074	0.00104397	0.00018404	0.0001743	0.00000975
600370.00	2367940.00	0.00042412	0.00016676	0.00015534	0.00001142	0.00087692	0.00018084	0.00017031	0.00001054
600870.00	2367940.00	0.00039945	0.00016523	0.00015369	0.00001155	0.00073114	0.00017677	0.00016579	0.00001098
601370.00	2367940.00	0.00048521	0.00016771	0.00015675	0.00001096	0.00097612	0.00017593	0.00016519	0.00001074
601870.00	2367940.00	0.00050609	0.00016662	0.0001565	0.00001012	0.0009703	0.00017306	0.00016299	0.00001007
602370.00	2367940.00	0.00049704	0.00016446	0.00015518	0.00000929	0.00096633	0.00017073	0.00016152	0.00000921
602870.00	2367940.00	0.00051062	0.00016255	0.00015393	0.00000863	0.00092294	0.00016701	0.00015856	0.00000845
603370.00	2367940.00	0.00050197	0.00016038	0.00015218	0.0000082	0.00091148	0.00016458	0.00015667	0.00000791
603870.00	2367940.00	0.00046999	0.00015753	0.00014958	0.00000795	0.00093724	0.00016324	0.00015565	0.00000759
604370.00	2367940.00	0.00047333	0.00015448	0.0001467	0.00000778	0.00092283	0.00015975	0.00015237	0.00000739
604870.00	2367940.00	0.00047242	0.00015074	0.00014311	0.00000763	0.00090545	0.00015582	0.00014858	0.00000724
605370.00	2367940.00	0.00040197	0.00014512	0.0001376	0.00000752	0.0008633	0.0001534	0.0001463	0.00000711
605870.00	2367940.00	0.00053936	0.00014378	0.00013641	0.00000737	0.00078163	0.00014532	0.00013835	0.00000697
606370.00	2367940.00	0.00044637	0.00013917	0.00013189	0.00000727	0.00087465	0.00014424	0.0001374	0.00000684
606870.00	2367940.00	0.00040809	0.00013535	0.00012816	0.00000719	0.00086287	0.00014186	0.00013513	0.00000673
607370.00	2367940.00	0.00042435	0.00013312	0.00012601	0.00000711	0.00086459	0.00013855	0.00013191	0.00000664
607870.00	2367940.00	0.00048184	0.0001316	0.00012456	0.00000704	0.00081326	0.00013429	0.00012773	0.00000656

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2367940.00	0.00033933	0.00012626	0.00011919	0.00000707	0.00073033	0.00013578	0.00012914	0.00000664
608870.00	2367940.00	0.00032354	0.00012372	0.00011666	0.00000706	0.00067312	0.00013382	0.00012716	0.00000666
609370.00	2367940.00	0.00055564	0.00012641	0.0001195	0.00000691	0.00069977	0.00012636	0.00011988	0.00000648
609870.00	2367940.00	0.00042687	0.00012345	0.00011654	0.00000691	0.00084585	0.0001284	0.00012186	0.00000655
610370.00	2367940.00	0.00039677	0.00012116	0.00011432	0.00000684	0.0008351	0.00012742	0.00012087	0.00000654
610870.00	2367940.00	0.00054884	0.00012112	0.00011447	0.00000665	0.00068503	0.00012125	0.00011489	0.00000636
611370.00	2367940.00	0.00054695	0.00011922	0.00011274	0.00000648	0.00067298	0.00011934	0.0001131	0.00000624
611870.00	2367940.00	0.00034213	0.00011422	0.00010785	0.00000637	0.00073184	0.0001226	0.00011633	0.00000627
612370.00	2367940.00	0.00027679	0.00010826	0.00010202	0.00000624	0.00047977	0.00011782	0.00011156	0.00000626
612870.00	2367940.00	0.00058294	0.00011235	0.00010668	0.00000567	0.00051457	0.00011108	0.00010553	0.00000555
613370.00	2367940.00	0.00027216	0.00010375	0.00009814	0.00000561	0.00047077	0.0001129	0.00010724	0.00000566
613870.00	2367940.00	0.00053135	0.00010899	0.0001039	0.00000509	0.00075927	0.00011001	0.00010504	0.00000498
614370.00	2367940.00	0.00068773	0.00010728	0.00010261	0.00000467	0.00057801	0.00010461	0.00010005	0.00000457
614870.00	2367940.00	0.00069202	0.00010425	0.00009994	0.0000043	0.00052744	0.00010126	0.00009704	0.00000422
615370.00	2367940.00	0.00047931	0.00009686	0.00009301	0.00000385	0.00034244	0.00009585	0.0000919	0.00000395
615870.00	2367940.00	0.00028941	0.00009009	0.00008653	0.00000357	0.00028388	0.00009259	0.00008899	0.0000036
616370.00	2367940.00	0.00065043	0.00009538	0.00009205	0.00000334	0.00049419	0.00009261	0.00008937	0.00000323
616870.00	2367940.00	0.00049516	0.00009208	0.00008894	0.00000314	0.00064188	0.00009225	0.00008924	0.000003
617370.00	2367940.00	0.00053978	0.00008964	0.00008678	0.00000286	0.00058781	0.00008865	0.00008592	0.00000272
617870.00	2367940.00	0.00056693	0.00008702	0.0000844	0.00000262	0.00054088	0.00008531	0.00008283	0.00000248
618370.00	2367940.00	0.00060503	0.00008393	0.00008156	0.00000237	0.0004406	0.0000812	0.00007894	0.00000225
618870.00	2367940.00	0.00054872	0.00007996	0.00007781	0.00000215	0.00037138	0.00007753	0.00007546	0.00000207
619370.00	2367940.00	0.0004052	0.00007477	0.00007281	0.00000196	0.00028923	0.00007373	0.00007184	0.00000189
619870.00	2367940.00	0.00021064	0.00006801	0.00006622	0.00000179	0.00021321	0.00006975	0.00006805	0.00000169
590370.00	2368440.00	0.0012487	0.00025066	0.00022171	0.00002895	0.00068226	0.00025546	0.00023081	0.00002464
590870.00	2368440.00	0.00058988	0.0002147	0.00018377	0.00003093	0.00052794	0.00023126	0.00020246	0.00002879
591370.00	2368440.00	0.00046457	0.00019137	0.00016192	0.00002945	0.00049872	0.00021102	0.00018159	0.00002942
591870.00	2368440.00	0.0006551	0.00017801	0.00015228	0.00002573	0.00052885	0.00019334	0.00016649	0.00002685
592370.00	2368440.00	0.00045447	0.00015539	0.00013309	0.00002229	0.00046687	0.00017176	0.00014815	0.00002361
592870.00	2368440.00	0.00028732	0.00013481	0.00011572	0.0000191	0.00035021	0.00014802	0.00012799	0.00002003
593370.00	2368440.00	0.00025749	0.00012692	0.00010993	0.00001698	0.00029981	0.0001321	0.00011509	0.00001701
593870.00	2368440.00	0.00029123	0.00014065	0.00012321	0.00001744	0.0003379	0.00013911	0.0001226	0.0000165
594370.00	2368440.00	0.00042354	0.00016965	0.0001513	0.00001835	0.00041452	0.00015717	0.00014008	0.00001709
594870.00	2368440.00	0.00071625	0.00020626	0.00018703	0.00001923	0.00050991	0.00018595	0.00016781	0.00001814
595370.00	2368440.00	0.00149683	0.00024469	0.00022522	0.00001947	0.00081719	0.00022093	0.00020187	0.00001906
595870.00	2368440.00	0.00171903	0.00025698	0.00023815	0.00001884	0.00100031	0.0002406	0.00022136	0.00001924
596370.00	2368440.00	0.00184926	0.00026119	0.00024423	0.00001696	0.00139677	0.00025364	0.00023574	0.0000179
596870.00	2368440.00	0.00147527	0.00024388	0.00022939	0.00001449	0.00165368	0.00025138	0.00023562	0.00001575
597370.00	2368440.00	0.00098585	0.0002182	0.00020601	0.00001219	0.00180116	0.00024074	0.00022735	0.00001339
597870.00	2368440.00	0.00072772	0.00019649	0.00018611	0.00001039	0.00163679	0.00022374	0.00021246	0.00001129
598370.00	2368440.00	0.00061721	0.0001814	0.00017218	0.00000921	0.00144181	0.00020679	0.00019713	0.00000967
598870.00	2368440.00	0.00058636	0.0001721	0.00016341	0.00000869	0.00133319	0.0001927	0.00018407	0.00000863
599370.00	2368440.00	0.00052117	0.00016514	0.00015629	0.00000884	0.00120147	0.00018313	0.00017479	0.00000833
599870.00	2368440.00	0.00047461	0.00016121	0.00015173	0.00000947	0.00107887	0.00017669	0.00016806	0.00000863
600370.00	2368440.00	0.00043368	0.00015899	0.00014875	0.00001024	0.00094434	0.00017275	0.00016344	0.00000931
600870.00	2368440.00	0.00040073	0.00015711	0.00014639	0.00001072	0.00077236	0.00016818	0.00015821	0.00000997
601370.00	2368440.00	0.00052167	0.00016031	0.00014975	0.00001056	0.00091025	0.00016497	0.00015484	0.00001013
601870.00	2368440.00	0.00045231	0.00015807	0.00014803	0.00001005	0.00092044	0.00016616	0.00015627	0.00000989
602370.00	2368440.00	0.00048514	0.00015722	0.00014799	0.00000923	0.00092575	0.00016289	0.0001537	0.00000919
602870.00	2368440.00	0.00048595	0.00015531	0.00014684	0.00000847	0.0009164	0.00016028	0.00015188	0.00000839
603370.00	2368440.00	0.00048882	0.00015304	0.00014514	0.00000789	0.00084032	0.00015653	0.00014882	0.00000772
603870.00	2368440.00	0.00046842	0.00015128	0.00014375	0.00000753	0.0009047	0.00015585	0.00014859	0.00000726
604370.00	2368440.00	0.0003808	0.00014647	0.00013913	0.00000733	0.00077391	0.00015538	0.00014839	0.00000699
604870.00	2368440.00	0.00045537	0.00014592	0.00013879	0.00000713	0.0008811	0.00015053	0.00014375	0.00000678
605370.00	2368440.00	0.00045724	0.00014229	0.00013528	0.000007	0.00081639	0.00014619	0.00013954	0.00000665
605870.00	2368440.00	0.00041442	0.00013823	0.00013133	0.00000689	0.00085447	0.00014426	0.00013773	0.00000653
606370.00	2368440.00	0.00045926	0.00013565	0.00012888	0.00000677	0.00083277	0.00013922	0.00013282	0.0000064
606870.00	2368440.00	0.00056128	0.00013316	0.00012651	0.00000665	0.00065259	0.00013271	0.00012643	0.00000628
607370.00	2368440.00	0.00045902	0.00012969	0.00012311	0.00000658	0.0008097	0.00013266	0.00012649	0.00000617
607870.00	2368440.00	0.0004622	0.00012726	0.00012075	0.00000651	0.00079878	0.00012985	0.00012377	0.00000608
608370.00	2368440.00	0.0004293	0.00012466	0.00011819	0.00000647	0.00081912	0.00012851	0.00012248	0.00000603
608870.00	2368440.00	0.00046358	0.00012315	0.00011673	0.00000642	0.00078899	0.00012546	0.00011948	0.00000598
609370.00	2368440.00	0.00054923	0.00012184	0.00011547	0.00000637	0.00064893	0.00012117	0.00011523	0.00000594
609870.00	2368440.00	0.00048191	0.0001199	0.00011352	0.00000638	0.00075894	0.00012152	0.00011556	0.00000596
610370.00	2368440.00	0.0005135	0.00011851	0.00011218	0.00000634	0.00070561	0.00011903	0.00011308	0.00000595
610870.00	2368440.00	0.00029229	0.00011196	0.00010555	0.00000641	0.00056211	0.00012168	0.0001155	0.00000618
611370.00	2368440.00	0.00052699	0.0001154	0.0001092	0.0000062	0.0006667	0.00011542	0.00010953	0.00000589
611870.00	2368440.00	0.00038702	0.00011263	0.00010648	0.00000615	0.0008259	0.00011869	0.00011274	0.00000595
612370.00	2368440.00	0.00028363	0.00010676	0.0001007	0.00000606	0.00053478	0.0001162	0.00011022	0.00000598
612870.00	2368440.00	0.00027007	0.00010382	0.00009782	0.00000601	0.00046303	0.00011312	0.00010708	0.00000604

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2368440.00	0.00065907	0.00011048	0.00010501	0.00000547	0.00066087	0.00010841	0.0001031	0.00000531
613870.00	2368440.00	0.00062999	0.00010814	0.00010293	0.00000521	0.00066885	0.00010656	0.0001015	0.00000507
614370.00	2368440.00	0.00067708	0.0001047	0.00009988	0.00000481	0.00046929	0.00010147	0.00009666	0.00000481
614870.00	2368440.00	0.00057804	0.00010061	0.00009614	0.00000447	0.00040127	0.00009832	0.00009376	0.00000456
615370.00	2368440.00	0.00067763	0.00010066	0.00009641	0.00000425	0.00050541	0.00009756	0.00009339	0.00000417
615870.00	2368440.00	0.00064285	0.00009726	0.00009336	0.0000039	0.00045151	0.00009432	0.00009045	0.00000387
616370.00	2368440.00	0.00045719	0.00009112	0.00008758	0.00000354	0.00032698	0.00009015	0.00008653	0.00000362
616870.00	2368440.00	0.00030313	0.00008521	0.00008193	0.00000328	0.00025891	0.0000866	0.0000833	0.0000033
617370.00	2368440.00	0.00061948	0.00008963	0.00008657	0.00000306	0.00044065	0.00008679	0.00008382	0.00000298
617870.00	2368440.00	0.00050745	0.00008484	0.00008208	0.00000275	0.00035197	0.00008294	0.00008021	0.00000273
618370.00	2368440.00	0.00058369	0.00008395	0.00008138	0.00000257	0.0004056	0.0000813	0.00007881	0.00000248
618870.00	2368440.00	0.00036962	0.00007721	0.00007492	0.0000023	0.000275	0.00007686	0.00007459	0.00000227
619370.00	2368440.00	0.00042035	0.00007604	0.00007391	0.00000213	0.00029811	0.00007483	0.00007275	0.00000208
619870.00	2368440.00	0.00018063	0.00006837	0.00006644	0.00000193	0.00020161	0.00007035	0.00006851	0.00000183
590370.00	2368940.00	0.00073099	0.00023759	0.00021039	0.0000272	0.00175156	0.00027074	0.00024731	0.00002344
590870.00	2368940.00	0.00151954	0.00022496	0.00019714	0.00002783	0.00075057	0.00022446	0.00019814	0.00002632
591370.00	2368940.00	0.00038356	0.00017781	0.00015032	0.00002749	0.00044838	0.00019642	0.00016891	0.00002751
591870.00	2368940.00	0.00047088	0.00016347	0.00013949	0.00002398	0.00047466	0.00018043	0.00015548	0.00002495
592370.00	2368940.00	0.00033769	0.00014225	0.00012153	0.00002072	0.00040867	0.00015879	0.00013688	0.00002191
592870.00	2368940.00	0.00027557	0.00012781	0.00011006	0.00001775	0.00033438	0.00013985	0.00012129	0.00001856
593370.00	2368940.00	0.00024839	0.00012019	0.00010454	0.00001565	0.00029179	0.00012569	0.00011	0.00001569
593870.00	2368940.00	0.0002729	0.00013093	0.00011492	0.00001601	0.00031707	0.00013041	0.00011526	0.00001516
594370.00	2368940.00	0.00035663	0.00015392	0.00013706	0.00001685	0.00038049	0.00014483	0.00012919	0.00001564
594870.00	2368940.00	0.00059856	0.00018786	0.00017015	0.00001772	0.00046688	0.00017028	0.00015368	0.0000166
595370.00	2368940.00	0.00109588	0.00022016	0.00020201	0.00001815	0.00064217	0.00019998	0.00018236	0.00001761
595870.00	2368940.00	0.00166268	0.00024275	0.00022492	0.00001783	0.00094987	0.00022429	0.00020638	0.00001791
596370.00	2368940.00	0.00182353	0.00025068	0.00023421	0.00001647	0.00130177	0.00023883	0.00022175	0.00001708
596870.00	2368940.00	0.00150464	0.00023897	0.00022462	0.00001436	0.00157418	0.00024138	0.00022601	0.00001537
597370.00	2368940.00	0.00098634	0.00021549	0.0002033	0.00001219	0.00180077	0.00023563	0.00022233	0.0000133
597870.00	2368940.00	0.00078545	0.0001956	0.00018529	0.00001031	0.0016501	0.00021936	0.00020812	0.00001123
598370.00	2368940.00	0.00075729	0.00018207	0.00017315	0.00000892	0.00147325	0.00020105	0.0001916	0.00000945
598870.00	2368940.00	0.00063713	0.00016956	0.00016137	0.00000819	0.00135222	0.00018811	0.00017979	0.00000831
599370.00	2368940.00	0.00056074	0.00016113	0.00015309	0.00000803	0.00124002	0.00017784	0.0001701	0.00000775
599870.00	2368940.00	0.00050291	0.00015583	0.00014744	0.00000839	0.00113255	0.00017052	0.00016278	0.00000774
600370.00	2368940.00	0.00043624	0.00015116	0.00014209	0.00000907	0.00088439	0.0001627	0.0001545	0.0000082
600870.00	2368940.00	0.00038256	0.00014898	0.0001392	0.00000978	0.00073146	0.00016029	0.00015135	0.00000894
601370.00	2368940.00	0.00048438	0.00015171	0.00014174	0.00000997	0.00085876	0.00015696	0.00014763	0.00000933
601870.00	2368940.00	0.00045892	0.00015122	0.00014143	0.00000979	0.00089799	0.0001576	0.00014814	0.00000946
602370.00	2368940.00	0.00048426	0.00015064	0.00014146	0.00000918	0.00088315	0.00015513	0.00014605	0.00000908
602870.00	2368940.00	0.00045518	0.00014844	0.00013999	0.00000845	0.00088451	0.00015399	0.00014558	0.00000841
603370.00	2368940.00	0.00047303	0.00014648	0.00013873	0.00000775	0.00081141	0.00014992	0.00014225	0.00000767
603870.00	2368940.00	0.00045279	0.0001448	0.00013754	0.00000726	0.00086255	0.0001491	0.00014201	0.00000709
604370.00	2368940.00	0.00045188	0.00014308	0.00013616	0.00000692	0.00086479	0.00014702	0.00014035	0.00000667
604870.00	2368940.00	0.00050999	0.00014165	0.00013496	0.0000067	0.00078944	0.00014272	0.0001363	0.00000642
605370.00	2368940.00	0.00043877	0.00013811	0.00013155	0.00000657	0.00083941	0.00014211	0.00013586	0.00000625
605870.00	2368940.00	0.00042738	0.0001346	0.00012815	0.00000645	0.00078704	0.00013857	0.00013245	0.00000613
606370.00	2368940.00	0.00047683	0.00013239	0.00012606	0.00000633	0.00077911	0.00013444	0.00012842	0.00000601
606870.00	2368940.00	0.00042077	0.00012849	0.00012226	0.00000624	0.00081028	0.0001326	0.0001267	0.0000059
607370.00	2368940.00	0.00029614	0.00012097	0.00011475	0.00000622	0.00051465	0.00013015	0.00012426	0.00000589
607870.00	2368940.00	0.00035365	0.00012154	0.00011546	0.00000608	0.0007545	0.00012824	0.00012253	0.00000571
608370.00	2368940.00	0.00057003	0.00012145	0.00011549	0.00000596	0.00054728	0.00011974	0.00011415	0.00000559
608870.00	2368940.00	0.00039946	0.00011841	0.00011246	0.00000595	0.00078883	0.00012248	0.00011693	0.00000555
609370.00	2368940.00	0.00034364	0.00011532	0.00010938	0.00000595	0.00074059	0.000122	0.00011645	0.00000555
609870.00	2368940.00	0.00037731	0.00011457	0.00010866	0.00000592	0.00078188	0.00011953	0.00011401	0.00000552
610370.00	2368940.00	0.00053783	0.00011445	0.0001086	0.00000585	0.0006095	0.00011343	0.00010798	0.00000545
610870.00	2368940.00	0.00039346	0.00011193	0.00010604	0.00000589	0.00078102	0.00011613	0.0001106	0.00000553
611370.00	2368940.00	0.00057405	0.00011123	0.00010545	0.00000578	0.00051415	0.00010931	0.00010387	0.00000544
611870.00	2368940.00	0.00026726	0.0001043	0.00009835	0.00000595	0.00047017	0.00011334	0.00010755	0.00000579
612370.00	2368940.00	0.00035924	0.00010722	0.00010146	0.00000576	0.00077265	0.00011333	0.00010778	0.00000554
612870.00	2368940.00	0.00039588	0.0001066	0.00010097	0.00000563	0.00080847	0.00011127	0.00010583	0.00000544
613370.00	2368940.00	0.00026187	0.00009962	0.00009402	0.0000056	0.00046047	0.00010845	0.00010289	0.00000556
613870.00	2368940.00	0.0002623	0.00009813	0.00009273	0.0000054	0.00046668	0.00010681	0.00010143	0.00000538
614370.00	2368940.00	0.00061733	0.00010391	0.00009889	0.00000501	0.00064813	0.00010214	0.00009729	0.00000485
614870.00	2368940.00	0.00060127	0.00009945	0.00009482	0.00000463	0.00041251	0.00009681	0.00009211	0.0000047
615370.00	2368940.00	0.00049265	0.00009537	0.00009102	0.00000435	0.00034608	0.00009393	0.00008943	0.0000045
615870.00	2368940.00	0.00033721	0.00008982	0.00008568	0.00000414	0.00027262	0.0000908	0.00008656	0.00000424
616370.00	2368940.00	0.00039204	0.00008911	0.0000853	0.00000382	0.00029182	0.00008909	0.00008515	0.00000394
616870.00	2368940.00	0.00043403	0.00008797	0.00008445	0.00000353	0.0003115	0.00008719	0.00008357	0.00000363
617370.00	2368940.00	0.00030205	0.00008284	0.00007954	0.0000033	0.00025466	0.00008409	0.00008075	0.00000333
617870.00	2368940.00	0.0002596	0.00007973	0.00007669	0.00000304	0.00024093	0.00008152	0.00007848	0.00000304

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2368940.00	0.0002166	0.00007661	0.00007382	0.00000279	0.0002263	0.00007884	0.00007609	0.00000275
618870.00	2368940.00	0.00027392	0.00007569	0.00007314	0.00000255	0.00023857	0.00007695	0.00007443	0.00000252
619370.00	2368940.00	0.00024017	0.00007272	0.00007039	0.00000234	0.00022675	0.0000744	0.00007212	0.00000228
619870.00	2368940.00	0.00016634	0.00006888	0.00006677	0.00000211	0.00019159	0.00007078	0.00006875	0.00000203
590370.00	2369440.00	0.00051624	0.00021455	0.0001887	0.00002585	0.00093153	0.00024423	0.00022161	0.00002262
590870.00	2369440.00	0.00090133	0.0002157	0.00018995	0.00002575	0.00201786	0.00024104	0.00021686	0.00002418
591370.00	2369440.00	0.00205454	0.0002162	0.00019219	0.00002401	0.0013066	0.00020678	0.00018272	0.00002405
591870.00	2369440.00	0.0018998	0.00019063	0.00016914	0.00002149	0.00086821	0.00018191	0.00015955	0.00002236
592370.00	2369440.00	0.00106703	0.00015745	0.0001385	0.00001895	0.00055902	0.00015972	0.00013977	0.00001995
592870.00	2369440.00	0.0004735	0.00013343	0.00011663	0.00001681	0.00042678	0.00014183	0.00012445	0.00001738
593370.00	2369440.00	0.00024623	0.00011569	0.00010096	0.00001473	0.00028645	0.00012082	0.00010608	0.00001474
593870.00	2369440.00	0.00025768	0.00012241	0.00010767	0.00001474	0.00029744	0.00012243	0.00010847	0.00001395
594370.00	2369440.00	0.00030564	0.00014046	0.00012497	0.00001548	0.00034109	0.00013351	0.00011918	0.00001433
594870.00	2369440.00	0.0004055	0.00016645	0.00015004	0.00001642	0.00039956	0.00015363	0.00013844	0.00001518
595370.00	2369440.00	0.00094806	0.00020287	0.00018601	0.00001685	0.00057305	0.00018397	0.00016776	0.00001621
595870.00	2369440.00	0.00150734	0.00022654	0.00020974	0.00001679	0.00085057	0.000208	0.00019131	0.00001669
596370.00	2369440.00	0.00176951	0.00024066	0.00022477	0.00001589	0.00130204	0.00022602	0.00020988	0.00001614
596870.00	2369440.00	0.00147289	0.00023276	0.0002186	0.00001416	0.00156886	0.00023158	0.00021668	0.0000149
597370.00	2369440.00	0.00127092	0.00021641	0.00020434	0.00001207	0.00154948	0.00022405	0.00021099	0.00001306
597870.00	2369440.00	0.00097217	0.00019702	0.00018679	0.00001022	0.00156607	0.00021207	0.00020096	0.00001111
598370.00	2369440.00	0.00083981	0.00018131	0.00017254	0.00000877	0.00143779	0.00019654	0.00018716	0.00000937
598870.00	2369440.00	0.00067467	0.00016745	0.00015957	0.00000788	0.00135005	0.00018435	0.00017621	0.00000814
599370.00	2369440.00	0.0005837	0.00015768	0.00015021	0.00000747	0.0012448	0.00017368	0.0001663	0.00000738
599870.00	2369440.00	0.00049619	0.0001505	0.00014292	0.00000757	0.00111939	0.00016579	0.00015865	0.00000714
600370.00	2369440.00	0.00043269	0.000145	0.00013694	0.00000806	0.000879	0.00015688	0.00014954	0.00000734
600870.00	2369440.00	0.00034687	0.00014129	0.00013239	0.0000089	0.00058791	0.00015259	0.00014444	0.00000816
601370.00	2369440.00	0.00046245	0.00014426	0.00013507	0.00000919	0.00084362	0.00015012	0.0001417	0.00000842
601870.00	2369440.00	0.00044186	0.00014407	0.00013472	0.00000935	0.00087128	0.00015044	0.00014161	0.00000883
602370.00	2369440.00	0.00059952	0.00014507	0.00013607	0.00000899	0.0006727	0.00014362	0.00013484	0.00000878
602870.00	2369440.00	0.00046734	0.0001428	0.00013437	0.00000843	0.00084615	0.00014669	0.00013833	0.00000836
603370.00	2369440.00	0.00043964	0.00014066	0.00013291	0.00000775	0.00084738	0.00014551	0.00013779	0.00000772
603870.00	2369440.00	0.0004583	0.00013928	0.00013215	0.00000713	0.00083875	0.00014266	0.00013562	0.00000705
604370.00	2369440.00	0.00046742	0.00013775	0.00013108	0.00000668	0.00082467	0.00014014	0.00013362	0.00000652
604870.00	2369440.00	0.00042329	0.00013532	0.00012893	0.00000639	0.00082467	0.00013932	0.00013316	0.00000616
605370.00	2369440.00	0.00045262	0.00013384	0.00012765	0.00000619	0.00080493	0.00013618	0.00013025	0.00000593
605870.00	2369440.00	0.00043169	0.00013113	0.00012507	0.00000606	0.00080218	0.00013428	0.0001285	0.00000578
606370.00	2369440.00	0.00043065	0.00012839	0.00012244	0.00000595	0.00079353	0.00013144	0.00012578	0.00000566
606870.00	2369440.00	0.00031091	0.00012179	0.00011589	0.0000059	0.00058213	0.00013033	0.00012473	0.0000056
607370.00	2369440.00	0.00043906	0.00012268	0.00011693	0.00000575	0.00075745	0.00012498	0.00011953	0.00000545
607870.00	2369440.00	0.00043808	0.00011998	0.00011432	0.00000566	0.00074559	0.00012208	0.00011673	0.00000535
608370.00	2369440.00	0.00038146	0.00011679	0.00011119	0.0000056	0.00076354	0.00012099	0.00011573	0.00000526
608870.00	2369440.00	0.00043267	0.00011537	0.00010985	0.00000552	0.00073425	0.00011725	0.00011208	0.00000517
609370.00	2369440.00	0.00052685	0.00011384	0.00010838	0.00000546	0.00057439	0.00011259	0.0001075	0.00000509
609870.00	2369440.00	0.00038236	0.00011115	0.00010568	0.00000546	0.00075526	0.00011491	0.00010982	0.00000509
610370.00	2369440.00	0.00051138	0.00011056	0.00010515	0.00000541	0.00060081	0.00010967	0.00010465	0.00000502
610870.00	2369440.00	0.00037528	0.00010845	0.00010299	0.00000546	0.00079715	0.00011334	0.00010824	0.0000051
611370.00	2369440.00	0.00027239	0.00010314	0.00009761	0.00000553	0.00050454	0.00011163	0.00010638	0.00000525
611870.00	2369440.00	0.0003492	0.00010515	0.00009969	0.00000545	0.00075345	0.00011092	0.00010577	0.00000515
612370.00	2369440.00	0.00058927	0.00010726	0.0001019	0.00000536	0.00071106	0.00010595	0.00010091	0.00000504
612870.00	2369440.00	0.00048035	0.00010491	0.00009958	0.00000534	0.00079329	0.00010638	0.00010132	0.00000506
613370.00	2369440.00	0.00027834	0.00009862	0.00009327	0.00000534	0.00054259	0.00010656	0.00010136	0.0000052
613870.00	2369440.00	0.0005539	0.00010275	0.00009762	0.00000513	0.00070992	0.00010217	0.00009726	0.00000491
614370.00	2369440.00	0.00063487	0.0001016	0.00009664	0.00000496	0.00061191	0.00009917	0.00009441	0.00000477
614870.00	2369440.00	0.00047445	0.00009881	0.00009397	0.00000484	0.00073856	0.00009995	0.00009527	0.00000468
615370.00	2369440.00	0.00063809	0.00009662	0.00009213	0.0000045	0.00043768	0.00009343	0.00008896	0.00000448
615870.00	2369440.00	0.00045097	0.00009108	0.00008685	0.00000423	0.00031999	0.00009008	0.0000857	0.00000438
616370.00	2369440.00	0.00041636	0.00008863	0.00008463	0.000004	0.00030366	0.00008809	0.00008394	0.00000414
616870.00	2369440.00	0.0003958	0.00008637	0.00008261	0.00000376	0.0002932	0.00008609	0.00008221	0.00000389
617370.00	2369440.00	0.00038001	0.00008415	0.00008064	0.00000351	0.00028477	0.00008405	0.00008044	0.00000362
617870.00	2369440.00	0.00035223	0.00008157	0.0000783	0.00000327	0.00026861	0.00008185	0.00007851	0.00000334
618370.00	2369440.00	0.00021107	0.0000765	0.00007343	0.00000307	0.00022138	0.00007871	0.00007565	0.00000306
618870.00	2369440.00	0.00017894	0.00007391	0.00007108	0.00000283	0.00020562	0.0000761	0.00007331	0.00000279
619370.00	2369440.00	0.00017246	0.00007175	0.00006916	0.00000259	0.00019905	0.00007381	0.00007128	0.00000253
619870.00	2369440.00	0.0001606	0.00006915	0.00006681	0.00000235	0.00018471	0.00007097	0.00006868	0.00000228
590370.00	2369940.00	0.00049337	0.00020223	0.00017783	0.0000244	0.00085473	0.00022806	0.00020642	0.00002164
590870.00	2369940.00	0.00051193	0.00018908	0.00016492	0.00002416	0.00110626	0.00022295	0.00020022	0.00002273
591370.00	2369940.00	0.00087915	0.00019108	0.00016866	0.00002242	0.00210422	0.00021631	0.00019411	0.0000222
591870.00	2369940.00	0.00205365	0.0001943	0.00017435	0.00001995	0.00136594	0.00018246	0.0001619	0.00002056
592370.00	2369940.00	0.00181708	0.00016891	0.00015137	0.00001754	0.00081182	0.00015814	0.00013977	0.00001837
592870.00	2369940.00	0.00068846	0.00013408	0.00011842	0.00001566	0.00045956	0.00013774	0.00012156	0.00001618

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2369940.00	0.00040608	0.0001226	0.0001082	0.0000144	0.00038633	0.00012684	0.00011252	0.00001432
593870.00	2369940.00	0.00024606	0.00011536	0.00010174	0.00001362	0.00028374	0.00011587	0.00010297	0.00001291
594370.00	2369940.00	0.00027104	0.00012879	0.00011456	0.00001423	0.00030727	0.00012353	0.00011039	0.00001314
594870.00	2369940.00	0.00041217	0.00015581	0.00014069	0.00001512	0.00038961	0.00014382	0.00012983	0.00001398
595370.00	2369940.00	0.00085021	0.00018779	0.00017216	0.00001563	0.00052652	0.00017007	0.00015514	0.00001492
595870.00	2369940.00	0.0014986	0.00021434	0.00019859	0.00001575	0.00083297	0.00019458	0.00017912	0.00001546
596370.00	2369940.00	0.00172553	0.00022678	0.00021158	0.0000152	0.00110018	0.00021006	0.00019474	0.00001532
596870.00	2369940.00	0.00162113	0.00022528	0.00021148	0.00001381	0.00127893	0.000217	0.0002026	0.0000144
597370.00	2369940.00	0.00120923	0.00021202	0.00019999	0.00001203	0.00159095	0.00021835	0.0002055	0.00001285
597870.00	2369940.00	0.00114994	0.00019683	0.00018667	0.00001016	0.00140885	0.00020467	0.00019366	0.00001101
598370.00	2369940.00	0.00091636	0.00018043	0.00017174	0.00000869	0.00139097	0.00019232	0.00018298	0.00000934
598870.00	2369940.00	0.00070111	0.00016565	0.00015796	0.00000769	0.00134615	0.00018125	0.0001732	0.00000805
599370.00	2369940.00	0.00060853	0.00015514	0.00014805	0.00000709	0.0012445	0.00017018	0.00016304	0.00000715
599870.00	2369940.00	0.0005191	0.00014704	0.00014009	0.00000695	0.00113935	0.00016168	0.00015498	0.0000067
600370.00	2369940.00	0.00041014	0.00013928	0.00013203	0.00000724	0.00084088	0.00015247	0.00014574	0.00000673
600870.00	2369940.00	0.00033688	0.00013518	0.00012719	0.00000798	0.00056446	0.00014653	0.00013917	0.00000736
601370.00	2369940.00	0.0004445	0.00013771	0.00012939	0.00000832	0.00084367	0.00014444	0.00013693	0.00000751
601870.00	2369940.00	0.00046363	0.00013806	0.00012936	0.00000871	0.00084736	0.00014268	0.00013464	0.00000804
602370.00	2369940.00	0.00046016	0.00013773	0.00012901	0.00000872	0.00082665	0.00014155	0.00013324	0.00000831
602870.00	2369940.00	0.00043538	0.00013658	0.00012821	0.00000837	0.00082307	0.00014111	0.00013292	0.00000819
603370.00	2369940.00	0.00044963	0.00013554	0.00012778	0.00000776	0.00081139	0.00013899	0.00013127	0.00000771
603870.00	2369940.00	0.00035682	0.00013155	0.00012436	0.00000719	0.00069955	0.0001396	0.00013246	0.00000715
604370.00	2369940.00	0.00046564	0.00013247	0.00012591	0.00000656	0.00078704	0.0001343	0.00012782	0.00000648
604870.00	2369940.00	0.00041257	0.00013016	0.00012397	0.00000618	0.00080326	0.00013398	0.00012795	0.00000603
605370.00	2369940.00	0.00045564	0.00012914	0.00012324	0.0000059	0.00077054	0.00013057	0.00012487	0.0000057
605870.00	2369940.00	0.00046381	0.00012726	0.00012153	0.00000573	0.00073343	0.00012814	0.00012265	0.00000549
606370.00	2369940.00	0.00045773	0.00012501	0.0001194	0.0000056	0.00072826	0.00012608	0.00012072	0.00000536
606870.00	2369940.00	0.00041882	0.00012214	0.00011663	0.00000551	0.00076193	0.0001247	0.00011945	0.00000525
607370.00	2369940.00	0.0005455	0.00011983	0.00011443	0.0000054	0.00053488	0.00011833	0.00011316	0.00000517
607870.00	2369940.00	0.00041215	0.00011674	0.00011141	0.00000533	0.0007391	0.00011922	0.00011417	0.00000506
608370.00	2369940.00	0.00044959	0.00011458	0.00010934	0.00000524	0.0006832	0.00011544	0.00011048	0.00000496
608870.00	2369940.00	0.00039809	0.00011187	0.0001067	0.00000518	0.00072889	0.00011448	0.00010961	0.00000487
609370.00	2369940.00	0.00026558	0.00010518	0.00009995	0.00000523	0.00044156	0.00011291	0.00010795	0.00000496
609870.00	2369940.00	0.00050535	0.00010862	0.00010357	0.00000505	0.00056247	0.00010742	0.00010271	0.00000472
610370.00	2369940.00	0.00050277	0.00010701	0.00010199	0.00000502	0.00056498	0.00010583	0.00010116	0.00000467
610870.00	2369940.00	0.00051661	0.0001055	0.00010051	0.00000499	0.0005366	0.00010395	0.00009931	0.00000464
611370.00	2369940.00	0.00041336	0.00010387	0.00009885	0.00000502	0.00070112	0.00010549	0.00010083	0.00000466
611870.00	2369940.00	0.00033305	0.00010159	0.00009653	0.00000506	0.00071375	0.00010708	0.00010234	0.00000474
612370.00	2369940.00	0.00048879	0.00010308	0.00009807	0.00000501	0.00076699	0.00010373	0.00009905	0.00000468
612870.00	2369940.00	0.00045251	0.00010146	0.00009645	0.00000501	0.00078044	0.00010311	0.00009841	0.00000471
613370.00	2369940.00	0.00040555	0.0000996	0.00009461	0.00000499	0.000779	0.00010258	0.00009785	0.00000473
613870.00	2369940.00	0.00052375	0.00009779	0.00009292	0.00000487	0.00048895	0.00009616	0.00009154	0.00000462
614370.00	2369940.00	0.00045594	0.0000932	0.00008853	0.00000468	0.0003207	0.00009191	0.00008718	0.00000472
614870.00	2369940.00	0.00066032	0.00009641	0.00009178	0.00000462	0.00044928	0.00009277	0.00008826	0.00000452
615370.00	2369940.00	0.00050072	0.00009534	0.00009074	0.0000046	0.00069315	0.00009539	0.00009096	0.00000443
615870.00	2369940.00	0.000561	0.00009421	0.00008979	0.00000442	0.00062297	0.00009274	0.00008849	0.00000426
616370.00	2369940.00	0.00060249	0.00009265	0.00008843	0.00000421	0.0005599	0.00009023	0.00008615	0.00000408
616870.00	2369940.00	0.00058001	0.00008901	0.00008509	0.00000392	0.00039662	0.00008628	0.00008234	0.00000393
617370.00	2369940.00	0.00049538	0.0000857	0.00008203	0.00000368	0.00034372	0.00008386	0.00008009	0.00000377
617870.00	2369940.00	0.00045493	0.00008323	0.00007978	0.00000345	0.0003197	0.00008183	0.00007828	0.00000355
618370.00	2369940.00	0.0002176	0.00007628	0.00007296	0.00000332	0.00022433	0.00007838	0.00007506	0.00000332
618870.00	2369940.00	0.00018354	0.00007383	0.00007074	0.00000309	0.00020754	0.00007601	0.00007294	0.00000307
619370.00	2369940.00	0.00016648	0.0000716	0.00006875	0.00000285	0.00019321	0.00007353	0.00007072	0.00000281
619870.00	2369940.00	0.00017582	0.00007012	0.00006749	0.00000263	0.00020014	0.00007217	0.00006959	0.00000258
590370.00	2370440.00	0.00047919	0.00019137	0.00016841	0.00002296	0.00086174	0.00021784	0.00019727	0.00002058
590870.00	2370440.00	0.0004847	0.00017861	0.00015603	0.00002258	0.00101019	0.00021001	0.00018864	0.00002137
591370.00	2370440.00	0.00071141	0.00017737	0.00015647	0.00002091	0.00190629	0.00020656	0.00018587	0.00002069
591870.00	2370440.00	0.00121751	0.00017899	0.00016029	0.0000187	0.00206964	0.00018865	0.00016961	0.00001904
592370.00	2370440.00	0.00205405	0.00017533	0.00015891	0.00001642	0.0012815	0.00016033	0.00014333	0.000017
592870.00	2370440.00	0.00160635	0.00014999	0.00013541	0.00001459	0.00071272	0.0001391	0.00012405	0.00001505
593370.00	2370440.00	0.00075845	0.00012745	0.00011398	0.00001347	0.00044975	0.00012548	0.00011199	0.00001348
593870.00	2370440.00	0.0003655	0.00011869	0.00010564	0.00001305	0.00035937	0.00011861	0.00010614	0.00001247
594370.00	2370440.00	0.00026235	0.00012114	0.00010796	0.00001317	0.00029892	0.00011709	0.00010492	0.00001218
594870.00	2370440.00	0.00043926	0.00014717	0.00013324	0.00001393	0.00038692	0.00013565	0.00012273	0.00001292
595370.00	2370440.00	0.00076568	0.00017411	0.00015962	0.00001449	0.00048957	0.00015765	0.00014389	0.00001376
595870.00	2370440.00	0.00129736	0.00019823	0.00018348	0.00001475	0.00071784	0.00017999	0.00016559	0.00001441
596370.00	2370440.00	0.00162116	0.00021317	0.0001987	0.00001447	0.00096113	0.00019589	0.00018142	0.00001447
596870.00	2370440.00	0.00152507	0.00021774	0.00020428	0.00001346	0.00134416	0.00020791	0.00019415	0.00001376
597370.00	2370440.00	0.00144865	0.00020857	0.00019674	0.00001183	0.00126978	0.00020548	0.00019292	0.00001256
597870.00	2370440.00	0.00121828	0.00019463	0.0001845	0.00001013	0.00132804	0.00019867	0.00018774	0.00001093

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2370440.00	0.00097227	0.00017917	0.00017051	0.00000866	0.00135269	0.00018846	0.00017915	0.00000932
598870.00	2370440.00	0.00077162	0.00016493	0.00015737	0.00000756	0.00131837	0.00017743	0.00016944	0.00000799
599370.00	2370440.00	0.00055186	0.00015131	0.00014443	0.00000688	0.0012196	0.00016863	0.00016154	0.00000709
599870.00	2370440.00	0.00050542	0.00014343	0.0001369	0.00000653	0.00112176	0.0001588	0.00015235	0.00000644
600370.00	2370440.00	0.00034272	0.00013297	0.00012619	0.00000678	0.00061054	0.00014822	0.00014166	0.00000656
600870.00	2370440.00	0.0004206	0.00013286	0.00012593	0.00000692	0.00083502	0.00014286	0.00013655	0.00000631
601370.00	2370440.00	0.00043411	0.00013184	0.00012439	0.00000745	0.00081833	0.00013886	0.00013217	0.00000669
601870.00	2370440.00	0.00041027	0.00013114	0.00012315	0.00000799	0.00082777	0.00013818	0.00013092	0.00000726
602370.00	2370440.00	0.00033505	0.00012842	0.00012009	0.00000832	0.00063001	0.0001381	0.0001303	0.0000078
602870.00	2370440.00	0.00042306	0.00013085	0.00012269	0.00000816	0.0007982	0.00013517	0.00012734	0.00000783
603370.00	2370440.00	0.00042667	0.00012967	0.00012193	0.00000774	0.00073891	0.0001329	0.00012529	0.00000761
603870.00	2370440.00	0.0004954	0.00012945	0.00012231	0.00000713	0.00070885	0.00012983	0.00012272	0.00000711
604370.00	2370440.00	0.00046562	0.00012762	0.00012107	0.00000655	0.00074285	0.00012886	0.00012233	0.00000653
604870.00	2370440.00	0.00042888	0.00012563	0.00011955	0.00000608	0.00076464	0.00012796	0.00012197	0.00000599
605370.00	2370440.00	0.0003594	0.00012274	0.00011699	0.00000575	0.00071885	0.0001281	0.0001225	0.0000056
605870.00	2370440.00	0.00042917	0.00012264	0.00011716	0.00000548	0.00074762	0.00012424	0.00011895	0.00000529
606370.00	2370440.00	0.0004458	0.00012107	0.00011575	0.00000532	0.00071863	0.00012187	0.00011677	0.0000051
606870.00	2370440.00	0.00036481	0.00011787	0.00011265	0.00000522	0.00073546	0.00012204	0.00011705	0.00000499
607370.00	2370440.00	0.0004173	0.00011647	0.00011135	0.00000511	0.0007253	0.00011823	0.00011335	0.00000488
607870.00	2370440.00	0.00029929	0.00011104	0.00010598	0.00000507	0.00057262	0.00011801	0.00011318	0.00000483
608370.00	2370440.00	0.00048258	0.00011184	0.0001069	0.00000494	0.000593	0.00011127	0.00010657	0.0000047
608870.00	2370440.00	0.000516	0.00010929	0.00010444	0.00000486	0.00049827	0.00010774	0.00010312	0.00000462
609370.00	2370440.00	0.00049113	0.00010738	0.00010259	0.00000479	0.00055153	0.00010628	0.00010175	0.00000453
609870.00	2370440.00	0.00052697	0.00010508	0.00010036	0.00000472	0.00045217	0.0001031	0.00009865	0.00000445
610370.00	2370440.00	0.00025485	0.00009892	0.00009409	0.00000483	0.00042182	0.00010627	0.00010168	0.00000459
610870.00	2370440.00	0.00025261	0.00009748	0.00009266	0.00000482	0.00042041	0.00010491	0.00010034	0.00000457
611370.00	2370440.00	0.0002839	0.00009821	0.0000935	0.00000471	0.00056422	0.00010465	0.00010024	0.00000441
611870.00	2370440.00	0.00050988	0.00009928	0.00009467	0.00000461	0.00047556	0.0000975	0.00009322	0.00000428
612370.00	2370440.00	0.00029018	0.00009616	0.00009146	0.00000471	0.00059463	0.00010233	0.00009791	0.00000442
612870.00	2370440.00	0.00037507	0.00009732	0.00009264	0.00000468	0.00075393	0.00010063	0.00009626	0.00000437
613370.00	2370440.00	0.00025218	0.00009207	0.00008732	0.00000476	0.00045834	0.0000996	0.00009505	0.00000454
613870.00	2370440.00	0.00051883	0.00009463	0.00009005	0.00000458	0.00045064	0.00009272	0.0000884	0.00000431
614370.00	2370440.00	0.0003884	0.00008911	0.00008464	0.00000447	0.00028819	0.00008853	0.00008407	0.00000445
614870.00	2370440.00	0.00037723	0.00008776	0.00008334	0.00000442	0.00028	0.00008739	0.00008295	0.00000444
615370.00	2370440.00	0.00063574	0.00009228	0.00008792	0.00000436	0.000428	0.00008875	0.0000845	0.00000425
615870.00	2370440.00	0.00060966	0.00009054	0.0000863	0.00000425	0.00041031	0.00008732	0.00008313	0.00000419
616370.00	2370440.00	0.00054041	0.00008794	0.00008385	0.0000041	0.00036747	0.00008548	0.00008135	0.00000413
616870.00	2370440.00	0.00053182	0.00008649	0.00008255	0.00000395	0.0003635	0.00008411	0.00008012	0.00000399
617370.00	2370440.00	0.00031866	0.00008037	0.00007654	0.00000383	0.0002528	0.00008105	0.00007714	0.00000391
617870.00	2370440.00	0.00021424	0.00007664	0.00007293	0.00000371	0.00022274	0.00007868	0.00007496	0.00000372
618370.00	2370440.00	0.00017075	0.00007433	0.0000708	0.00000353	0.00019915	0.00007633	0.00007281	0.00000352
618870.00	2370440.00	0.00017197	0.00007293	0.00006962	0.00000331	0.0001994	0.00007497	0.00007168	0.00000329
619370.00	2370440.00	0.00017881	0.00007159	0.0000685	0.00000308	0.00020265	0.00007366	0.00007059	0.00000306
619870.00	2370440.00	0.00056261	0.00007816	0.00007532	0.00000284	0.00040173	0.0000754	0.00007263	0.00000277
590370.00	2370940.00	0.00046203	0.00018127	0.00015963	0.00002164	0.00082352	0.00020605	0.00018645	0.0000196
590870.00	2370940.00	0.000466	0.00016948	0.00014836	0.00002112	0.00095945	0.00019904	0.00017894	0.0000201
591370.00	2370940.00	0.00050126	0.0001602	0.00014061	0.00001959	0.00126655	0.00019351	0.00017416	0.00001934
591870.00	2370940.00	0.0007772	0.00016153	0.000144	0.00001753	0.00205361	0.00018593	0.00016818	0.00001775
592370.00	2370940.00	0.00108043	0.00013991	0.00012457	0.00001534	0.00054323	0.00013891	0.00012289	0.00001602
592870.00	2370940.00	0.00093831	0.0001294	0.00011575	0.00001365	0.00049258	0.00012796	0.00011388	0.00001408
593370.00	2370940.00	0.00045232	0.00011452	0.00010192	0.00001259	0.00038294	0.00011719	0.00010466	0.00001253
593870.00	2370940.00	0.00031367	0.00011103	0.0000989	0.00001213	0.00033607	0.00011213	0.00010056	0.00001157
594370.00	2370940.00	0.00025185	0.00011396	0.00010175	0.00001221	0.00028825	0.00011095	0.00009966	0.00001129
594870.00	2370940.00	0.00041171	0.00013703	0.00012413	0.00001289	0.00036919	0.00012705	0.00011511	0.00001194
595370.00	2370940.00	0.00076393	0.00016341	0.00014999	0.00001341	0.00047578	0.00014742	0.00013471	0.0000127
595870.00	2370940.00	0.001225	0.00018592	0.00017214	0.00001378	0.0006737	0.00016802	0.00015466	0.00001336
596370.00	2370940.00	0.00156126	0.00020189	0.00018816	0.00001373	0.00090875	0.00018396	0.00017039	0.00001357
596870.00	2370940.00	0.00157801	0.00020567	0.00019271	0.00001296	0.0010174	0.00019255	0.00017929	0.00001326
597370.00	2370940.00	0.00149285	0.00020233	0.0001907	0.00001163	0.00113784	0.00019562	0.00018337	0.00001225
597870.00	2370940.00	0.00119876	0.00019158	0.00018146	0.00001012	0.00134962	0.00019429	0.00018348	0.00001081
598370.00	2370940.00	0.00092034	0.00017657	0.00016787	0.0000087	0.00140639	0.00018646	0.00017712	0.00000933
598870.00	2370940.00	0.00081082	0.00016374	0.00015624	0.0000075	0.00130091	0.00017438	0.00016642	0.00000797
599370.00	2370940.00	0.0006532	0.00015161	0.00014493	0.00000669	0.00123878	0.00016458	0.00015764	0.00000694
599870.00	2370940.00	0.00042029	0.00013799	0.00013168	0.0000063	0.00093757	0.00015667	0.00015026	0.00000641
600370.00	2370940.00	0.00035235	0.00013011	0.00012388	0.00000622	0.00068926	0.00014695	0.00014083	0.00000612
600870.00	2370940.00	0.00041893	0.0001287	0.00012244	0.00000626	0.00082964	0.00013905	0.00013325	0.00000579
601370.00	2370940.00	0.00044554	0.00012726	0.00012061	0.00000665	0.00081053	0.00013389	0.0001279	0.00000599
601870.00	2370940.00	0.00039235	0.00012549	0.00011827	0.00000722	0.00080501	0.00013332	0.00012681	0.00000651
602370.00	2370940.00	0.00030829	0.00012194	0.00011416	0.00000778	0.00051369	0.00013095	0.00012373	0.00000722
602870.00	2370940.00	0.00043747	0.00012574	0.00011796	0.00000777	0.0007692	0.0001287	0.00012139	0.0000073

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2370940.00	0.00042818	0.00012511	0.0001175	0.00000761	0.00076004	0.00012794	0.00012059	0.00000735
603870.00	2370940.00	0.00038588	0.0001234	0.00011621	0.00000719	0.00075383	0.00012804	0.00012095	0.00000709
604370.00	2370940.00	0.00045282	0.00012304	0.00011644	0.0000066	0.00071902	0.00012421	0.00011763	0.00000658
604870.00	2370940.00	0.00042885	0.00012124	0.00011517	0.00000607	0.00073279	0.00012305	0.00011702	0.00000604
605370.00	2370940.00	0.0004496	0.0001199	0.00011429	0.00000562	0.00070116	0.00012052	0.00011498	0.00000554
605870.00	2370940.00	0.00042032	0.00011832	0.00011301	0.00000531	0.00073107	0.00011977	0.0001146	0.00000517
606370.00	2370940.00	0.00042941	0.00011698	0.00011189	0.00000509	0.00071487	0.00011783	0.00011291	0.00000492
606870.00	2370940.00	0.00038739	0.00011488	0.00010992	0.00000496	0.00073035	0.00011729	0.00011253	0.00000476
607370.00	2370940.00	0.00045171	0.00011355	0.00010871	0.00000484	0.00065453	0.00011345	0.00010881	0.00000464
607870.00	2370940.00	0.00044352	0.00011134	0.00010659	0.00000475	0.00064922	0.00011149	0.00010695	0.00000455
608370.00	2370940.00	0.00050443	0.00010897	0.0001043	0.00000467	0.00051718	0.00010749	0.00010301	0.00000447
608870.00	2370940.00	0.00033035	0.00010545	0.00010083	0.00000462	0.00067229	0.00010975	0.00010535	0.00000439
609370.00	2370940.00	0.00025844	0.00009999	0.00009537	0.00000462	0.0004285	0.00010706	0.00010265	0.00000441
609870.00	2370940.00	0.00025416	0.00009802	0.00009346	0.00000456	0.0004207	0.00010503	0.00010068	0.00000435
610370.00	2370940.00	0.00043879	0.00010087	0.00009646	0.0000044	0.00059207	0.00010063	0.00009649	0.00000414
610870.00	2370940.00	0.0003712	0.00009888	0.00009451	0.00000437	0.0006695	0.00010084	0.00009674	0.00000409
611370.00	2370940.00	0.00029852	0.00009615	0.00009178	0.00000437	0.00061733	0.00010112	0.00009703	0.00000409
611870.00	2370940.00	0.00024567	0.00009241	0.00008789	0.00000451	0.00041019	0.0000999	0.00009559	0.00000431
612370.00	2370940.00	0.00050263	0.00009503	0.00009075	0.00000428	0.00044945	0.00009307	0.00008909	0.00000397
612870.00	2370940.00	0.00024216	0.00008992	0.00008548	0.00000444	0.00041832	0.00009709	0.00009288	0.0000042
613370.00	2370940.00	0.00048364	0.00009307	0.00008878	0.00000429	0.00049923	0.00009159	0.0000876	0.00000398
613870.00	2370940.00	0.00023769	0.00008776	0.00008326	0.0000045	0.00040709	0.00009538	0.00009105	0.00000433
614370.00	2370940.00	0.00039649	0.00008683	0.00008264	0.0000042	0.00028853	0.0000859	0.00008178	0.00000412
614870.00	2370940.00	0.00035898	0.00008492	0.00008073	0.00000419	0.00026946	0.00008458	0.00008044	0.00000415
615370.00	2370940.00	0.00035112	0.00008374	0.00007958	0.00000416	0.00026563	0.00008357	0.00007942	0.00000415
615870.00	2370940.00	0.00041796	0.00008427	0.0000802	0.00000407	0.00029563	0.00008319	0.00007908	0.0000041
616370.00	2370940.00	0.00047893	0.0000846	0.0000806	0.00000399	0.00032768	0.00008269	0.00007866	0.00000403
616870.00	2370940.00	0.00026412	0.00007869	0.00007469	0.000004	0.00023504	0.00007989	0.00007589	0.00000401
617370.00	2370940.00	0.00021266	0.0000764	0.00007248	0.00000392	0.00021991	0.00007828	0.00007437	0.0000039
617870.00	2370940.00	0.00016923	0.00007431	0.00007051	0.00000381	0.00019985	0.00007621	0.00007243	0.00000378
618370.00	2370940.00	0.00043002	0.0000789	0.00007542	0.00000348	0.00030168	0.00007766	0.00007408	0.00000357
618870.00	2370940.00	0.00057114	0.00008055	0.0000772	0.00000335	0.0003979	0.00007766	0.00007434	0.00000332
619370.00	2370940.00	0.00043691	0.00007941	0.00007614	0.00000327	0.00059529	0.00007935	0.00007619	0.00000316
619870.00	2370940.00	0.00040754	0.00007757	0.00007448	0.00000309	0.00059656	0.00007797	0.00007499	0.00000298
590370.00	2371440.00	0.00044573	0.00017202	0.00015161	0.00002042	0.00077937	0.00019457	0.00017591	0.00001866
590870.00	2371440.00	0.00044067	0.00016042	0.00014062	0.0000198	0.00085613	0.00018716	0.00016823	0.00001893
591370.00	2371440.00	0.00046162	0.00015133	0.00013301	0.00001832	0.00110148	0.00018264	0.00016454	0.00001811
591870.00	2371440.00	0.00100438	0.0001613	0.00014497	0.00001633	0.00199719	0.00017335	0.00015679	0.00001657
592370.00	2371440.00	0.00148985	0.00014355	0.00012923	0.00001432	0.00067	0.0001358	0.00012091	0.00001489
592870.00	2371440.00	0.0002536	0.00010458	0.00009183	0.00001276	0.00030504	0.00011307	0.00009997	0.0000131
593370.00	2371440.00	0.00023536	0.00009976	0.00008823	0.00001153	0.00028111	0.00010528	0.00009383	0.00001145
593870.00	2371440.00	0.00022117	0.00009882	0.00008788	0.00001094	0.00025386	0.00010023	0.00008982	0.00001041
594370.00	2371440.00	0.00024918	0.00010837	0.00009699	0.00001138	0.000285	0.00010614	0.0000956	0.00001054
594870.00	2371440.00	0.00040679	0.00012883	0.00011687	0.00001196	0.00035921	0.00011993	0.00010886	0.00001107
595370.00	2371440.00	0.0007477	0.00015326	0.00014083	0.00001243	0.00046403	0.0001381	0.00012634	0.00001175
595870.00	2371440.00	0.00116618	0.00017461	0.00016175	0.00001286	0.00063738	0.00015718	0.00014478	0.0000124
596370.00	2371440.00	0.00147433	0.00019005	0.00017708	0.00001297	0.00083586	0.00017237	0.00015965	0.00001273
596870.00	2371440.00	0.00155131	0.00019887	0.00018637	0.0000125	0.00108172	0.00018394	0.00017142	0.00001252
597370.00	2371440.00	0.00144998	0.00019675	0.00018533	0.00001142	0.00115651	0.00018822	0.0001764	0.00001182
597870.00	2371440.00	0.00132225	0.00018809	0.00017808	0.00001001	0.00116284	0.00018556	0.00017492	0.00001064
598370.00	2371440.00	0.00107608	0.00017591	0.00016728	0.00000864	0.00126328	0.00018001	0.00017077	0.00000925
598870.00	2371440.00	0.00074463	0.00016102	0.0001535	0.00000752	0.00134898	0.00017334	0.00016533	0.00000801
599370.00	2371440.00	0.0005766	0.00014824	0.0001416	0.00000664	0.00123451	0.00016392	0.00015694	0.00000698
599870.00	2371440.00	0.00061596	0.00014127	0.00013528	0.00000598	0.00114437	0.00015217	0.0001461	0.00000607
600370.00	2371440.00	0.0004081	0.00012993	0.00012414	0.00000579	0.00090873	0.00014589	0.00014015	0.00000574
600870.00	2371440.00	0.00042709	0.0001255	0.00011977	0.00000573	0.00083111	0.00013573	0.00013033	0.0000054
601370.00	2371440.00	0.00043972	0.00012308	0.00011709	0.00000598	0.00080236	0.00013017	0.00012473	0.00000544
601870.00	2371440.00	0.00041928	0.00012115	0.00011469	0.00000645	0.00076919	0.00012704	0.00012125	0.00000579
602370.00	2371440.00	0.00041102	0.00012062	0.00011368	0.00000694	0.00078467	0.00012572	0.00011946	0.00000626
602870.00	2371440.00	0.00041929	0.00012041	0.00011314	0.00000727	0.00075867	0.00012385	0.00011716	0.0000067
603370.00	2371440.00	0.00046108	0.00012053	0.00011322	0.00000731	0.00070045	0.00012139	0.00011446	0.00000693
603870.00	2371440.00	0.00040563	0.00011931	0.00011221	0.0000071	0.00073534	0.00012223	0.00011533	0.0000069
604370.00	2371440.00	0.00040051	0.00011823	0.00011157	0.00000666	0.00073037	0.00012109	0.0001145	0.00000659
604870.00	2371440.00	0.00038799	0.00011672	0.00011058	0.00000614	0.00072942	0.00011989	0.00011378	0.00000611
605370.00	2371440.00	0.00031767	0.00011335	0.00010765	0.0000057	0.0006017	0.00011983	0.00011417	0.00000566
605870.00	2371440.00	0.0004202	0.00011428	0.00010905	0.00000523	0.00070274	0.00011531	0.00011016	0.00000515
606370.00	2371440.00	0.00032758	0.00011124	0.00010626	0.00000498	0.00064523	0.00011622	0.00011136	0.00000485
606870.00	2371440.00	0.00035215	0.00011066	0.0001059	0.00000477	0.00069754	0.00011403	0.00010943	0.0000046
607370.00	2371440.00	0.00036499	0.00010943	0.00010481	0.00000463	0.0007026	0.000112	0.00010756	0.00000444
607870.00	2371440.00	0.00036619	0.00010772	0.0001032	0.00000453	0.00069539	0.00011012	0.00010579	0.00000433

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2371440.00	0.00032664	0.000105	0.00010054	0.00000445	0.00065753	0.000109	0.00010474	0.00000426
608870.00	2371440.00	0.00047402	0.00010419	0.00009983	0.00000436	0.00053213	0.00010298	0.00009881	0.00000417
609370.00	2371440.00	0.00042179	0.00010207	0.00009778	0.00000429	0.00060931	0.0001022	0.00009811	0.00000409
609870.00	2371440.00	0.00046143	0.00010009	0.00009587	0.00000422	0.00052646	0.00009904	0.00009502	0.00000402
610370.00	2371440.00	0.00025075	0.00009426	0.00009002	0.00000424	0.00042641	0.00010091	0.00009686	0.00000404
610870.00	2371440.00	0.00049098	0.00009627	0.00009217	0.0000041	0.00043548	0.0000944	0.00009052	0.00000387
611370.00	2371440.00	0.00043922	0.00009511	0.00009105	0.00000406	0.00054448	0.00009437	0.00009056	0.00000381
611870.00	2371440.00	0.00047868	0.00009356	0.00008954	0.00000402	0.00045938	0.00009184	0.00008808	0.00000376
612370.00	2371440.00	0.00024063	0.0000886	0.00008448	0.00000412	0.00041451	0.00009523	0.00009134	0.00000389
612870.00	2371440.00	0.00048224	0.00009113	0.00008715	0.00000398	0.00044865	0.00008931	0.00008561	0.0000037
613370.00	2371440.00	0.00047596	0.00009015	0.00008617	0.00000399	0.00046833	0.00008847	0.00008478	0.00000369
613870.00	2371440.00	0.0002339	0.00008537	0.00008116	0.00000421	0.00039772	0.00009287	0.00008883	0.00000404
614370.00	2371440.00	0.00045309	0.00008558	0.00008166	0.00000391	0.00030885	0.00008374	0.00007996	0.00000378
614870.00	2371440.00	0.00043837	0.00008435	0.00008044	0.00000391	0.00030262	0.00008271	0.0000789	0.00000381
615370.00	2371440.00	0.00028003	0.00007983	0.00007586	0.00000397	0.000237	0.00008047	0.0000766	0.00000387
615870.00	2371440.00	0.00025973	0.00007847	0.0000745	0.00000397	0.00023121	0.00007942	0.00007554	0.00000388
616370.00	2371440.00	0.00020511	0.00007617	0.0000722	0.00000397	0.00021302	0.00007782	0.00007395	0.00000388
616870.00	2371440.00	0.00020283	0.00007524	0.00007132	0.00000392	0.00021214	0.00007694	0.00007309	0.00000385
617370.00	2371440.00	0.00017054	0.00007364	0.00006977	0.00000388	0.00019894	0.00007537	0.00007156	0.00000381
617870.00	2371440.00	0.00016927	0.00007268	0.0000689	0.00000378	0.00019796	0.00007444	0.00007071	0.00000373
618370.00	2371440.00	0.00058396	0.00008079	0.00007725	0.00000354	0.00040635	0.00007764	0.00007416	0.00000347
618870.00	2371440.00	0.00027241	0.0000774	0.00007385	0.00000356	0.00053347	0.00008149	0.00007801	0.00000348
619370.00	2371440.00	0.00022326	0.00007392	0.00007046	0.00000346	0.00038663	0.00008	0.00007656	0.00000344
619870.00	2371440.00	0.0002212	0.00007256	0.00006925	0.00000331	0.00038023	0.00007849	0.0000752	0.00000329
590370.00	2371940.00	0.00043255	0.00016366	0.00014442	0.00001924	0.00076739	0.00018596	0.00016824	0.00001772
590870.00	2371940.00	0.00042917	0.00015308	0.00013452	0.00001856	0.00084606	0.00017899	0.00016118	0.00001781
591370.00	2371940.00	0.00048714	0.00014732	0.00013022	0.00001711	0.00124676	0.00017659	0.00015964	0.00001694
591870.00	2371940.00	0.00137423	0.00016059	0.00014536	0.00001523	0.00166365	0.0001588	0.00014329	0.0000155
592370.00	2371940.00	0.00174774	0.00014593	0.0001325	0.00001343	0.00082371	0.00013353	0.00011964	0.00001389
592870.00	2371940.00	0.00031467	0.00010451	0.00009246	0.00001205	0.00034417	0.00011177	0.00009946	0.00001231
593370.00	2371940.00	0.00020706	0.00009168	0.00008122	0.00001046	0.00024107	0.0000962	0.00008575	0.00001046
593870.00	2371940.00	0.00022478	0.00009596	0.00008557	0.00001038	0.00026414	0.00009815	0.00008826	0.00000989
594370.00	2371940.00	0.00028168	0.0001057	0.00009502	0.00001068	0.00030877	0.00010378	0.00009386	0.00000991
594870.00	2371940.00	0.00046646	0.00012357	0.00011248	0.00001109	0.00036636	0.00011466	0.00010434	0.00001032
595370.00	2371940.00	0.00071165	0.00014349	0.00013193	0.00001156	0.0004429	0.00012946	0.00011857	0.0000109
595870.00	2371940.00	0.00124224	0.00016707	0.00015508	0.000012	0.00066531	0.00014863	0.00013716	0.00001147
596370.00	2371940.00	0.00142734	0.00018006	0.00016783	0.00001223	0.00080093	0.00016223	0.00015034	0.00001189
596870.00	2371940.00	0.00148643	0.00018723	0.00017529	0.00001194	0.00090403	0.00017196	0.00016003	0.00001193
597370.00	2371940.00	0.00143726	0.00018993	0.0001788	0.00001113	0.00110366	0.0001794	0.00016802	0.00001138
597870.00	2371940.00	0.0013376	0.00018373	0.00017383	0.0000099	0.00110654	0.00017881	0.00016838	0.00001043
598370.00	2371940.00	0.00114847	0.00017369	0.00016509	0.0000086	0.00117062	0.0001743	0.00016513	0.00000917
598870.00	2371940.00	0.00081574	0.00016039	0.0001529	0.00000749	0.00131372	0.00016942	0.00016145	0.00000797
599370.00	2371940.00	0.00059497	0.00014712	0.00014053	0.00000659	0.00124406	0.00016158	0.00015462	0.00000696
599870.00	2371940.00	0.00064134	0.00013998	0.00013413	0.00000585	0.00113667	0.00014978	0.00014378	0.000006
600370.00	2371940.00	0.00041599	0.00012809	0.00012256	0.00000554	0.00092675	0.00014377	0.00013818	0.00000559
600870.00	2371940.00	0.00045655	0.00012334	0.00011802	0.00000532	0.00083297	0.00013242	0.00012731	0.0000051
601370.00	2371940.00	0.00041501	0.00011923	0.00011376	0.00000547	0.00079621	0.00012775	0.00012269	0.00000506
601870.00	2371940.00	0.00040404	0.00011689	0.00011108	0.00000581	0.00075956	0.00012363	0.00011839	0.00000524
602370.00	2371940.00	0.00039641	0.00011594	0.00010967	0.00000627	0.0007717	0.0001217	0.00011608	0.00000562
602870.00	2371940.00	0.00036038	0.00011462	0.00010791	0.00000671	0.0007266	0.00012082	0.00011471	0.0000061
603370.00	2371940.00	0.00054113	0.0001156	0.00010873	0.00000687	0.00053302	0.00011326	0.00010686	0.0000064
603870.00	2371940.00	0.0004056	0.00011488	0.00010798	0.0000069	0.00071174	0.00011719	0.0001106	0.00000659
604370.00	2371940.00	0.00038611	0.00011392	0.00010729	0.00000663	0.0007104	0.00011683	0.00011035	0.00000648
604870.00	2371940.00	0.00040543	0.00011313	0.00010695	0.00000618	0.00069735	0.00011489	0.00010877	0.00000613
605370.00	2371940.00	0.00039495	0.0001117	0.00010602	0.00000569	0.00069996	0.00011366	0.00010799	0.00000567
605870.00	2371940.00	0.00032686	0.00010896	0.00010369	0.00000527	0.0006419	0.0001139	0.00010866	0.00000524
606370.00	2371940.00	0.00037661	0.0001088	0.00010392	0.00000488	0.00069723	0.00011092	0.00010612	0.0000048
606870.00	2371940.00	0.00046129	0.00010797	0.00010337	0.0000046	0.00059015	0.00010677	0.00010229	0.00000448
607370.00	2371940.00	0.0003413	0.0001057	0.00010125	0.00000445	0.00067239	0.00010877	0.00010446	0.0000043
607870.00	2371940.00	0.00026347	0.00010045	0.00009603	0.00000443	0.00041522	0.00010666	0.00010236	0.0000043
608370.00	2371940.00	0.00048586	0.00010335	0.00009913	0.00000421	0.00049731	0.00010149	0.00009743	0.00000406
608870.00	2371940.00	0.00030776	0.00010017	0.000096	0.00000417	0.00061446	0.00010426	0.00010027	0.00000399
609370.00	2371940.00	0.00042682	0.0000997	0.00009563	0.00000408	0.0005764	0.0000993	0.0000954	0.0000039
609870.00	2371940.00	0.00047293	0.00009759	0.00009358	0.00000401	0.00047069	0.00009601	0.00009217	0.00000384
610370.00	2371940.00	0.00048296	0.00009546	0.00009151	0.00000394	0.00042167	0.00009366	0.00008989	0.00000377
610870.00	2371940.00	0.000482	0.00009365	0.00008977	0.00000388	0.00040793	0.00009181	0.00008811	0.0000037
611370.00	2371940.00	0.00030174	0.00009156	0.00008769	0.00000387	0.00060924	0.00009514	0.00009149	0.00000365
611870.00	2371940.00	0.00023775	0.0000875	0.00008353	0.00000397	0.00039129	0.00009439	0.00009056	0.00000383
612370.00	2371940.00	0.00023418	0.00008612	0.00008219	0.00000393	0.00038685	0.00009296	0.0000892	0.00000376
612870.00	2371940.00	0.00030859	0.00008796	0.00008419	0.00000377	0.00061728	0.00009103	0.00008751	0.00000352

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2371940.00	0.00023072	0.00008385	0.00008	0.00000385	0.00039103	0.00009032	0.00008667	0.00000365
613870.00	2371940.00	0.00027811	0.00008529	0.00008151	0.00000378	0.00056849	0.0000896	0.00008608	0.00000353
614370.00	2371940.00	0.00038415	0.00008188	0.00007822	0.00000366	0.00027497	0.00008082	0.00007731	0.00000351
614870.00	2371940.00	0.00043287	0.00008195	0.0000783	0.00000365	0.00029615	0.00008025	0.00007673	0.00000352
615370.00	2371940.00	0.00039744	0.00008034	0.00007669	0.00000365	0.00028101	0.00007912	0.00007556	0.00000355
615870.00	2371940.00	0.00024596	0.00007601	0.00007228	0.00000373	0.0002235	0.00007698	0.00007337	0.0000036
616370.00	2371940.00	0.00019085	0.00007385	0.00007008	0.00000377	0.00020498	0.00007539	0.00007176	0.00000363
616870.00	2371940.00	0.00019908	0.00007317	0.00006943	0.00000374	0.00020709	0.00007471	0.00007108	0.00000363
617370.00	2371940.00	0.00046616	0.00007835	0.00007478	0.00000357	0.00031574	0.00007635	0.0000728	0.00000356
617870.00	2371940.00	0.00055869	0.00008106	0.00007745	0.00000361	0.00050925	0.00007842	0.00007498	0.00000343
618370.00	2371940.00	0.00042152	0.00007564	0.0000722	0.00000344	0.00029308	0.00007424	0.00007076	0.00000348
618870.00	2371940.00	0.00057277	0.0000787	0.00007527	0.00000343	0.00045355	0.00007572	0.00007242	0.0000033
619370.00	2371940.00	0.00027614	0.00007512	0.0000717	0.00000342	0.0005437	0.00007871	0.00007538	0.00000333
619870.00	2371940.00	0.00021377	0.00007104	0.00006765	0.00000338	0.00036302	0.00007737	0.00007399	0.00000338
590370.00	2372440.00	0.00041991	0.00015596	0.00013781	0.00001815	0.00074993	0.00017758	0.00016075	0.00001684
590870.00	2372440.00	0.00042022	0.0001465	0.0001291	0.00001741	0.00084667	0.00017169	0.00015491	0.00001677
591370.00	2372440.00	0.00047535	0.00014129	0.00012526	0.00001603	0.00121236	0.00016881	0.00015292	0.0000159
591870.00	2372440.00	0.00097974	0.00014922	0.00013488	0.00001434	0.00185158	0.00015763	0.00014311	0.00001452
592370.00	2372440.00	0.00148918	0.00013432	0.00012171	0.00001261	0.00067673	0.00012533	0.00011228	0.00001305
592870.00	2372440.00	0.00039468	0.00010353	0.00009219	0.00001134	0.00035987	0.00010884	0.00009727	0.00001157
593370.00	2372440.00	0.00023538	0.00009336	0.00008311	0.00001026	0.00027891	0.00009832	0.00008816	0.00001016
593870.00	2372440.00	0.00022884	0.0000931	0.00008329	0.00000981	0.0002684	0.00009536	0.000086	0.00000936
594370.00	2372440.00	0.00028099	0.000101	0.00009102	0.00000998	0.00030355	0.00009949	0.00009021	0.00000927
594870.00	2372440.00	0.00037204	0.00011385	0.0001035	0.00001035	0.00033425	0.00010725	0.00009769	0.00000957
595370.00	2372440.00	0.00062235	0.00013319	0.00012241	0.00001078	0.00040972	0.00012109	0.00011098	0.00001011
595870.00	2372440.00	0.00119917	0.00015749	0.00014629	0.0000112	0.00063717	0.00013963	0.00012897	0.00001067
596370.00	2372440.00	0.00140074	0.00017108	0.00015957	0.00001151	0.0007828	0.00015307	0.00014198	0.00001109
596870.00	2372440.00	0.00145046	0.00017869	0.00016729	0.0000114	0.00087766	0.00016279	0.00015154	0.00001125
597370.00	2372440.00	0.00142892	0.00018234	0.00017155	0.00001079	0.00102299	0.00017015	0.00015923	0.00001092
597870.00	2372440.00	0.00133435	0.00017888	0.00016913	0.00000975	0.00106855	0.00017202	0.00016185	0.00001016
598370.00	2372440.00	0.00120619	0.00017076	0.00016222	0.00000854	0.00108139	0.00016865	0.00015957	0.00000908
598870.00	2372440.00	0.00098223	0.00016016	0.00015273	0.00000743	0.00117111	0.00016349	0.00015559	0.0000079
599370.00	2372440.00	0.00087045	0.00014961	0.00014316	0.00000645	0.00110713	0.00015431	0.00014751	0.00000681
599870.00	2372440.00	0.00072881	0.00013964	0.00013391	0.00000573	0.00108576	0.00014627	0.00014034	0.00000593
600370.00	2372440.00	0.00044742	0.00012741	0.00012206	0.00000535	0.00099225	0.00014175	0.00013629	0.00000545
600870.00	2372440.00	0.00049504	0.00012167	0.00011666	0.00000501	0.00081427	0.00012922	0.00012433	0.00000489
601370.00	2372440.00	0.00041733	0.0001164	0.00011135	0.00000504	0.00078611	0.00012494	0.00012019	0.00000475
601870.00	2372440.00	0.0004108	0.00011367	0.00010842	0.00000525	0.00075858	0.00012034	0.00011555	0.00000479
602370.00	2372440.00	0.00041326	0.00011204	0.00010641	0.00000562	0.00072537	0.00011667	0.00011164	0.00000504
602870.00	2372440.00	0.00038152	0.00011096	0.00010488	0.00000608	0.00073798	0.00011595	0.00011048	0.00000546
603370.00	2372440.00	0.00032059	0.00010896	0.00010249	0.00000648	0.00063616	0.00011594	0.00011	0.00000594
603870.00	2372440.00	0.00038268	0.00011028	0.00010369	0.00000659	0.00070141	0.00011326	0.00010709	0.00000617
604370.00	2372440.00	0.00037681	0.00010977	0.00010327	0.0000065	0.00069161	0.00011255	0.0001063	0.00000624
604870.00	2372440.00	0.00035828	0.00010871	0.00010251	0.0000062	0.00068295	0.00011207	0.00010598	0.00000608
605370.00	2372440.00	0.00034891	0.00010747	0.0001017	0.00000577	0.00067434	0.00011103	0.0001053	0.00000573
605870.00	2372440.00	0.00042037	0.00010704	0.00010177	0.00000527	0.00064111	0.00010735	0.00010209	0.00000526
606370.00	2372440.00	0.00031149	0.00010399	0.00009907	0.00000492	0.00060242	0.0001088	0.00010392	0.00000488
606870.00	2372440.00	0.0003881	0.00010425	0.0000997	0.00000455	0.00066439	0.00010518	0.00010071	0.00000447
607370.00	2372440.00	0.00047226	0.00010305	0.00009876	0.00000429	0.00052032	0.00010112	0.00009693	0.00000419
607870.00	2372440.00	0.00029404	0.00009997	0.00009578	0.00000419	0.00055915	0.00010455	0.00010049	0.00000406
608370.00	2372440.00	0.00029677	0.00009884	0.00009477	0.00000407	0.00057574	0.00010303	0.00009911	0.00000392
608870.00	2372440.00	0.00025955	0.00009541	0.00009139	0.00000402	0.00043727	0.00010125	0.00009737	0.00000388
609370.00	2372440.00	0.00048556	0.00009669	0.00009281	0.00000388	0.00041505	0.00009471	0.00009097	0.00000374
609870.00	2372440.00	0.00037374	0.00009536	0.00009153	0.00000383	0.00061631	0.00009607	0.00009241	0.00000366
610370.00	2372440.00	0.00027933	0.00009203	0.00008824	0.00000379	0.00054795	0.00009636	0.00009274	0.00000362
610870.00	2372440.00	0.00023736	0.00008797	0.00008418	0.00000379	0.00038695	0.00009403	0.00009038	0.00000365
611370.00	2372440.00	0.00036562	0.00009022	0.00008657	0.00000365	0.00059652	0.00009095	0.00008748	0.00000347
611870.00	2372440.00	0.00044156	0.00008881	0.00008522	0.00000359	0.00046701	0.0000874	0.000084	0.0000034
612370.00	2372440.00	0.00041755	0.00008754	0.00008399	0.00000355	0.00050645	0.00008666	0.00008332	0.00000334
612870.00	2372440.00	0.00039015	0.00008632	0.00008279	0.00000352	0.00054899	0.00008614	0.00008285	0.0000033
613370.00	2372440.00	0.00022622	0.00008159	0.00007797	0.00000361	0.00037851	0.00008774	0.00008431	0.00000343
613870.00	2372440.00	0.00040734	0.00008422	0.00008073	0.00000349	0.00051771	0.00008353	0.00008029	0.00000323
614370.00	2372440.00	0.00031651	0.00007845	0.000075	0.00000345	0.00024589	0.00007816	0.00007487	0.00000328
614870.00	2372440.00	0.00025487	0.00007608	0.0000726	0.00000348	0.00022298	0.00007668	0.00007338	0.0000033
615370.00	2372440.00	0.00024921	0.00007502	0.00007154	0.00000348	0.00022086	0.0000757	0.00007239	0.00000332
615870.00	2372440.00	0.00021532	0.00007333	0.00006981	0.00000351	0.0002107	0.00007449	0.00007114	0.00000334
616370.00	2372440.00	0.00018182	0.00007168	0.00006814	0.00000354	0.00019775	0.00007311	0.00006974	0.00000337
616870.00	2372440.00	0.00035465	0.0000749	0.00007149	0.00000342	0.00026022	0.00007416	0.0000708	0.00000336
617370.00	2372440.00	0.00032691	0.00007836	0.00007482	0.00000354	0.00063845	0.00008076	0.00007742	0.00000335
617870.00	2372440.00	0.0002303	0.00007491	0.00007134	0.00000357	0.00042187	0.00008039	0.00007693	0.00000345

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2372440.00	0.00023095	0.00007413	0.00007059	0.00000353	0.00042423	0.00007943	0.000076	0.00000343
618870.00	2372440.00	0.00023275	0.00007335	0.00006988	0.00000347	0.00042946	0.0000784	0.00007502	0.00000338
619370.00	2372440.00	0.00021943	0.00007167	0.00006825	0.00000342	0.00038741	0.00007741	0.00007405	0.00000336
619870.00	2372440.00	0.00021085	0.00006989	0.00006651	0.00000338	0.00035972	0.00007621	0.00007285	0.00000336
590370.00	2372940.00	0.00041012	0.00014909	0.00013196	0.00001713	0.00075014	0.00017058	0.0001546	0.00001598
590870.00	2372940.00	0.00042122	0.00014127	0.00012492	0.00001634	0.00089435	0.00016584	0.00015004	0.0000158
591370.00	2372940.00	0.00052691	0.00013904	0.00012402	0.00001502	0.00140475	0.0001627	0.00014778	0.00001492
591870.00	2372940.00	0.00122775	0.00014728	0.00013386	0.00001343	0.00161268	0.00014634	0.00013272	0.00001363
592370.00	2372940.00	0.00168273	0.00013613	0.00012426	0.00001187	0.00082163	0.0001235	0.00011128	0.00001222
592870.00	2372940.00	0.00079426	0.00010918	0.00009855	0.00001063	0.00043515	0.00010815	0.00009726	0.00001088
593370.00	2372940.00	0.00030212	0.00009393	0.00008416	0.00000976	0.00031804	0.0000979	0.00008824	0.00000966
593870.00	2372940.00	0.00020384	0.00008675	0.00007775	0.000009	0.00023432	0.00008863	0.00008004	0.00000859
594370.00	2372940.00	0.0002246	0.00009284	0.0000836	0.00000924	0.00025913	0.0000923	0.00008373	0.00000857
594870.00	2372940.00	0.00029801	0.00010504	0.00009538	0.00000966	0.00030494	0.00010042	0.00009155	0.00000888
595370.00	2372940.00	0.00063966	0.00012634	0.00011631	0.00001003	0.00040582	0.00011467	0.00010526	0.00000941
595870.00	2372940.00	0.00088899	0.00014302	0.00013256	0.00001046	0.00050706	0.00012888	0.00011892	0.00000996
596370.00	2372940.00	0.00121435	0.00015857	0.00014777	0.0000108	0.00066584	0.00014278	0.00013237	0.00001041
596870.00	2372940.00	0.00140449	0.00016998	0.00015915	0.00001084	0.00083254	0.00015391	0.00014331	0.0000106
597370.00	2372940.00	0.00139879	0.00017512	0.0001647	0.00001042	0.00099082	0.00016198	0.00015155	0.00001042
597870.00	2372940.00	0.00133417	0.00017335	0.00016379	0.00000956	0.00100872	0.00016462	0.00015475	0.00000987
598370.00	2372940.00	0.00117993	0.00016753	0.00015903	0.0000085	0.00110532	0.00016432	0.00015539	0.00000893
598870.00	2372940.00	0.00085093	0.00015695	0.00014947	0.00000748	0.00129047	0.0001627	0.00015481	0.0000079
599370.00	2372940.00	0.00091718	0.00014836	0.00014193	0.00000643	0.00106895	0.00015133	0.00014453	0.0000068
599870.00	2372940.00	0.00061777	0.00013426	0.00012857	0.00000569	0.00088474	0.00014173	0.00013578	0.00000595
600370.00	2372940.00	0.00042316	0.00012507	0.00011981	0.00000526	0.00093138	0.00014013	0.00013469	0.00000545
600870.00	2372940.00	0.00052767	0.00012019	0.0001154	0.00000479	0.00078654	0.00012649	0.00012174	0.00000475
601370.00	2372940.00	0.00043487	0.00011478	0.00011006	0.00000472	0.00082513	0.0001231	0.00011858	0.00000452
601870.00	2372940.00	0.00042034	0.00011095	0.00010615	0.0000048	0.00075017	0.00011736	0.00011292	0.00000444
602370.00	2372940.00	0.0004032	0.00010855	0.00010347	0.00000508	0.00072093	0.0001138	0.00010921	0.00000459
602870.00	2372940.00	0.0003982	0.00010751	0.00010204	0.00000548	0.00072856	0.00011168	0.00010678	0.0000049
603370.00	2372940.00	0.00046796	0.0001073	0.00010146	0.00000584	0.00062928	0.00010734	0.00010208	0.00000526
603870.00	2372940.00	0.00039932	0.00010643	0.00010027	0.00000616	0.00067851	0.00010836	0.0001027	0.00000566
604370.00	2372940.00	0.00042142	0.00010625	0.00010001	0.00000624	0.00063785	0.00010674	0.00010086	0.00000588
604870.00	2372940.00	0.00038391	0.00010541	0.00009931	0.00000611	0.00065948	0.00010705	0.00010114	0.0000059
605370.00	2372940.00	0.0003098	0.00010309	0.00009727	0.00000582	0.00059922	0.00010811	0.00010238	0.00000573
605870.00	2372940.00	0.00031957	0.0001024	0.00009701	0.00000539	0.0006231	0.00010661	0.00010125	0.00000536
606370.00	2372940.00	0.00035962	0.00010201	0.00009708	0.00000493	0.00065817	0.00010401	0.00009909	0.00000492
606870.00	2372940.00	0.00033548	0.00010043	0.00009586	0.00000457	0.00064728	0.00010322	0.0000987	0.00000453
607370.00	2372940.00	0.00041568	0.00009992	0.00009568	0.00000424	0.00059734	0.00009937	0.0000952	0.00000417
607870.00	2372940.00	0.0003945	0.00009872	0.00009469	0.00000404	0.00061922	0.00009864	0.00009471	0.00000393
608370.00	2372940.00	0.00044595	0.00009752	0.00009364	0.00000388	0.00052369	0.00009585	0.00009209	0.00000376
608870.00	2372940.00	0.00027821	0.00009427	0.00009044	0.00000383	0.00051952	0.00009861	0.00009492	0.00000369
609370.00	2372940.00	0.0002649	0.00009234	0.00008858	0.00000375	0.00047639	0.00009714	0.00009353	0.00000362
609870.00	2372940.00	0.00024255	0.00008877	0.00008499	0.00000379	0.00038356	0.00009466	0.00009095	0.00000371
610370.00	2372940.00	0.00042006	0.00009154	0.00008795	0.00000359	0.00051287	0.00009055	0.00008711	0.00000344
610870.00	2372940.00	0.00024198	0.00008675	0.00008317	0.00000359	0.00041312	0.0000922	0.00008875	0.00000345
611370.00	2372940.00	0.00023052	0.00008435	0.00008078	0.00000358	0.00037051	0.00009027	0.00008681	0.00000346
611870.00	2372940.00	0.00022785	0.00008299	0.00007947	0.00000352	0.00036927	0.0000889	0.0000855	0.0000034
612370.00	2372940.00	0.00023604	0.00008264	0.00007921	0.00000343	0.00041351	0.00008789	0.00008461	0.00000328
612870.00	2372940.00	0.00043173	0.00008397	0.00008064	0.00000333	0.00044246	0.00008251	0.00007937	0.00000314
613370.00	2372940.00	0.00045162	0.00008243	0.00007914	0.00000329	0.00037724	0.00008055	0.00007745	0.0000031
613870.00	2372940.00	0.00044563	0.00008155	0.00007828	0.00000327	0.0003967	0.00007974	0.00007669	0.00000306
614370.00	2372940.00	0.0002101	0.00007427	0.00007096	0.0000033	0.00020733	0.00007535	0.00007224	0.00000311
614870.00	2372940.00	0.00021269	0.0000733	0.00007001	0.00000329	0.00020756	0.00007434	0.00007125	0.00000309
615370.00	2372940.00	0.00017708	0.0000715	0.00006819	0.00000331	0.00019304	0.00007282	0.00006972	0.0000031
615870.00	2372940.00	0.00017055	0.00007043	0.00006712	0.00000332	0.00018951	0.00007176	0.00006865	0.00000312
616370.00	2372940.00	0.0001605	0.00006932	0.00006599	0.00000333	0.00018317	0.00007058	0.00006745	0.00000314
616870.00	2372940.00	0.00026696	0.00007103	0.00006778	0.00000325	0.00022228	0.00007137	0.00006824	0.00000313
617370.00	2372940.00	0.00046473	0.00007757	0.00007428	0.0000033	0.00057404	0.00007635	0.00007328	0.00000307
617870.00	2372940.00	0.00026596	0.00007448	0.00007113	0.00000335	0.00053495	0.00007816	0.00007499	0.00000318
618370.00	2372940.00	0.00021497	0.00007162	0.00006822	0.00000339	0.00037711	0.00007758	0.00007429	0.00000329
618870.00	2372940.00	0.00020993	0.00007039	0.00006699	0.0000034	0.00036237	0.00007674	0.00007341	0.00000332
619370.00	2372940.00	0.00020883	0.00006952	0.00006616	0.00000336	0.00035932	0.00007582	0.00007252	0.00000331
619870.00	2372940.00	0.00021013	0.00006877	0.00006542	0.00000335	0.00036087	0.0000752	0.00007186	0.00000334
590370.00	2373440.00	0.00040034	0.00014269	0.00012652	0.00001617	0.00074192	0.0001636	0.00014843	0.00001518
590870.00	2373440.00	0.00041774	0.00013602	0.00012065	0.00001537	0.0009074	0.00015949	0.00014458	0.00001491
591370.00	2373440.00	0.00052045	0.00013399	0.00011988	0.00001412	0.00138167	0.00015589	0.00014185	0.00001403
591870.00	2373440.00	0.00141962	0.00014315	0.00013054	0.0000126	0.00136312	0.00013628	0.00012347	0.00001281
592370.00	2373440.00	0.00116545	0.00011829	0.00010712	0.00001117	0.00053797	0.00011347	0.00010193	0.00001154
592870.00	2373440.00	0.00036937	0.0000959	0.00008584	0.00001006	0.00034086	0.00010061	0.00009038	0.00001023

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2373440.00	0.00020306	0.00008398	0.00007506	0.00000892	0.00023728	0.00008827	0.00007941	0.00000886
593870.00	2373440.00	0.00020604	0.0000844	0.00007592	0.00000847	0.0002446	0.00008672	0.00007863	0.00000809
594370.00	2373440.00	0.00021001	0.00008764	0.00007911	0.00000853	0.00024762	0.00008757	0.00007969	0.00000789
594870.00	2373440.00	0.0002506	0.00009748	0.00008848	0.000009	0.00027982	0.00009422	0.00008598	0.00000824
595370.00	2373440.00	0.00034719	0.00011176	0.0001023	0.00000947	0.00032171	0.00010464	0.00009594	0.00000871
595870.00	2373440.00	0.0008293	0.00013447	0.0001247	0.00000977	0.00047939	0.0001213	0.00011202	0.00000928
596370.00	2373440.00	0.00123217	0.00015137	0.00014123	0.00001014	0.00066896	0.00013526	0.00012555	0.00000971
596870.00	2373440.00	0.00137416	0.00016222	0.00015194	0.00001028	0.00082465	0.00014595	0.00013599	0.00000996
597370.00	2373440.00	0.00137271	0.00016727	0.00015726	0.00001001	0.00092319	0.00015345	0.00014352	0.00000994
597870.00	2373440.00	0.0012883	0.00016822	0.00015887	0.00000935	0.00103359	0.0001586	0.00014909	0.00000951
598370.00	2373440.00	0.0011263	0.00016379	0.00015536	0.00000843	0.00114256	0.00015996	0.00015122	0.00000874
598870.00	2373440.00	0.00105895	0.00015597	0.00014858	0.00000738	0.00107313	0.00015503	0.00014724	0.00000779
599370.00	2373440.00	0.00095174	0.00014682	0.00014041	0.00000641	0.00102901	0.00014808	0.00014129	0.00000679
599870.00	2373440.00	0.0006521	0.00013314	0.00012749	0.00000565	0.00085541	0.00013915	0.00013321	0.00000594
600370.00	2373440.00	0.00048013	0.00012425	0.00011912	0.00000513	0.00089248	0.00013478	0.00012947	0.0000053
600870.00	2373440.00	0.00050098	0.00011837	0.0001137	0.00000467	0.00080481	0.00012572	0.00012103	0.00000469
601370.00	2373440.00	0.00044053	0.00011299	0.00010851	0.00000448	0.00082249	0.00012114	0.00011678	0.00000437
601870.00	2373440.00	0.00041638	0.00010885	0.00010438	0.00000447	0.00078244	0.00011595	0.00011175	0.0000042
602370.00	2373440.00	0.00041042	0.00010611	0.00010149	0.00000463	0.00074723	0.00011152	0.0001073	0.00000422
602870.00	2373440.00	0.0003935	0.00010419	0.00009924	0.00000495	0.00072371	0.00010869	0.00010426	0.00000443
603370.00	2373440.00	0.00028995	0.00010048	0.00009505	0.00000543	0.00055216	0.00010862	0.0001037	0.00000492
603870.00	2373440.00	0.00035378	0.00010204	0.00009634	0.0000057	0.00067652	0.0001059	0.00010072	0.00000518
604370.00	2373440.00	0.00045619	0.00010245	0.00009657	0.00000588	0.00056642	0.00010143	0.00009599	0.00000545
604870.00	2373440.00	0.0003611	0.00010152	0.00009559	0.00000593	0.00065096	0.00010373	0.0000981	0.00000563
605370.00	2373440.00	0.00037028	0.00010108	0.00009534	0.00000574	0.00064111	0.00010262	0.00009704	0.00000558
605870.00	2373440.00	0.0003617	0.00010013	0.00009473	0.00000541	0.00064054	0.00010184	0.0000965	0.00000534
606370.00	2373440.00	0.00025845	0.00009545	0.00009032	0.00000513	0.00041172	0.000102	0.00009686	0.00000514
606870.00	2373440.00	0.00025572	0.0000942	0.00008945	0.00000474	0.00040231	0.00010055	0.00009579	0.00000476
607370.00	2373440.00	0.00047622	0.00009629	0.00009208	0.00000421	0.00043326	0.000094	0.00008981	0.00000419
607870.00	2373440.00	0.00034781	0.00009544	0.00009144	0.00000399	0.00063205	0.00009676	0.00009284	0.00000392
608370.00	2373440.00	0.00031076	0.00009382	0.00009	0.00000381	0.00060473	0.00009644	0.00009273	0.00000372
608870.00	2373440.00	0.00037209	0.00009342	0.00008976	0.00000366	0.00060329	0.00009348	0.00008994	0.00000354
609370.00	2373440.00	0.00027509	0.00009059	0.000087	0.0000036	0.00051811	0.00009441	0.00009093	0.00000347
609870.00	2373440.00	0.00030166	0.00009012	0.00008661	0.00000351	0.00058859	0.00009264	0.00008926	0.00000337
610370.00	2373440.00	0.00027751	0.00008813	0.00008468	0.00000345	0.00053819	0.00009155	0.00008823	0.00000332
610870.00	2373440.00	0.00030513	0.00008731	0.00008392	0.00000339	0.00058781	0.0000895	0.00008625	0.00000325
611370.00	2373440.00	0.00034383	0.00008618	0.00008285	0.00000333	0.00057853	0.00008692	0.00008373	0.00000319
611870.00	2373440.00	0.00044029	0.00008445	0.00008118	0.00000327	0.00040229	0.00008275	0.00007963	0.00000313
612370.00	2373440.00	0.000315	0.00008309	0.00007986	0.00000323	0.0005777	0.00008464	0.00008156	0.00000308
612870.00	2373440.00	0.00022011	0.0000786	0.00007531	0.00000329	0.00035737	0.00008449	0.00008131	0.00000318
613370.00	2373440.00	0.00039596	0.00008089	0.00007775	0.00000314	0.0004773	0.00007997	0.00007701	0.00000296
613870.00	2373440.00	0.00043624	0.00007939	0.00007629	0.00000309	0.00038025	0.0000776	0.00007468	0.00000291
614370.00	2373440.00	0.00035405	0.00007545	0.00007239	0.00000306	0.00025434	0.00007452	0.0000716	0.00000291
614870.00	2373440.00	0.00028452	0.00007317	0.00007012	0.00000305	0.00022856	0.00007309	0.00007019	0.0000029
615370.00	2373440.00	0.00021329	0.00007069	0.00006762	0.00000308	0.00020416	0.00007158	0.00006868	0.0000029
615870.00	2373440.00	0.0001584	0.00006848	0.00006536	0.00000312	0.00017957	0.00006967	0.00006675	0.00000292
616370.00	2373440.00	0.00015374	0.00006742	0.00006429	0.00000313	0.00017475	0.00006855	0.00006562	0.00000293
616870.00	2373440.00	0.00016473	0.00006698	0.00006386	0.00000311	0.00018389	0.00006822	0.0000653	0.00000293
617370.00	2373440.00	0.00038598	0.00007103	0.00006803	0.000003	0.00026684	0.00006965	0.00006675	0.0000029
617870.00	2373440.00	0.00056346	0.00007416	0.00007112	0.00000304	0.00037608	0.00007073	0.00006788	0.00000286
618370.00	2373440.00	0.00027183	0.00007211	0.00006897	0.00000315	0.00054697	0.00007521	0.00007224	0.00000297
618870.00	2373440.00	0.00020636	0.00006875	0.00006551	0.00000324	0.00035538	0.00007493	0.00007179	0.00000314
619370.00	2373440.00	0.00020662	0.00006808	0.00006483	0.00000325	0.00035531	0.00007439	0.0000712	0.0000032
619870.00	2373440.00	0.00020814	0.00006752	0.00006427	0.00000325	0.00035902	0.00007388	0.00007065	0.00000323
590370.00	2373940.00	0.00039521	0.0001372	0.00012191	0.00001528	0.00075642	0.00015769	0.00014329	0.00001441
590870.00	2373940.00	0.00049736	0.00013603	0.00012158	0.00001445	0.00123422	0.00015574	0.00014168	0.00001406
591370.00	2373940.00	0.00055259	0.0001309	0.00011762	0.00001328	0.001454	0.00014954	0.00013632	0.00001321
591870.00	2373940.00	0.00152263	0.00013759	0.00012574	0.00001185	0.00116026	0.00012776	0.00011569	0.00001207
592370.00	2373940.00	0.0007205	0.0001057	0.00009513	0.00001057	0.00041629	0.0001065	0.0000956	0.0000109
592870.00	2373940.00	0.00020759	0.00008476	0.00007538	0.00000937	0.00024742	0.00009083	0.00008127	0.00000956
593370.00	2373940.00	0.0002064	0.00008223	0.00007372	0.00000851	0.00024563	0.00008661	0.00007818	0.00000843
593870.00	2373940.00	0.00024668	0.00008496	0.00007672	0.00000824	0.0002791	0.00008713	0.00007926	0.00000787
594370.00	2373940.00	0.00022184	0.00008558	0.00007743	0.00000815	0.00025507	0.00008558	0.00007801	0.00000757
594870.00	2373940.00	0.00022256	0.00009136	0.00008299	0.00000837	0.00026339	0.00008914	0.0000815	0.00000763
595370.00	2373940.00	0.00034783	0.00010606	0.00009722	0.00000884	0.00031569	0.00009953	0.0000914	0.00000813
595870.00	2373940.00	0.00070326	0.00012484	0.00011568	0.00000916	0.00042363	0.00011338	0.00010473	0.00000865
596370.00	2373940.00	0.00127127	0.00014556	0.00013603	0.00000954	0.00069368	0.00012876	0.00011972	0.00000904
596870.00	2373940.00	0.00133512	0.00015443	0.0001447	0.00000973	0.0007939	0.00013827	0.00012891	0.00000936
597370.00	2373940.00	0.00133533	0.00016072	0.00015112	0.0000096	0.00092561	0.00014651	0.0001371	0.00000941
597870.00	2373940.00	0.0013003	0.00016158	0.0001525	0.00000908	0.00093028	0.00015056	0.00014139	0.00000917

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2373940.00	0.00120775	0.00015941	0.00015113	0.00000827	0.00099608	0.0001526	0.00014404	0.00000855
598870.00	2373940.00	0.00111019	0.00015321	0.00014589	0.00000732	0.00099359	0.00015007	0.00014236	0.00000771
599370.00	2373940.00	0.00096008	0.00014506	0.00013864	0.00000642	0.00102351	0.0001454	0.00013862	0.00000677
599870.00	2373940.00	0.00068786	0.00013183	0.00012621	0.00000562	0.00081128	0.00013618	0.00013024	0.00000593
600370.00	2373940.00	0.0005119	0.00012338	0.00011831	0.00000507	0.00087394	0.00013219	0.00012693	0.00000526
600870.00	2373940.00	0.00042555	0.00011601	0.00011137	0.00000464	0.00083088	0.00012665	0.00012192	0.00000473
601370.00	2373940.00	0.00041099	0.00011094	0.0001066	0.00000434	0.00082106	0.00012054	0.00011624	0.0000043
601870.00	2373940.00	0.0003989	0.00010662	0.0001024	0.00000422	0.00078106	0.00011471	0.00011067	0.00000404
602370.00	2373940.00	0.00040011	0.00010355	0.00009928	0.00000427	0.00074363	0.00010959	0.00010563	0.00000395
602870.00	2373940.00	0.00039936	0.00010109	0.00009661	0.00000448	0.0006789	0.00010521	0.00010116	0.00000405
603370.00	2373940.00	0.00036803	0.00009964	0.0000948	0.00000484	0.00069321	0.00010395	0.00009963	0.00000433
603870.00	2373940.00	0.00035363	0.00009865	0.00009344	0.00000521	0.00066993	0.00010244	0.00009776	0.00000468
604370.00	2373940.00	0.00037167	0.00009846	0.00009296	0.0000055	0.0006486	0.00010053	0.00009552	0.00000501
604870.00	2373940.00	0.00039975	0.00009834	0.0000927	0.00000564	0.00060644	0.0000987	0.00009344	0.00000526
605370.00	2373940.00	0.00040136	0.00009792	0.00009232	0.0000056	0.00058971	0.0000979	0.00009255	0.00000536
605870.00	2373940.00	0.00039656	0.00009725	0.00009186	0.00000539	0.0005864	0.00009723	0.00009197	0.00000526
606370.00	2373940.00	0.00026367	0.00009343	0.0000883	0.00000513	0.00045334	0.00009935	0.00009425	0.0000051
606870.00	2373940.00	0.00034936	0.00009496	0.00009028	0.00000467	0.00061972	0.0000964	0.00009175	0.00000466
607370.00	2373940.00	0.00033611	0.00009367	0.00008937	0.00000431	0.00061912	0.00009543	0.00009114	0.00000429
607870.00	2373940.00	0.00026	0.00009032	0.00008625	0.00000406	0.00044566	0.00009547	0.00009143	0.00000404
608370.00	2373940.00	0.0002705	0.00008998	0.00008618	0.00000379	0.00049236	0.00009415	0.00009041	0.00000374
608870.00	2373940.00	0.00041791	0.00009068	0.00008712	0.00000355	0.00051124	0.00008917	0.0000857	0.00000346
609370.00	2373940.00	0.0002692	0.00008805	0.00008457	0.00000348	0.00049913	0.00009171	0.00008833	0.00000338
609870.00	2373940.00	0.00029794	0.00008782	0.00008445	0.00000337	0.00057724	0.00009007	0.00008681	0.00000326
610370.00	2373940.00	0.00025361	0.00008522	0.00008189	0.00000333	0.00045507	0.00008925	0.00008604	0.00000321
610870.00	2373940.00	0.00044505	0.00008526	0.00008204	0.00000322	0.00038544	0.00008334	0.00008023	0.00000311
611370.00	2373940.00	0.00022529	0.00008059	0.00007731	0.00000328	0.00035745	0.0000861	0.0000829	0.0000032
611870.00	2373940.00	0.00042589	0.00008269	0.00007956	0.00000313	0.00041293	0.0000811	0.0000781	0.00000301
612370.00	2373940.00	0.00021997	0.00007799	0.0000748	0.00000319	0.00035308	0.00008372	0.00008061	0.00000311
612870.00	2373940.00	0.00028399	0.00007969	0.00007664	0.00000305	0.00055026	0.00008193	0.00007901	0.00000291
613370.00	2373940.00	0.00041077	0.00007881	0.00007582	0.00000299	0.00042055	0.00007741	0.00007456	0.00000284
613870.00	2373940.00	0.00040711	0.00007774	0.00007479	0.00000295	0.00042456	0.00007636	0.00007356	0.00000279
614370.00	2373940.00	0.00021949	0.00007126	0.00006829	0.00000296	0.00020458	0.00007197	0.00006915	0.00000281
614870.00	2373940.00	0.00019551	0.0000697	0.00006676	0.00000295	0.00019625	0.00007072	0.00006794	0.00000278
615370.00	2373940.00	0.0001702	0.00006817	0.00006522	0.00000294	0.00018508	0.00006935	0.00006659	0.00000276
615870.00	2373940.00	0.00015334	0.0000668	0.00006385	0.00000295	0.00017306	0.00006789	0.00006514	0.00000276
616370.00	2373940.00	0.00014695	0.00006554	0.00006258	0.00000296	0.00016615	0.0000666	0.00006384	0.00000276
616870.00	2373940.00	0.00021222	0.0000665	0.00006362	0.00000288	0.00019959	0.00006728	0.00006456	0.00000272
617370.00	2373940.00	0.00028361	0.00007191	0.00006899	0.00000292	0.00056529	0.00007432	0.0000716	0.00000272
617870.00	2373940.00	0.0002187	0.00006945	0.00006648	0.00000298	0.00039357	0.00007402	0.00007121	0.00000281
618370.00	2373940.00	0.00020757	0.00006814	0.00006513	0.00000301	0.00035987	0.00007357	0.0000707	0.00000287
618870.00	2373940.00	0.00020322	0.00006713	0.00006406	0.00000307	0.00034811	0.00007319	0.00007022	0.00000297
619370.00	2373940.00	0.00020538	0.00006675	0.00006363	0.00000311	0.00035399	0.00007297	0.00006992	0.00000305
619870.00	2373940.00	0.00020403	0.00006602	0.00006292	0.00000311	0.00035213	0.00007227	0.0000692	0.00000307
590370.00	2374440.00	0.00053061	0.00014005	0.00012563	0.00001441	0.00125955	0.0001556	0.00014194	0.00001366
590870.00	2374440.00	0.00143647	0.00014068	0.00012709	0.00001358	0.00076335	0.00013203	0.00011861	0.00001343
591370.00	2374440.00	0.00151887	0.00013639	0.00012397	0.00001242	0.00088207	0.00012624	0.00011372	0.00001252
591870.00	2374440.00	0.00156463	0.00013037	0.00011921	0.00001116	0.00090521	0.0001191	0.00010771	0.00001139
592370.00	2374440.00	0.00074114	0.00010264	0.00009267	0.00000997	0.00041647	0.00010274	0.00009247	0.00001027
592870.00	2374440.00	0.00019853	0.00008136	0.00007256	0.0000088	0.000235	0.00008689	0.00007789	0.000009
593370.00	2374440.00	0.00020737	0.00008003	0.00007195	0.00000808	0.00024642	0.0000842	0.00007621	0.00000799
593870.00	2374440.00	0.00026385	0.00008298	0.00007518	0.0000078	0.00028315	0.00008481	0.00007734	0.00000747
594370.00	2374440.00	0.0003457	0.00008788	0.00008012	0.00000776	0.00030442	0.00008638	0.00007911	0.00000728
594870.00	2374440.00	0.00045923	0.00009592	0.00008802	0.00000791	0.00033417	0.0000906	0.00008324	0.00000736
595370.00	2374440.00	0.00032087	0.00009983	0.00009156	0.00000828	0.0003012	0.00009426	0.00008667	0.00000759
595870.00	2374440.00	0.00070005	0.00011847	0.00010991	0.00000856	0.00041754	0.00010748	0.0000994	0.00000808
596370.00	2374440.00	0.00117901	0.00013667	0.00012773	0.00000894	0.0006331	0.00012121	0.00011274	0.00000847
596870.00	2374440.00	0.00128194	0.00014649	0.00013729	0.00000919	0.00073514	0.00013074	0.00012194	0.00000881
597370.00	2374440.00	0.00130199	0.0001524	0.00014324	0.00000916	0.00081403	0.00013818	0.00012922	0.00000895
597870.00	2374440.00	0.00127883	0.00015539	0.00014661	0.00000879	0.00088832	0.00014364	0.00013484	0.0000088
598370.00	2374440.00	0.00121219	0.00015467	0.00014655	0.00000812	0.00093947	0.00014643	0.0001381	0.00000832
598870.00	2374440.00	0.00113211	0.00015	0.00014274	0.00000726	0.00094292	0.00014533	0.00013773	0.0000076
599370.00	2374440.00	0.00077593	0.00013778	0.00013138	0.0000064	0.00082506	0.00013995	0.00013316	0.00000678
599870.00	2374440.00	0.00063581	0.00013028	0.00012462	0.00000566	0.00088433	0.00013597	0.00013001	0.00000595
600370.00	2374440.00	0.00048364	0.00012202	0.00011696	0.00000507	0.00091095	0.00013192	0.00012663	0.00000529
600870.00	2374440.00	0.00054091	0.00011624	0.00011175	0.00000449	0.00077657	0.00012193	0.00011733	0.0000046
601370.00	2374440.00	0.00052063	0.00011079	0.00010665	0.00000414	0.0007464	0.00011553	0.0001114	0.00000414
601870.00	2374440.00	0.00040424	0.00010509	0.00010106	0.00000402	0.00077659	0.00011292	0.00010901	0.00000391
602370.00	2374440.00	0.00037608	0.00010116	0.00009715	0.00000401	0.00073904	0.00010848	0.00010471	0.00000377
602870.00	2374440.00	0.00038536	0.00009857	0.00009446	0.00000412	0.00068576	0.0001035	0.00009974	0.00000376

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2374440.00	0.00041776	0.00009722	0.00009287	0.00000435	0.00064193	0.00009939	0.0000955	0.00000389
603870.00	2374440.00	0.00036387	0.00009574	0.00009102	0.00000472	0.00066398	0.00009907	0.00009485	0.00000422
604370.00	2374440.00	0.00025398	0.00009163	0.00008644	0.00000518	0.00042494	0.00009891	0.00009415	0.00000477
604870.00	2374440.00	0.00037741	0.00009484	0.00008954	0.00000529	0.00061389	0.00009592	0.00009106	0.00000486
605370.00	2374440.00	0.00038618	0.00009454	0.00008915	0.00000539	0.00058829	0.00009481	0.00008975	0.00000506
605870.00	2374440.00	0.00040026	0.00009411	0.00008881	0.0000053	0.00055784	0.00009367	0.00008858	0.0000051
606370.00	2374440.00	0.00039736	0.00009341	0.00008835	0.00000506	0.00055336	0.00009295	0.00008799	0.00000496
606870.00	2374440.00	0.00040588	0.00009247	0.00008775	0.00000472	0.00053421	0.00009168	0.00008699	0.00000469
607370.00	2374440.00	0.00033621	0.0000911	0.00008672	0.00000438	0.00060267	0.00009254	0.00008818	0.00000436
607870.00	2374440.00	0.00040823	0.0000902	0.0000862	0.000004	0.00051875	0.00008907	0.00008508	0.00000399
608370.00	2374440.00	0.00041968	0.00008901	0.0000853	0.00000371	0.0004896	0.00008745	0.00008376	0.00000368
608870.00	2374440.00	0.00044787	0.00008754	0.00008405	0.00000349	0.00041111	0.00008526	0.00008183	0.00000343
609370.00	2374440.00	0.00035183	0.00008704	0.00008369	0.00000336	0.00057807	0.00008711	0.00008384	0.00000327
609870.00	2374440.00	0.00026457	0.00008469	0.00008141	0.00000328	0.00049138	0.00008797	0.00008479	0.00000319
610370.00	2374440.00	0.00023574	0.00008207	0.00007884	0.00000323	0.00038659	0.00008677	0.00008362	0.00000314
610870.00	2374440.00	0.00036393	0.00008379	0.00008069	0.0000031	0.00053551	0.00008335	0.00008036	0.00000299
611370.00	2374440.00	0.00037511	0.0000825	0.00007945	0.00000305	0.00050656	0.00008179	0.00007886	0.00000294
611870.00	2374440.00	0.00023265	0.00007889	0.00007585	0.00000305	0.00040008	0.00008313	0.00008019	0.00000294
612370.00	2374440.00	0.00027729	0.00007923	0.00007626	0.00000297	0.00053644	0.00008144	0.00007859	0.00000285
612870.00	2374440.00	0.00039044	0.00007843	0.00007553	0.00000291	0.00044664	0.00007731	0.00007452	0.00000279
613370.00	2374440.00	0.00041865	0.00007674	0.00007388	0.00000286	0.0003622	0.00007506	0.00007232	0.00000274
613870.00	2374440.00	0.00031486	0.00007597	0.00007314	0.00000284	0.00053601	0.00007672	0.00007402	0.0000027
614370.00	2374440.00	0.00023495	0.00007005	0.00006723	0.00000282	0.00020819	0.00007048	0.00006778	0.0000027
614870.00	2374440.00	0.00015874	0.00006744	0.0000646	0.00000284	0.00017666	0.00006852	0.00006584	0.00000268
615370.00	2374440.00	0.00015221	0.00006629	0.00006347	0.00000282	0.00017078	0.00006731	0.00006466	0.00000265
615870.00	2374440.00	0.00018311	0.00006607	0.00006331	0.00000276	0.00018811	0.0000671	0.0000645	0.0000026
616370.00	2374440.00	0.00015874	0.00006466	0.0000619	0.00000276	0.00017624	0.00006578	0.00006319	0.00000259
616870.00	2374440.00	0.00031505	0.00006712	0.00006445	0.00000266	0.00023326	0.00006641	0.00006387	0.00000253
617370.00	2374440.00	0.00026349	0.00006978	0.00006704	0.00000274	0.0005232	0.00007234	0.00006979	0.00000255
617870.00	2374440.00	0.00021357	0.00006764	0.00006485	0.00000279	0.00037859	0.00007199	0.00006937	0.00000262
618370.00	2374440.00	0.00020069	0.00006613	0.00006328	0.00000284	0.00034164	0.0000717	0.00006899	0.00000271
618870.00	2374440.00	0.00020002	0.00006552	0.00006267	0.00000286	0.00034171	0.00007111	0.00006838	0.00000273
619370.00	2374440.00	0.00020256	0.00006524	0.0000623	0.00000294	0.00034839	0.00007127	0.0000684	0.00000287
619870.00	2374440.00	0.00020162	0.00006462	0.00006168	0.00000294	0.00034803	0.00007063	0.00006775	0.00000289
590370.00	2374940.00	0.00072611	0.00014014	0.00012651	0.00001363	0.00139484	0.00014734	0.00013434	0.000013
590870.00	2374940.00	0.00083125	0.00012173	0.00010878	0.00001295	0.00044989	0.00012129	0.00010843	0.00001286
591370.00	2374940.00	0.00116588	0.00012099	0.00010923	0.00001176	0.00054956	0.00011584	0.00010393	0.00001191
591870.00	2374940.00	0.00117489	0.0001142	0.00010365	0.00001054	0.00054445	0.0001086	0.00009779	0.00001081
592370.00	2374940.00	0.00021225	0.00008506	0.00007551	0.00000956	0.00025518	0.00009178	0.00008196	0.00000982
592870.00	2374940.00	0.0002061	0.00008018	0.00007177	0.00000841	0.00024488	0.00008548	0.00007694	0.00000854
593370.00	2374940.00	0.00021506	0.00007819	0.0000705	0.00000769	0.00024954	0.00008207	0.00007448	0.0000076
593870.00	2374940.00	0.00044459	0.00008544	0.00007804	0.00000741	0.00032691	0.00008471	0.00007755	0.00000716
594370.00	2374940.00	0.00056985	0.00009	0.0000827	0.0000073	0.00035143	0.00008573	0.0000788	0.00000693
594870.00	2374940.00	0.00073309	0.00009776	0.00009035	0.0000074	0.00040381	0.00008959	0.00008262	0.00000697
595370.00	2374940.00	0.00066829	0.00010347	0.00009581	0.00000766	0.00038925	0.00009421	0.00008703	0.00000718
595870.00	2374940.00	0.00056159	0.0001098	0.00010174	0.00000806	0.00036871	0.00010081	0.00009327	0.00000754
596370.00	2374940.00	0.00104912	0.00012781	0.00011944	0.00000838	0.00056183	0.00011396	0.00010601	0.00000795
596870.00	2374940.00	0.00122965	0.00013886	0.00013018	0.00000868	0.00069336	0.00012381	0.00011553	0.00000828
597370.00	2374940.00	0.00126975	0.00014575	0.00013701	0.00000873	0.00078878	0.00013149	0.00012302	0.00000847
597870.00	2374940.00	0.00125438	0.00014909	0.00014061	0.00000848	0.00084312	0.0001369	0.00012848	0.00000842
598370.00	2374940.00	0.00121291	0.0001494	0.00014148	0.00000792	0.00087421	0.00014007	0.00013199	0.00000808
598870.00	2374940.00	0.00084868	0.00014077	0.00013357	0.0000072	0.00079349	0.00013928	0.00013177	0.00000751
599370.00	2374940.00	0.0007061	0.00013604	0.0001296	0.00000644	0.00094015	0.00013926	0.00013253	0.00000673
599870.00	2374940.00	0.00064532	0.00012903	0.00012337	0.00000566	0.00089338	0.00013382	0.00012788	0.00000594
600370.00	2374940.00	0.00063674	0.00012189	0.00011694	0.00000495	0.00077642	0.00012574	0.00012055	0.00000519
600870.00	2374940.00	0.00059045	0.00011531	0.00011089	0.00000442	0.00072324	0.00011913	0.00011457	0.00000456
601370.00	2374940.00	0.00040965	0.00010846	0.00010432	0.00000414	0.00081804	0.00011791	0.00011371	0.0000042
601870.00	2374940.00	0.00043856	0.00010419	0.00010033	0.00000386	0.0007645	0.00011049	0.0001067	0.00000379
602370.00	2374940.00	0.00037952	0.00009957	0.00009578	0.00000379	0.00073846	0.00010681	0.00010319	0.00000362
602870.00	2374940.00	0.00041157	0.00009699	0.00009319	0.0000038	0.00068873	0.00010111	0.0000976	0.00000351
603370.00	2374940.00	0.00036683	0.00009439	0.00009039	0.000004	0.00067717	0.00009895	0.00009533	0.00000362
603870.00	2374940.00	0.00033686	0.00009256	0.00008826	0.0000043	0.00064917	0.00009716	0.00009331	0.00000385
604370.00	2374940.00	0.00038938	0.00009229	0.0000877	0.00000459	0.0006094	0.00009355	0.00008944	0.0000041
604870.00	2374940.00	0.00025041	0.00008843	0.00008342	0.00000501	0.00042906	0.00009524	0.00009063	0.00000461
605370.00	2374940.00	0.00027465	0.00008956	0.00008441	0.00000514	0.0005202	0.00009457	0.00008979	0.00000478
605870.00	2374940.00	0.00024176	0.00008733	0.00008209	0.00000524	0.00038723	0.00009357	0.00008855	0.00000503
606370.00	2374940.00	0.00024351	0.00008709	0.00008198	0.00000511	0.00039655	0.00009313	0.00008815	0.00000498
606870.00	2374940.00	0.00024722	0.00008679	0.00008195	0.00000485	0.0004129	0.00009244	0.00008765	0.00000479
607370.00	2374940.00	0.00040024	0.0000888	0.00008437	0.00000442	0.0005108	0.0000878	0.00008339	0.0000044
607870.00	2374940.00	0.00025869	0.00008585	0.00008169	0.00000416	0.00045948	0.00009025	0.0000861	0.00000415

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2374940.00	0.00023786	0.00008348	0.00007958	0.00000389	0.00037839	0.00008896	0.00008505	0.00000391
608870.00	2374940.00	0.00023896	0.00008276	0.00007915	0.00000361	0.0003871	0.00008782	0.00008422	0.0000036
609370.00	2374940.00	0.00043139	0.00008414	0.00008085	0.00000329	0.00041175	0.00008202	0.00007879	0.00000323
609870.00	2374940.00	0.00041932	0.00008344	0.00008029	0.00000315	0.00043849	0.00008146	0.00007838	0.00000308
610370.00	2374940.00	0.00025268	0.00008123	0.00007813	0.0000031	0.00045673	0.00008451	0.00008149	0.00000302
610870.00	2374940.00	0.00035429	0.00008168	0.00007869	0.00000299	0.00053235	0.00008123	0.00007834	0.00000289
611370.00	2374940.00	0.00034611	0.00008055	0.00007762	0.00000293	0.00053256	0.0000803	0.00007748	0.00000283
611870.00	2374940.00	0.00042136	0.0000788	0.00007591	0.00000288	0.00036845	0.00007693	0.00007415	0.00000278
612370.00	2374940.00	0.00038976	0.00007801	0.00007517	0.00000283	0.00043845	0.00007671	0.00007398	0.00000273
612870.00	2374940.00	0.0002149	0.000074	0.00007114	0.00000286	0.00034747	0.0000787	0.00007592	0.00000278
613370.00	2374940.00	0.00022897	0.00007403	0.00007124	0.00000279	0.00040775	0.0000776	0.00007491	0.00000269
613870.00	2374940.00	0.00030841	0.00007433	0.00007161	0.00000272	0.00052527	0.00007502	0.00007242	0.0000026
614370.00	2374940.00	0.00016937	0.00006729	0.00006454	0.00000275	0.00018271	0.00006832	0.00006569	0.00000262
614870.00	2374940.00	0.00015689	0.00006601	0.00006329	0.00000272	0.00017416	0.00006702	0.00006444	0.00000258
615370.00	2374940.00	0.00030997	0.00006798	0.00006538	0.00000261	0.00022919	0.00006735	0.00006486	0.00000249
615870.00	2374940.00	0.00046622	0.00007201	0.00006943	0.00000258	0.00047787	0.00006987	0.00006745	0.00000242
616370.00	2374940.00	0.0005309	0.00007051	0.00006797	0.00000254	0.00034	0.00006725	0.00006485	0.00000239
616870.00	2374940.00	0.00053018	0.00006979	0.00006726	0.00000252	0.00034264	0.00006653	0.00006416	0.00000237
617370.00	2374940.00	0.00041904	0.00006959	0.00006704	0.00000254	0.00052108	0.00006831	0.00006595	0.00000236
617870.00	2374940.00	0.0002945	0.00006796	0.00006539	0.00000257	0.00055968	0.00006942	0.00006703	0.00000238
618370.00	2374940.00	0.00019713	0.00006448	0.0000618	0.00000267	0.00033256	0.00006985	0.0000673	0.00000255
618870.00	2374940.00	0.00019662	0.00006391	0.00006121	0.0000027	0.00033271	0.00006942	0.00006684	0.00000259
619370.00	2374940.00	0.00019719	0.00006347	0.00006073	0.00000273	0.00033535	0.00006909	0.00006645	0.00000264
619870.00	2374940.00	0.00019779	0.00006306	0.00006029	0.00000277	0.00033903	0.00006885	0.00006615	0.0000027
590370.00	2375440.00	0.00131257	0.00013616	0.00012323	0.00001293	0.00072461	0.00012848	0.00011601	0.00001248
590870.00	2375440.00	0.00093598	0.00011948	0.00010728	0.00001221	0.00047415	0.00011717	0.00010503	0.00001213
591370.00	2375440.00	0.00037527	0.00010105	0.0000897	0.00001135	0.00034559	0.00010676	0.00009528	0.00001148
591870.00	2375440.00	0.00030338	0.00009258	0.0000824	0.00001018	0.00032045	0.00009888	0.00008846	0.00001041
592370.00	2375440.00	0.00022777	0.0000838	0.00007477	0.00000903	0.00027242	0.00009003	0.00008078	0.00000925
592870.00	2375440.00	0.00021674	0.00007883	0.00007082	0.00000801	0.00025875	0.00008368	0.00007558	0.0000081
593370.00	2375440.00	0.00032119	0.0000804	0.00007303	0.00000737	0.00029936	0.00008281	0.00007552	0.00000729
593870.00	2375440.00	0.00058881	0.00008582	0.00007882	0.000007	0.00035341	0.0000832	0.0000764	0.0000068
594370.00	2375440.00	0.00073134	0.00009026	0.00008337	0.00000689	0.00039444	0.00008434	0.00007777	0.00000657
594870.00	2375440.00	0.00082332	0.00009593	0.00008896	0.00000697	0.00042796	0.0000872	0.00008063	0.00000657
595370.00	2375440.00	0.0010059	0.00010586	0.00009865	0.00000722	0.00050462	0.00009335	0.0000866	0.00000675
595870.00	2375440.00	0.00108605	0.00011529	0.00010774	0.00000754	0.00056331	0.00010099	0.00009395	0.00000705
596370.00	2375440.00	0.0011934	0.00012575	0.00011783	0.00000791	0.00064982	0.00011008	0.00010267	0.00000741
596870.00	2375440.00	0.00122694	0.00013349	0.00012529	0.0000082	0.00071567	0.00011819	0.00011043	0.00000775
597370.00	2375440.00	0.00121866	0.00013823	0.00012994	0.0000083	0.00072494	0.00012449	0.00011647	0.00000802
597870.00	2375440.00	0.00122633	0.00014289	0.00013474	0.00000815	0.00079742	0.00013042	0.00012238	0.00000804
598370.00	2375440.00	0.00119141	0.00014457	0.00013685	0.00000772	0.00085696	0.00013455	0.00012675	0.00000779
598870.00	2375440.00	0.00076579	0.00013824	0.0001311	0.00000714	0.00093572	0.00013744	0.00013014	0.0000073
599370.00	2375440.00	0.00075488	0.0001335	0.00012712	0.00000637	0.00084929	0.00013415	0.0001275	0.00000665
599870.00	2375440.00	0.00073718	0.00012699	0.0001214	0.00000558	0.00074541	0.00012848	0.00012257	0.00000591
600370.00	2375440.00	0.00067846	0.00012049	0.00011558	0.00000491	0.00071346	0.00012282	0.00011764	0.00000518
600870.00	2375440.00	0.00061797	0.00011419	0.00010982	0.00000437	0.00069088	0.00011699	0.00011244	0.00000455
601370.00	2375440.00	0.00042586	0.00010773	0.00010366	0.00000407	0.00082438	0.00011624	0.00011209	0.00000415
601870.00	2375440.00	0.00033576	0.0001009	0.00009706	0.00000384	0.00068729	0.00011209	0.00010822	0.00000388
602370.00	2375440.00	0.00040399	0.00009851	0.00009491	0.0000036	0.00073339	0.00010465	0.00010117	0.00000349
602870.00	2375440.00	0.00036698	0.00009477	0.00009117	0.00000359	0.0007043	0.00010099	0.00009761	0.00000338
603370.00	2375440.00	0.00040141	0.0000927	0.00008904	0.00000366	0.00065969	0.00009597	0.00009262	0.00000334
603870.00	2375440.00	0.00036248	0.00009059	0.00008669	0.0000039	0.00065133	0.00009416	0.00009066	0.0000035
604370.00	2375440.00	0.00033546	0.00008908	0.00008487	0.0000042	0.00062522	0.00009262	0.00008887	0.00000375
604870.00	2375440.00	0.00035051	0.00008864	0.00008414	0.0000045	0.00061122	0.00009067	0.00008663	0.00000404
605370.00	2375440.00	0.00037712	0.00008836	0.00008361	0.00000475	0.00056993	0.0000887	0.00008438	0.00000432
605870.00	2375440.00	0.0004051	0.000088	0.00008312	0.00000488	0.00051053	0.00008698	0.00008244	0.00000455
606370.00	2375440.00	0.00041343	0.00008749	0.00008261	0.00000488	0.00047534	0.00008603	0.00008138	0.00000465
606870.00	2375440.00	0.00026054	0.00008531	0.00008052	0.00000479	0.00047487	0.00008965	0.00008499	0.00000466
607370.00	2375440.00	0.00029368	0.00008565	0.00008114	0.00000451	0.0005571	0.00008818	0.00008374	0.00000445
607870.00	2375440.00	0.00031701	0.00008511	0.00008093	0.00000418	0.00057132	0.00008651	0.00008236	0.00000416
608370.00	2375440.00	0.00033488	0.00008424	0.0000804	0.00000384	0.00056355	0.00008482	0.00008099	0.00000383
608870.00	2375440.00	0.00027436	0.00008247	0.00007888	0.00000358	0.00051998	0.00008522	0.00008165	0.00000357
609370.00	2375440.00	0.00025037	0.00008076	0.00007739	0.00000337	0.00044344	0.00008437	0.00008103	0.00000334
609870.00	2375440.00	0.00022549	0.00007809	0.00007483	0.00000327	0.0003508	0.00008342	0.00008016	0.00000326
610370.00	2375440.00	0.00022368	0.00007724	0.00007413	0.00000311	0.00034932	0.00008231	0.00007923	0.00000308
610870.00	2375440.00	0.00024472	0.00007811	0.00007517	0.00000294	0.00043599	0.00008125	0.00007838	0.00000286
611370.00	2375440.00	0.00033647	0.00007857	0.00007574	0.00000283	0.00052905	0.00007833	0.00007559	0.00000274
611870.00	2375440.00	0.00021625	0.00007395	0.00007105	0.0000029	0.00034164	0.00007936	0.00007649	0.00000287
612370.00	2375440.00	0.00033277	0.00007639	0.00007366	0.00000273	0.00051466	0.00007623	0.0000736	0.00000263
612870.00	2375440.00	0.00037889	0.00007512	0.00007243	0.00000268	0.00043134	0.00007387	0.00007128	0.00000259

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2375440.00	0.0003719	0.00007394	0.0000713	0.00000265	0.00043303	0.00007286	0.00007031	0.00000255
613870.00	2375440.00	0.00020541	0.00006993	0.00006724	0.00000269	0.00032884	0.00007488	0.00007226	0.00000262
614370.00	2375440.00	0.00016283	0.00006572	0.00006307	0.00000265	0.00017752	0.00006666	0.00006413	0.00000253
614870.00	2375440.00	0.00014578	0.00006421	0.00006158	0.00000263	0.00016287	0.00006499	0.00006249	0.00000249
615370.00	2375440.00	0.00033685	0.000067	0.0000645	0.0000025	0.00023577	0.00006601	0.00006361	0.0000024
615870.00	2375440.00	0.00044306	0.00007029	0.00006782	0.00000247	0.00048306	0.00006844	0.00006611	0.00000233
616370.00	2375440.00	0.00024074	0.00006753	0.00006506	0.00000247	0.00046088	0.00007005	0.0000677	0.00000234
616870.00	2375440.00	0.00020673	0.00006564	0.00006316	0.00000248	0.00035417	0.0000695	0.00006714	0.00000236
617370.00	2375440.00	0.00021345	0.00006533	0.00006287	0.00000246	0.00037842	0.00006873	0.0000664	0.00000233
617870.00	2375440.00	0.0002293	0.00006521	0.00006276	0.00000244	0.00043207	0.000068	0.00006571	0.00000229
618370.00	2375440.00	0.00024326	0.00006492	0.00006248	0.00000244	0.00047263	0.00006734	0.00006506	0.00000228
618870.00	2375440.00	0.00022761	0.00006399	0.00006153	0.00000245	0.00043008	0.00006684	0.00006455	0.00000229
619370.00	2375440.00	0.00019411	0.00006194	0.00005942	0.00000251	0.00032878	0.00006685	0.00006447	0.00000239
619870.00	2375440.00	0.00019451	0.00006156	0.00005895	0.0000026	0.00033119	0.0000671	0.00006456	0.00000253
590370.00	2375940.00	0.00022448	0.00010513	0.00009189	0.00001324	0.00026202	0.00011163	0.00009886	0.00001277
590870.00	2375940.00	0.0002119	0.00009764	0.00008517	0.00001247	0.00024751	0.00010439	0.0000921	0.0000123
591370.00	2375940.00	0.00020889	0.00009087	0.00007972	0.00001115	0.00024759	0.00009774	0.00008649	0.00001124
591870.00	2375940.00	0.00033101	0.0000903	0.0000807	0.00000961	0.00032238	0.0000957	0.00008589	0.00000981
592370.00	2375940.00	0.00042064	0.00008715	0.00007866	0.00000849	0.0003352	0.00009045	0.00008175	0.0000087
592870.00	2375940.00	0.00044637	0.00008362	0.00007601	0.00000761	0.00033193	0.00008548	0.00007776	0.00000772
593370.00	2375940.00	0.00047947	0.00008173	0.00007474	0.00000699	0.00033103	0.0000819	0.00007495	0.00000695
593870.00	2375940.00	0.00063408	0.00008401	0.00007738	0.00000663	0.00036033	0.00008089	0.00007443	0.00000645
594370.00	2375940.00	0.00093799	0.00009121	0.00008468	0.00000653	0.00045254	0.00008301	0.00007678	0.00000623
594870.00	2375940.00	0.00097232	0.00009538	0.00008879	0.00000659	0.00047587	0.00008518	0.00007898	0.0000062
595370.00	2375940.00	0.00103037	0.00010219	0.00009539	0.0000068	0.00051739	0.00008986	0.00008351	0.00000635
595870.00	2375940.00	0.00110819	0.00011087	0.00010377	0.0000071	0.00057326	0.00009676	0.00009015	0.00000661
596370.00	2375940.00	0.00119971	0.00012097	0.00011351	0.00000746	0.00067156	0.00010539	0.00009846	0.00000694
596870.00	2375940.00	0.00118661	0.00012692	0.00011919	0.00000773	0.00067421	0.00011226	0.00010497	0.00000729
597370.00	2375940.00	0.00119834	0.00013277	0.00012488	0.00000788	0.00072247	0.00011892	0.00011136	0.00000755
597870.00	2375940.00	0.00119931	0.00013751	0.00012968	0.00000782	0.00079647	0.00012489	0.00011725	0.00000764
598370.00	2375940.00	0.00083811	0.00013468	0.00012714	0.00000754	0.00081293	0.00012908	0.00012158	0.0000075
598870.00	2375940.00	0.00083302	0.00013327	0.0001263	0.00000697	0.00074758	0.00012979	0.00012264	0.00000715
599370.00	2375940.00	0.00079519	0.00013009	0.00012381	0.00000629	0.00074274	0.00012893	0.00012236	0.00000657
599870.00	2375940.00	0.00074404	0.00012506	0.00011949	0.00000557	0.00072942	0.0001257	0.00011982	0.00000588
600370.00	2375940.00	0.00069415	0.00011909	0.00011419	0.0000049	0.00069603	0.0001206	0.00011542	0.00000518
600870.00	2375940.00	0.00065092	0.00011276	0.00010844	0.00000433	0.00063628	0.00011442	0.00010986	0.00000456
601370.00	2375940.00	0.00045111	0.00010711	0.00010309	0.00000402	0.00082275	0.0001143	0.00011018	0.00000412
601870.00	2375940.00	0.00034434	0.00010017	0.00009641	0.00000376	0.00070407	0.00011078	0.00010695	0.00000382
602370.00	2375940.00	0.00040226	0.0000973	0.00009382	0.00000349	0.00073234	0.00010351	0.0001001	0.00000341
602870.00	2375940.00	0.00040836	0.00009378	0.0000904	0.00000338	0.0006868	0.00009828	0.00009507	0.00000322
603370.00	2375940.00	0.00035375	0.00009041	0.00008697	0.00000344	0.00067326	0.00009584	0.00009265	0.00000319
603870.00	2375940.00	0.00035264	0.00008839	0.00008481	0.00000358	0.0006489	0.00009252	0.00008928	0.00000324
604370.00	2375940.00	0.00034088	0.00008686	0.00008304	0.00000382	0.00062744	0.00009031	0.0000869	0.00000342
604870.00	2375940.00	0.00034129	0.00008596	0.00008185	0.00000411	0.00060651	0.00008839	0.00008472	0.00000367
605370.00	2375940.00	0.00033762	0.00008536	0.00008097	0.00000439	0.00059031	0.00008718	0.00008322	0.00000396
605870.00	2375940.00	0.00032288	0.00008486	0.00008024	0.00000461	0.00057826	0.00008667	0.00008244	0.00000423
606370.00	2375940.00	0.00025444	0.00008299	0.00007824	0.00000475	0.00046422	0.00008758	0.0000831	0.00000447
606870.00	2375940.00	0.00028491	0.00008365	0.00007897	0.00000468	0.00054162	0.00008642	0.00008194	0.00000449
607370.00	2375940.00	0.00039984	0.00008373	0.00007926	0.00000447	0.00046132	0.0000823	0.00007793	0.00000437
607870.00	2375940.00	0.00034343	0.000083	0.00007878	0.00000422	0.00054018	0.00008318	0.00007901	0.00000417
608370.00	2375940.00	0.00023329	0.00007948	0.00007547	0.000004	0.00038163	0.00008446	0.00008045	0.00000401
608870.00	2375940.00	0.00026517	0.00008022	0.00007657	0.00000365	0.00049663	0.0000831	0.00007946	0.00000364
609370.00	2375940.00	0.0003848	0.00008004	0.00007672	0.00000332	0.00046743	0.00007872	0.00007542	0.0000033
609870.00	2375940.00	0.00026014	0.00007834	0.00007518	0.00000316	0.00048521	0.00008095	0.00007783	0.00000313
610370.00	2375940.00	0.00032639	0.00007828	0.00007532	0.00000295	0.00053791	0.0000783	0.0000754	0.0000029
610870.00	2375940.00	0.0004129	0.0000769	0.00007409	0.00000281	0.00037574	0.00007475	0.000072	0.00000275
611370.00	2375940.00	0.00021824	0.00007379	0.00007097	0.00000283	0.00034541	0.00007826	0.00007548	0.00000278
611870.00	2375940.00	0.00028539	0.00007543	0.00007274	0.00000269	0.00052884	0.00007645	0.00007384	0.00000261
612370.00	2375940.00	0.0003933	0.00007436	0.00007173	0.00000262	0.00039422	0.00007264	0.00007011	0.00000254
612870.00	2375940.00	0.00030607	0.00007355	0.00007095	0.00000259	0.00051652	0.00007386	0.00007136	0.0000025
613370.00	2375940.00	0.00037703	0.00007233	0.00006978	0.00000255	0.00040651	0.00007097	0.00006851	0.00000246
613870.00	2375940.00	0.00022239	0.00007006	0.00006752	0.00000255	0.00039137	0.00007314	0.00007068	0.00000246
614370.00	2375940.00	0.00017462	0.00006462	0.00006208	0.00000254	0.00018229	0.00006546	0.00006301	0.00000244
614870.00	2375940.00	0.00014276	0.00006269	0.00006016	0.00000253	0.00015926	0.00006334	0.00006094	0.00000241
615370.00	2375940.00	0.0001644	0.00006263	0.00006016	0.00000247	0.00017569	0.00006353	0.00006117	0.00000236
615870.00	2375940.00	0.00041113	0.00006595	0.00006359	0.00000236	0.00025663	0.00006407	0.0000618	0.00000227
616370.00	2375940.00	0.00050505	0.00006706	0.00006474	0.00000233	0.00031543	0.00006404	0.00006182	0.00000222
616870.00	2375940.00	0.00021411	0.00006466	0.0000623	0.00000236	0.00037982	0.00006769	0.00006544	0.00000225
617370.00	2375940.00	0.00019501	0.00006294	0.00006057	0.00000237	0.000322	0.00006735	0.00006508	0.00000227
617870.00	2375940.00	0.00019175	0.00006204	0.00005965	0.00000239	0.00031638	0.00006694	0.00006465	0.00000229

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2375940.00	0.00019114	0.00006146	0.00005908	0.00000239	0.00031681	0.00006642	0.00006413	0.00000229
618870.00	2375940.00	0.00021814	0.00006231	0.00005999	0.00000231	0.0004015	0.00006512	0.00006295	0.00000217
619370.00	2375940.00	0.00019295	0.00006063	0.00005827	0.00000236	0.0003258	0.00006506	0.00006283	0.00000223
619870.00	2375940.00	0.0001911	0.00006005	0.00005762	0.00000243	0.00032178	0.00006517	0.00006283	0.00000234
590370.00	2376440.00	0.0002216	0.00010136	0.00008887	0.00001249	0.00026032	0.00010753	0.00009544	0.00001208
590870.00	2376440.00	0.00022199	0.00009556	0.00008401	0.00001155	0.00026416	0.00010198	0.00009054	0.00001144
591370.00	2376440.00	0.0002515	0.00009095	0.00008066	0.00001029	0.00029322	0.00009729	0.0000869	0.00001039
591870.00	2376440.00	0.0003316	0.0000874	0.00007831	0.00000909	0.00031681	0.00009238	0.0000831	0.00000928
592370.00	2376440.00	0.00059476	0.00008796	0.00007994	0.00000802	0.00036536	0.00008863	0.00008041	0.00000822
592870.00	2376440.00	0.00074796	0.00008718	0.00007996	0.00000721	0.00039932	0.00008498	0.00007765	0.00000732
593370.00	2376440.00	0.00080643	0.00008592	0.00007928	0.00000664	0.00041195	0.00008187	0.00007525	0.00000662
593870.00	2376440.00	0.00081753	0.0000853	0.000079	0.0000063	0.0004133	0.00007994	0.0000738	0.00000614
594370.00	2376440.00	0.00105774	0.00009124	0.00008503	0.0000062	0.00051157	0.00008154	0.00007563	0.00000591
594870.00	2376440.00	0.00112399	0.00009573	0.00008946	0.00000627	0.00055504	0.00008391	0.00007804	0.00000587
595370.00	2376440.00	0.00117798	0.00010243	0.00009597	0.00000646	0.00061735	0.00008842	0.00008244	0.00000598
595870.00	2376440.00	0.00113109	0.00010723	0.00010053	0.0000067	0.00059476	0.0000931	0.00008689	0.00000621
596370.00	2376440.00	0.0011629	0.00011519	0.00010817	0.00000702	0.00064432	0.00010026	0.00009375	0.00000651
596870.00	2376440.00	0.00118964	0.00012344	0.0001161	0.00000734	0.00077308	0.00010858	0.00010175	0.00000682
597370.00	2376440.00	0.00117394	0.00012727	0.00011979	0.00000749	0.00071394	0.0001136	0.00010648	0.00000712
597870.00	2376440.00	0.00116606	0.00013243	0.00012494	0.0000075	0.00080525	0.0001198	0.00011255	0.00000724
598370.00	2376440.00	0.00084028	0.00012875	0.00012147	0.00000728	0.000705	0.00012246	0.00011523	0.00000723
598870.00	2376440.00	0.00082443	0.00012904	0.00012221	0.00000683	0.00071243	0.00012477	0.00011781	0.00000695
599370.00	2376440.00	0.00079492	0.00012701	0.00012079	0.00000622	0.00071613	0.0001249	0.00011843	0.00000646
599870.00	2376440.00	0.00075566	0.00012257	0.00011703	0.00000553	0.00068576	0.00012222	0.00011637	0.00000585
600370.00	2376440.00	0.00070433	0.00011744	0.00011254	0.00000489	0.00067413	0.00011827	0.00011309	0.00000518
600870.00	2376440.00	0.00065955	0.00011146	0.00010714	0.00000432	0.00062322	0.00011269	0.00010812	0.00000457
601370.00	2376440.00	0.00043593	0.00010582	0.00010181	0.00000401	0.00081314	0.0001133	0.00010917	0.00000413
601870.00	2376440.00	0.00040433	0.00010066	0.000097	0.00000366	0.00077705	0.00010818	0.00010447	0.00000371
602370.00	2376440.00	0.00040131	0.00009626	0.00009286	0.0000034	0.00073131	0.00010245	0.00009908	0.00000336
602870.00	2376440.00	0.00037543	0.00009221	0.00008895	0.00000326	0.0006981	0.00009812	0.00009497	0.00000315
603370.00	2376440.00	0.00026011	0.00008596	0.0000826	0.00000335	0.00047707	0.00009592	0.00009267	0.00000324
603870.00	2376440.00	0.00025683	0.00008391	0.00008049	0.00000342	0.0004776	0.00009269	0.00008948	0.00000321
604370.00	2376440.00	0.00035993	0.00008499	0.00008151	0.00000348	0.00061748	0.00008777	0.00008464	0.00000313
604870.00	2376440.00	0.00031553	0.00008333	0.00007957	0.00000376	0.00059994	0.00008695	0.00008359	0.00000336
605370.00	2376440.00	0.00035241	0.00008294	0.00007892	0.00000401	0.00057019	0.00008415	0.00008056	0.00000359
605870.00	2376440.00	0.00040323	0.00008246	0.00007821	0.00000425	0.00048398	0.00008138	0.00007753	0.00000385
606370.00	2376440.00	0.00036236	0.00008214	0.0000777	0.00000444	0.00052665	0.000082	0.0000779	0.0000041
606870.00	2376440.00	0.00038276	0.00008177	0.00007728	0.00000449	0.00048257	0.00008072	0.00007649	0.00000424
607370.00	2376440.00	0.00038462	0.00008131	0.00007689	0.00000442	0.00046772	0.00008008	0.00007583	0.00000425
607870.00	2376440.00	0.00039046	0.00008065	0.00007642	0.00000422	0.00044905	0.00007923	0.00007509	0.00000414
608370.00	2376440.00	0.00040558	0.00007967	0.00007572	0.00000395	0.0004094	0.00007789	0.00007396	0.00000393
608870.00	2376440.00	0.00026774	0.00007837	0.00007466	0.00000371	0.00050435	0.00008086	0.00007715	0.0000037
609370.00	2376440.00	0.00036052	0.00007807	0.00007468	0.00000338	0.00048728	0.00007726	0.00007388	0.00000338
609870.00	2376440.00	0.00032474	0.00007712	0.00007398	0.00000315	0.00052803	0.00007721	0.00007408	0.00000313
610370.00	2376440.00	0.00039787	0.0000759	0.00007297	0.00000292	0.00040221	0.00007402	0.00007113	0.00000289
610870.00	2376440.00	0.00035107	0.00007539	0.00007261	0.00000279	0.00048585	0.0000745	0.00007177	0.00000273
611370.00	2376440.00	0.000213	0.00007148	0.00006865	0.00000283	0.00033251	0.00007671	0.00007389	0.00000282
611870.00	2376440.00	0.00022228	0.00007194	0.00006928	0.00000266	0.00036974	0.00007537	0.00007277	0.0000026
612370.00	2376440.00	0.000227	0.00007151	0.00006892	0.00000258	0.00039225	0.0000744	0.00007189	0.00000252
612870.00	2376440.00	0.00036303	0.00007186	0.00006936	0.00000249	0.000429	0.00007056	0.00006815	0.00000241
613370.00	2376440.00	0.00030097	0.00007093	0.00006846	0.00000246	0.00050233	0.00007113	0.00006876	0.00000238
613870.00	2376440.00	0.00038107	0.0000696	0.00006719	0.00000242	0.00036676	0.00006804	0.0000657	0.00000234
614370.00	2376440.00	0.00014608	0.00006226	0.00005979	0.00000248	0.0001627	0.00006284	0.00006046	0.00000237
614870.00	2376440.00	0.00013971	0.00006108	0.00005864	0.00000244	0.00015628	0.00006165	0.00005933	0.00000233
615370.00	2376440.00	0.0003158	0.00006399	0.00006167	0.00000232	0.00022468	0.0000632	0.00006095	0.00000225
615870.00	2376440.00	0.00030962	0.0000666	0.00006431	0.00000229	0.00054004	0.0000671	0.00006491	0.0000022
616370.00	2376440.00	0.00024107	0.00006482	0.00006254	0.00000227	0.00045988	0.00006682	0.00006464	0.00000218
616870.00	2376440.00	0.0002215	0.00006361	0.00006135	0.00000226	0.00040552	0.00006607	0.00006392	0.00000216
617370.00	2376440.00	0.00019359	0.00006168	0.00005942	0.00000226	0.00031868	0.00006574	0.00006356	0.00000218
617870.00	2376440.00	0.00018914	0.00006066	0.00005838	0.00000228	0.00030957	0.00006538	0.00006318	0.00000221
618370.00	2376440.00	0.00018842	0.00006008	0.00005781	0.00000227	0.00030979	0.0000648	0.00006261	0.00000219
618870.00	2376440.00	0.00019115	0.00005985	0.00005755	0.00000231	0.00031823	0.00006483	0.00006259	0.00000225
619370.00	2376440.00	0.00019051	0.00005935	0.00005704	0.00000231	0.00031957	0.00006437	0.00006212	0.00000225
619870.00	2376440.00	0.00018973	0.00005885	0.00005654	0.00000231	0.00031941	0.00006388	0.00006163	0.00000225
590370.00	2376940.00	0.00020631	0.00009671	0.00008464	0.00001207	0.00023843	0.00010251	0.00009085	0.00001166
590870.00	2376940.00	0.00022678	0.00009277	0.00008195	0.00001082	0.00027053	0.00009883	0.00008809	0.00001074
591370.00	2376940.00	0.00030321	0.00008943	0.00007977	0.00000966	0.00031038	0.00009486	0.0000851	0.00000976
591870.00	2376940.00	0.00038924	0.00008605	0.00007746	0.00000858	0.00032564	0.00008982	0.00008106	0.00000876
592370.00	2376940.00	0.00053461	0.00008415	0.00007652	0.00000762	0.00034676	0.0000854	0.0000776	0.0000078
592870.00	2376940.00	0.00070896	0.00008403	0.00007717	0.00000685	0.00038433	0.00008198	0.00007503	0.00000695

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2376940.00	0.0007914	0.0000833	0.00007699	0.00000631	0.00040465	0.00007933	0.00007304	0.00000629
593870.00	2376940.00	0.00090655	0.00008439	0.0000784	0.00000599	0.00043505	0.00007805	0.00007221	0.00000584
594370.00	2376940.00	0.00097996	0.00008685	0.00008098	0.00000587	0.00047171	0.0000783	0.0000727	0.0000056
594870.00	2376940.00	0.00100643	0.00008996	0.00008406	0.0000059	0.00049584	0.00007987	0.00007432	0.00000554
595370.00	2376940.00	0.00106961	0.00009573	0.00008966	0.00000606	0.00053851	0.00008368	0.00007805	0.00000564
595870.00	2376940.00	0.00110899	0.00010266	0.00009634	0.00000631	0.00058382	0.00008913	0.00008329	0.00000584
596370.00	2376940.00	0.00110365	0.00010885	0.00010226	0.00000659	0.00059597	0.00009511	0.00008899	0.00000613
596870.00	2376940.00	0.00112927	0.00011576	0.00010888	0.00000688	0.00063893	0.00010195	0.00009551	0.00000644
597370.00	2376940.00	0.00113834	0.0001213	0.00011421	0.00000709	0.0006791	0.0001081	0.00010138	0.00000672
597870.00	2376940.00	0.0008234	0.00012072	0.00011354	0.00000718	0.00064823	0.00011291	0.00010599	0.00000692
598370.00	2376940.00	0.0008247	0.00012372	0.0001167	0.00000702	0.0006703	0.00011704	0.00011011	0.00000693
598870.00	2376940.00	0.00080959	0.0001243	0.00011765	0.00000665	0.00065241	0.00011942	0.00011266	0.00000676
599370.00	2376940.00	0.00078895	0.00012321	0.00011709	0.00000612	0.00066112	0.00012029	0.00011394	0.00000635
599870.00	2376940.00	0.00075508	0.00011995	0.00011445	0.0000055	0.00065063	0.00011883	0.00011303	0.0000058
600370.00	2376940.00	0.00071179	0.00011543	0.00011056	0.00000488	0.00064325	0.00011562	0.00011044	0.00000518
600870.00	2376940.00	0.00066599	0.00011006	0.00010575	0.00000431	0.00060972	0.00011087	0.00010629	0.00000458
601370.00	2376940.00	0.00046735	0.00010577	0.00010178	0.00000398	0.00086664	0.00011209	0.00010798	0.00000411
601870.00	2376940.00	0.00035344	0.00009882	0.00009515	0.00000367	0.00073335	0.00010878	0.000105	0.00000378
602370.00	2376940.00	0.00036756	0.00009486	0.00009151	0.00000336	0.00072682	0.00010246	0.00009909	0.00000337
602870.00	2376940.00	0.00046688	0.00009165	0.00008855	0.0000031	0.00061396	0.00009406	0.00009104	0.00000302
603370.00	2376940.00	0.00043062	0.00008819	0.00008516	0.00000303	0.00061238	0.00009069	0.00008781	0.00000288
603870.00	2376940.00	0.00038969	0.00008537	0.00008229	0.00000307	0.00061963	0.00008822	0.00008537	0.00000284
604370.00	2376940.00	0.00024414	0.00008016	0.00007682	0.00000333	0.00044112	0.00008838	0.00008528	0.0000031
604870.00	2376940.00	0.00032736	0.00008146	0.00007804	0.00000343	0.00060022	0.00008465	0.00008159	0.00000307
605370.00	2376940.00	0.00026655	0.00007936	0.00007564	0.00000372	0.0005179	0.00008434	0.00008099	0.00000335
605870.00	2376940.00	0.00031962	0.00007984	0.0000759	0.00000394	0.00056607	0.0000817	0.00007816	0.00000354
606370.00	2376940.00	0.00036266	0.00007964	0.00007549	0.00000415	0.00051547	0.00007943	0.00007565	0.00000378
606870.00	2376940.00	0.00039966	0.00007913	0.00007486	0.00000427	0.00043733	0.0000775	0.00007353	0.00000397
607370.00	2376940.00	0.00022654	0.00007637	0.00007199	0.00000437	0.0003776	0.00008139	0.0000772	0.00000419
607870.00	2376940.00	0.00027647	0.00007795	0.00007372	0.00000423	0.00051851	0.00008008	0.00007599	0.00000409
608370.00	2376940.00	0.00027794	0.00007739	0.00007337	0.00000403	0.00051916	0.00007933	0.00007537	0.00000396
608870.00	2376940.00	0.0003778	0.00007694	0.00007321	0.00000373	0.00043884	0.0000756	0.00007189	0.00000371
609370.00	2376940.00	0.00022695	0.00007415	0.00007061	0.00000354	0.00037758	0.00007829	0.00007474	0.00000355
609870.00	2376940.00	0.00040194	0.00007467	0.0000715	0.00000317	0.00036674	0.00007272	0.00006955	0.00000317
610370.00	2376940.00	0.00039454	0.00007392	0.00007097	0.00000294	0.00038535	0.00007206	0.00006913	0.00000293
610870.00	2376940.00	0.00034241	0.00007346	0.00007068	0.00000278	0.00048096	0.00007269	0.00006995	0.00000274
611370.00	2376940.00	0.00024736	0.00007204	0.00006936	0.00000268	0.00045756	0.00007412	0.00007148	0.00000264
611870.00	2376940.00	0.00023302	0.0000709	0.00006831	0.00000259	0.00041234	0.00007338	0.00007085	0.00000253
612370.00	2376940.00	0.00030102	0.00007109	0.00006862	0.00000248	0.000506	0.00007115	0.00006874	0.0000024
612870.00	2376940.00	0.00026839	0.00007009	0.00006766	0.00000243	0.00049827	0.00007108	0.00006872	0.00000236
613370.00	2376940.00	0.0003884	0.0000687	0.00006634	0.00000236	0.0003266	0.00006684	0.00006455	0.00000229
613870.00	2376940.00	0.00036012	0.00006831	0.00006598	0.00000233	0.00039891	0.00006697	0.00006471	0.00000226
614370.00	2376940.00	0.00014579	0.00006083	0.00005845	0.00000239	0.00016267	0.00006137	0.00005908	0.00000229
614870.00	2376940.00	0.00014257	0.00006007	0.00005772	0.00000235	0.00015894	0.0000606	0.00005834	0.00000226
615370.00	2376940.00	0.00026042	0.00006188	0.00005963	0.00000226	0.00020623	0.00006165	0.00005946	0.00000218
615870.00	2376940.00	0.00048009	0.0000658	0.0000636	0.0000022	0.00037465	0.00006301	0.0000609	0.00000212
616370.00	2376940.00	0.00022133	0.00006315	0.00006095	0.0000022	0.00040346	0.00006541	0.00006329	0.00000212
616870.00	2376940.00	0.00019938	0.00006161	0.00005942	0.00000219	0.00033516	0.00006481	0.0000627	0.00000211
617370.00	2376940.00	0.00019306	0.00006055	0.00005838	0.00000217	0.00031818	0.00006422	0.00006212	0.0000021
617870.00	2376940.00	0.00018757	0.00005949	0.00005732	0.00000217	0.00030548	0.0000637	0.00006161	0.00000209
618370.00	2376940.00	0.00018633	0.00005881	0.00005663	0.00000218	0.00030425	0.00006338	0.00006126	0.00000212
618870.00	2376940.00	0.00018799	0.0000585	0.00005631	0.0000022	0.00031128	0.00006331	0.00006116	0.00000216
619370.00	2376940.00	0.00018676	0.00005792	0.00005573	0.00000219	0.00030994	0.00006272	0.00006058	0.00000214
619870.00	2376940.00	0.00018622	0.00005743	0.00005525	0.00000219	0.00031026	0.00006223	0.00006009	0.00000214
590370.00	2377440.00	0.00020717	0.00009361	0.00008228	0.00001133	0.00024208	0.00009916	0.00008816	0.000011
590870.00	2377440.00	0.00021543	0.0000891	0.00007878	0.00001031	0.00025767	0.00009486	0.00008462	0.00001025
591370.00	2377440.00	0.00028326	0.00008611	0.00007694	0.00000917	0.00030037	0.0000914	0.00008213	0.00000927
591870.00	2377440.00	0.0004097	0.00008382	0.00007568	0.00000814	0.00032437	0.00008699	0.00007869	0.0000083
592370.00	2377440.00	0.00062497	0.00008345	0.00007621	0.00000723	0.0003619	0.00008324	0.00007584	0.0000074
592870.00	2377440.00	0.00067244	0.00008097	0.00007445	0.00000652	0.00036915	0.00007929	0.00007269	0.00000661
593370.00	2377440.00	0.00089284	0.00008269	0.00007668	0.00000601	0.00042916	0.00007759	0.0000716	0.00000599
593870.00	2377440.00	0.0009098	0.00008222	0.00007652	0.0000057	0.00043866	0.00007584	0.00007029	0.00000555
594370.00	2377440.00	0.00094626	0.0000837	0.00007813	0.00000556	0.00045684	0.00007566	0.00007034	0.00000531
594870.00	2377440.00	0.0010026	0.0000871	0.00008151	0.00000559	0.0004934	0.00007729	0.00007204	0.00000525
595370.00	2377440.00	0.00103205	0.0000916	0.00008588	0.00000572	0.00051758	0.00008033	0.00007501	0.00000532
595870.00	2377440.00	0.00106495	0.00009776	0.00009181	0.00000595	0.00055452	0.00008512	0.00007962	0.0000055
596370.00	2377440.00	0.00107134	0.00010388	0.00009767	0.00000621	0.00057509	0.00009078	0.00008501	0.00000576
596870.00	2377440.00	0.00109367	0.00011041	0.00010392	0.00000649	0.00061156	0.00009713	0.00009107	0.00000606
597370.00	2377440.00	0.00110666	0.00011593	0.00010922	0.00000671	0.00065397	0.00010314	0.0000968	0.00000634
597870.00	2377440.00	0.00080257	0.00011569	0.00010885	0.00000684	0.00062509	0.00010792	0.00010136	0.00000656

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2377440.00	0.00080144	0.00011868	0.00011192	0.00000676	0.00063088	0.00011191	0.00010528	0.00000663
598870.00	2377440.00	0.0007956	0.00012031	0.00011384	0.00000647	0.00064512	0.00011495	0.00010844	0.00000651
599370.00	2377440.00	0.00077924	0.00012004	0.00011402	0.00000602	0.00065907	0.0001165	0.00011031	0.00000619
599870.00	2377440.00	0.00075037	0.00011764	0.00011218	0.00000546	0.00065395	0.00011589	0.00011018	0.00000571
600370.00	2377440.00	0.00071193	0.00011362	0.00010875	0.00000487	0.00063478	0.00011325	0.0001081	0.00000515
600870.00	2377440.00	0.0006689	0.00010873	0.00010441	0.00000431	0.00060603	0.00010915	0.00010458	0.00000458
601370.00	2377440.00	0.00047949	0.00010498	0.00010101	0.00000397	0.00087272	0.00011059	0.00010649	0.0000041
601870.00	2377440.00	0.00042533	0.00009955	0.00009595	0.0000036	0.00082037	0.00010608	0.0001024	0.00000368
602370.00	2377440.00	0.00030604	0.00009218	0.0000888	0.00000338	0.00059644	0.00010268	0.0000992	0.00000348
602870.00	2377440.00	0.00038926	0.00009039	0.00008731	0.00000307	0.00069091	0.00009563	0.00009261	0.00000303
603370.00	2377440.00	0.00036196	0.00008667	0.00008371	0.00000296	0.0006627	0.00009185	0.000089	0.00000285
603870.00	2377440.00	0.00039353	0.00008403	0.00008113	0.0000029	0.00060956	0.00008683	0.00008411	0.00000272
604370.00	2377440.00	0.00019516	0.00007175	0.00006825	0.0000035	0.00031581	0.00007935	0.00007585	0.0000035
604870.00	2377440.00	0.00041843	0.00008002	0.00007694	0.00000309	0.00051071	0.00007995	0.00007717	0.00000278
605370.00	2377440.00	0.00034197	0.00007862	0.00007528	0.00000335	0.00057086	0.00008041	0.00007743	0.00000298
605870.00	2377440.00	0.00018391	0.00006862	0.00006452	0.0000041	0.00029291	0.00007449	0.00007058	0.00000391
606370.00	2377440.00	0.00022402	0.0000745	0.00007056	0.00000394	0.00038038	0.00008024	0.00007662	0.00000362
606870.00	2377440.00	0.00028113	0.00007642	0.00007236	0.00000406	0.00052777	0.00007871	0.00007499	0.00000373
607370.00	2377440.00	0.00017928	0.00006765	0.00006307	0.00000458	0.00028109	0.00007291	0.00006844	0.00000447
607870.00	2377440.00	0.00039853	0.00007582	0.00007171	0.0000041	0.00038612	0.00007386	0.00006994	0.00000392
608370.00	2377440.00	0.00028683	0.00007547	0.00007146	0.00000401	0.00051832	0.00007678	0.00007289	0.00000389
608870.00	2377440.00	0.0001771	0.0000664	0.00006216	0.00000424	0.0002754	0.0000717	0.0000674	0.00000431
609370.00	2377440.00	0.00028722	0.00007411	0.00007057	0.00000355	0.00051574	0.00007519	0.00007167	0.00000353
609870.00	2377440.00	0.00038374	0.00007307	0.00006983	0.00000324	0.00038979	0.00007142	0.00006818	0.00000325
610370.00	2377440.00	0.00017447	0.00006436	0.00006088	0.00000349	0.00027075	0.00006957	0.00006598	0.00000359
610870.00	2377440.00	0.00038551	0.0000712	0.00006842	0.00000278	0.00037069	0.00006935	0.00006658	0.00000277
611370.00	2377440.00	0.00025532	0.00007051	0.00006784	0.00000267	0.00047865	0.00007211	0.00006948	0.00000263
611870.00	2377440.00	0.00017144	0.0000624	0.00005949	0.00000291	0.00026604	0.00006727	0.0000643	0.00000297
612370.00	2377440.00	0.00037413	0.00006904	0.00006664	0.0000024	0.00038163	0.00006725	0.0000649	0.00000235
612870.00	2377440.00	0.00024535	0.0000682	0.00006583	0.00000237	0.00045817	0.00006974	0.00006743	0.00000231
613370.00	2377440.00	0.00016638	0.00006021	0.00005758	0.00000263	0.00025936	0.00006476	0.0000621	0.00000265
613870.00	2377440.00	0.00022746	0.00006629	0.00006401	0.00000229	0.00041189	0.00006829	0.00006607	0.00000222
614370.00	2377440.00	0.00013892	0.00005865	0.00005634	0.00000231	0.00015516	0.00005899	0.00005677	0.00000221
614870.00	2377440.00	0.0001463	0.00005892	0.00005665	0.00000227	0.00016268	0.00005952	0.00005734	0.00000218
615370.00	2377440.00	0.00043424	0.00006345	0.00006129	0.00000216	0.00026287	0.00006124	0.00005915	0.00000209
615870.00	2377440.00	0.0004468	0.0000646	0.00006248	0.00000212	0.00041348	0.00006226	0.00006021	0.00000205
616370.00	2377440.00	0.00047089	0.00006358	0.00006149	0.00000209	0.00036353	0.00006084	0.00005882	0.00000202
616870.00	2377440.00	0.00020727	0.00006084	0.00005874	0.0000021	0.0003615	0.00006329	0.00006125	0.00000203
617370.00	2377440.00	0.0001878	0.0000591	0.000057	0.0000021	0.00030394	0.00006294	0.00006089	0.00000204
617870.00	2377440.00	0.00018507	0.00005825	0.00005616	0.00000209	0.00029918	0.00006231	0.00006028	0.00000203
618370.00	2377440.00	0.00018524	0.00005767	0.00005557	0.0000021	0.00030129	0.00006213	0.00006006	0.00000207
618870.00	2377440.00	0.00018555	0.00005724	0.00005514	0.0000021	0.00030498	0.00006183	0.00005975	0.00000208
619370.00	2377440.00	0.00018431	0.00005667	0.00005458	0.00000209	0.00030362	0.00006124	0.00005918	0.00000206
619870.00	2377440.00	0.00018373	0.00005618	0.0000541	0.00000208	0.00030383	0.00006075	0.0000587	0.00000204
590370.00	2377940.00	0.00021455	0.0000915	0.00008091	0.00001059	0.00025446	0.0000968	0.00008647	0.00001033
590870.00	2377940.00	0.00024127	0.00008745	0.00007778	0.00000967	0.00027979	0.00009284	0.00008322	0.00000962
591370.00	2377940.00	0.00031931	0.00008426	0.00007559	0.00000867	0.00030478	0.00008869	0.00007993	0.00000876
591870.00	2377940.00	0.00048847	0.00008281	0.00007511	0.00000771	0.00033574	0.00008467	0.00007681	0.00000787
592370.00	2377940.00	0.00061258	0.0000809	0.00007402	0.00000688	0.00035523	0.00008061	0.00007358	0.00000703
592870.00	2377940.00	0.00080845	0.00008133	0.00007512	0.00000621	0.00040498	0.00007792	0.00007163	0.00000629
593370.00	2377940.00	0.00087093	0.00008016	0.00007443	0.00000572	0.00042047	0.00007525	0.00006955	0.0000057
593870.00	2377940.00	0.00094303	0.00008091	0.00007549	0.00000543	0.00045008	0.00007398	0.00006869	0.00000529
594370.00	2377940.00	0.00097123	0.00008196	0.00007667	0.00000529	0.00046895	0.00007373	0.00006868	0.00000505
594870.00	2377940.00	0.0009887	0.00008422	0.00007893	0.0000053	0.00048739	0.00007477	0.00006979	0.00000498
595370.00	2377940.00	0.00104602	0.00008905	0.00008363	0.00000542	0.00053023	0.00007785	0.00007281	0.00000503
595870.00	2377940.00	0.00103878	0.0000936	0.00008799	0.00000561	0.00053978	0.00008165	0.00007646	0.00000519
596370.00	2377940.00	0.00106698	0.00010011	0.00009424	0.00000587	0.0005802	0.00008719	0.00008176	0.00000543
596870.00	2377940.00	0.00108097	0.00010611	0.00009998	0.00000613	0.00062338	0.00009314	0.00008744	0.0000057
597370.00	2377940.00	0.00109339	0.00011187	0.0001055	0.00000637	0.00066636	0.00009906	0.00009309	0.00000597
597870.00	2377940.00	0.00108995	0.00011602	0.00010953	0.00000649	0.00069059	0.00010398	0.00009779	0.00000618
598370.00	2377940.00	0.00078611	0.00011434	0.00010785	0.00000649	0.00062948	0.00010742	0.0001011	0.00000631
598870.00	2377940.00	0.00078429	0.00011612	0.00010985	0.00000628	0.00061964	0.00011031	0.00010404	0.00000627
599370.00	2377940.00	0.00077137	0.0001163	0.0001104	0.0000059	0.00061681	0.00011206	0.00010602	0.00000604
599870.00	2377940.00	0.0007491	0.0001148	0.0001094	0.0000054	0.00061958	0.00011225	0.00010662	0.00000563
600370.00	2377940.00	0.00071118	0.00011118	0.00010634	0.00000484	0.00059308	0.00011021	0.00010508	0.00000513
600870.00	2377940.00	0.00066717	0.00010644	0.00010216	0.00000428	0.00054682	0.00010641	0.00010181	0.0000046
601370.00	2377940.00	0.00048075	0.00010413	0.00010015	0.00000397	0.00089325	0.00010946	0.00010536	0.0000041
601870.00	2377940.00	0.00043595	0.00009886	0.00009528	0.00000358	0.00082782	0.00010478	0.00010111	0.00000367
602370.00	2377940.00	0.00039389	0.00009344	0.00009018	0.00000326	0.00071616	0.00009942	0.00009611	0.00000331
602870.00	2377940.00	0.00037059	0.00008938	0.00008635	0.00000303	0.00069614	0.00009531	0.0000923	0.00000302

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2377940.00	0.00030322	0.00008466	0.00008175	0.00000291	0.00060671	0.00009248	0.00008961	0.00000287
603870.00	2377940.00	0.00036224	0.00008274	0.00007995	0.00000279	0.00063231	0.00008681	0.00008416	0.00000265
604370.00	2377940.00	0.0002321	0.00007664	0.00007365	0.00000299	0.00038944	0.00008549	0.00008259	0.0000029
604870.00	2377940.00	0.00034372	0.00007824	0.00007534	0.0000029	0.00058818	0.00008097	0.00007835	0.00000263
605370.00	2377940.00	0.00032559	0.0000767	0.00007362	0.00000308	0.00057366	0.00007922	0.00007647	0.00000275
605870.00	2377940.00	0.00029575	0.00007543	0.00007211	0.00000332	0.00055481	0.00007834	0.00007538	0.00000296
606370.00	2377940.00	0.00034193	0.00007513	0.0000716	0.00000353	0.00052267	0.00007561	0.00007246	0.00000316
606870.00	2377940.00	0.00023339	0.00007295	0.00006913	0.00000382	0.00042169	0.0000738	0.00007388	0.00000349
607370.00	2377940.00	0.00027218	0.00007386	0.00006992	0.00000393	0.00050984	0.00007601	0.00007237	0.00000364
607870.00	2377940.00	0.00021318	0.00007126	0.0000672	0.00000405	0.00034419	0.00007634	0.00007248	0.00000386
608370.00	2377940.00	0.00022823	0.00007204	0.00006806	0.00000398	0.00039531	0.00007576	0.00007193	0.00000383
608870.00	2377940.00	0.0002583	0.00007272	0.0000689	0.00000382	0.00048916	0.00007505	0.00007132	0.00000373
609370.00	2377940.00	0.00044589	0.00007388	0.00007031	0.00000357	0.00048409	0.00007157	0.00006804	0.00000353
609870.00	2377940.00	0.0002229	0.00007012	0.00006672	0.0000034	0.00037482	0.00007362	0.00007022	0.0000034
610370.00	2377940.00	0.00024396	0.00007026	0.00006713	0.00000313	0.00044758	0.00007262	0.00006949	0.00000313
610870.00	2377940.00	0.00026043	0.0000699	0.00006701	0.00000288	0.00049684	0.00007163	0.00006875	0.00000288
611370.00	2377940.00	0.00039862	0.0000704	0.00006775	0.00000265	0.00052641	0.0000689	0.00006627	0.00000263
611870.00	2377940.00	0.00030221	0.000069	0.00006648	0.00000251	0.00055684	0.00006945	0.00006697	0.00000248
612370.00	2377940.00	0.00024564	0.00006741	0.000065	0.00000242	0.0004587	0.00006907	0.0000667	0.00000238
612870.00	2377940.00	0.00020765	0.00006529	0.00006292	0.00000237	0.00033422	0.00006856	0.00006623	0.00000233
613370.00	2377940.00	0.00026775	0.00006646	0.00006421	0.00000225	0.00051074	0.00006742	0.00006523	0.00000219
613870.00	2377940.00	0.00013171	0.00004711	0.00004456	0.00000254	0.00022006	0.00005125	0.00004867	0.00000257
614370.00	2377940.00	0.00029864	0.00006167	0.00005952	0.00000215	0.00022843	0.0000611	0.00005901	0.00000209
614870.00	2377940.00	0.00023888	0.00005988	0.00005775	0.00000213	0.00020869	0.00006008	0.00005801	0.00000207
615370.00	2377940.00	0.0003323	0.0000609	0.00005881	0.00000209	0.00024051	0.00005988	0.00005786	0.00000203
615870.00	2377940.00	0.00030954	0.00006211	0.00006005	0.00000206	0.00042476	0.00006156	0.00005957	0.00000199
616370.00	2377940.00	0.00026143	0.00006122	0.00005918	0.00000204	0.00045731	0.00006183	0.00005986	0.00000197
616870.00	2377940.00	0.00022141	0.00006007	0.00005805	0.00000202	0.00041091	0.00006179	0.00005984	0.00000196
617370.00	2377940.00	0.0002078	0.00005906	0.00005706	0.000002	0.00037291	0.00006117	0.00005924	0.00000194
617870.00	2377940.00	0.00018264	0.000057	0.00005496	0.00000203	0.0002928	0.00006115	0.00005915	0.000002
618370.00	2377940.00	0.00018761	0.00005695	0.00005498	0.00000197	0.0003104	0.00006017	0.00005827	0.00000191
618870.00	2377940.00	0.00020439	0.000057	0.00005507	0.00000193	0.00036876	0.00005914	0.00005729	0.00000185
619370.00	2377940.00	0.00018809	0.00005584	0.00005392	0.00000193	0.00031493	0.00005889	0.00005704	0.00000185
619870.00	2377940.00	0.00018584	0.00005519	0.00005328	0.00000191	0.00031053	0.0000584	0.00005657	0.00000183
590370.00	2378440.00	0.00021068	0.00008837	0.00007831	0.00001006	0.0002504	0.00009342	0.00008359	0.00000982
590870.00	2378440.00	0.00030672	0.00008637	0.00007729	0.00000908	0.00030102	0.00009076	0.00008172	0.00000905
591370.00	2378440.00	0.00044475	0.0000842	0.00007603	0.00000817	0.00032607	0.00008668	0.00007841	0.00000827
591870.00	2378440.00	0.00059026	0.00008232	0.000075	0.00000731	0.00035014	0.00008255	0.00007509	0.00000746
592370.00	2378440.00	0.00086114	0.00008325	0.0000767	0.00000655	0.00042072	0.00007968	0.000073	0.00000668
592870.00	2378440.00	0.0009232	0.00008138	0.00007545	0.00000593	0.00044062	0.00007639	0.0000704	0.00000599
593370.00	2378440.00	0.00094928	0.00008	0.00007453	0.00000547	0.00045373	0.00007378	0.00006834	0.00000544
593870.00	2378440.00	0.00092631	0.00007858	0.00007341	0.00000517	0.00044544	0.00007182	0.00006678	0.00000504
594370.00	2378440.00	0.00102338	0.00008099	0.00007594	0.00000505	0.00049686	0.00007221	0.0000674	0.00000482
594870.00	2378440.00	0.0009978	0.00008202	0.00007699	0.00000503	0.00049085	0.00007265	0.00006792	0.00000473
595370.00	2378440.00	0.00103626	0.00008611	0.00008097	0.00000514	0.00052821	0.00007525	0.00007048	0.00000477
595870.00	2378440.00	0.00107716	0.00009197	0.00008664	0.00000533	0.00059896	0.00007958	0.00007467	0.00000491
596370.00	2378440.00	0.00105354	0.0000963	0.00009075	0.00000555	0.00057822	0.00008375	0.00007863	0.00000512
596870.00	2378440.00	0.00105652	0.00010167	0.00009587	0.00000579	0.00060886	0.00008912	0.00008375	0.00000537
597370.00	2378440.00	0.00105812	0.0001086	0.00010254	0.00000606	0.00075318	0.00009616	0.00009055	0.00000562
597870.00	2378440.00	0.00106234	0.00011109	0.00010492	0.00000617	0.00065731	0.00009936	0.0000935	0.00000586
598370.00	2378440.00	0.00076523	0.0001097	0.00010348	0.00000622	0.00060413	0.00010285	0.00009684	0.00000602
598870.00	2378440.00	0.00075246	0.00011123	0.00010516	0.00000607	0.00057589	0.00010557	0.00009953	0.00000604
599370.00	2378440.00	0.00073336	0.00011162	0.00010587	0.00000576	0.00055975	0.00010747	0.00010158	0.00000589
599870.00	2378440.00	0.00072376	0.00011103	0.00010572	0.00000532	0.00056812	0.0001083	0.00010275	0.00000555
600370.00	2378440.00	0.00070324	0.00010875	0.00010394	0.00000481	0.00056548	0.00010729	0.00010219	0.00000509
600870.00	2378440.00	0.00064835	0.00010424	0.00009997	0.00000427	0.00051825	0.00010403	0.00009943	0.00000461
601370.00	2378440.00	0.00049016	0.00010319	0.00009922	0.00000397	0.0008987	0.00010785	0.00010376	0.00000409
601870.00	2378440.00	0.00040135	0.00009761	0.00009401	0.0000036	0.00083175	0.00010477	0.00010106	0.00000371
602370.00	2378440.00	0.0004076	0.00009299	0.00008975	0.00000324	0.00073755	0.0000984	0.00009511	0.00000329
602870.00	2378440.00	0.00036613	0.00008856	0.00008557	0.00000299	0.00069653	0.00009457	0.00009156	0.000003
603370.00	2378440.00	0.00037038	0.00008502	0.00008222	0.0000028	0.00066142	0.0000898	0.00008706	0.00000274
603870.00	2378440.00	0.00027866	0.00008024	0.00007749	0.00000275	0.00054759	0.000088	0.00008532	0.00000268
604370.00	2378440.00	0.00035928	0.00007908	0.00007643	0.00000265	0.00060142	0.00008229	0.00007981	0.00000248
604870.00	2378440.00	0.00031755	0.00007663	0.00007391	0.00000272	0.00058978	0.00008051	0.00007801	0.0000025
605370.00	2378440.00	0.00037504	0.00007534	0.00007254	0.0000028	0.00052987	0.00007617	0.00007364	0.00000252
605870.00	2378440.00	0.0003538	0.00007408	0.00007108	0.000003	0.00052793	0.00007488	0.0000722	0.00000267
606370.00	2378440.00	0.00040943	0.0000729	0.00006971	0.00000319	0.0004095	0.0000713	0.00006845	0.00000285
606870.00	2378440.00	0.00038234	0.00007249	0.00006905	0.00000344	0.00043722	0.00007127	0.00006818	0.00000309
607370.00	2378440.00	0.00020954	0.00006932	0.00006551	0.00000381	0.00033534	0.00007518	0.00007159	0.00000359
607870.00	2378440.00	0.00023101	0.00007056	0.00006672	0.00000383	0.00041352	0.00007414	0.00007056	0.00000358

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2378440.00	0.00040133	0.00007288	0.00006906	0.00000381	0.00052557	0.00007148	0.00006787	0.00000361
608870.00	2378440.00	0.00021007	0.00006877	0.00006495	0.00000382	0.00033925	0.0000733	0.00006958	0.00000371
609370.00	2378440.00	0.00034688	0.00007159	0.00006799	0.0000036	0.00055392	0.00007132	0.00006779	0.00000352
609870.00	2378440.00	0.00021004	0.00006781	0.00006435	0.00000347	0.00033754	0.00007199	0.00006854	0.00000345
610370.00	2378440.00	0.0002061	0.00006685	0.00006359	0.00000325	0.00032455	0.00007131	0.00006804	0.00000327
610870.00	2378440.00	0.00020275	0.00006577	0.0000627	0.00000307	0.00031555	0.00007097	0.00006786	0.00000312
611370.00	2378440.00	0.00030113	0.00006817	0.00006546	0.00000271	0.00055028	0.00006868	0.00006598	0.0000027
611870.00	2378440.00	0.00033882	0.0000677	0.00006519	0.00000252	0.00054968	0.00006728	0.00006478	0.0000025
612370.00	2378440.00	0.00019927	0.0000637	0.0000612	0.0000025	0.00030906	0.00006818	0.00006567	0.00000251
612870.00	2378440.00	0.00019935	0.00006326	0.00006089	0.00000237	0.00031131	0.00006725	0.00006489	0.00000236
613370.00	2378440.00	0.00023187	0.00006431	0.00006209	0.00000222	0.00042183	0.00006595	0.00006378	0.00000218
613870.00	2378440.00	0.00013948	0.00005011	0.00004762	0.00000249	0.00022661	0.0000543	0.00005177	0.00000253
614370.00	2378440.00	0.00016474	0.00005748	0.0000551	0.00000238	0.00025446	0.00006164	0.00005925	0.0000024
614870.00	2378440.00	0.00021417	0.00006186	0.00005977	0.00000208	0.00037722	0.00006377	0.00006174	0.00000203
615370.00	2378440.00	0.00029704	0.00006174	0.00005972	0.00000202	0.00043872	0.00006132	0.00005936	0.00000196
615870.00	2378440.00	0.00020772	0.00006023	0.0000582	0.00000202	0.00036309	0.00006227	0.0000603	0.00000197
616370.00	2378440.00	0.00029152	0.00006009	0.00005812	0.00000197	0.000429	0.00005979	0.00005789	0.0000019
616870.00	2378440.00	0.00021907	0.00005896	0.000057	0.00000196	0.0004041	0.00006055	0.00005865	0.0000019
617370.00	2378440.00	0.0001837	0.00005661	0.0000546	0.00000201	0.00029314	0.00006074	0.00005873	0.000002
617870.00	2378440.00	0.00026325	0.00005774	0.00005585	0.00000189	0.00043908	0.00005809	0.00005627	0.00000182
618370.00	2378440.00	0.00023899	0.00005696	0.00005509	0.00000187	0.0004351	0.00005793	0.00005613	0.0000018
618870.00	2378440.00	0.00025885	0.00005618	0.00005434	0.00000184	0.00040293	0.00005645	0.00005469	0.00000176
619370.00	2378440.00	0.00026306	0.00005557	0.00005375	0.00000182	0.00039909	0.00005573	0.000054	0.00000173
619870.00	2378440.00	0.00026262	0.00005499	0.0000532	0.0000018	0.00039814	0.00005516	0.00005345	0.00000171
590370.00	2378940.00	0.00022871	0.00008642	0.00007695	0.00000947	0.00026742	0.00009122	0.00008195	0.00000927
590870.00	2378940.00	0.00025241	0.0000824	0.0000737	0.0000087	0.00028119	0.00008715	0.00007848	0.00000867
591370.00	2378940.00	0.00027203	0.0000781	0.00007024	0.00000786	0.0002837	0.00008252	0.00007458	0.00000794
591870.00	2378940.00	0.00040872	0.00007664	0.00006964	0.00000699	0.00031027	0.00007899	0.00007187	0.00000712
592370.00	2378940.00	0.00044289	0.00007347	0.00006721	0.00000626	0.00031239	0.00007488	0.0000685	0.00000638
592870.00	2378940.00	0.00065945	0.00007458	0.00006893	0.00000565	0.00035945	0.00007268	0.00006697	0.00000571
593370.00	2378940.00	0.00091351	0.00007724	0.00007203	0.00000522	0.00043665	0.00007154	0.00006635	0.00000519
593870.00	2378940.00	0.00094379	0.00007703	0.00007209	0.00000494	0.00045396	0.00007009	0.00006528	0.00000481
594370.00	2378940.00	0.00096822	0.00007775	0.00007295	0.0000048	0.00047185	0.00006971	0.00006513	0.00000459
594870.00	2378940.00	0.00102552	0.00008061	0.00007581	0.0000048	0.00051173	0.00007093	0.00006644	0.0000045
595370.00	2378940.00	0.00109297	0.00008606	0.00008114	0.00000492	0.00062624	0.0000745	0.00006996	0.00000453
595870.00	2378940.00	0.00108042	0.00009078	0.00008569	0.00000509	0.00069634	0.00007855	0.00007389	0.00000465
596370.00	2378940.00	0.00099576	0.00009623	0.00009089	0.00000534	0.00085246	0.00008475	0.0000799	0.00000485
596870.00	2378940.00	0.00098279	0.00010061	0.00009505	0.00000556	0.00084786	0.00008913	0.00008406	0.00000507
597370.00	2378940.00	0.0010332	0.00010215	0.00009646	0.0000057	0.00061001	0.00009035	0.00008503	0.00000532
597870.00	2378940.00	0.00101707	0.00010558	0.00009972	0.00000585	0.00059522	0.00009452	0.00008896	0.00000556
598370.00	2378940.00	0.00073705	0.00010477	0.00009883	0.00000594	0.00055446	0.00009815	0.00009241	0.00000574
598870.00	2378940.00	0.00072182	0.00010666	0.00010081	0.00000585	0.00053409	0.00010106	0.00009526	0.00000581
599370.00	2378940.00	0.00070474	0.00010758	0.00010197	0.00000561	0.00052765	0.00010328	0.00009756	0.00000572
599870.00	2378940.00	0.00068863	0.00010719	0.00010196	0.00000523	0.00052565	0.00010439	0.00009893	0.00000546
600370.00	2378940.00	0.00066626	0.00010535	0.00010059	0.00000476	0.00051881	0.00010392	0.00009885	0.00000507
600870.00	2378940.00	0.00065966	0.0001029	0.00009863	0.00000427	0.00052167	0.0001021	0.00009752	0.00000458
601370.00	2378940.00	0.00032316	0.00009611	0.00009202	0.0000041	0.00056729	0.00010707	0.00010274	0.00000434
601870.00	2378940.00	0.00057413	0.00009652	0.00009305	0.00000347	0.00061016	0.00009736	0.00009376	0.0000036
602370.00	2378940.00	0.00042611	0.00009235	0.00008914	0.00000321	0.00073267	0.00009687	0.0000936	0.00000327
602870.00	2378940.00	0.00037872	0.00008798	0.00008502	0.00000296	0.00069921	0.00009333	0.00009035	0.00000298
603370.00	2378940.00	0.00038278	0.00008436	0.00008162	0.00000274	0.00065653	0.0000886	0.00008589	0.0000027
603870.00	2378940.00	0.00036467	0.00008095	0.00007834	0.0000026	0.00062801	0.00008493	0.0000824	0.00000252
604370.00	2378940.00	0.00043926	0.00007803	0.00007555	0.00000248	0.00049581	0.00007856	0.00007619	0.00000237
604870.00	2378940.00	0.0003073	0.00007534	0.00007277	0.00000257	0.00058415	0.00007971	0.00007732	0.00000239
605370.00	2378940.00	0.00040413	0.00007386	0.00007128	0.00000258	0.00048229	0.00007386	0.00007151	0.00000235
605870.00	2378940.00	0.00033715	0.00007243	0.00006966	0.00000277	0.0005384	0.00007391	0.00007144	0.00000248
606370.00	2378940.00	0.00031507	0.00007131	0.00006834	0.00000297	0.00053232	0.00007287	0.00007023	0.00000265
606870.00	2378940.00	0.00027457	0.00007027	0.00006706	0.00000322	0.00051499	0.00007274	0.00006986	0.00000288
607370.00	2378940.00	0.00025736	0.00006961	0.00006618	0.00000343	0.00048741	0.00007222	0.00006911	0.00000311
607870.00	2378940.00	0.0002288	0.00006861	0.00006499	0.00000362	0.00041262	0.00007215	0.00006881	0.00000334
608370.00	2378940.00	0.00020824	0.00006726	0.00006353	0.00000373	0.00034239	0.00007181	0.00006828	0.00000352
608870.00	2378940.00	0.00025756	0.00006905	0.00006536	0.00000369	0.00048984	0.00007103	0.00006751	0.00000351
609370.00	2378940.00	0.00025824	0.00006869	0.00006509	0.0000036	0.00049042	0.00007051	0.00006702	0.00000349
609870.00	2378940.00	0.00021017	0.00006645	0.00006297	0.00000348	0.00034469	0.00007021	0.00006678	0.00000343
610370.00	2378940.00	0.0002073	0.00006569	0.00006241	0.00000328	0.00033449	0.00006955	0.00006627	0.00000327
610870.00	2378940.00	0.00020209	0.00006464	0.00006156	0.00000308	0.00031771	0.00006894	0.00006584	0.0000031
611370.00	2378940.00	0.00019887	0.00006365	0.00006076	0.00000289	0.0003086	0.00006837	0.00006545	0.00000292
611870.00	2378940.00	0.00024946	0.00006524	0.00006265	0.00000259	0.00047153	0.00006672	0.00006414	0.00000258
612370.00	2378940.00	0.00022177	0.00006386	0.00006142	0.00000244	0.0003864	0.00006599	0.00006356	0.00000243
612870.00	2378940.00	0.00038422	0.00006495	0.0000627	0.00000225	0.00049566	0.00006335	0.00006113	0.00000222

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2378940.00	0.00019727	0.00006139	0.00005915	0.00000225	0.00030999	0.00006497	0.00006274	0.00000223
613870.00	2378940.00	0.00012927	0.00004529	0.00004284	0.00000246	0.00021449	0.00004932	0.00004681	0.00000251
614370.00	2378940.00	0.00026899	0.00006184	0.0000598	0.00000204	0.00046225	0.00006199	0.00006	0.00000199
614870.00	2378940.00	0.00018868	0.00005883	0.00005674	0.0000021	0.000294	0.00006296	0.00006087	0.00000209
615370.00	2378940.00	0.0002757	0.00006047	0.0000585	0.00000196	0.00044893	0.0000604	0.00005849	0.00000191
615870.00	2378940.00	0.00023978	0.00005961	0.00005766	0.00000194	0.00044005	0.00006048	0.00005859	0.00000189
616370.00	2378940.00	0.00028175	0.00005892	0.00005701	0.00000191	0.00042714	0.00005869	0.00005684	0.00000185
616870.00	2378940.00	0.00018806	0.00005693	0.00005501	0.00000192	0.00030511	0.00005989	0.000058	0.00000188
617370.00	2378940.00	0.00031921	0.00005729	0.00005544	0.00000185	0.00036479	0.00005629	0.00005449	0.00000179
617870.00	2378940.00	0.00024697	0.00005663	0.00005479	0.00000184	0.000434	0.00005725	0.00005548	0.00000177
618370.00	2378940.00	0.00025343	0.00005593	0.00005412	0.00000181	0.00043084	0.00005637	0.00005463	0.00000174
618870.00	2378940.00	0.00025094	0.00005509	0.00005331	0.00000178	0.00040035	0.00005542	0.0000537	0.00000172
619370.00	2378940.00	0.00025898	0.00005446	0.0000527	0.00000176	0.00039174	0.00005459	0.0000529	0.00000169
619870.00	2378940.00	0.00025835	0.00005387	0.00005213	0.00000174	0.00039036	0.000054	0.00005234	0.00000166
590370.00	2379440.00	0.00019142	0.00008151	0.00007227	0.00000924	0.00022576	0.00008607	0.00007704	0.00000903
590870.00	2379440.00	0.00019475	0.00007754	0.00006909	0.00000845	0.00023312	0.00008224	0.00007383	0.00000841
591370.00	2379440.00	0.00020636	0.00007375	0.00006618	0.00000757	0.00024682	0.00007844	0.00007081	0.00000764
591870.00	2379440.00	0.00018934	0.00006868	0.00006191	0.00000677	0.0002279	0.00007312	0.00006624	0.00000688
592370.00	2379440.00	0.00031966	0.00006908	0.00006309	0.00000599	0.00028149	0.00007176	0.00006568	0.00000608
592870.00	2379440.00	0.00061381	0.0000718	0.0000664	0.00000539	0.00034293	0.00007028	0.00006483	0.00000545
593370.00	2379440.00	0.00086127	0.00007436	0.00006938	0.00000498	0.00041639	0.00006927	0.00006431	0.00000495
593870.00	2379440.00	0.00112011	0.00007987	0.00007512	0.00000475	0.00057016	0.00007043	0.00006581	0.00000461
594370.00	2379440.00	0.00100076	0.00007661	0.00007202	0.00000458	0.00048927	0.00006822	0.00006384	0.00000438
594870.00	2379440.00	0.00102899	0.00007877	0.0000742	0.00000457	0.00052057	0.00006909	0.0000648	0.00000428
595370.00	2379440.00	0.00107527	0.00008477	0.00008008	0.0000047	0.00070061	0.00007349	0.00006917	0.00000431
595870.00	2379440.00	0.00099312	0.00008381	0.00007905	0.00000476	0.00052118	0.00007307	0.00006868	0.00000439
596370.00	2379440.00	0.00098282	0.00008789	0.00008294	0.00000495	0.00052612	0.00007678	0.00007222	0.00000457
596870.00	2379440.00	0.00096213	0.00009197	0.00008682	0.00000516	0.00051966	0.00008101	0.00007622	0.00000479
597370.00	2379440.00	0.00100254	0.00009776	0.00009237	0.00000539	0.00058252	0.00008641	0.00008139	0.00000503
597870.00	2379440.00	0.00097652	0.00010085	0.0000953	0.00000556	0.00055282	0.00009031	0.00008504	0.00000527
598370.00	2379440.00	0.00068827	0.0000996	0.00009393	0.00000567	0.00049357	0.00009353	0.00008805	0.00000548
598870.00	2379440.00	0.00067061	0.00010161	0.00009597	0.00000564	0.00048567	0.00009655	0.00009096	0.00000559
599370.00	2379440.00	0.00066811	0.00010328	0.00009782	0.00000546	0.00049369	0.00009915	0.0000936	0.00000554
599870.00	2379440.00	0.00066466	0.00010377	0.00009863	0.00000513	0.00050216	0.00010077	0.00009544	0.00000534
600370.00	2379440.00	0.00065568	0.00010283	0.00009812	0.00000471	0.00050604	0.00010101	0.00009602	0.00000499
600870.00	2379440.00	0.00061738	0.00009989	0.00009565	0.00000424	0.00048285	0.00009936	0.00009478	0.00000458
601370.00	2379440.00	0.0005007	0.00010101	0.00009705	0.00000395	0.00091193	0.00010451	0.00010045	0.00000406
601870.00	2379440.00	0.0004748	0.0000966	0.00009305	0.00000355	0.00084187	0.00010042	0.00009678	0.00000364
602370.00	2379440.00	0.0002955	0.00008777	0.00008444	0.00000333	0.00052881	0.00009801	0.0000945	0.00000351
602870.00	2379440.00	0.00033272	0.00008645	0.00008348	0.00000297	0.00065427	0.00009357	0.00009054	0.00000303
603370.00	2379440.00	0.00029098	0.00008195	0.00007918	0.00000277	0.00056073	0.00009001	0.0000872	0.00000281
603870.00	2379440.00	0.00032452	0.00007979	0.00007722	0.00000257	0.00062593	0.00008532	0.0000828	0.00000252
604370.00	2379440.00	0.000288	0.00007635	0.00007385	0.00000249	0.00056871	0.0000825	0.00008009	0.00000241
604870.00	2379440.00	0.00028648	0.00007401	0.00007155	0.00000246	0.00056244	0.00007929	0.00007696	0.00000232
605370.00	2379440.00	0.00024998	0.00007122	0.00006869	0.00000253	0.0004829	0.00007723	0.00007488	0.00000235
605870.00	2379440.00	0.00029177	0.00007069	0.0000681	0.00000259	0.00054625	0.00007399	0.00007165	0.00000234
606370.00	2379440.00	0.00037081	0.00006984	0.00006715	0.0000027	0.00047092	0.00006963	0.00006722	0.00000241
606870.00	2379440.00	0.00024281	0.00006796	0.00006498	0.00000298	0.00046281	0.00007181	0.00006914	0.00000267
607370.00	2379440.00	0.00022693	0.000067	0.00006381	0.0000032	0.00041634	0.00007099	0.00006809	0.00000289
607870.00	2379440.00	0.00030261	0.00006786	0.00006452	0.00000333	0.00048753	0.00006835	0.00006533	0.00000302
608370.00	2379440.00	0.00039497	0.00006889	0.00006543	0.00000346	0.00050793	0.00006748	0.00006429	0.00000319
608870.00	2379440.00	0.00023093	0.00006655	0.00006298	0.00000357	0.00042074	0.00006925	0.00006588	0.00000336
609370.00	2379440.00	0.00041451	0.00006826	0.00006476	0.00000351	0.00046829	0.00006621	0.00006286	0.00000335
609870.00	2379440.00	0.00028455	0.00006697	0.00006355	0.00000342	0.00052381	0.00006784	0.00006452	0.00000333
610370.00	2379440.00	0.000317	0.00006676	0.0000635	0.00000325	0.00053263	0.0000668	0.0000636	0.0000032
610870.00	2379440.00	0.00037342	0.00006643	0.00006339	0.00000303	0.00050081	0.00006522	0.0000622	0.00000301
611370.00	2379440.00	0.00026949	0.00006489	0.00006206	0.00000284	0.00050787	0.00006592	0.00006309	0.00000283
611870.00	2379440.00	0.00025049	0.00006389	0.00006125	0.00000264	0.00047411	0.00006525	0.00006261	0.00000264
612370.00	2379440.00	0.00019657	0.00006123	0.0000587	0.00000253	0.00030761	0.00006512	0.00006258	0.00000255
612870.00	2379440.00	0.00026314	0.00006269	0.0000604	0.00000229	0.00049772	0.00006353	0.00006126	0.00000227
613370.00	2379440.00	0.00019976	0.00006041	0.00005819	0.00000222	0.00032076	0.00006339	0.00006118	0.00000221
613870.00	2379440.00	0.00012778	0.00004432	0.00004188	0.00000244	0.00021157	0.0000483	0.0000458	0.0000025
614370.00	2379440.00	0.00015269	0.00005315	0.00005083	0.00000232	0.00023777	0.00005724	0.00005488	0.00000236
614870.00	2379440.00	0.0002172	0.00005945	0.00005748	0.00000197	0.00039011	0.00006089	0.00005897	0.00000192
615370.00	2379440.00	0.00019787	0.00005826	0.00005632	0.00000195	0.00032811	0.00006056	0.00005866	0.00000191
615870.00	2379440.00	0.00034845	0.00005785	0.00005599	0.00000186	0.00029572	0.00005621	0.00005439	0.00000181
616370.00	2379440.00	0.00018196	0.00005582	0.0000539	0.00000192	0.00028379	0.00005946	0.00005756	0.00000191
616870.00	2379440.00	0.0002212	0.00005688	0.00005504	0.00000184	0.00040707	0.00005805	0.00005627	0.00000179
617370.00	2379440.00	0.00020985	0.00005603	0.00005421	0.00000182	0.00038042	0.0000575	0.00005573	0.00000177
617870.00	2379440.00	0.00023638	0.00005556	0.00005378	0.00000178	0.00042477	0.00005631	0.00005458	0.00000173

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2379440.00	0.00017713	0.00005345	0.00005164	0.00000181	0.00028136	0.00005678	0.00005501	0.00000178
618870.00	2379440.00	0.00023314	0.00005408	0.00005235	0.00000173	0.00040458	0.00005477	0.00005309	0.00000168
619370.00	2379440.00	0.00025529	0.00005341	0.00005171	0.00000171	0.00038521	0.0000535	0.00005186	0.00000164
619870.00	2379440.00	0.00025446	0.00005281	0.00005113	0.00000168	0.00038342	0.00005291	0.00005129	0.00000162
590370.00	2379940.00	0.0001959	0.00007967	0.00007095	0.00000872	0.00023321	0.00008404	0.0000755	0.00000855
590870.00	2379940.00	0.00019346	0.00007526	0.00006725	0.00000801	0.00023226	0.00007975	0.00007176	0.00000799
591370.00	2379940.00	0.00018759	0.00007068	0.00006343	0.00000725	0.0002259	0.00007514	0.00006782	0.00000732
591870.00	2379940.00	0.00018088	0.0000663	0.00005983	0.00000647	0.00021779	0.00007054	0.00006397	0.00000657
592370.00	2379940.00	0.00034514	0.0000678	0.00006209	0.00000571	0.00028392	0.00006996	0.00006416	0.0000058
592870.00	2379940.00	0.00068434	0.00007132	0.00006616	0.00000516	0.00036032	0.00006888	0.00006368	0.00000521
593370.00	2379940.00	0.00086023	0.00007262	0.00006785	0.00000476	0.00041461	0.00006746	0.00006273	0.00000474
593870.00	2379940.00	0.00102687	0.00007539	0.00007087	0.00000452	0.00050254	0.00006747	0.00006307	0.0000044
594370.00	2379940.00	0.00100182	0.00007488	0.0000705	0.00000438	0.00049422	0.00006654	0.00006236	0.00000418
594870.00	2379940.00	0.00061362	0.00008027	0.00007571	0.00000455	0.00116657	0.00007899	0.00007478	0.0000042
595370.00	2379940.00	0.00098326	0.00007785	0.00007345	0.0000044	0.00050455	0.00006811	0.00006403	0.00000408
595870.00	2379940.00	0.00096598	0.00008052	0.00007601	0.00000452	0.00050435	0.0000704	0.00006623	0.00000417
596370.00	2379940.00	0.00093519	0.00008368	0.00007901	0.00000468	0.00049224	0.00007348	0.00006916	0.00000432
596870.00	2379940.00	0.00091314	0.00008754	0.00008267	0.00000487	0.0004868	0.00007742	0.00007289	0.00000453
597370.00	2379940.00	0.0009523	0.00009297	0.00008788	0.00000509	0.00052741	0.00008236	0.0000776	0.00000475
597870.00	2379940.00	0.00095249	0.00009684	0.00009157	0.00000528	0.00053663	0.00008659	0.00008161	0.00000498
598370.00	2379940.00	0.00067883	0.00009596	0.00009055	0.00000541	0.00048702	0.00008989	0.00008469	0.0000052
598870.00	2379940.00	0.00068509	0.00009883	0.00009341	0.00000542	0.0004993	0.00009322	0.00008792	0.00000531
599370.00	2379940.00	0.00071036	0.00010154	0.00009624	0.00000529	0.00052977	0.00009623	0.00009095	0.00000528
599870.00	2379940.00	0.00065501	0.00010076	0.00009573	0.00000503	0.00049089	0.0000974	0.00009221	0.00000518
600370.00	2379940.00	0.000647	0.00010029	0.00009563	0.00000466	0.00049396	0.00009806	0.00009316	0.0000049
600870.00	2379940.00	0.00061219	0.00009798	0.00009375	0.00000423	0.00047653	0.00009707	0.00009254	0.00000453
601370.00	2379940.00	0.00050691	0.00009966	0.00009572	0.00000394	0.00090481	0.00010248	0.00009845	0.00000404
601870.00	2379940.00	0.00048158	0.00009576	0.00009221	0.00000355	0.00085667	0.00009914	0.0000955	0.00000364
602370.00	2379940.00	0.00042188	0.00009061	0.00008741	0.0000032	0.00073576	0.00009482	0.00009154	0.00000328
602870.00	2379940.00	0.00040657	0.00008674	0.00008384	0.0000029	0.00069459	0.00009075	0.00008781	0.00000295
603370.00	2379940.00	0.00036724	0.00008286	0.00008018	0.00000268	0.00066496	0.00008748	0.00008479	0.00000269
603870.00	2379940.00	0.00045143	0.0000795	0.00007706	0.00000244	0.00052479	0.00008058	0.00007817	0.00000242
604370.00	2379940.00	0.00036756	0.00007649	0.00007412	0.00000237	0.00058968	0.00007947	0.00007718	0.00000229
604870.00	2379940.00	0.00025432	0.00007228	0.00006989	0.00000239	0.00048823	0.00007903	0.00007673	0.0000023
605370.00	2379940.00	0.0002443	0.00007002	0.00006763	0.0000024	0.00046624	0.00007634	0.00007408	0.00000226
605870.00	2379940.00	0.000281	0.00006935	0.00006693	0.00000242	0.00053751	0.00007315	0.00007094	0.00000221
606370.00	2379940.00	0.00021742	0.0000662	0.00006359	0.00000261	0.00039024	0.00007226	0.00006986	0.0000024
606870.00	2379940.00	0.00020732	0.0000648	0.000062	0.0000028	0.00035544	0.00007076	0.0000682	0.00000256
607370.00	2379940.00	0.00025574	0.00006615	0.00006323	0.00000292	0.00048484	0.00006885	0.00006624	0.00000261
607870.00	2379940.00	0.00032101	0.00006612	0.00006304	0.00000308	0.00046511	0.00006605	0.00006328	0.00000277
608370.00	2379940.00	0.00036955	0.00006537	0.00006214	0.00000323	0.00036394	0.00006365	0.00006069	0.00000295
608870.00	2379940.00	0.00027107	0.00006572	0.00006233	0.00000339	0.00050965	0.0000671	0.00006395	0.00000314
609370.00	2379940.00	0.00032193	0.00006602	0.0000626	0.00000341	0.00052489	0.00006594	0.00006272	0.00000322
609870.00	2379940.00	0.00023513	0.00006447	0.00006107	0.00000339	0.00043449	0.00006651	0.00006324	0.00000327
610370.00	2379940.00	0.00019421	0.00006193	0.00005859	0.00000335	0.00030403	0.00006678	0.00006347	0.00000331
610870.00	2379940.00	0.00019423	0.00006155	0.00005837	0.00000318	0.00030368	0.00006604	0.00006287	0.00000317
611370.00	2379940.00	0.00045303	0.0000642	0.00006134	0.00000286	0.0003768	0.00006132	0.00005847	0.00000285
611870.00	2379940.00	0.000218	0.00006184	0.00005912	0.00000272	0.00038085	0.00006398	0.00006126	0.00000272
612370.00	2379940.00	0.00025771	0.00006198	0.00005948	0.0000025	0.00048655	0.00006298	0.00006048	0.00000249
612870.00	2379940.00	0.00030178	0.00006171	0.0000594	0.00000231	0.00051791	0.00006168	0.00005938	0.0000023
613370.00	2379940.00	0.00035111	0.0000613	0.00005915	0.00000216	0.00049447	0.0000602	0.00005807	0.00000213
613870.00	2379940.00	0.00013501	0.00004715	0.00004471	0.00000244	0.00021785	0.00005118	0.00004867	0.00000251
614370.00	2379940.00	0.00015327	0.0000526	0.0000503	0.0000023	0.00023718	0.00005662	0.00005427	0.00000235
614870.00	2379940.00	0.00020282	0.00005785	0.00005591	0.00000194	0.00034372	0.00005975	0.00005783	0.00000191
615370.00	2379940.00	0.0003105	0.0000578	0.00005595	0.00000185	0.00038779	0.0000567	0.0000549	0.0000018
615870.00	2379940.00	0.0002041	0.0000568	0.00005494	0.00000185	0.00035448	0.00005841	0.0000566	0.00000181
616370.00	2379940.00	0.00030326	0.00005657	0.00005478	0.00000179	0.00038507	0.00005563	0.00005389	0.00000174
616870.00	2379940.00	0.00019573	0.00005537	0.00005357	0.0000018	0.00033277	0.00005723	0.00005547	0.00000176
617370.00	2379940.00	0.00023193	0.00005523	0.00005348	0.00000175	0.00041972	0.00005595	0.00005425	0.0000017
617870.00	2379940.00	0.00018092	0.00005347	0.0000517	0.00000177	0.00029118	0.00005629	0.00005456	0.00000173
618370.00	2379940.00	0.00018173	0.00005297	0.00005123	0.00000174	0.00029681	0.00005556	0.00005386	0.0000017
618870.00	2379940.00	0.0002032	0.00005298	0.00005128	0.00000169	0.00036739	0.0000544	0.00005276	0.00000165
619370.00	2379940.00	0.00018487	0.00005197	0.00005028	0.00000168	0.00031215	0.0000541	0.00005245	0.00000164
619870.00	2379940.00	0.00024707	0.00005181	0.00005018	0.00000163	0.00037924	0.00005196	0.00005038	0.00000158
590370.00	2380440.00	0.00023846	0.00007894	0.00007078	0.00000816	0.00026707	0.00008303	0.00007501	0.00000802
590870.00	2380440.00	0.00026535	0.00007536	0.00006787	0.00000749	0.00027296	0.00007921	0.00007173	0.00000748
591370.00	2380440.00	0.00046063	0.00007518	0.00006846	0.00000673	0.00031222	0.00007645	0.00006965	0.0000068
591870.00	2380440.00	0.00022358	0.00006652	0.0000604	0.00000613	0.0002522	0.00007036	0.00006414	0.00000622
592370.00	2380440.00	0.00021708	0.00006298	0.00005751	0.00000548	0.00024448	0.00006642	0.00006087	0.00000555
592870.00	2380440.00	0.00025492	0.00006136	0.00005642	0.00000494	0.00025173	0.00006377	0.00005881	0.00000495

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2380440.00	0.00029445	0.00006041	0.00005587	0.00000453	0.00025779	0.00006169	0.00005721	0.00000448
593870.00	2380440.00	0.00044827	0.00006232	0.00005805	0.00000427	0.0002896	0.00006125	0.00005709	0.00000416
594370.00	2380440.00	0.0010354	0.00007438	0.00007018	0.0000042	0.00052908	0.00006545	0.00006145	0.000004
594870.00	2380440.00	0.00105846	0.00007719	0.000073	0.00000419	0.00063611	0.00006727	0.00006336	0.00000391
595370.00	2380440.00	0.00095898	0.00007513	0.00007095	0.00000418	0.00049107	0.00006591	0.00006202	0.00000388
595870.00	2380440.00	0.00096064	0.00007817	0.00007388	0.00000429	0.00050723	0.00006823	0.00006427	0.00000396
596370.00	2380440.00	0.00091517	0.00008053	0.0000761	0.00000443	0.00048128	0.00007076	0.00006667	0.00000409
596870.00	2380440.00	0.00093419	0.00008529	0.00008066	0.00000463	0.0005078	0.00007492	0.00007064	0.00000428
597370.00	2380440.00	0.00094947	0.00008988	0.00008504	0.00000484	0.00053426	0.00007935	0.00007486	0.00000449
597870.00	2380440.00	0.0009699	0.00009462	0.00008958	0.00000503	0.0005969	0.00008406	0.00007936	0.0000047
598370.00	2380440.00	0.0006984	0.00009347	0.00008829	0.00000517	0.0005206	0.00008691	0.000082	0.00000491
598870.00	2380440.00	0.00070753	0.00009654	0.00009133	0.00000521	0.00053754	0.0000903	0.00008526	0.00000503
599370.00	2380440.00	0.00067135	0.0000973	0.00009218	0.00000512	0.00049176	0.00009232	0.00008723	0.00000509
599870.00	2380440.00	0.00064413	0.00009773	0.00009282	0.00000491	0.00047933	0.00009408	0.00008906	0.00000502
600370.00	2380440.00	0.00068022	0.00009894	0.00009434	0.0000046	0.0005135	0.00009557	0.00009081	0.00000476
600870.00	2380440.00	0.00068343	0.00009815	0.00009393	0.00000422	0.00053154	0.00009557	0.00009115	0.00000442
601370.00	2380440.00	0.00046359	0.00009777	0.00009384	0.00000394	0.00091155	0.00010141	0.00009738	0.00000402
601870.00	2380440.00	0.00048887	0.00009466	0.00009112	0.00000354	0.00085118	0.00009745	0.00009383	0.00000362
602370.00	2380440.00	0.00044164	0.00008988	0.00008669	0.00000319	0.00073204	0.00009323	0.00008996	0.00000327
602870.00	2380440.00	0.00038968	0.00008589	0.00008298	0.00000291	0.00070408	0.00009032	0.00008736	0.00000296
603370.00	2380440.00	0.00038378	0.00008231	0.00007966	0.00000265	0.00066195	0.00008621	0.00008354	0.00000267
603870.00	2380440.00	0.00035943	0.00007883	0.00007636	0.00000247	0.0006315	0.00008282	0.00008038	0.00000245
604370.00	2380440.00	0.00027352	0.00007454	0.00007215	0.00000238	0.00052871	0.00008122	0.00007886	0.00000236
604870.00	2380440.00	0.00028843	0.00007243	0.00007016	0.00000228	0.00056149	0.00007759	0.0000754	0.00000219
605370.00	2380440.00	0.00030101	0.00007038	0.00006814	0.00000224	0.00056005	0.00007422	0.00007212	0.0000021
605870.00	2380440.00	0.00039941	0.00006854	0.00006634	0.0000022	0.00044016	0.00006831	0.00006628	0.00000203
606370.00	2380440.00	0.00031606	0.00006711	0.00006478	0.00000234	0.00052114	0.00006892	0.00006681	0.00000211
606870.00	2380440.00	0.00027061	0.00006564	0.00006314	0.0000025	0.0005075	0.00006844	0.0000662	0.00000224
607370.00	2380440.00	0.00023475	0.00006422	0.00006152	0.0000027	0.00044489	0.00006785	0.00006542	0.00000243
607870.00	2380440.00	0.00019996	0.00006214	0.00005919	0.00000295	0.00033592	0.00006729	0.0000646	0.00000269
608370.00	2380440.00	0.00019631	0.00006165	0.00005852	0.00000313	0.00032219	0.00006664	0.00006376	0.00000289
608870.00	2380440.00	0.00027176	0.00006402	0.00006083	0.0000032	0.00050761	0.00006533	0.0000624	0.00000293
609370.00	2380440.00	0.00019273	0.00006103	0.00005766	0.00000336	0.00030633	0.00006607	0.00006286	0.00000321
609870.00	2380440.00	0.0004224	0.00006436	0.00006109	0.00000327	0.00042342	0.00006194	0.00005883	0.00000311
610370.00	2380440.00	0.00027032	0.00006316	0.00005992	0.00000324	0.00049806	0.00006404	0.00006091	0.00000312
610870.00	2380440.00	0.0002492	0.00006242	0.0000593	0.00000312	0.0004681	0.00006373	0.00006068	0.00000305
611370.00	2380440.00	0.00019124	0.00005969	0.00005668	0.00000302	0.00029915	0.00006392	0.00006091	0.00000301
611870.00	2380440.00	0.00019193	0.00005927	0.00005645	0.00000282	0.0003011	0.00006319	0.00006036	0.00000283
612370.00	2380440.00	0.00019643	0.00005909	0.00005648	0.00000261	0.00031541	0.00006227	0.00005965	0.00000262
612870.00	2380440.00	0.00025655	0.00006003	0.00005766	0.00000237	0.00048146	0.00006087	0.00005851	0.00000236
613370.00	2380440.00	0.00031596	0.00005984	0.00005765	0.00000219	0.00050341	0.00005938	0.0000572	0.00000218
613870.00	2380440.00	0.00012518	0.0000427	0.00004024	0.00000246	0.00020636	0.00004657	0.00004403	0.00000254
614370.00	2380440.00	0.0001854	0.00005594	0.00005384	0.0000021	0.00028652	0.00005999	0.00005787	0.00000213
614870.00	2380440.00	0.00018542	0.00005546	0.00005341	0.00000205	0.00028939	0.0000596	0.00005751	0.00000209
615370.00	2380440.00	0.00031411	0.00005647	0.00005466	0.00000181	0.0003689	0.00005522	0.00005345	0.00000177
615870.00	2380440.00	0.00030244	0.00005598	0.00005421	0.00000177	0.00038351	0.00005495	0.00005322	0.00000173
616370.00	2380440.00	0.0003009	0.0000554	0.00005366	0.00000174	0.00037912	0.00005439	0.0000527	0.00000169
616870.00	2380440.00	0.00017984	0.00005349	0.00005171	0.00000178	0.0002822	0.00005654	0.00005478	0.00000175
617370.00	2380440.00	0.00023515	0.00005421	0.00005251	0.0000017	0.0004185	0.00005472	0.00005306	0.00000165
617870.00	2380440.00	0.00030028	0.00005349	0.00005182	0.00000167	0.00035891	0.00005254	0.00005092	0.00000162
618370.00	2380440.00	0.00031904	0.00005263	0.00005099	0.00000164	0.00031351	0.00005136	0.00004976	0.0000016
618870.00	2380440.00	0.00017245	0.00005084	0.00004914	0.0000017	0.00026988	0.00005409	0.00005239	0.00000169
619370.00	2380440.00	0.00017871	0.00005087	0.00004923	0.00000164	0.00029369	0.00005325	0.00005165	0.00000161
619870.00	2380440.00	0.00023181	0.00005101	0.00004942	0.00000159	0.00040412	0.00005155	0.00005001	0.00000154
590370.00	2380940.00	0.00030161	0.00007794	0.00007022	0.00000771	0.00028017	0.00008105	0.00007346	0.00000759
590870.00	2380940.00	0.00032304	0.00007444	0.00006734	0.00000711	0.00028378	0.00007732	0.00007022	0.0000071
591370.00	2380940.00	0.00082307	0.00007956	0.00007318	0.00000638	0.00040222	0.0000761	0.00006965	0.00000645
591870.00	2380940.00	0.0004599	0.00006951	0.00006372	0.00000579	0.00030481	0.00007039	0.0000645	0.00000589
592370.00	2380940.00	0.00065683	0.0000699	0.00006469	0.0000052	0.00034913	0.00006807	0.00006278	0.00000529
592870.00	2380940.00	0.00058721	0.00006616	0.00006144	0.00000472	0.00032786	0.00006464	0.00005988	0.00000476
593370.00	2380940.00	0.00064554	0.00006542	0.00006107	0.00000435	0.00034343	0.00006274	0.00005841	0.00000433
593870.00	2380940.00	0.00084041	0.00006809	0.00006398	0.00000412	0.00040929	0.00006242	0.0000584	0.00000402
594370.00	2380940.00	0.00037861	0.0000715	0.00006726	0.00000425	0.00100419	0.00007779	0.00007379	0.00000401
594870.00	2380940.00	0.00099404	0.00007263	0.00006866	0.00000397	0.00051687	0.00006362	0.0000599	0.00000372
595370.00	2380940.00	0.00096645	0.0000736	0.00006961	0.00000399	0.00050609	0.00006432	0.00006061	0.0000037
595870.00	2380940.00	0.00094986	0.00007578	0.0000717	0.00000408	0.00050586	0.00006612	0.00006236	0.00000376
596370.00	2380940.00	0.00097055	0.00008024	0.000076	0.00000425	0.00057158	0.00006982	0.00006594	0.00000388
596870.00	2380940.00	0.00094893	0.00008553	0.00008107	0.00000446	0.00069273	0.00007497	0.00007092	0.00000405
597370.00	2380940.00	0.00093144	0.00008654	0.00008195	0.00000459	0.00053293	0.0000763	0.00007205	0.00000425
597870.00	2380940.00	0.00065782	0.00008596	0.00008118	0.00000478	0.0004715	0.00007966	0.00007518	0.00000448

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2380940.00	0.00064971	0.00008885	0.00008393	0.00000492	0.00046404	0.00008301	0.00007833	0.00000468
598870.00	2380940.00	0.00064483	0.00009139	0.0000864	0.00000498	0.0004625	0.00008605	0.00008121	0.00000484
599370.00	2380940.00	0.00062365	0.00009296	0.00008802	0.00000494	0.00045243	0.00008851	0.00008359	0.00000492
599870.00	2380940.00	0.00060509	0.00009399	0.0000892	0.00000479	0.00044861	0.00009051	0.00008563	0.00000488
600370.00	2380940.00	0.00061928	0.00009483	0.00009032	0.00000451	0.00046525	0.00009205	0.00008736	0.00000469
600870.00	2380940.00	0.00056629	0.000093	0.00008884	0.00000416	0.0004403	0.00009185	0.00008742	0.00000443
601370.00	2380940.00	0.00032181	0.00009058	0.00008659	0.00000399	0.00055855	0.00009924	0.0000951	0.00000414
601870.00	2380940.00	0.00041974	0.00009272	0.00008916	0.00000356	0.00084461	0.00009723	0.00009358	0.00000365
602370.00	2380940.00	0.00043556	0.00008967	0.00008647	0.0000032	0.00082186	0.00009343	0.00009015	0.00000328
602870.00	2380940.00	0.0003567	0.00008471	0.00008179	0.00000293	0.00068535	0.00009014	0.00008714	0.000003
603370.00	2380940.00	0.00050133	0.00008121	0.00007865	0.00000256	0.00050023	0.00008155	0.00007893	0.00000261
603870.00	2380940.00	0.00041718	0.00007835	0.00007595	0.00000241	0.0005841	0.00008041	0.00007801	0.0000024
604370.00	2380940.00	0.00027137	0.00007384	0.00007149	0.00000234	0.0005187	0.00008052	0.00007818	0.00000234
604870.00	2380940.00	0.00024687	0.00007054	0.00006828	0.00000226	0.00046032	0.00007761	0.00007538	0.00000223
605370.00	2380940.00	0.00032265	0.00006975	0.00006762	0.00000213	0.00055719	0.00007281	0.00007079	0.00000202
605870.00	2380940.00	0.00033971	0.00006776	0.00006564	0.00000212	0.0005216	0.00006953	0.00006756	0.00000196
606370.00	2380940.00	0.00035913	0.00006607	0.00006391	0.00000216	0.00047394	0.00006654	0.00006458	0.00000197
606870.00	2380940.00	0.00035796	0.00006471	0.00006245	0.00000226	0.00045023	0.00006463	0.0000626	0.00000203
607370.00	2380940.00	0.00020207	0.00006143	0.00005888	0.00000255	0.00034915	0.00006704	0.00006472	0.00000232
607870.00	2380940.00	0.00031644	0.00006298	0.00006036	0.00000261	0.00046056	0.00006314	0.00006082	0.00000232
608370.00	2380940.00	0.00027213	0.00006232	0.00005951	0.00000282	0.00047362	0.00006348	0.00006096	0.00000253
608870.00	2380940.00	0.00028124	0.00006252	0.00005954	0.00000299	0.00051218	0.00006358	0.00006086	0.00000271
609370.00	2380940.00	0.00023721	0.00006158	0.00005846	0.00000312	0.00044571	0.00006353	0.00006065	0.00000289
609870.00	2380940.00	0.00023111	0.00006124	0.00005805	0.00000319	0.0004287	0.00006316	0.00006016	0.000003
610370.00	2380940.00	0.00019873	0.00005986	0.00005665	0.0000032	0.00033021	0.0000631	0.00006003	0.00000308
610870.00	2380940.00	0.00028489	0.00006141	0.00005832	0.00000309	0.0004986	0.00006176	0.00005877	0.00000299
611370.00	2380940.00	0.00043036	0.00006139	0.00005845	0.00000294	0.00037734	0.00005873	0.00005584	0.00000289
611870.00	2380940.00	0.00024971	0.00006	0.0000572	0.0000028	0.00046704	0.00006105	0.00005828	0.00000277
612370.00	2380940.00	0.00018895	0.00005749	0.00005481	0.00000268	0.00029636	0.00006121	0.00005852	0.00000269
612870.00	2380940.00	0.00018685	0.00005675	0.00005424	0.00000251	0.00029043	0.00006061	0.00005808	0.00000253
613370.00	2380940.00	0.00031456	0.0000586	0.00005637	0.00000223	0.00049312	0.00005812	0.00005589	0.00000223
613870.00	2380940.00	0.0001236	0.00004182	0.00003933	0.00000249	0.00020357	0.00004563	0.00004306	0.00000257
614370.00	2380940.00	0.00014706	0.00004986	0.00004754	0.00000232	0.00022805	0.00005376	0.00005137	0.00000239
614870.00	2380940.00	0.00025768	0.00005596	0.00005408	0.00000187	0.00043282	0.00005597	0.00005413	0.00000184
615370.00	2380940.00	0.00019147	0.00005466	0.00005281	0.00000185	0.00031368	0.00005688	0.00005505	0.00000183
615870.00	2380940.00	0.00028248	0.00005481	0.00005307	0.00000174	0.0004	0.00005412	0.00005242	0.0000017
616370.00	2380940.00	0.00024724	0.00005433	0.00005262	0.00000171	0.00042381	0.00005444	0.00005278	0.00000167
616870.00	2380940.00	0.00032873	0.00005324	0.00005158	0.00000166	0.00029443	0.00005166	0.00005004	0.00000162
617370.00	2380940.00	0.00023153	0.00005316	0.00005151	0.00000166	0.00041284	0.00005363	0.00005202	0.00000161
617870.00	2380940.00	0.00021034	0.00005245	0.00005081	0.00000164	0.00038208	0.00005343	0.00005183	0.0000016
618370.00	2380940.00	0.00029721	0.00005185	0.00005025	0.0000016	0.00034803	0.00005087	0.00004932	0.00000155
618870.00	2380940.00	0.0003106	0.00005108	0.00004951	0.00000158	0.0003143	0.00004989	0.00004835	0.00000153
619370.00	2380940.00	0.00017133	0.00004948	0.00004783	0.00000165	0.00026838	0.00005264	0.00005099	0.00000165
619870.00	2380940.00	0.00018673	0.00004976	0.00004819	0.00000157	0.00032267	0.00005136	0.00004983	0.00000153
588472.38	2364388.75	0.00079872	0.00044199	0.00042047	0.00002152	0.00117786	0.00042685	0.00040351	0.00002334
588972.38	2364388.75	0.00085685	0.00048149	0.00045959	0.0000219	0.00123016	0.00046789	0.00044604	0.00002185
589472.38	2364388.75	0.00089883	0.00050662	0.00048071	0.00002592	0.00127574	0.00050369	0.00048101	0.00002268
589972.38	2364388.75	0.00194328	0.00052339	0.0004948	0.00002859	0.00215073	0.00053955	0.0005183	0.00002126
590472.38	2364388.75	0.00260538	0.00049805	0.00045605	0.00004201	0.0015878	0.00051395	0.00048415	0.0000298
590972.38	2364388.75	0.00267405	0.00045111	0.00039625	0.00005486	0.00143708	0.00046913	0.00042499	0.00004415
588472.38	2364888.75	0.00077471	0.00042494	0.00040574	0.00001921	0.0011327	0.00041222	0.00039216	0.00002006
588972.38	2364888.75	0.00082155	0.00045547	0.00043487	0.00002059	0.00117852	0.00044685	0.00042731	0.00001955
589472.38	2364888.75	0.00084789	0.00046895	0.00044357	0.00002538	0.0012091	0.00047271	0.00045137	0.00002134
589972.38	2364888.75	0.00083195	0.00045476	0.0004227	0.00003206	0.00122084	0.00048324	0.00045951	0.00002373
590472.38	2364888.75	0.00239951	0.00044848	0.00040747	0.00004101	0.00138745	0.00046172	0.00043192	0.0000298
590972.38	2364888.75	0.0015114	0.00038124	0.00032926	0.00005198	0.00089263	0.0004077	0.00036482	0.00004288
588472.38	2365388.75	0.00075033	0.0004076	0.00039001	0.00001759	0.00109202	0.00039801	0.00038034	0.00001766
588972.38	2365388.75	0.00078138	0.00042868	0.00040932	0.00001935	0.00111445	0.00042506	0.00040764	0.00001743
589472.38	2365388.75	0.00079479	0.00043284	0.00040849	0.00002435	0.00113195	0.00044258	0.00042297	0.00001962
589972.38	2365388.75	0.00079371	0.00041711	0.00038365	0.00003345	0.00116736	0.00044077	0.00041495	0.00002582
590472.38	2365388.75	0.00078787	0.0003815	0.00034042	0.00004109	0.00155625	0.00043988	0.00040884	0.00003104
590972.38	2365388.75	0.00265191	0.00038369	0.00033666	0.00004702	0.00150306	0.00038965	0.00034925	0.0000404
588472.38	2365888.75	0.00072392	0.00038952	0.00037317	0.00001635	0.00104769	0.00038309	0.00036738	0.00001571
588972.38	2365888.75	0.00073699	0.0004029	0.00038489	0.00001801	0.00104889	0.00040507	0.00038961	0.00001546
589472.38	2365888.75	0.00074857	0.00040043	0.00037665	0.00002378	0.00107069	0.0004147	0.00039603	0.00001867
589972.38	2365888.75	0.00073199	0.00038031	0.00034897	0.00003134	0.00109504	0.00040956	0.00038613	0.00002343
590472.38	2365888.75	0.0007105	0.0003511	0.00031111	0.00003998	0.00111469	0.00038623	0.00035455	0.00003168
590972.38	2365888.75	0.00071967	0.00031636	0.00027225	0.00004411	0.0015469	0.00037678	0.00033857	0.00003821
588472.38	2366388.75	0.00069719	0.00037156	0.000356	0.00001556	0.00100548	0.00036844	0.00035402	0.00001443
588972.38	2366388.75	0.00070955	0.00037876	0.00036049	0.00001826	0.00101139	0.00038404	0.0003687	0.00001534

Particle Phase		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
589472.38	2366388.75	0.0007666	0.00037185	0.00035038	0.00002146	0.00155011	0.00040767	0.00039149	0.00001618
589972.38	2366388.75	0.00069432	0.00034871	0.00031866	0.00003005	0.00115621	0.00038611	0.00036369	0.00002242
590472.38	2366388.75	0.00066797	0.00032149	0.00028384	0.00003766	0.00109803	0.00035927	0.00032908	0.00003019
590972.38	2366388.75	0.00067607	0.00029193	0.00025115	0.00004079	0.00142779	0.00034658	0.00031058	0.000036
588472.38	2366888.75	0.00066756	0.00035331	0.0003385	0.00001481	0.00095847	0.00035351	0.00034025	0.00001327
588972.38	2366888.75	0.00067556	0.00035534	0.00033741	0.00001793	0.00096594	0.0003642	0.00034951	0.00001469
589472.38	2366888.75	0.00082762	0.00034944	0.00032824	0.00002119	0.00178876	0.00038454	0.00036871	0.00001583
589972.38	2366888.75	0.00181828	0.00034215	0.00031444	0.00002771	0.00104035	0.00034597	0.00032534	0.00002063
590472.38	2366888.75	0.00071822	0.00030005	0.00026489	0.00003516	0.00162406	0.00034933	0.00032077	0.00002856
590972.38	2366888.75	0.00071439	0.00027445	0.00023686	0.00003759	0.00176469	0.000329	0.00029525	0.00003375
591758.19	2356560.25	0.01126788	0.0095405	0.00671667	0.00282385	0.02900486	0.0140817	0.01225676	0.00182494
592258.19	2356560.25	0.00250237	0.00799336	0.00192223	0.00607116	0.028678	0.01903148	0.01496849	0.004063
592758.19	2356560.25	0.01311194	0.01235134	0.01056994	0.0017814	0.01319646	0.01621143	0.01069249	0.00551894
593258.19	2356560.25	0.01039373	0.00919448	0.00838311	0.00081136	0.03206906	0.02751391	0.02585915	0.00165478
593758.19	2356560.25	0.00766657	0.00682354	0.00643715	0.00038639	0.02054445	0.01704218	0.01643542	0.00060676
594258.19	2356560.25	0.00590322	0.00514006	0.00490362	0.00023643	0.01357674	0.01047627	0.01014794	0.00032832
591758.19	2357060.25	0.01484712	0.0151079	0.01402278	0.00108511	0.02413313	0.01840715	0.01697455	0.00143263
592258.19	2357060.25	0.0098124	0.00901264	0.00760221	0.00141042	0.03386331	0.03170817	0.03018985	0.00151831
592758.19	2357060.25	0.01020455	0.00858529	0.00784173	0.00074357	0.02495707	0.0192696	0.01800545	0.00126415
593258.19	2357060.25	0.00823477	0.00756466	0.00677578	0.00078888	0.02069912	0.0167507	0.01571651	0.00103417
593758.19	2357060.25	0.00621782	0.00557525	0.00515169	0.00042356	0.01402912	0.01169414	0.01099711	0.00069703
594258.19	2357060.25	0.0044159	0.00369278	0.00339861	0.00029416	0.00927418	0.00680238	0.00639751	0.00040488
591758.19	2357560.25	0.01060378	0.00994511	0.00930181	0.0006433	0.0137742	0.01154463	0.01091756	0.00062707
592258.19	2357560.25	0.00659513	0.00548188	0.00473585	0.00074603	0.01910546	0.01599586	0.015144	0.00085185
592758.19	2357560.25	0.0072405	0.00549904	0.00507759	0.00042145	0.01272604	0.0090182	0.00828176	0.00073645
593258.19	2357560.25	0.00552177	0.00449484	0.00407192	0.00042291	0.01204668	0.00810543	0.00766156	0.00044387
593758.19	2357560.25	0.00476107	0.00417017	0.0037307	0.00043948	0.00972139	0.00708683	0.00659475	0.00049208
594258.19	2357560.25	0.00388669	0.00342155	0.00310364	0.00031791	0.00722225	0.0053962	0.00497338	0.00042282
591758.19	2358060.25	0.00679107	0.00596598	0.00552058	0.0004454	0.00951166	0.00700122	0.00665315	0.00034807
592258.19	2358060.25	0.00435878	0.00341216	0.00292675	0.00048541	0.01082972	0.00789771	0.00735213	0.00054559
592758.19	2358060.25	0.00508533	0.00380476	0.00346501	0.00033975	0.00768307	0.00489739	0.00440945	0.00048794
593258.19	2358060.25	0.00402131	0.00290301	0.0026658	0.00023721	0.00920364	0.00547737	0.00514536	0.00033202
593758.19	2358060.25	0.00356179	0.00276156	0.00249292	0.00026865	0.00650888	0.00400712	0.00373263	0.00027449
594258.19	2358060.25	0.00311354	0.00257101	0.00229697	0.00027404	0.00566775	0.00369989	0.0034128	0.00028709
591758.19	2358560.25	0.00451873	0.00369131	0.0033504	0.00034092	0.00725175	0.00490352	0.0046582	0.00024533
592258.19	2358560.25	0.00312876	0.00230436	0.00195645	0.00034791	0.00708385	0.00444542	0.00405779	0.00038763
592758.19	2358560.25	0.00359203	0.00258494	0.00231799	0.00026694	0.00533137	0.00297434	0.00263133	0.00034301
593258.19	2358560.25	0.00324701	0.00218183	0.00199807	0.00018376	0.00696329	0.00381293	0.00354439	0.00026854
593758.19	2358560.25	0.00268379	0.00186917	0.00169628	0.00017289	0.00503155	0.00267871	0.00249218	0.00018653
594258.19	2358560.25	0.00253902	0.00187206	0.0016878	0.00018426	0.00431769	0.00244128	0.00225356	0.00018772
591758.19	2359060.25	0.00322492	0.0024606	0.00218647	0.00027413	0.00552534	0.00344814	0.00325005	0.00019809
592258.19	2359060.25	0.00239208	0.00165877	0.00139357	0.0002652	0.00515065	0.00282147	0.00252897	0.0002925
592758.19	2359060.25	0.00260006	0.00179042	0.0015784	0.00021202	0.00409118	0.00200638	0.00175044	0.00025594
593258.19	2359060.25	0.0028171	0.00183575	0.00166937	0.00016638	0.00512769	0.00258332	0.00236867	0.00021464
593758.19	2359060.25	0.00215802	0.00138057	0.00126023	0.00012035	0.00454372	0.00211917	0.00196467	0.0001545
594258.19	2359060.25	0.00201243	0.00134704	0.00121668	0.00013036	0.00337629	0.00168783	0.00155771	0.00013012

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
600239.00	2356326.00	0.00121257	0.00006589	0.00006275	0.00000314	0.00172098	0.00007287	0.00006934	0.00000353
601239.00	2356326.00	0.00104858	0.00005482	0.00005228	0.00000254	0.00146944	0.00005988	0.00005707	0.00000281
602239.00	2356326.00	0.0009236	0.00004672	0.00004461	0.00000211	0.00128225	0.00005063	0.00004832	0.00000231
596178.25	2355631.50	0.00321642	0.00022938	0.00020585	0.00002352	0.00514517	0.00030842	0.00028097	0.00002746
596670.63	2355544.50	0.00273771	0.00018764	0.00016942	0.00001822	0.00423084	0.00024059	0.00021992	0.00002067
597163.06	2355457.75	0.00237079	0.0001567	0.00014215	0.00001455	0.00356939	0.00019382	0.00017766	0.00001616
598147.88	2355284.00	0.00185439	0.00011501	0.00010502	0.00000999	0.00269324	0.00013552	0.00012473	0.00001078
599132.63	2355110.50	0.00151548	0.00008916	0.00008178	0.00000739	0.00215223	0.000102	0.00009416	0.00000784
600117.44	2354936.75	0.00127937	0.00007202	0.00006626	0.00000577	0.00179095	0.00008089	0.00007482	0.00000607
601102.25	2354763.25	0.00110721	0.00006006	0.00005537	0.00000469	0.001535	0.00006666	0.00006174	0.00000491
602087.06	2354589.50	0.0009765	0.00005132	0.00004738	0.00000394	0.00134462	0.00005653	0.00005241	0.00000412
594823.13	2355385.50	0.00609409	0.00052616	0.00046522	0.00006094	0.01106742	0.00074578	0.00069316	0.00005263
595058.06	2355300.00	0.00540103	0.00045509	0.0004045	0.00005059	0.00955127	0.00062735	0.00058319	0.00004416
595527.94	2355129.00	0.00435307	0.0003499	0.00031354	0.00003636	0.0073444	0.00045895	0.00042682	0.00003213
595997.75	2354958.00	0.00361134	0.00027754	0.00025022	0.00002732	0.0058622	0.00035015	0.00032573	0.00002442
596467.63	2354787.00	0.0030656	0.0002259	0.00020462	0.00002127	0.00482072	0.0002765	0.0002573	0.0000192
596937.44	2354616.00	0.00265095	0.00018786	0.00017081	0.00001705	0.00406145	0.00022464	0.00020912	0.00001552
597877.19	2354274.00	0.0020716	0.00013716	0.00012545	0.00001171	0.00304952	0.0001586	0.00014777	0.00001083
598816.88	2353931.75	0.00169413	0.00010605	0.00009742	0.00000863	0.00242135	0.00011987	0.00011178	0.00000809
599756.56	2353589.75	0.00143163	0.00008559	0.00007887	0.00000672	0.00200157	0.00009529	0.00008893	0.00000637
600696.25	2353247.75	0.00123971	0.00007137	0.00006592	0.00000545	0.0017044	0.00007864	0.00007343	0.00000521
601635.94	2352905.75	0.00109371	0.00006103	0.00005646	0.00000458	0.00148417	0.00006675	0.00006235	0.0000044
593971.06	2355326.00	0.00857979	0.00065398	0.00059765	0.00005632	0.0162911	0.00102409	0.00090608	0.000118
594187.56	2355201.00	0.00744988	0.00055119	0.00050719	0.000044	0.01358305	0.00081125	0.00072528	0.00008597
594404.06	2355076.00	0.00654445	0.00047007	0.00043487	0.0000352	0.01152938	0.00065716	0.00059261	0.00006455
594620.56	2354951.00	0.0058102	0.00040532	0.0003766	0.00002872	0.00994784	0.00054323	0.00049343	0.0000498
594837.06	2354826.00	0.00520426	0.00035301	0.00032918	0.00002383	0.00870454	0.00045688	0.00041758	0.0000393
595270.06	2354576.00	0.00427161	0.00027495	0.00025784	0.00001711	0.00689435	0.00033719	0.00031133	0.00002586
595703.13	2354326.00	0.00359411	0.00022064	0.00020778	0.00001286	0.00566355	0.00026044	0.0002424	0.00001804
596136.13	2354076.00	0.00308354	0.00018151	0.0001715	0.00001002	0.00478121	0.00020854	0.00019527	0.00001326
596569.13	2353826.00	0.00268754	0.00015241	0.00014438	0.00000803	0.00412185	0.00017178	0.00016162	0.00001016
597435.13	2353326.00	0.002125	0.00011313	0.00010761	0.00000552	0.0032127	0.00012442	0.00011786	0.00000656
598301.19	2352826.00	0.00174956	0.00008855	0.00008448	0.00000406	0.00262362	0.00009612	0.00009147	0.00000465
599167.19	2352326.00	0.00148521	0.00007213	0.00006898	0.00000315	0.00221255	0.00007777	0.00007425	0.00000353
600033.25	2351826.00	0.00129129	0.0000606	0.00005805	0.00000255	0.00191127	0.00006513	0.00006232	0.00000281
600899.25	2351326.00	0.00114369	0.00005214	0.00005002	0.00000212	0.0016812	0.00005596	0.00005364	0.00000232
593579.56	2355201.00	0.00935265	0.00071232	0.00058743	0.0001249	0.01515639	0.00097188	0.0008175	0.00015438
593771.06	2355040.50	0.00801541	0.0005892	0.00049369	0.00009551	0.0137442	0.00083726	0.00071906	0.0001182
593962.63	2354879.75	0.0069504	0.00049417	0.00041905	0.00007512	0.01220916	0.0007097	0.00061753	0.00009217
594154.13	2354719.00	0.00609295	0.00041976	0.0003593	0.00006047	0.01078186	0.00060019	0.00052694	0.00007325
594345.63	2354558.25	0.0053965	0.00036073	0.00031112	0.00004961	0.00952921	0.00050971	0.00045045	0.00005926
594537.13	2354397.75	0.00482381	0.00031329	0.00027194	0.00004135	0.0084581	0.00043606	0.00038735	0.00004871
594920.19	2354076.25	0.00394368	0.00024287	0.00021298	0.00002989	0.00677607	0.00032698	0.0002928	0.00003418
595303.19	2353754.75	0.00330824	0.00019425	0.00017173	0.00002253	0.00556076	0.00025343	0.00022836	0.00002507
595686.19	2353433.50	0.00283436	0.00015944	0.0001419	0.00001754	0.00466537	0.00020244	0.00018333	0.00001911
596069.25	2353112.00	0.00246917	0.00013364	0.00011965	0.00001399	0.00398896	0.00016587	0.00015087	0.000015
596835.25	2352469.25	0.00195075	0.00009882	0.00008938	0.00000944	0.00306204	0.00011852	0.00010858	0.00000994
597601.31	2351826.50	0.00160581	0.00007709	0.00007032	0.00000677	0.00247079	0.00009032	0.00008324	0.00000708
598367.38	2351183.75	0.00136345	0.00006267	0.00005756	0.00000511	0.00206584	0.00007223	0.00006689	0.00000534
599133.38	2350541.00	0.00118589	0.0000526	0.00004859	0.00000401	0.00177316	0.0000599	0.0000557	0.0000042
593138.88	2355253.50	0.00859568	0.000753	0.00055554	0.00019746	0.00716473	0.00036209	0.00030521	0.00005688
593203.19	2355177.00	0.00818202	0.0006983	0.00052589	0.00017241	0.00745525	0.00037041	0.00031201	0.00005841
593363.88	2354985.50	0.00721238	0.00058086	0.00045471	0.00012615	0.0078261	0.00037474	0.00031658	0.00005816
593524.56	2354794.00	0.0063948	0.00048914	0.00039331	0.00009583	0.0078252	0.00036123	0.00030717	0.00005406
593685.25	2354602.50	0.00571586	0.00041691	0.00034189	0.00007503	0.00759964	0.0003376	0.00028947	0.00004813
593846.00	2354411.00	0.00514873	0.00035928	0.00029904	0.00006024	0.00726378	0.00031041	0.00026821	0.00004221
594006.69	2354219.50	0.00466996	0.00031262	0.00026333	0.00004929	0.00687627	0.00028295	0.00024616	0.0000368
594167.38	2354027.75	0.00426301	0.00027444	0.00023342	0.00004102	0.00647453	0.00025693	0.00022487	0.00003207
594488.75	2353644.75	0.00361792	0.0002168	0.00018715	0.00002964	0.00571263	0.00021194	0.00018732	0.00002461
594810.13	2353261.75	0.00312806	0.00017595	0.00015355	0.0000224	0.00504113	0.00017628	0.00015697	0.00001932
595131.56	2352878.75	0.00274545	0.00014601	0.00012849	0.00001752	0.00446726	0.00014857	0.00013303	0.00001554
595452.94	2352495.75	0.00244112	0.00012343	0.00010934	0.00001409	0.00398104	0.00012686	0.00011407	0.00001278
596095.75	2351729.75	0.00199338	0.00009227	0.00008254	0.00000973	0.00322574	0.00009599	0.00008683	0.00000916
596738.50	2350963.75	0.00167955	0.00007232	0.00006514	0.00000718	0.00267946	0.00007576	0.00006879	0.00000697
597381.31	2350197.75	0.00144625	0.0000588	0.00005322	0.00000558	0.0022731	0.00006187	0.00005631	0.00000556
592839.00	2355286.75	0.00457539	0.0003883	0.00024574	0.00014256	0.00329775	0.00018071	0.00015858	0.00002213
592889.00	2355200.25	0.004376	0.00035518	0.00023369	0.00012149	0.00326806	0.00016843	0.00014877	0.00001966
592939.00	2355113.50	0.00418766	0.00032663	0.00022196	0.00010467	0.00329151	0.00015916	0.00014126	0.0000179
592989.00	2355027.00	0.00401284	0.00030172	0.00021078	0.00009094	0.0033527	0.00015197	0.00013564	0.00001632
593114.00	2354810.50	0.00362168	0.00025037	0.00018456	0.0000658	0.00355889	0.0001398	0.00012622	0.00001358

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593239.00	2354594.00	0.00331356	0.00021232	0.00016274	0.00004958	0.00372367	0.00013147	0.00011956	0.00001191
593364.00	2354377.50	0.00306308	0.00018319	0.00014457	0.00003862	0.00379789	0.00012397	0.00011338	0.0000106
593489.00	2354161.00	0.00285496	0.00016024	0.00012933	0.0000309	0.00378883	0.0001166	0.00010706	0.00000953
593614.00	2353944.50	0.00267489	0.00014166	0.00011644	0.00002522	0.00372681	0.00010936	0.00010072	0.00000864
593739.00	2353728.00	0.00251529	0.00012642	0.00010545	0.00002097	0.0036315	0.00010239	0.00009452	0.00000787
593989.00	2353295.00	0.00224256	0.00010304	0.00008785	0.00001519	0.00339165	0.00008954	0.00008293	0.00000661
594239.00	2352862.00	0.0020153	0.00008606	0.00007451	0.00001155	0.00313169	0.00007842	0.00007278	0.00000564
594489.00	2352429.00	0.00182462	0.00007331	0.00006416	0.00000915	0.00288092	0.00006907	0.00006418	0.00000489
594739.00	2351995.75	0.00166247	0.00006339	0.00005595	0.00000744	0.00264522	0.0000612	0.0000569	0.0000043
595239.00	2351129.75	0.00140591	0.00004926	0.00004397	0.00000529	0.00224104	0.00004909	0.00004564	0.00000345
595739.00	2350263.75	0.00121265	0.00003982	0.00003577	0.00000405	0.00192588	0.00004052	0.00003763	0.00000288
592615.25	2355292.25	0.00247982	0.00015906	0.00012491	0.00003415	0.00273229	0.0001638	0.00014238	0.00002142
592649.44	2355198.25	0.00233445	0.00014438	0.00011566	0.00002873	0.0024701	0.00014442	0.00012619	0.00001823
592683.63	2355104.50	0.00219693	0.00013159	0.00010699	0.0000246	0.00226199	0.00012848	0.00011276	0.00001573
592717.81	2355010.50	0.00207096	0.00012049	0.0000991	0.00002139	0.00209861	0.00011519	0.00010152	0.00001368
592752.00	2354916.50	0.00195801	0.00011061	0.00009198	0.00001862	0.00197384	0.00010413	0.00009213	0.000012
592837.56	2354681.50	0.00172999	0.00009075	0.00007721	0.00001354	0.00179365	0.00008381	0.00007486	0.00000894
592923.06	2354446.50	0.00156662	0.00007636	0.00006613	0.00001023	0.00173802	0.0000706	0.00006365	0.00000694
593008.56	2354211.75	0.00144895	0.00006581	0.00005781	0.000008	0.00173998	0.00006161	0.00005606	0.00000555
593094.06	2353976.75	0.00135859	0.00005779	0.00005133	0.00000647	0.00175878	0.00005511	0.00005056	0.00000454
593179.56	2353741.75	0.00128408	0.00005142	0.00004612	0.0000053	0.00177779	0.00005017	0.00004637	0.00000379
593265.06	2353507.00	0.00122068	0.00004628	0.00004185	0.00000443	0.00179188	0.00004627	0.00004305	0.00000322
593436.06	2353037.00	0.00111507	0.00003852	0.00003527	0.00000324	0.00179301	0.00004033	0.0000379	0.00000243
593607.06	2352567.25	0.00102912	0.00003296	0.00003044	0.00000252	0.00176207	0.00003588	0.00003396	0.00000193
593778.06	2352097.50	0.00095696	0.00002879	0.00002675	0.00000205	0.00170773	0.00003232	0.00003073	0.00000159
593949.13	2351627.50	0.00089393	0.00002552	0.00002381	0.00000171	0.00163753	0.00002933	0.00002798	0.00000135
594291.13	2350687.75	0.00078893	0.00002074	0.00001947	0.00000127	0.00148111	0.00002462	0.00002357	0.00000105
592412.63	2355341.25	0.00174239	0.00011995	0.00009545	0.00002451	0.00356573	0.00019609	0.00017288	0.0000232
592430.00	2355242.75	0.0016367	0.00010857	0.00008826	0.0000203	0.00303927	0.00016545	0.00014607	0.00001937
592447.38	2355144.25	0.0015286	0.00009827	0.00008118	0.00001709	0.00264745	0.00014199	0.00012549	0.0000165
592464.75	2355045.75	0.00142415	0.00008907	0.00007449	0.00001458	0.00234401	0.00012346	0.00010923	0.00001424
592482.13	2354947.25	0.00132552	0.00008087	0.0000683	0.00001257	0.00210229	0.00010848	0.00009609	0.00001239
592499.50	2354848.75	0.00123454	0.00007361	0.00006267	0.00001094	0.00190624	0.00009617	0.0000853	0.00001087
592542.88	2354602.50	0.00104242	0.00005896	0.00005096	0.000008	0.00154711	0.00007346	0.00006537	0.00000809
592586.31	2354356.50	0.0008951	0.00004818	0.0000421	0.00000608	0.0013142	0.00005826	0.00005202	0.00000623
592629.69	2354110.25	0.00078275	0.00004015	0.00003538	0.00000476	0.00115892	0.00004764	0.0000427	0.00000494
592673.13	2353864.00	0.00069641	0.00003407	0.00003023	0.00000384	0.00105599	0.00004001	0.00003601	0.000004
592716.50	2353617.75	0.00062894	0.00002938	0.00002622	0.00000317	0.00098644	0.00003437	0.00003107	0.0000033
592759.94	2353371.50	0.0005755	0.00002568	0.00002304	0.00000265	0.0009401	0.00003011	0.00002735	0.00000277
592846.75	2352879.25	0.00049851	0.00002037	0.00001843	0.00000194	0.00088577	0.00002425	0.00002221	0.00000203
592933.56	2352386.75	0.00044625	0.0000168	0.00001531	0.00000149	0.00085574	0.00002047	0.0000189	0.00000157
593020.44	2351894.25	0.0004089	0.00001429	0.00001309	0.0000012	0.00083323	0.00001787	0.0000166	0.00000126
593107.25	2351402.00	0.00038203	0.00001247	0.00001148	0.00000099	0.00081189	0.00001595	0.0000149	0.00000105
593280.88	2350417.25	0.00034378	0.00001001	0.00000928	0.00000073	0.00076812	0.0000133	0.00001252	0.00000078
592239.00	2355426.00	0.00158513	0.00012076	0.00009168	0.00002908	0.00694957	0.00034909	0.00029931	0.00004978
592239.00	2355326.00	0.00150313	0.00010919	0.00008566	0.00002354	0.00563724	0.00027374	0.00024022	0.00003352
592239.00	2355226.00	0.00141312	0.00009886	0.00007933	0.00001953	0.0047005	0.0002216	0.00019708	0.00002453
592239.00	2355126.00	0.00131933	0.00008946	0.00007302	0.00001645	0.00402396	0.00018401	0.00016494	0.00001907
592239.00	2355026.00	0.00122726	0.00008104	0.000067	0.00001404	0.00352843	0.000156	0.00014054	0.00001547
592239.00	2354926.00	0.00113973	0.00007351	0.00006141	0.0000121	0.00316009	0.00013459	0.00012164	0.00001295
592239.00	2354826.00	0.00105843	0.00006683	0.0000563	0.00001053	0.00287908	0.0001178	0.00010672	0.00001108
592239.00	2354576.00	0.00088461	0.00005329	0.0000456	0.00000769	0.00239741	0.00008848	0.00008048	0.000008
592239.00	2354326.00	0.0007485	0.00004325	0.00003741	0.00000583	0.00207707	0.00006965	0.00006355	0.0000061
592239.00	2354076.00	0.0006428	0.00003573	0.00003116	0.00000457	0.00183954	0.00005666	0.00005184	0.00000482
592239.00	2353826.00	0.00056034	0.00003003	0.00002635	0.00000368	0.00165322	0.00004725	0.00004334	0.00000391
592239.00	2353576.00	0.00049531	0.00002562	0.00002259	0.00000303	0.00150363	0.00004019	0.00003697	0.00000322
592239.00	2353326.00	0.00044364	0.00002216	0.00001962	0.00000253	0.00138021	0.00003475	0.00003206	0.00000269
592239.00	2352826.00	0.00036811	0.00001718	0.00001532	0.00000186	0.00118026	0.000027	0.00002502	0.00000197
592239.00	2352326.00	0.0003177	0.00001387	0.00001244	0.00000143	0.00103075	0.00002185	0.00002033	0.00000152
592239.00	2351826.00	0.00028313	0.00001159	0.00001044	0.00000115	0.00091291	0.00001825	0.00001702	0.00000123
592239.00	2351326.00	0.00025867	0.00000995	0.000009	0.00000095	0.00081903	0.00001562	0.0000146	0.00000102
592239.00	2350326.00	0.00022367	0.00000777	0.00000707	0.00000071	0.00068074	0.00001211	0.00001135	0.00000076
592100.06	2355538.25	0.00181035	0.00014132	0.00010402	0.0000373	0.01515731	0.0008292	0.00062683	0.00020237
592082.75	2355439.75	0.00176694	0.00012923	0.00009978	0.00002944	0.01233788	0.00063811	0.00049645	0.00014167
592065.38	2355341.25	0.00168837	0.00011763	0.00009381	0.00002382	0.01026346	0.00050192	0.00040139	0.00010053
592048.00	2355242.75	0.0015961	0.00010704	0.00008729	0.00001975	0.00872054	0.00040314	0.0003307	0.00007245
592030.63	2355144.25	0.00149843	0.0000973	0.00008067	0.00001663	0.00756025	0.00033066	0.0002772	0.00005346
592013.25	2355045.75	0.00140061	0.00008847	0.00007427	0.00001419	0.00667909	0.00027654	0.00023606	0.00004048
591995.88	2354947.25	0.00130706	0.00008051	0.00006828	0.00001223	0.00600217	0.00023534	0.00020389	0.00003145
591978.50	2354848.75	0.00121991	0.00007341	0.00006277	0.00001064	0.00546677	0.00020323	0.00017819	0.00002504

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591935.13	2354602.50	0.001034	0.00005891	0.00005115	0.00000777	0.00454732	0.00014879	0.00013325	0.00001554
591891.69	2354356.50	0.00088983	0.00004812	0.00004222	0.0000059	0.00395033	0.00011547	0.00010475	0.00001072
591848.31	2354110.25	0.00077996	0.00004002	0.0000354	0.00000462	0.00353295	0.00009352	0.00008554	0.00000799
591804.88	2353864.00	0.00069687	0.00003389	0.00003016	0.00000373	0.00322062	0.00007799	0.00007192	0.00000606
591761.50	2353617.75	0.00063382	0.00002917	0.0000261	0.00000306	0.00297488	0.00006655	0.00006187	0.00000468
591718.06	2353371.50	0.00058581	0.00002549	0.00002292	0.00000256	0.00277419	0.00005792	0.00005419	0.00000373
591631.25	2352879.25	0.00052023	0.00002025	0.00001837	0.00000188	0.00244826	0.00004574	0.0000432	0.00000254
591544.44	2352386.75	0.00047774	0.00001678	0.00001533	0.00000145	0.00219714	0.00003766	0.0000358	0.00000186
591457.56	2351894.25	0.00044693	0.00001436	0.00001319	0.00000117	0.0019868	0.00003189	0.00003045	0.00000143
591370.75	2351402.00	0.00042221	0.00001259	0.00001162	0.00000097	0.00180799	0.00002758	0.00002642	0.00000116
591197.13	2350417.25	0.00038241	0.00001017	0.00000945	0.00000072	0.00152328	0.00002161	0.00002078	0.00000082
591999.56	2355668.25	0.00273597	0.00023603	0.00014697	0.00008907	0.03300248	0.00175971	0.00142203	0.00033768
591965.38	2355574.25	0.00286472	0.00021782	0.00015027	0.00006755	0.02679009	0.0013895	0.00110969	0.00027981
591931.19	2355480.25	0.00287429	0.00020049	0.00014752	0.00005297	0.02245686	0.00112308	0.00089307	0.00023001
591897.00	2355386.25	0.00280593	0.0001838	0.00014118	0.00004263	0.01933239	0.00092521	0.00073686	0.00018835
591862.75	2355292.25	0.00270173	0.00016845	0.00013329	0.00003516	0.01703424	0.00077522	0.00062092	0.0001543
591828.56	2355198.25	0.00257395	0.00015417	0.00012466	0.00002951	0.01529006	0.00065915	0.00053231	0.00012684
591794.38	2355104.50	0.00243741	0.00014116	0.00011599	0.00002517	0.01394057	0.00056807	0.00046316	0.00010491
591760.19	2355010.50	0.00229926	0.00012927	0.00010757	0.00002171	0.01284006	0.00049451	0.00040721	0.00008731
591726.00	2354916.50	0.00216634	0.00011857	0.00009966	0.00001892	0.01193207	0.00043471	0.00036151	0.00007319
591640.44	2354681.50	0.00186703	0.0000963	0.00008247	0.00001383	0.01022701	0.00032687	0.00027814	0.00004874
591554.94	2354446.50	0.00162169	0.00007933	0.00006885	0.00001049	0.00901925	0.00025661	0.00022258	0.00003403
591469.44	2354211.75	0.00143083	0.0000665	0.00005829	0.00000821	0.00811763	0.00020858	0.00018376	0.00002482
591383.94	2353976.75	0.00128513	0.0000567	0.0000501	0.0000066	0.00740162	0.00017393	0.0001553	0.00001863
591298.44	2353741.75	0.00117629	0.00004916	0.00004374	0.00000541	0.00682755	0.00014829	0.00013393	0.00001437
591212.94	2353507.00	0.00109569	0.0000433	0.00003878	0.00000452	0.00635162	0.00012875	0.00011741	0.00001134
591041.94	2353037.00	0.00098738	0.00003492	0.00003162	0.0000033	0.00558328	0.00010104	0.00009355	0.00000749
590870.94	2352567.25	0.00091812	0.00002934	0.0000268	0.00000254	0.00499446	0.0000827	0.00007744	0.00000526
590699.94	2352097.50	0.00086906	0.00002543	0.00002339	0.00000204	0.00450395	0.00006964	0.00006576	0.00000388
590528.88	2351627.50	0.00082893	0.00002253	0.00002083	0.00000171	0.00407846	0.00005983	0.00005685	0.00000298
590186.88	2350687.75	0.00075982	0.00001846	0.0000172	0.00000126	0.00339113	0.00004616	0.00004426	0.0000019
591889.00	2355719.75	0.00513448	0.0006282	0.00025764	0.00037057	0.05984003	0.00304117	0.00270062	0.00034055
591839.00	2355633.25	0.00560037	0.00056752	0.00027492	0.0002926	0.0488754	0.00239394	0.00211892	0.00027501
591789.00	2355546.50	0.00579721	0.00051518	0.00027882	0.00023635	0.04117159	0.00193995	0.00170796	0.000232
591739.00	2355460.00	0.00580517	0.00046892	0.00027391	0.000195	0.03576372	0.00161445	0.00141437	0.00020009
591689.00	2355373.25	0.00569783	0.00042738	0.0002637	0.00016368	0.03189444	0.0013727	0.00119783	0.00017487
591639.00	2355286.75	0.00551895	0.00039011	0.00025071	0.00013939	0.0291133	0.00119001	0.00103586	0.00015415
591589.00	2355200.25	0.00529646	0.00035647	0.00023636	0.00012011	0.02704387	0.00104742	0.00091074	0.00013668
591539.00	2355113.50	0.0050538	0.0003261	0.00022163	0.00010448	0.02544031	0.00093293	0.00081122	0.00012171
591489.00	2355027.00	0.00481201	0.00029908	0.00020741	0.00009167	0.02419878	0.00084041	0.00073159	0.00010882
591364.00	2354810.50	0.00424975	0.00024329	0.00017538	0.00006791	0.02196759	0.0006705	0.00058706	0.00008344
591239.00	2354594.00	0.00378787	0.00020136	0.00014946	0.0000519	0.0203497	0.00055468	0.00048945	0.00006523
591114.00	2354377.50	0.00343893	0.00017008	0.0001293	0.00004078	0.01898454	0.00047007	0.00041831	0.00005176
590989.00	2354161.00	0.00318987	0.00014667	0.00011388	0.00003279	0.01776474	0.0004056	0.00036385	0.00004176
590864.00	2353944.50	0.00301665	0.00012888	0.00010202	0.00002686	0.01666355	0.00035508	0.00032084	0.00003425
590739.00	2353728.00	0.00288687	0.00011487	0.00009251	0.00002235	0.0156718	0.00031459	0.00028608	0.00002851
590489.00	2353295.00	0.00270695	0.0000945	0.00007838	0.00001612	0.01397798	0.00025425	0.00023369	0.00002056
590239.00	2352862.00	0.00258179	0.00008057	0.00006843	0.00001214	0.01257554	0.00021168	0.0001962	0.00001548
589989.00	2352429.00	0.00248291	0.00007046	0.00006102	0.00000945	0.01139092	0.00018025	0.00016817	0.00001208
589739.00	2351995.75	0.00239509	0.00006278	0.00005521	0.00000756	0.01036947	0.00015611	0.00014641	0.0000097
589239.00	2351129.75	0.00223231	0.0000518	0.0000466	0.0000052	0.0087268	0.00012175	0.00011517	0.00000659
588739.00	2350263.75	0.00208284	0.00004427	0.00004044	0.00000383	0.00745819	0.00009865	0.00009387	0.00000478
591853.31	2355866.25	0.00894036	0.00119734	0.0004494	0.00074795	0.12962767	0.00728532	0.00636566	0.00091967
591789.06	2355789.75	0.0109652	0.00112104	0.00054494	0.00057611	0.10776107	0.00576538	0.005134	0.00063137
591724.75	2355713.25	0.01228641	0.00105984	0.00060269	0.00045715	0.09069675	0.0046362	0.00418065	0.00045554
591660.50	2355636.50	0.01294596	0.0009972	0.00062606	0.00037115	0.07753267	0.00378926	0.00344508	0.00034418
591596.19	2355560.00	0.01312544	0.00093305	0.00062572	0.00030733	0.06762839	0.00315552	0.00288465	0.00027087
591531.94	2355483.25	0.01298466	0.00086846	0.00060952	0.00025894	0.06013971	0.00266991	0.00245002	0.00021989
591467.63	2355406.75	0.01264832	0.00080601	0.00058483	0.00022119	0.05460049	0.00229785	0.00211446	0.0001834
591403.38	2355330.25	0.01218232	0.00074632	0.00055503	0.00019129	0.0504272	0.00200591	0.00184973	0.00015617
591339.13	2355253.50	0.01164576	0.0006901	0.00052289	0.00016721	0.04725933	0.00177281	0.00163761	0.0001352
591274.81	2355177.00	0.01109813	0.00063854	0.00049116	0.00014738	0.04489788	0.00158691	0.00146808	0.00011883
591114.13	2354985.50	0.00981106	0.00052825	0.00041796	0.00011029	0.04101477	0.00125316	0.00116387	0.00008929
590953.44	2354794.00	0.00875974	0.00044327	0.00035795	0.00008532	0.03863599	0.00103623	0.00096571	0.00007052
590792.75	2354602.50	0.00796859	0.0003788	0.00031091	0.00006789	0.03689166	0.00088469	0.00082747	0.00005722
590632.00	2354411.00	0.00739859	0.00032976	0.00027449	0.00005527	0.03539076	0.00077248	0.00072529	0.00004718
590471.31	2354219.50	0.00698702	0.00029172	0.00024586	0.00004586	0.03400425	0.00068601	0.00064636	0.00003966
590310.63	2354027.75	0.00668192	0.00026153	0.00022286	0.00003866	0.03266619	0.00061683	0.00058295	0.00003387
589989.25	2353644.75	0.00629042	0.00021761	0.00018899	0.00002862	0.03011446	0.00051263	0.00048701	0.00002562
589667.88	2353261.75	0.00605464	0.00018746	0.00016534	0.00002212	0.02774066	0.00043706	0.00041699	0.00002006

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
589346.44	2352878.75	0.00588316	0.00016545	0.00014776	0.00001769	0.02556347	0.00037952	0.00036329	0.00001622
589025.06	2352495.75	0.00573807	0.00014865	0.00013409	0.00001457	0.02357827	0.00033404	0.00032059	0.00001346
588382.25	2351729.75	0.00544748	0.00012421	0.00011369	0.00001052	0.02017542	0.00026686	0.00025704	0.00000982
591779.38	2355940.25	0.02341302	0.00243654	0.00123021	0.00120634	0.1896386	0.01130202	0.00964649	0.00165555
591702.75	2355876.00	0.02921271	0.00243507	0.00153538	0.00089969	0.16774092	0.00962625	0.00833739	0.00128886
591626.19	2355811.75	0.03290906	0.00241446	0.00171883	0.00069564	0.14872694	0.00822017	0.00719893	0.00102124
591549.56	2355747.50	0.03473291	0.00234954	0.00179669	0.00055285	0.13286617	0.00706113	0.00623875	0.00082239
591472.94	2355683.25	0.0351486	0.00224771	0.0017984	0.00044931	0.11994344	0.00611234	0.00543992	0.00067242
591396.38	2355619.00	0.0346735	0.00212469	0.00175182	0.00037287	0.1095666	0.0053359	0.00477846	0.00055744
591319.75	2355554.75	0.03361475	0.00199176	0.00167682	0.00031494	0.10131983	0.00469908	0.00423098	0.00046811
591243.13	2355490.50	0.03220982	0.00185666	0.0015867	0.00026996	0.09476102	0.00417352	0.00377577	0.00039776
591166.56	2355426.00	0.03060129	0.00172297	0.00148888	0.00023409	0.08949567	0.00373383	0.00339309	0.00034074
591089.94	2355361.75	0.02896497	0.00159714	0.00139242	0.00020472	0.08530114	0.00336798	0.00307314	0.00029484
590898.44	2355201.00	0.02504493	0.00131937	0.00116815	0.00015122	0.07783031	0.00267829	0.00246563	0.00021266
590706.94	2355040.50	0.02172821	0.00109811	0.00098214	0.00011597	0.07300708	0.00220682	0.00204692	0.0001599
590515.38	2354879.75	0.01907549	0.00092462	0.00083306	0.00009156	0.06946224	0.00186796	0.00174406	0.0001239
590323.88	2354719.00	0.01703592	0.00078978	0.00071575	0.00007403	0.0666036	0.00161596	0.00151748	0.00009848
590132.38	2354558.25	0.01549926	0.00068453	0.0006235	0.00006103	0.06410672	0.00142221	0.0013423	0.00007991
589940.88	2354397.75	0.01434384	0.00060157	0.0005504	0.00005118	0.06185238	0.00126969	0.00120359	0.0000661
589557.81	2354076.25	0.01279256	0.00048097	0.0004435	0.00003747	0.05772419	0.00104381	0.00099679	0.00004703
589174.81	2353754.75	0.0118627	0.00039961	0.0003713	0.0000283	0.053933	0.00088508	0.00084997	0.00003511
588791.81	2353433.50	0.01127406	0.00034256	0.00032044	0.00002213	0.05042962	0.00076719	0.00074011	0.00002708
588408.75	2353112.00	0.01085761	0.00030064	0.00028285	0.00001779	0.04720188	0.00067591	0.00065445	0.00002146
591719.38	2356026.00	0.05342785	0.00671334	0.00297401	0.00373932	0.21719711	0.01303693	0.01131241	0.00172452
591632.75	2355976.00	0.06678769	0.00656638	0.00373155	0.00283484	0.20042371	0.01171565	0.01025743	0.00145825
591546.19	2355926.00	0.0753185	0.00641667	0.00419722	0.00221944	0.18452536	0.01049433	0.00925264	0.0012417
591459.56	2355876.00	0.07947546	0.00618581	0.00440124	0.00178459	0.17031473	0.0094047	0.0083395	0.00106519
591373.00	2355826.00	0.08037129	0.00588265	0.00441553	0.00146712	0.15810277	0.00845215	0.00753114	0.00092102
591286.38	2355776.00	0.07919078	0.00553839	0.00430866	0.00122974	0.14781529	0.00762614	0.00682379	0.00080235
591199.75	2355726.00	0.0766489	0.00517303	0.00412939	0.00104365	0.13924837	0.00691232	0.00620824	0.00070409
591113.19	2355676.00	0.07334781	0.00480833	0.0039125	0.00089583	0.13215459	0.00629587	0.00567361	0.00062226
591026.56	2355626.00	0.0696709	0.0044569	0.00368035	0.00077656	0.12627524	0.00576209	0.00520854	0.00055354
590939.94	2355576.00	0.06587286	0.00412538	0.00344661	0.00067878	0.121344	0.00529749	0.00480229	0.00049521
590723.44	2355451.00	0.05685441	0.00340381	0.00290326	0.00050055	0.11200211	0.00437248	0.00398955	0.00038293
590506.94	2355326.00	0.04922472	0.00283172	0.00244888	0.00038284	0.10544652	0.0036933	0.00338987	0.00030343
590290.44	2355201.00	0.04312436	0.00238508	0.00208372	0.00030136	0.10047376	0.00318065	0.00293549	0.00024516
590073.94	2355076.00	0.03837725	0.00203652	0.00179374	0.00024278	0.096377	0.00278359	0.00258204	0.00020154
589857.44	2354951.00	0.03471855	0.00176239	0.00156305	0.00019934	0.09280982	0.00246894	0.00230072	0.00016822
589640.94	2354826.00	0.03188297	0.00154411	0.00137778	0.00016633	0.08954713	0.00221426	0.00207192	0.00014234
589207.94	2354576.00	0.02791863	0.00122494	0.00110455	0.00012039	0.08359446	0.00182916	0.00172343	0.00010573
588774.88	2354326.00	0.02533867	0.00100796	0.0009168	0.00009116	0.07816373	0.00155278	0.00147114	0.00008164
588341.88	2354076.00	0.02354323	0.00085378	0.00078233	0.00007144	0.0731471	0.00134516	0.00128023	0.00006493
591675.19	2356120.75	0.06410645	0.00729121	0.00363916	0.00365206	0.18838966	0.01111887	0.00995337	0.00116552
591581.25	2356086.50	0.07977832	0.00727333	0.00455488	0.00271846	0.17516431	0.0100986	0.00912421	0.00097439
591487.25	2356052.50	0.08963562	0.00720668	0.00511486	0.00209183	0.16232242	0.00914286	0.00831703	0.00082584
591393.25	2356018.25	0.09430955	0.00701411	0.00535872	0.00165539	0.15066841	0.00828363	0.00757455	0.00070908
591299.31	2355984.00	0.09513251	0.00671266	0.00537292	0.00133974	0.1403885	0.00752104	0.00690549	0.00061555
591205.31	2355949.75	0.09346018	0.00634507	0.00523856	0.00110652	0.13143069	0.00684792	0.0063085	0.00053942
591111.38	2355915.50	0.09022755	0.00594648	0.00501799	0.00092849	0.12370224	0.00625697	0.00578014	0.00047683
591017.38	2355881.25	0.08614326	0.00554246	0.00475294	0.00078952	0.11704095	0.00573732	0.00531283	0.00042449
590923.44	2355847.25	0.08163113	0.00514701	0.00446932	0.00067768	0.11124027	0.00527873	0.00489875	0.00037998
590829.44	2355813.00	0.07702644	0.00477258	0.0041852	0.00058738	0.10618037	0.00487412	0.00453224	0.00034188
590594.56	2355727.50	0.06615114	0.00395163	0.00352595	0.00042568	0.09591492	0.00405036	0.0037823	0.00026807
590359.63	2355642.00	0.0569455	0.00329556	0.00297426	0.0003213	0.08809581	0.00342804	0.00321341	0.00021463
590124.69	2355556.50	0.0495373	0.00278007	0.00252968	0.0002504	0.08186727	0.00294847	0.00277333	0.00017514
589889.75	2355471.00	0.04368103	0.00237497	0.0021747	0.00020027	0.07670369	0.0025716	0.00242623	0.00014536
589654.88	2355385.50	0.03905293	0.0020538	0.00189019	0.0001636	0.07226157	0.00226969	0.0021472	0.00012249
589419.94	2355300.00	0.03536341	0.00179609	0.00165999	0.00013611	0.06828764	0.00202311	0.00191849	0.00010462
588950.06	2355129.00	0.02998172	0.0014157	0.00131732	0.00009838	0.06141691	0.00164752	0.00156876	0.00007876
588480.25	2354958.00	0.02627991	0.00115395	0.00107953	0.00007442	0.05564584	0.00137804	0.00131635	0.00006169
591648.13	2356221.75	0.03742001	0.00414717	0.00206988	0.00207728	0.12691277	0.00756438	0.00670334	0.00086104
591549.63	2356204.50	0.04561901	0.00410809	0.00255112	0.00155698	0.11472485	0.00668318	0.00597692	0.00070626
591451.13	2356187.00	0.05037849	0.00403298	0.00282521	0.00120778	0.10392977	0.00591707	0.00532813	0.00058894
591352.69	2356169.75	0.05209999	0.00387842	0.00291661	0.00096182	0.09445247	0.00525109	0.00475336	0.00049773
591254.19	2356152.25	0.05184663	0.00367316	0.00289123	0.00078194	0.0864128	0.00468361	0.00425771	0.0004259
591155.69	2356135.00	0.05030675	0.00343602	0.00278886	0.00064716	0.07947652	0.00419342	0.00382533	0.00036809
591057.25	2356117.50	0.04809861	0.00319339	0.00264928	0.00054411	0.07360681	0.00377578	0.00345448	0.0003213
590958.75	2356100.25	0.04548381	0.00295102	0.00248798	0.00046304	0.06850956	0.00341296	0.00313031	0.00028266
590860.25	2356083.00	0.04274185	0.00271976	0.00232181	0.00039795	0.06410586	0.00309921	0.00284873	0.00025048
590761.81	2356065.50	0.04006517	0.00250641	0.00216116	0.00034525	0.06029959	0.00282837	0.00260489	0.00022348

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
590515.56	2356022.00	0.0339049	0.00204542	0.00179526	0.00025016	0.05254896	0.00228648	0.0021147	0.00017178
590269.38	2355978.75	0.02884511	0.00168456	0.00149607	0.00018849	0.04665951	0.0018879	0.00175223	0.00013567
590023.19	2355935.25	0.02488311	0.00140703	0.00126039	0.00014664	0.04204254	0.00158864	0.00147907	0.00010957
589777.00	2355892.00	0.0217822	0.00119109	0.00107406	0.00011704	0.03827141	0.00135752	0.00126729	0.00009023
589530.75	2355848.50	0.01935124	0.00102199	0.00092652	0.00009547	0.03515285	0.00117628	0.00110084	0.00007544
589284.56	2355805.00	0.01741159	0.00088735	0.00080801	0.00007934	0.03248437	0.00103106	0.00096707	0.00006399
588792.19	2355718.25	0.01455095	0.00068988	0.00063251	0.00005737	0.02809915	0.00081489	0.00076704	0.00004786
588299.75	2355631.50	0.0125705	0.00055543	0.00051188	0.00004354	0.02464993	0.00066426	0.00062695	0.00003731
591539.00	2356326.00	0.01936841	0.00215588	0.00101275	0.00114314	0.06258722	0.00370639	0.0031828	0.0005236
591439.00	2356326.00	0.02061544	0.00196272	0.00108017	0.00088255	0.0543879	0.00315067	0.00271807	0.00043261
591339.00	2356326.00	0.02076783	0.00178634	0.00108597	0.00070036	0.04767434	0.00270021	0.00233712	0.00036309
591239.00	2356326.00	0.02023191	0.00162139	0.00105359	0.00056779	0.04219041	0.00233377	0.00202476	0.00030902
591139.00	2356326.00	0.01933425	0.00146928	0.00100079	0.00046848	0.0376834	0.00203342	0.00176727	0.00026615
591039.00	2356326.00	0.01825023	0.00133072	0.00093829	0.00039243	0.03393679	0.00178506	0.0015534	0.00023166
590939.00	2356326.00	0.0170926	0.0012057	0.00087253	0.00033317	0.03079731	0.00157786	0.00137458	0.00020328
590839.00	2356326.00	0.01593575	0.00109336	0.0008076	0.00028576	0.02814751	0.00140381	0.0012241	0.00017971
590739.00	2356326.00	0.01482383	0.00099317	0.00074573	0.00024744	0.02587378	0.00125637	0.00109633	0.00016004
590489.00	2356326.00	0.01235647	0.00078882	0.00060997	0.00017886	0.02144754	0.0009742	0.00085149	0.00012271
590239.00	2356326.00	0.01037649	0.00063684	0.00050227	0.00013457	0.01826578	0.00077705	0.00068039	0.00009666
589989.00	2356326.00	0.00883035	0.00052306	0.00041847	0.0001046	0.01587951	0.00063452	0.00055671	0.00007781
589739.00	2356326.00	0.00762709	0.00043671	0.00035324	0.00008348	0.01402369	0.0005285	0.00046467	0.00006383
589489.00	2356326.00	0.0066799	0.00037001	0.00030192	0.00006809	0.01254337	0.00044768	0.00039447	0.0000532
589239.00	2356326.00	0.00592462	0.00031765	0.00026107	0.00005658	0.01133014	0.00038472	0.00033971	0.000045
588739.00	2356326.00	0.00481485	0.0002422	0.00020138	0.00004082	0.00946143	0.00029451	0.00026108	0.00003343
588239.00	2356326.00	0.00404937	0.0001918	0.00016091	0.00003088	0.00809004	0.00023433	0.00020842	0.00002591
591549.63	2356447.50	0.01244874	0.00186913	0.00064192	0.00122722	0.03500708	0.00222072	0.00170914	0.00051158
591451.13	2356465.00	0.01286226	0.00161536	0.00066026	0.00095509	0.02973853	0.0018582	0.00142726	0.00043093
591352.69	2356482.25	0.01271306	0.0014115	0.00064848	0.00076302	0.02560989	0.00157549	0.00120791	0.00036757
591254.19	2356499.75	0.01222373	0.00124046	0.00061913	0.00062133	0.02230054	0.00134991	0.00103294	0.00031697
591155.69	2356517.00	0.01157576	0.0010973	0.00058164	0.00051566	0.01964828	0.00116901	0.00089314	0.00027588
591057.25	2356534.50	0.01085916	0.00097582	0.00054116	0.00043467	0.01747212	0.00102107	0.00077888	0.00024219
590958.75	2356551.75	0.01013211	0.00087173	0.0005008	0.00037093	0.01568597	0.00089939	0.00068531	0.00021408
590860.25	2356569.00	0.00942474	0.00078151	0.00046212	0.00031939	0.01420083	0.00079806	0.00060754	0.00019052
590761.81	2356586.50	0.00875446	0.00070343	0.00042587	0.00027756	0.01294945	0.00071269	0.0005421	0.00017058
590515.56	2356630.00	0.00729026	0.00054978	0.00034787	0.00020192	0.01058353	0.000551	0.00041873	0.00013227
590269.38	2356673.25	0.0061192	0.0004394	0.00028671	0.00015269	0.0089498	0.00043914	0.00033408	0.00010506
590023.19	2356716.75	0.00519691	0.00035821	0.00023915	0.00011907	0.0077695	0.00035879	0.00027357	0.00008522
589777.00	2356760.00	0.00447195	0.00029732	0.00020208	0.00009525	0.00688519	0.00029943	0.00022904	0.00007039
589530.75	2356803.50	0.00389546	0.00025058	0.00017284	0.00007774	0.00619655	0.00025423	0.00019527	0.00005896
589284.56	2356847.00	0.00343306	0.00021413	0.00014954	0.00006459	0.00564894	0.00021918	0.00016912	0.00005006
588792.19	2356933.75	0.00275056	0.00016208	0.00011548	0.0000466	0.00482913	0.00016926	0.00013187	0.00003739
588299.75	2357020.50	0.00228466	0.00012771	0.00009243	0.00003528	0.00423431	0.0001361	0.00010704	0.00002906
591487.25	2356599.50	0.01271069	0.00146807	0.00071285	0.00075522	0.02153411	0.00149076	0.0010171	0.00047367
591393.25	2356633.75	0.01244977	0.00129211	0.00069116	0.00060095	0.01887157	0.00127961	0.00087967	0.00039994
591299.31	2356668.00	0.01189768	0.00114235	0.00065361	0.00048874	0.01672161	0.0011094	0.00076836	0.00034105
591205.31	2356702.25	0.01121553	0.00101393	0.00060937	0.00040456	0.01496487	0.00097022	0.00067688	0.00029335
591111.38	2356736.50	0.0104907	0.00090419	0.00056374	0.00034045	0.01351584	0.00085542	0.00060088	0.00025454
591017.38	2356770.75	0.00976822	0.00080949	0.00051926	0.00029024	0.01230938	0.00075961	0.00053705	0.00022256
590923.44	2356804.75	0.00907764	0.00072758	0.00047734	0.00025024	0.01130332	0.00067911	0.00048313	0.00019598
590829.44	2356839.00	0.00843003	0.00065609	0.00043868	0.00021741	0.01045298	0.0006107	0.00043703	0.00017367
590594.56	2356924.50	0.00702971	0.0005147	0.00035669	0.00015802	0.00883231	0.00047922	0.00034781	0.00013141
590359.63	2357010.00	0.00592192	0.00041271	0.00029323	0.00011948	0.0076789	0.00038662	0.00028428	0.00010234
590124.69	2357095.50	0.00505392	0.0003375	0.00024429	0.0000932	0.00681635	0.0003192	0.00023754	0.00008166
589889.75	2357181.00	0.00437168	0.00028091	0.0002063	0.0000746	0.0061455	0.00026877	0.0002022	0.00006657
589654.88	2357266.50	0.00382925	0.00023735	0.00017645	0.0000609	0.0056043	0.00023001	0.00017484	0.00005517
589419.94	2357352.00	0.00339272	0.00020334	0.00015269	0.00005065	0.00515676	0.00019958	0.0001532	0.00004638
588950.06	2357523.00	0.00274613	0.00015468	0.00011801	0.00003667	0.00445718	0.00015571	0.00012161	0.0000341
588480.25	2357694.00	0.00230098	0.00012246	0.00009459	0.00002787	0.00392851	0.00012622	0.0001	0.00002622
591286.38	2356876.00	0.01264852	0.00119519	0.00081984	0.00037536	0.01495618	0.00097409	0.00071496	0.00025913
591199.75	2356926.00	0.01176616	0.00106989	0.00075342	0.00031647	0.01366753	0.00086888	0.0006468	0.00022209
591113.19	2356976.00	0.01090745	0.00096038	0.00069034	0.00027005	0.01255363	0.00077999	0.00058743	0.00019257
591026.56	2357026.00	0.01009888	0.00086436	0.00063191	0.00023245	0.01158654	0.00070385	0.00053547	0.00016838
590939.94	2357076.00	0.00935051	0.00078064	0.00057869	0.00020195	0.01074471	0.00063838	0.00048987	0.00014851
590723.44	2357201.00	0.0077596	0.0006148	0.00046773	0.00014707	0.00905454	0.00050985	0.00039793	0.00011192
590506.94	2357326.00	0.00651942	0.00049438	0.00038304	0.00011134	0.00778234	0.00041673	0.0003294	0.00008733
590290.44	2357451.00	0.0055567	0.00040518	0.00031826	0.00008692	0.0067976	0.00034704	0.00027727	0.00006977
590073.94	2357576.00	0.004803	0.00033779	0.00026822	0.00006957	0.00601859	0.00029389	0.00023688	0.000057
589857.44	2357701.00	0.00420266	0.00028577	0.00022893	0.00005685	0.00539028	0.0002524	0.00020506	0.00004735
589640.94	2357826.00	0.00371934	0.00024501	0.00019774	0.00004726	0.00487456	0.00021953	0.00017958	0.00003996
589207.94	2358076.00	0.00300175	0.00018648	0.00015229	0.00003418	0.00408597	0.00017148	0.00014192	0.00002956

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
588774.88	2358326.00	0.00250381	0.00014755	0.00012159	0.00002596	0.00351601	0.00013881	0.00011595	0.00002285
588341.88	2358576.00	0.00214481	0.00012048	0.00010002	0.00002046	0.00308749	0.00011564	0.00009734	0.0000183
591089.94	2357290.25	0.00957549	0.0009326	0.00073665	0.00019595	0.01165688	0.00077325	0.00062642	0.00014684
590898.44	2357451.00	0.00785168	0.00073318	0.00058943	0.00014375	0.00963731	0.00062053	0.00050752	0.00011301
590706.94	2357611.50	0.00653954	0.00058861	0.00047908	0.00010953	0.00813271	0.00050671	0.00041753	0.00008918
590515.38	2357772.25	0.00553486	0.00048162	0.00039554	0.00008608	0.0069872	0.00042064	0.00034876	0.00007188
590323.88	2357933.00	0.00475381	0.00040084	0.00033146	0.00006938	0.00609849	0.00035454	0.00029555	0.00005899
590132.38	2358093.75	0.00413619	0.00033847	0.00028152	0.00005695	0.00539452	0.00030294	0.00025377	0.00004917
589940.88	2358254.25	0.00364206	0.00028964	0.00024211	0.00004753	0.00482582	0.00026206	0.00022049	0.00004158
589557.81	2358575.75	0.0029091	0.00021946	0.00018495	0.00003451	0.00397084	0.0002025	0.00017164	0.00003086
589174.81	2358897.25	0.00240079	0.00017274	0.00014656	0.00002618	0.00336375	0.00016218	0.00013831	0.00002388
588791.81	2359218.50	0.00203543	0.00014035	0.00011973	0.00002062	0.00291341	0.00013377	0.00011465	0.00001912
588408.75	2359540.00	0.00176471	0.00011705	0.00010032	0.00001673	0.0025683	0.00011304	0.00009729	0.00001576
590953.44	2357858.00	0.00580247	0.00054999	0.00046728	0.00008271	0.00831566	0.00059335	0.00050359	0.00008976
590792.75	2358049.50	0.00486231	0.00044676	0.00038217	0.00006459	0.00705698	0.00048368	0.00041327	0.00007041
590632.00	2358241.00	0.00414486	0.00036939	0.00031765	0.00005174	0.00609259	0.00040095	0.00034454	0.0000564
590471.31	2358432.50	0.00358402	0.00031016	0.0002679	0.00004225	0.00533643	0.00033749	0.00029145	0.00004604
590310.63	2358624.25	0.00313965	0.00026404	0.00022893	0.00003511	0.00473136	0.00028795	0.00024979	0.00003816
589989.25	2359007.25	0.00248822	0.00019834	0.00017314	0.0000252	0.00383396	0.00021731	0.00018996	0.00002735
589667.88	2359390.25	0.00204222	0.0001551	0.00013618	0.00001893	0.00320643	0.00017067	0.00015014	0.00002054
589346.44	2359773.25	0.00172444	0.00012539	0.00011063	0.00001476	0.00274771	0.00013847	0.00012247	0.000016
589025.06	2360156.25	0.00148995	0.00010418	0.00009231	0.00001187	0.00240114	0.00011541	0.00010255	0.00001286
588382.25	2360922.25	0.0011725	0.0000767	0.00006845	0.00000825	0.00191595	0.00008541	0.00007645	0.00000896
590489.00	2359357.00	0.00242475	0.00017663	0.00015883	0.0000178	0.00357048	0.00018839	0.00016829	0.0000201
590239.00	2359790.00	0.00200378	0.00013885	0.00012551	0.00001333	0.00299073	0.00014635	0.00013147	0.00001488
589989.00	2360223.00	0.00170081	0.00011283	0.00010247	0.00001037	0.00256539	0.00011807	0.00010661	0.00001146
589739.00	2360656.25	0.00147568	0.00009422	0.00008591	0.00000831	0.00224592	0.00009817	0.00008905	0.00000912
589239.00	2361522.25	0.0011671	0.00007	0.00006424	0.00000576	0.00180131	0.00007275	0.00006647	0.00000628
588739.00	2362388.25	0.00096848	0.00005538	0.00005107	0.00000431	0.0015089	0.00005764	0.00005296	0.00000468
588239.00	2363254.25	0.00083185	0.00004582	0.00004242	0.0000034	0.00130283	0.00004783	0.00004414	0.00000369
591373.00	2356826.00	0.01350621	0.00133969	0.00088647	0.00045322	0.01645621	0.00109979	0.00079354	0.00030625
591166.56	2357226.00	0.01040451	0.00103332	0.0008085	0.00022481	0.01265702	0.00084879	0.00068414	0.00016465
592239.00	2355526.00	0.00163945	0.00013314	0.00009633	0.00003681	0.00878688	0.00046282	0.00038164	0.00008118
598239.00	2356326.00	0.00176376	0.00010544	0.00009993	0.00000551	0.00261845	0.00012276	0.00011628	0.00000648
599239.00	2356326.00	0.00143708	0.00008168	0.00007763	0.00000405	0.0020758	0.00009214	0.00008751	0.00000464
595685.81	2355718.25	0.00385639	0.00028733	0.00025586	0.00003147	0.00646681	0.00041193	0.00037362	0.00003831
594118.38	2355642.00	0.00931861	0.00086829	0.0007485	0.0001198	0.0186124	0.00134127	0.00124406	0.00009721
594353.31	2355556.50	0.00799953	0.0007262	0.00063286	0.00009334	0.01543352	0.00109045	0.00101265	0.00007781
594588.25	2355471.00	0.00694504	0.00061469	0.00054007	0.00007462	0.01298261	0.00089655	0.00083303	0.00006352
593364.81	2355676.00	0.01371151	0.00112825	0.00099632	0.00013192	0.02819328	0.00211589	0.00176305	0.00035285
593451.44	2355626.00	0.01270288	0.00103575	0.00092003	0.00011572	0.02623371	0.00191306	0.00161752	0.00029554
593538.06	2355576.00	0.01184598	0.00095565	0.00085442	0.00010122	0.02433513	0.0017258	0.00147642	0.00024938
593754.56	2355451.00	0.01001667	0.00078592	0.0007117	0.00007422	0.0198623	0.00132165	0.00115354	0.0001681
592698.63	2355940.25	0.01475123	0.00177141	0.00093873	0.00083268	0.00544487	0.00042817	0.0003091	0.00011907
592775.25	2355876.00	0.0159243	0.0016769	0.00102701	0.0006499	0.00687182	0.00047829	0.0003659	0.00011239
592851.81	2355811.75	0.01629921	0.00158133	0.00105946	0.00052187	0.00861912	0.0005752	0.00043841	0.00013679
592928.44	2355747.50	0.01594122	0.00146811	0.00103965	0.00042846	0.01044753	0.00072036	0.00052777	0.00019259
593005.06	2355683.25	0.01513509	0.00134459	0.00098718	0.00035741	0.0121309	0.0008646	0.00062632	0.00023828
593081.63	2355619.00	0.01427968	0.00123032	0.0009296	0.00030072	0.01358687	0.00097835	0.00071992	0.00025843
593158.25	2355554.75	0.01342438	0.0011271	0.00087103	0.00025607	0.01474156	0.00105533	0.00079784	0.00025749
593234.88	2355490.50	0.01258633	0.00103375	0.00081321	0.00022054	0.0154923	0.00109328	0.00084953	0.00024376
593311.44	2355426.00	0.01178026	0.00094896	0.00075705	0.00019191	0.01585994	0.00109784	0.00087386	0.00022398
593388.06	2355361.75	0.01102089	0.00087316	0.00070406	0.0001691	0.01593535	0.00107938	0.00087661	0.00020277
592431.81	2356096.25	0.00286432	0.00292391	0.00015252	0.00277139	0.00981123	0.00160603	0.00048226	0.00112377
592496.13	2356019.50	0.00522439	0.00206242	0.00029209	0.00177034	0.00608157	0.00052122	0.00033055	0.00019067
592560.38	2355943.00	0.00742212	0.00166743	0.00043691	0.00123052	0.00488841	0.00039938	0.00028519	0.00011419
592624.69	2355866.25	0.00904792	0.00145733	0.00055275	0.00090458	0.00479747	0.00036617	0.00027916	0.00008701
592688.94	2355789.75	0.01024415	0.00133716	0.00064417	0.00069299	0.00503431	0.00035078	0.00028242	0.00006836
592753.25	2355713.25	0.01042312	0.0012119	0.00066458	0.00054733	0.00509825	0.00033176	0.00027475	0.00005701
592817.50	2355636.50	0.01041016	0.00111358	0.0006707	0.00044288	0.00531564	0.00032269	0.00027179	0.0000509
592881.81	2355560.00	0.01018382	0.00102611	0.00066045	0.00036567	0.00561939	0.00032155	0.00027304	0.00004851
592946.06	2355483.25	0.00983288	0.00094631	0.0006391	0.00030721	0.00598832	0.00032721	0.0002782	0.00004901
593010.38	2355406.75	0.00943548	0.00087521	0.00061337	0.00026184	0.00640501	0.00033828	0.00028695	0.00005133
593074.63	2355330.25	0.00902174	0.00081171	0.00058555	0.00022616	0.00681076	0.00035091	0.00029665	0.00005426
592339.00	2356152.75	0.00052767	0.00332094	0.00002763	0.00329333	0.03735004	0.00375029	0.00180566	0.00194463
592389.00	2356066.25	0.00178758	0.0018574	0.00009456	0.00176285	0.01439834	0.00184576	0.00069036	0.00115541
592439.00	2355979.50	0.00310504	0.00125199	0.00016612	0.00108588	0.00897881	0.00072585	0.00045291	0.00027294
592489.00	2355893.00	0.00414108	0.00095697	0.00022383	0.00073314	0.00615209	0.00043224	0.00033403	0.0000982
592539.00	2355806.50	0.00481641	0.00079021	0.00026139	0.00052883	0.00492257	0.00034855	0.000278	0.00007054
592589.00	2355719.75	0.00517579	0.00068057	0.00028217	0.0003984	0.00438594	0.0003034	0.0002482	0.00005519

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592639.00	2355633.25	0.00526045	0.0005981	0.00028684	0.00031126	0.00405141	0.00026953	0.00022534	0.00004419
592689.00	2355546.50	0.00516828	0.00053135	0.00028117	0.00025018	0.00378069	0.0002409	0.00020495	0.00003595
592739.00	2355460.00	0.00499195	0.00047603	0.00027083	0.0002052	0.00355845	0.00021672	0.00018679	0.00002993
592789.00	2355373.25	0.00478524	0.00042801	0.00025839	0.00016962	0.00339288	0.00019662	0.00017117	0.00002545
592307.38	2356138.00	0.00032	0.00105995	0.00001747	0.00104249	0.05156829	0.00441523	0.00252824	0.001887
592341.63	2356044.00	0.00106916	0.0005459	0.00005907	0.00048683	0.02121183	0.00213433	0.00100341	0.00113091
592375.81	2355950.00	0.00180259	0.00037399	0.00010003	0.00027397	0.01301691	0.00108549	0.0006218	0.00046368
592410.00	2355856.25	0.00237106	0.0003043	0.00013111	0.00017319	0.00877757	0.00056986	0.00043481	0.00013505
592444.19	2355762.25	0.0027239	0.00026681	0.00014859	0.00011822	0.00628333	0.00039128	0.00032533	0.00006594
592478.44	2355668.25	0.0028658	0.00023958	0.00015391	0.00008567	0.00488612	0.00030751	0.00025985	0.00004766
592512.63	2355574.25	0.00285876	0.00021604	0.00015106	0.00006498	0.00404556	0.00025486	0.00021707	0.00003779
592546.81	2355480.25	0.0027644	0.00019488	0.00014373	0.00005115	0.00348004	0.00021691	0.00018611	0.00003079
592581.00	2355386.25	0.00262626	0.00017574	0.00013443	0.00004131	0.00306055	0.00018749	0.00016198	0.00002551
592273.75	2356129.00	0.00021824	0.00056182	0.00001262	0.0005492	0.07153809	0.00562123	0.00356991	0.00205133
592291.06	2356030.50	0.00070758	0.00030528	0.00004185	0.00026343	0.03204416	0.00255515	0.0015183	0.00103684
592308.44	2355932.00	0.00120191	0.00022454	0.00007168	0.00015286	0.01929051	0.00155173	0.00089633	0.00065541
592325.81	2355833.50	0.00158802	0.00019328	0.00009433	0.00009894	0.01327921	0.00089965	0.00061668	0.00028297
592343.19	2355735.00	0.00182091	0.0001755	0.00010655	0.00006894	0.00949478	0.00055956	0.00044533	0.00011423
592360.56	2355636.75	0.00191384	0.00016066	0.00011011	0.00005055	0.00701	0.00039173	0.00033387	0.00005786
592377.94	2355538.25	0.0019068	0.00014639	0.00010784	0.00003855	0.00537937	0.00029763	0.00025973	0.0000379
592395.25	2355439.75	0.00183974	0.00013271	0.00010237	0.00003034	0.00430252	0.00023775	0.00020903	0.00002871
592239.00	2356126.00	0.0001856	0.00047752	0.00001108	0.00046644	0.09824964	0.00751141	0.00499871	0.0025127
592239.00	2356026.00	0.000583	0.00026791	0.00003584	0.00023207	0.04934723	0.00332869	0.0023755	0.0009532
592239.00	2355926.00	0.00101076	0.00020174	0.00006284	0.0001389	0.02978222	0.0020938	0.00137895	0.00071485
592239.00	2355826.00	0.00134615	0.00017494	0.00008318	0.00009176	0.02057399	0.00139756	0.00092905	0.00046851
592239.00	2355726.00	0.00155222	0.00015927	0.00009441	0.00006486	0.01508981	0.00093476	0.00066931	0.00026545
592239.00	2355626.00	0.00164009	0.00014601	0.00009802	0.00004799	0.01137874	0.00064267	0.00049868	0.00014399
592204.25	2356129.00	0.0001835	0.00053677	0.00001092	0.00052585	0.13046802	0.01003266	0.00675746	0.00327523
592186.94	2356030.50	0.00058674	0.00028094	0.00003597	0.00024498	0.07729921	0.00486676	0.00381833	0.00104844
592169.56	2355932.00	0.00104312	0.00020707	0.00006429	0.00014278	0.04825247	0.00294035	0.00227479	0.00066557
592152.19	2355833.50	0.00141983	0.00017997	0.00008647	0.0000935	0.03327872	0.00203485	0.00150707	0.00052778
592134.81	2355735.00	0.00166744	0.00016549	0.00009962	0.00006587	0.02463205	0.00147868	0.00107891	0.00039977
592117.44	2355636.75	0.00178854	0.00015343	0.00010474	0.00004869	0.0190499	0.00109798	0.00081021	0.00028777
592170.63	2356138.00	0.00020157	0.00104633	0.00001165	0.00103468	0.16656497	0.01293911	0.00876201	0.00417712
592136.38	2356044.00	0.00071372	0.00052778	0.00004185	0.00048593	0.11764851	0.00753272	0.00597446	0.00155827
592102.19	2355950.00	0.00137306	0.00035496	0.00007955	0.00027542	0.08027626	0.00463747	0.00390645	0.00073101
592068.00	2355856.25	0.00197822	0.0002883	0.00011194	0.00017636	0.05683723	0.00315302	0.00265034	0.00050268
592033.81	2355762.25	0.00244337	0.00025675	0.00013466	0.00012209	0.04228173	0.00230017	0.00189437	0.0004058
592189.00	2356239.50	0.00000731	0.0065951	0.0000003	0.00659481	0.19961469	0.01723707	0.01054524	0.00669184
592139.00	2356152.75	0.00023873	0.00263194	0.00001322	0.00261873	0.20005782	0.01558186	0.01065217	0.0049297
592089.00	2356066.25	0.00099135	0.00151765	0.00005495	0.0014627	0.16758282	0.01125167	0.00871865	0.00253305
592039.00	2355979.50	0.00211832	0.00105283	0.00011477	0.00093806	0.12905461	0.00774227	0.00650069	0.00124159
591989.00	2355893.00	0.00330654	0.00082955	0.00017432	0.00065523	0.0981124	0.00545664	0.0047688	0.00068785
591939.00	2355806.50	0.00435716	0.0007078	0.00022385	0.00048395	0.07565205	0.00400012	0.00354568	0.00045444
592174.75	2356249.50	0.00000782	0.01115397	0.00000032	0.01115367	0.20081987	0.01650062	0.01069531	0.00580531
592110.44	2356172.75	0.00031856	0.0041342	0.0000167	0.00411752	0.22585014	0.01728007	0.01214556	0.00513455
592046.19	2356096.25	0.001591	0.00235176	0.00008305	0.00226871	0.21604288	0.0149136	0.01144668	0.00346695
591981.88	2356019.50	0.00381174	0.00164925	0.00019635	0.00145291	0.18762445	0.01192412	0.00972326	0.00220088
591917.63	2355943.00	0.00641852	0.00133967	0.00032627	0.0010134	0.15680191	0.00932495	0.00792014	0.00140481
592085.81	2356197.50	0.00052514	0.00838468	0.00002574	0.00835897	0.23475363	0.01722017	0.01272133	0.00449889
592009.19	2356133.25	0.00339745	0.00440166	0.00017082	0.00423086	0.24606813	0.0168959	0.01320692	0.00368901
591932.56	2356069.00	0.0091817	0.00302014	0.00047295	0.00254719	0.2345936	0.01525181	0.01240035	0.00285145
591856.00	2356004.50	0.01628009	0.00254318	0.00084965	0.00169354	0.21306306	0.01322553	0.01106161	0.00216394
592065.81	2356226.00	0.00087961	0.02168792	0.00004151	0.0216465	0.22363252	0.01572884	0.0121825	0.00354635
591979.19	2356176.00	0.00688339	0.01224904	0.00034874	0.01190034	0.24370975	0.01613502	0.01320338	0.00293165
592130.25	2356186.50	0.00016812	0.0045417	0.00000881	0.00453292	0.2199906	0.01738749	0.01183783	0.00554969
591806.00	2356076.00	0.03701928	0.00717982	0.00203753	0.0051423	0.23289745	0.01436738	0.01231646	0.00205094
592051.06	2356257.50	0.00106755	0.02300578	0.00004943	0.02295648	0.195789	0.01356499	0.01068312	0.00288188
591957.06	2356223.50	0.00830783	0.01277236	0.00041923	0.01235317	0.20978426	0.01364081	0.01142208	0.00221873
591863.13	2356189.25	0.02443413	0.00895592	0.00132109	0.00763483	0.20936217	0.01306685	0.0113116	0.00175525
591769.13	2356155.00	0.04461844	0.00762434	0.00249655	0.00512781	0.20064365	0.01214864	0.01073105	0.00141761
592042.06	2356291.25	0.00092373	0.01346675	0.00004227	0.01342454	0.15891792	0.01106421	0.00863802	0.0024262
591943.56	2356274.00	0.00589576	0.00732008	0.00028765	0.00703245	0.15970618	0.01045236	0.00867041	0.00178195
591845.06	2356256.50	0.01542825	0.00511715	0.00080313	0.00431402	0.15172952	0.00954394	0.00818239	0.00136154
591746.63	2356239.25	0.02665623	0.00434201	0.00144352	0.0028985	0.13961588	0.00853004	0.00745997	0.00107008
592039.00	2356326.00	0.00075091	0.01014746	0.00003461	0.01011288	0.12187117	0.00860867	0.00655305	0.00205564
591939.00	2356326.00	0.00374325	0.00545837	0.00017898	0.00527941	0.11135568	0.0074004	0.00596118	0.00143922
591839.00	2356326.00	0.00817361	0.00362348	0.00040524	0.00321825	0.09776665	0.00624799	0.00518254	0.00106546
591739.00	2356326.00	0.01270235	0.00279961	0.00064676	0.00215286	0.08434124	0.00523526	0.00441781	0.00081745
591639.00	2356326.00	0.01665532	0.00239629	0.0008625	0.0015338	0.07252586	0.0043927	0.0037465	0.0006462

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
591943.56	2356378.00	0.00310769	0.00549806	0.0001538	0.0053443	0.07514175	0.00519581	0.00392273	0.00127308
591845.06	2356395.50	0.00619314	0.00363708	0.00031382	0.00332328	0.06138668	0.00411646	0.00315341	0.00096306
591746.63	2356412.75	0.00901764	0.00272227	0.00046266	0.00225961	0.05036657	0.00330459	0.00254452	0.00076007
591648.13	2356430.25	0.01119013	0.00220685	0.00057726	0.0016296	0.04169207	0.00268793	0.00207072	0.00061721
591863.13	2356462.75	0.00644482	0.00307304	0.00035929	0.00271375	0.04214465	0.00313633	0.00210152	0.00103482
591769.13	2356497.00	0.00931788	0.00235296	0.0005282	0.00182476	0.03464566	0.00253836	0.00170148	0.00083689
591675.19	2356531.25	0.0113894	0.00195263	0.00064788	0.00130475	0.02909569	0.00209494	0.00140971	0.00068524
591581.25	2356565.50	0.01245837	0.00168036	0.00070503	0.00097534	0.02485775	0.00175575	0.00118896	0.00056678
591719.38	2356626.00	0.01346778	0.00215015	0.00092744	0.0012227	0.02567355	0.00195747	0.00126236	0.00069512
591632.75	2356676.00	0.01454789	0.00190337	0.00099191	0.00091146	0.02273377	0.00166686	0.0011146	0.00055226
591546.19	2356726.00	0.0146835	0.00169184	0.00098866	0.00070317	0.02028251	0.00143662	0.00099046	0.00044617
591459.56	2356776.00	0.01424711	0.00150496	0.00094693	0.00055803	0.01821186	0.00125128	0.00088448	0.00036681
591549.56	2356904.50	0.01541445	0.00180381	0.00126742	0.0005364	0.01998661	0.00141541	0.00107955	0.00033587
591472.94	2356968.75	0.01442198	0.00160728	0.00117132	0.00043596	0.01816601	0.00126984	0.00098579	0.00028405
591396.38	2357033.00	0.01335639	0.00143348	0.00107201	0.00036148	0.01653384	0.00114303	0.00089919	0.00024384
591319.75	2357097.25	0.01230905	0.00128134	0.00097674	0.00030459	0.01508125	0.00103197	0.00082006	0.00021192
591243.13	2357161.50	0.01131854	0.00114881	0.00088852	0.0002603	0.01379329	0.00093443	0.00074843	0.00018601
591467.63	2357245.25	0.01147959	0.00122623	0.00099413	0.0002321	0.01632835	0.00128017	0.00104914	0.00023104
591403.38	2357321.75	0.01047285	0.00109698	0.00089822	0.00019876	0.01480493	0.00115329	0.00095162	0.00020168
591339.13	2357398.50	0.00955504	0.00098355	0.00081206	0.0001715	0.01347209	0.00104092	0.00086369	0.00017723
590438.50	2356953.50	0.00625992	0.00044506	0.00030998	0.00013508	0.00808028	0.00041866	0.0003054	0.00011326
591489.00	2357625.00	0.00842102	0.0007822	0.0006795	0.0001027	0.01203071	0.00099557	0.00085744	0.00013813
591364.00	2357841.50	0.00675907	0.00060783	0.00053277	0.00007505	0.00951102	0.00074444	0.00064635	0.00009809
591239.00	2358058.00	0.0055515	0.00048372	0.00042675	0.00005697	0.00779402	0.00057288	0.00050034	0.00007254
591114.00	2358274.50	0.00466053	0.00039338	0.00034868	0.0000447	0.00657143	0.00045274	0.00039727	0.00005547
590989.00	2358491.00	0.00398339	0.00032585	0.0002898	0.00003605	0.00566026	0.00036628	0.00032278	0.0000435
590864.00	2358707.50	0.0034545	0.00027415	0.00024453	0.00002962	0.00495666	0.00030257	0.00026765	0.00003492
592204.81	2356232.00	0.00000674	0.00327006	0.00000028	0.00326979	0.19154315	0.01752695	0.01006349	0.0074635
592221.63	2356227.50	0.00000628	0.00179249	0.00000026	0.00179223	0.17902666	0.01735954	0.00934693	0.00801267
592162.38	2356261.75	0.00000868	0.02448779	0.00000035	0.02448747	0.19525504	0.01545899	0.01047749	0.00498152
592622.00	2356004.50	0.01241726	0.00188033	0.00077339	0.00110694	0.00442446	0.00041368	0.00026375	0.00014993
592239.00	2356226.00	0.00000617	0.00153307	0.00000025	0.00153283	0.16395871	0.01689111	0.00849969	0.00839143
592152.38	2356276.00	0.00000986	0.05218699	0.00000039	0.05218667	0.1819751	0.01422129	0.00988803	0.00433328
591806.00	2356576.00	0.01115628	0.00248469	0.00076906	0.00171564	0.02927944	0.00232908	0.00144329	0.00088579
592239.00	2356426.00	0.00002622	0.01194625	0.00000118	0.01194509	0.03510674	0.00526724	0.0017069	0.00356035
592273.19	2356420.00	0.00004371	0.00892879	0.00000276	0.00892605	0.03082281	0.00564464	0.00147836	0.00416628
592289.00	2356412.50	0.0000533	0.01050492	0.00000365	0.01050129	0.02999712	0.00593882	0.00143008	0.00450876
592303.25	2356402.50	0.00005593	0.01261928	0.00000394	0.01261536	0.03027851	0.00636205	0.0014376	0.00492446
592315.63	2356390.25	0.00005219	0.01191419	0.00000365	0.01191056	0.03207299	0.00704881	0.00152238	0.00552645
592325.63	2356376.00	0.00004476	0.01024616	0.000003	0.01024317	0.03591966	0.00817901	0.00171385	0.00646516
592333.00	2356360.25	0.00003964	0.00888675	0.00000243	0.00888433	0.04203313	0.00980949	0.00202573	0.00778377
592337.50	2356343.25	0.0000405	0.00816235	0.00000221	0.00816015	0.05028653	0.01182053	0.00245425	0.00936629
592339.00	2356326.00	0.00004493	0.00950984	0.00000231	0.00950755	0.06024073	0.01415488	0.00298484	0.01117005
592439.00	2356326.00	0.0023135	0.00371248	0.00015123	0.00356126	0.01347279	0.02791053	0.00057476	0.02733578
592337.50	2356308.75	0.00004705	0.0132847	0.00000236	0.01328237	0.07082488	0.01654123	0.00350889	0.01303237
592435.94	2356291.25	0.00256985	0.00566132	0.00015849	0.00550286	0.01458855	0.0140666	0.00062712	0.01343951
592534.44	2356274.00	0.00788739	0.00359362	0.0004964	0.00309723	0.00106568	0.00399371	0.00004968	0.00394405
592333.00	2356291.75	0.00004373	0.01490688	0.00000211	0.01490479	0.080585	0.01790136	0.003979	0.0139224
592426.94	2356257.50	0.00255549	0.00671991	0.00014985	0.00657009	0.0154345	0.00649901	0.0006808	0.00581821
592520.94	2356223.50	0.00827181	0.00432269	0.00051779	0.00380492	0.00232048	0.00198924	0.00011724	0.00187201
592614.88	2356189.25	0.01332959	0.00335495	0.00086801	0.00248695	0.00170114	0.00051333	0.00009788	0.00041545
592708.88	2356155.00	0.01743775	0.00293697	0.00119075	0.00174622	0.00427873	0.00078103	0.00022543	0.00055561
592802.81	2356120.75	0.01965755	0.00268208	0.00140062	0.00128146	0.01161586	0.00235478	0.00060776	0.00174701
592896.75	2356086.50	0.02041678	0.002482	0.00150832	0.00097368	0.02429614	0.00306967	0.00144088	0.00162878
592990.75	2356052.50	0.02021645	0.00229903	0.00154144	0.0007576	0.03680718	0.00351763	0.00232009	0.00119754
593883.44	2355727.50	0.01106106	0.00105759	0.00089893	0.00015866	0.02296912	0.00167509	0.00154976	0.00012533
592325.63	2356276.00	0.00003619	0.00803263	0.00000163	0.00803101	0.08959838	0.01777715	0.00443063	0.01334653
592412.19	2356226.00	0.0019908	0.00287912	0.00011331	0.00276583	0.01750109	0.0042828	0.00080391	0.00347889
592498.81	2356176.00	0.00687841	0.0018634	0.0004201	0.0014433	0.00414386	0.00148045	0.00021452	0.00126593
592585.44	2356126.00	0.01166211	0.00164531	0.00074382	0.00090149	0.00281918	0.0004407	0.00016811	0.00027259
592672.00	2356076.00	0.0156458	0.0016584	0.00103459	0.00062381	0.00414954	0.00046115	0.00023955	0.0002216
592758.63	2356026.00	0.01797494	0.00168513	0.00122124	0.00046389	0.00741276	0.00066715	0.0003936	0.00027355
592845.25	2355976.00	0.01876073	0.00166489	0.00130034	0.00036455	0.01230731	0.00120064	0.00064218	0.00055846
592931.81	2355926.00	0.01855904	0.00160333	0.00130834	0.00029498	0.01800765	0.00177412	0.00101454	0.00075958
593018.44	2355876.00	0.01781161	0.00151823	0.00127371	0.00024452	0.02369627	0.0021699	0.00144242	0.00072748
593105.00	2355826.00	0.01688672	0.00142716	0.00122061	0.00020654	0.02800377	0.00239317	0.00176839	0.00062478
593191.63	2355776.00	0.01581288	0.00132447	0.00114912	0.00017535	0.02966958	0.0024025	0.00188714	0.00051537
593278.25	2355726.00	0.0148228	0.00122961	0.00107826	0.00015135	0.02976094	0.00229793	0.00187322	0.00042471
592315.63	2356261.75	0.00002729	0.01050352	0.00000117	0.01050237	0.09822778	0.01696383	0.00489926	0.01206461
592392.19	2356197.50	0.00131925	0.0043108	0.00007048	0.00424034	0.02130419	0.0036275	0.00101085	0.00261665

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592468.81	2356133.25	0.00477577	0.00266144	0.00027187	0.00238958	0.00662105	0.00145178	0.00033544	0.00111634
592545.44	2356069.00	0.00884054	0.00208888	0.00053108	0.0015578	0.0042135	0.00044807	0.00024508	0.00020299
592303.25	2356249.50	0.00001905	0.01218693	0.00000079	0.01218617	0.10821793	0.01624842	0.00544623	0.01080225
592367.56	2356172.75	0.00084404	0.00502822	0.00004369	0.00498456	0.02780164	0.00350897	0.00133142	0.00217755
592289.00	2356239.50	0.00001238	0.00841796	0.00000049	0.00841748	0.11968439	0.01589451	0.00606574	0.00982879
592273.19	2356232.00	0.00000839	0.00340838	0.00000033	0.00340806	0.13313101	0.01595505	0.00679799	0.00915706
592256.38	2356227.50	0.0000067	0.00184498	0.00000026	0.00184472	0.14817662	0.01634925	0.00762443	0.00872486
592145.00	2356291.75	0.00001139	0.05622102	0.00000045	0.05622065	0.1655901	0.01283311	0.00898406	0.00384905
592140.50	2356308.75	0.00001347	0.03638334	0.00000052	0.03638289	0.1460732	0.01135551	0.00789245	0.00346308
592139.00	2356326.00	0.00001721	0.02753243	0.00000064	0.02753186	0.12550293	0.00987726	0.00673144	0.00314585
592140.50	2356343.25	0.00002265	0.02557017	0.00000081	0.02556941	0.10609418	0.00852322	0.00563277	0.00289047
592042.06	2356360.75	0.00071058	0.00997884	0.00003362	0.00994526	0.09084043	0.00660965	0.00479853	0.00181112
592145.00	2356360.25	0.00002838	0.02215623	0.00000102	0.02215527	0.08899014	0.00737595	0.00466636	0.00270961
592051.06	2356394.50	0.00077487	0.00842597	0.00003893	0.00838707	0.06841698	0.00527678	0.00353758	0.00173921
591957.06	2356428.50	0.00325791	0.00459872	0.00017552	0.00442322	0.05264123	0.00397622	0.0026713	0.00130493
592152.38	2356376.00	0.00003219	0.02051948	0.00000118	0.02051836	0.07480311	0.00649137	0.00386861	0.00262277
592065.81	2356426.00	0.00090815	0.00794569	0.00005167	0.00789405	0.0538013	0.00454868	0.00272753	0.00182116
591979.19	2356476.00	0.00390146	0.00442668	0.00024952	0.00417719	0.04111835	0.00348934	0.00205092	0.00143842
591892.56	2356526.00	0.00769852	0.00307881	0.00051813	0.00256069	0.03393787	0.00281243	0.00167932	0.0011331
592162.38	2356390.25	0.00003324	0.01878901	0.00000126	0.01878778	0.06337948	0.00585787	0.00323203	0.00262583
592085.81	2356454.50	0.00105016	0.00736356	0.00006947	0.00729413	0.04395602	0.0041897	0.00219501	0.00199469
592009.19	2356518.75	0.00483665	0.00427977	0.00038243	0.00389736	0.03626386	0.00336227	0.0018072	0.00155508
591932.56	2356583.00	0.0092449	0.00318368	0.00077388	0.0024098	0.03174194	0.00275126	0.00160733	0.00114393
591856.00	2356647.50	0.01312771	0.00274679	0.00112294	0.00162386	0.02891439	0.00233084	0.00148879	0.00084205
591779.38	2356711.75	0.01546329	0.0024837	0.00131966	0.00116405	0.02647275	0.00202314	0.00138517	0.00063797
591702.75	2356776.00	0.01630664	0.00224869	0.00137653	0.00087216	0.02416064	0.00178179	0.00128167	0.00050013
591626.19	2356840.25	0.01614218	0.00201973	0.00134479	0.00067494	0.02199092	0.00158367	0.00117902	0.00040466
592174.75	2356402.50	0.00003194	0.01466136	0.00000125	0.01466013	0.05475543	0.00546694	0.0027577	0.00270925
592110.44	2356479.25	0.00123756	0.00555716	0.00009023	0.00546696	0.03841012	0.00408884	0.00189316	0.00219569
591596.19	2357092.00	0.01372146	0.00154339	0.00121321	0.00033019	0.02004366	0.00158085	0.0012718	0.00030906
591531.94	2357168.75	0.01257043	0.00137402	0.00109969	0.00027434	0.01806943	0.00142257	0.00115631	0.00026626
592189.00	2356412.50	0.00002987	0.01111971	0.00000122	0.01111851	0.04795946	0.00524521	0.00238891	0.00285631
591639.00	2357365.25	0.01116575	0.00108802	0.00092785	0.00016017	0.01664533	0.00145157	0.00123088	0.00022069
591589.00	2357451.75	0.01015368	0.00097196	0.00083527	0.00013669	0.01486937	0.0012772	0.00109005	0.00018716
591539.00	2357538.50	0.00921728	0.00086907	0.00075109	0.00011797	0.0133105	0.00112491	0.00096469	0.00016022
592204.81	2356420.00	0.00002835	0.01138653	0.00000121	0.01138533	0.04269793	0.00516236	0.00210726	0.0030551
591760.19	2357641.50	0.009985	0.00093	0.00079678	0.00013322	0.01288898	0.00106144	0.00093263	0.00012882
591726.00	2357735.50	0.00914256	0.00083814	0.0007226	0.00011554	0.01169409	0.00093271	0.00082307	0.00010964
592221.63	2356424.50	0.00002656	0.01355858	0.00000115	0.01355745	0.03854033	0.00518031	0.00188759	0.00329273
592435.94	2356360.75	0.00222609	0.00325434	0.00015579	0.00309858	0.01084198	0.02109484	0.00044869	0.02064619
592632.94	2356256.50	0.01238508	0.00280095	0.00079883	0.00200212	0.00073676	0.00079067	0.00003571	0.00075496
592256.38	2356424.50	0.00003204	0.00960958	0.00000172	0.00960788	0.03254602	0.00542465	0.00157131	0.00385335
592239.00	2356526.00	0.00137703	0.00477537	0.00010106	0.00467434	0.02776855	0.0045027	0.00145229	0.00305041
592239.00	2356626.00	0.00471028	0.00286471	0.00035984	0.00250488	0.03563653	0.00459295	0.00235979	0.00223317
592239.00	2356726.00	0.00793611	0.00215275	0.00059933	0.00155343	0.0428177	0.00511571	0.00341325	0.00170246
592239.00	2356826.00	0.00965916	0.00179173	0.00073879	0.00105295	0.04198417	0.00475821	0.00365284	0.00110536
592239.00	2356926.00	0.01040467	0.0015399	0.00078434	0.00075556	0.03836828	0.00402242	0.00330356	0.00071886
592239.00	2357026.00	0.01030582	0.00132921	0.00076375	0.00056547	0.03453259	0.0033659	0.00288228	0.00048362
592239.00	2357126.00	0.00978149	0.00114997	0.00071263	0.00043734	0.0312095	0.00289241	0.00253213	0.00036029
592239.00	2357226.00	0.00910071	0.00099983	0.00065221	0.00034763	0.02821974	0.00252974	0.00223381	0.00029593
592239.00	2357326.00	0.00832805	0.00087029	0.00058763	0.00028266	0.02527074	0.00221384	0.00195629	0.00025755
592239.00	2357426.00	0.00767097	0.0007665	0.0005315	0.000235	0.02270971	0.00193671	0.00170805	0.00022866
592273.75	2356523.00	0.00167016	0.0037866	0.00012173	0.00366489	0.02486201	0.00477726	0.00130466	0.00347261
592291.06	2356621.50	0.00500479	0.0023159	0.00036961	0.0019463	0.03353248	0.00512949	0.00238808	0.0027414
592308.44	2356720.00	0.00804901	0.00179077	0.00058566	0.00120511	0.04211081	0.00549523	0.00361458	0.00188065
592325.81	2356818.50	0.00958132	0.00152342	0.00070512	0.0008183	0.04262492	0.00486059	0.00376021	0.00110039
592343.19	2356917.00	0.01013957	0.0013282	0.00073673	0.00059147	0.04187336	0.00423584	0.00355185	0.00068399
592360.56	2357015.25	0.0099859	0.00116041	0.00071471	0.0004457	0.03959799	0.0038125	0.00326225	0.00055024
592377.94	2357113.75	0.00945282	0.00101344	0.00066644	0.000347	0.03532488	0.0033348	0.00282967	0.00050513
592412.63	2357310.75	0.008058	0.00077924	0.00055243	0.00022682	0.02525561	0.00227901	0.00188652	0.00039249
592430.00	2357409.25	0.00745993	0.00069113	0.00050174	0.00018939	0.02122182	0.00184995	0.00151648	0.00033346
592307.38	2356514.00	0.00238573	0.00357883	0.00017971	0.00339913	0.02129039	0.00519054	0.00110157	0.00408897
592341.63	2356608.00	0.00657534	0.00232465	0.00049481	0.00182985	0.02868294	0.00558326	0.00214239	0.00344087
592375.81	2356702.00	0.01029805	0.001913	0.00076068	0.00115232	0.03849044	0.00546147	0.00338899	0.00207248
592410.00	2356795.75	0.01202057	0.00168906	0.00089497	0.0007941	0.04402003	0.00495185	0.00382523	0.00112662
592444.19	2356889.75	0.01246726	0.00149701	0.00091568	0.00058133	0.04519483	0.00475543	0.00380198	0.00095345
592478.44	2356983.75	0.01225048	0.0013296	0.00088607	0.00044354	0.0395438	0.00408172	0.00317758	0.00090413
592512.63	2357077.75	0.01150049	0.00116948	0.0008195	0.00034998	0.03141109	0.00313949	0.00239233	0.00074717
592546.81	2357171.75	0.01063569	0.00102946	0.00074736	0.0002821	0.0249156	0.00236464	0.00179466	0.00056999
592581.00	2357265.75	0.00975051	0.00090742	0.00067615	0.00023127	0.02018303	0.00181233	0.00138288	0.00042946

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592615.25	2357359.75	0.00894466	0.00080458	0.00061168	0.0001929	0.0168634	0.00143265	0.00110522	0.00032743
592649.44	2357453.75	0.00823631	0.00071659	0.00055371	0.00016288	0.0144751	0.00116578	0.00091065	0.00025514
592339.00	2356499.25	0.00281886	0.00422193	0.00021655	0.00400541	0.01720301	0.00586092	0.00085787	0.00500306
592389.00	2356585.75	0.00721888	0.00266888	0.00055358	0.0021153	0.02147241	0.00608655	0.00162051	0.00446606
592439.00	2356672.50	0.01099435	0.00211697	0.00082412	0.00129285	0.03150989	0.00503855	0.00271724	0.00232131
592489.00	2356759.00	0.01276751	0.00181063	0.00094702	0.00086361	0.04267848	0.0052315	0.00360731	0.0016242
592539.00	2356845.50	0.01281506	0.00155541	0.00094396	0.00061145	0.0381715	0.00471122	0.00309782	0.0016134
592589.00	2356932.25	0.01239086	0.00135008	0.00089688	0.00045319	0.03042263	0.00338434	0.0022703	0.00111405
592639.00	2357018.75	0.01153902	0.00116869	0.00082185	0.00034684	0.02495239	0.00246279	0.00174364	0.00071915
592689.00	2357105.50	0.01055025	0.00101306	0.0007406	0.00027246	0.02187026	0.00197673	0.00146879	0.00050794
592739.00	2357192.00	0.00962323	0.0008849	0.00066576	0.00021915	0.02046069	0.00172906	0.0013323	0.00039676
592789.00	2357278.75	0.00872679	0.00077656	0.00059611	0.00018045	0.01935171	0.00155573	0.00123716	0.00031857
592839.00	2357365.25	0.00794881	0.00068549	0.00053475	0.00015075	0.01820308	0.00140118	0.00114022	0.00026096
592889.00	2357451.75	0.00721553	0.0006074	0.00048004	0.00012737	0.01687731	0.00125378	0.00103726	0.00021652
592939.00	2357538.50	0.00656343	0.00054254	0.00043336	0.00010918	0.01559841	0.00112478	0.00094279	0.00018199
592367.56	2356479.25	0.00285072	0.00532519	0.00022269	0.00510253	0.0130459	0.00698112	0.00061971	0.00636142
592431.81	2356555.75	0.00708348	0.00333014	0.00055385	0.00277629	0.01316417	0.00706677	0.00093765	0.00612915
592496.13	2356632.50	0.01042015	0.00253534	0.00081011	0.00172523	0.02058088	0.00459581	0.00175937	0.00283645
592560.38	2356709.00	0.01227672	0.00209454	0.0009325	0.00116204	0.02889442	0.0053164	0.00232677	0.00298964
592624.69	2356785.75	0.01240382	0.00176379	0.00093713	0.00082666	0.02626509	0.00367382	0.00191933	0.00175449
592688.94	2356862.25	0.01174806	0.00148888	0.00087523	0.00061365	0.02685431	0.00293179	0.00189295	0.00103884
592753.25	2356938.75	0.01102286	0.00128213	0.00080891	0.00047322	0.0293842	0.00280698	0.00203647	0.00077051
592817.50	2357015.50	0.01008034	0.00110485	0.0007303	0.00037456	0.02886495	0.00253177	0.00196577	0.000566
592881.81	2357092.00	0.00917535	0.00096032	0.00065718	0.00030314	0.02633392	0.002167	0.00175066	0.00041634
592946.06	2357168.75	0.00840633	0.00084538	0.0005951	0.00025029	0.02332372	0.00183137	0.0015114	0.00031998
593010.38	2357245.25	0.0077361	0.00074988	0.00053953	0.00021035	0.02031037	0.00154148	0.00128684	0.00025464
593074.63	2357321.75	0.0071067	0.00066884	0.00049061	0.00017823	0.01762549	0.00130624	0.00109724	0.000209
592392.19	2356454.50	0.00272951	0.00493046	0.00021519	0.00471531	0.0095422	0.00861584	0.0004375	0.00817836
592468.81	2356518.75	0.0070827	0.00313199	0.00055387	0.00257813	0.00583825	0.00944213	0.00034263	0.00909956
592545.44	2356583.00	0.01029127	0.00243259	0.00080593	0.00162667	0.00849557	0.00522676	0.00068871	0.00453806
592622.00	2356647.50	0.01218045	0.00206136	0.00094586	0.00111551	0.01290328	0.00462207	0.00091177	0.00371031
592698.63	2356711.75	0.01261588	0.00177272	0.00096274	0.00080998	0.0254225	0.00374919	0.00180208	0.00194711
592775.25	2356776.00	0.01210073	0.00153435	0.00092138	0.00061298	0.03438666	0.00362522	0.00244136	0.00118386
592851.81	2356840.25	0.01125437	0.00132962	0.00085201	0.00047761	0.03356915	0.00327986	0.0023732	0.00090666
592928.44	2356904.50	0.01047079	0.0011702	0.0007891	0.0003811	0.03029945	0.00286487	0.00211342	0.00075145
593005.06	2356968.75	0.0097341	0.00103741	0.00072873	0.00030868	0.02694112	0.00246055	0.00184202	0.00061853
593081.63	2357033.00	0.00895981	0.00092292	0.00066836	0.00025456	0.0236701	0.00210062	0.00160235	0.00049828
592412.19	2356426.00	0.00254323	0.00418662	0.00019723	0.00398941	0.00766201	0.00992057	0.00033202	0.00958859
592498.81	2356476.00	0.00711745	0.00271582	0.00055134	0.00216449	0.00169623	0.0144072	0.00007319	0.01433408
592585.44	2356526.00	0.01061811	0.00218943	0.00082973	0.0013597	0.00121211	0.01034263	0.00006389	0.01027876
592672.00	2356576.00	0.01253451	0.00190805	0.00097754	0.00093052	0.0077743	0.00512327	0.00055336	0.00456993
592758.63	2356626.00	0.01310763	0.00169635	0.00101897	0.00067739	0.02204601	0.00498234	0.0016571	0.00332525
592845.25	2356676.00	0.01292933	0.00151692	0.00100025	0.00051667	0.0311642	0.00452318	0.00231468	0.00220851
592931.81	2356726.00	0.01229266	0.00135889	0.00095201	0.00040689	0.0330979	0.00387531	0.00244607	0.00142924
593018.44	2356776.00	0.01139426	0.00122069	0.00089351	0.00032718	0.03185851	0.00336788	0.00237502	0.00099286
592426.94	2356394.50	0.00234165	0.00362478	0.0001748	0.00345	0.00809969	0.01236825	0.00033624	0.01203207
592520.94	2356428.50	0.00672057	0.00235409	0.00050538	0.00184872	0.00040681	0.02699116	0.00001457	0.02697668
592614.88	2356462.75	0.01041349	0.00192981	0.00078629	0.00114352	0.00001699	0.032031	0.00000046	0.03203055
592708.88	2356497.00	0.01257563	0.00171393	0.00094367	0.00077026	0.00246361	0.00976843	0.00016909	0.00959938
592802.81	2356531.25	0.01314197	0.00153782	0.00098747	0.00055036	0.01563626	0.0049788	0.00116337	0.00381544
592896.75	2356565.50	0.01286302	0.00137511	0.00096481	0.0004103	0.02936307	0.00423334	0.00221836	0.00201498
592990.75	2356599.50	0.01216563	0.00123141	0.00091523	0.00031618	0.03507769	0.00392604	0.00268191	0.00124413
593883.44	2356924.50	0.00583167	0.00049526	0.00043243	0.00006283	0.01356017	0.00105519	0.00094008	0.0001151
594118.38	2357010.00	0.00490043	0.00040382	0.00035659	0.00004723	0.01062319	0.00078142	0.00070233	0.00007909
594353.31	2357095.50	0.00418245	0.00033549	0.0002988	0.00003669	0.00869651	0.00060398	0.00054611	0.00005787
592534.44	2356378.00	0.00655776	0.00210389	0.00046874	0.00163516	0.00021269	0.07518618	0.00000745	0.07517887
592632.94	2356395.50	0.01011043	0.00173746	0.00073692	0.00100054	0.0000001	0.05729055	0	0.05729055
592731.38	2356412.75	0.01242402	0.00158997	0.00092102	0.00066896	0.00143298	0.00852007	0.00007454	0.00844554
592829.88	2356430.25	0.01337455	0.00148087	0.00100488	0.00047599	0.01360227	0.00378045	0.00089194	0.00288852
592928.38	2356447.50	0.01328476	0.00136232	0.00100885	0.00035346	0.02827967	0.00351916	0.00198687	0.00153229
593026.88	2356465.00	0.01275027	0.00124939	0.00097665	0.00027274	0.03602029	0.00360447	0.00265028	0.00095419
592539.00	2356326.00	0.00685947	0.00235702	0.00046147	0.00189555	0.00039377	0.00955642	0.00001609	0.00954036
592639.00	2356326.00	0.01070229	0.00192077	0.00073788	0.00118289	0.00009485	0.0023078	0.00000325	0.00230455
592739.00	2356326.00	0.01340312	0.001762	0.00095028	0.00081173	0.00376964	0.00534399	0.00018184	0.00516217
592839.00	2356326.00	0.01458947	0.00165578	0.00106091	0.00059487	0.02207001	0.00641031	0.00134636	0.00506395
592939.00	2356326.00	0.01476039	0.0015566	0.00109886	0.00045775	0.03973664	0.00577809	0.00261551	0.00316259
593039.00	2356326.00	0.01436495	0.00145384	0.00109283	0.000361	0.04706273	0.00520638	0.00328044	0.00192592
593139.00	2356326.00	0.01376824	0.00135731	0.0010661	0.00029121	0.04767454	0.00476894	0.0034551	0.00131383
596739.00	2356326.00	0.00258557	0.00017138	0.00016123	0.00001014	0.0041269	0.00021834	0.00020545	0.00001289
592731.38	2356239.25	0.01576792	0.00244834	0.00104658	0.00140177	0.00463217	0.00424662	0.00021564	0.00403099

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592829.88	2356221.75	0.01727779	0.00222384	0.00118782	0.00103603	0.01947684	0.00400063	0.00107373	0.00292691
592928.38	2356204.50	0.01745863	0.00204055	0.00124302	0.00079754	0.03949343	0.00365334	0.0024465	0.00120684
593026.88	2356187.00	0.0169558	0.00186886	0.00123921	0.00062965	0.05106384	0.00441404	0.00353112	0.00088292
593125.31	2356169.75	0.01609374	0.00170761	0.0011991	0.00050851	0.0549233	0.00507207	0.00414102	0.00093106
593223.81	2356152.25	0.01510774	0.00155945	0.00114231	0.00041714	0.05331672	0.00507207	0.00420134	0.00087072
593322.31	2356135.00	0.01418515	0.00143087	0.00108356	0.00034731	0.04912027	0.00468324	0.00392351	0.00075973
593420.75	2356117.50	0.01326822	0.00131238	0.00101877	0.0002936	0.04389138	0.00414274	0.00350335	0.00063938
593519.25	2356100.25	0.01240907	0.00120575	0.0009547	0.00025105	0.03886365	0.00361039	0.00307939	0.000531
594208.63	2355978.75	0.00792818	0.00069528	0.00059102	0.00010426	0.01793349	0.00144688	0.00127853	0.00016835
594454.81	2355935.25	0.00689361	0.00058546	0.00050404	0.00008142	0.01442913	0.0011101	0.00098784	0.00012226
594701.00	2355892.00	0.00605923	0.00049826	0.00043311	0.00006514	0.01186915	0.0008732	0.00078147	0.00009173
594947.25	2355848.50	0.00534761	0.00042848	0.00037535	0.00005313	0.00999549	0.00070607	0.00063459	0.00007147
593084.75	2356018.25	0.01946621	0.00212755	0.00152279	0.00060476	0.04230576	0.00354595	0.00270266	0.00084329
593178.69	2355984.00	0.01846157	0.00196604	0.00147167	0.00049437	0.04243975	0.0033198	0.00272917	0.00059062
593272.69	2355949.75	0.01737004	0.00181192	0.00140217	0.00040975	0.04012561	0.00302682	0.00260268	0.00042415
593366.63	2355915.50	0.01625055	0.00166515	0.00132124	0.00034391	0.03704038	0.00274826	0.0024313	0.00031696
593460.63	2355881.25	0.01515026	0.00152918	0.00123662	0.00029257	0.03390306	0.00250114	0.00225248	0.00024868
593554.56	2355847.25	0.01411892	0.00140628	0.00115449	0.00025179	0.0310558	0.00228695	0.00208305	0.0002039
593648.56	2355813.00	0.0131796	0.00129659	0.00107789	0.00021871	0.02851742	0.00209586	0.00192301	0.00017285
592046.19	2356555.75	0.00543268	0.00337216	0.00046984	0.00290233	0.03422742	0.00334673	0.00175326	0.00159347
591981.88	2356632.50	0.0102109	0.00272199	0.00092903	0.00179296	0.03268707	0.00285003	0.00174957	0.00110047
591917.63	2356709.00	0.01406295	0.0025162	0.00130088	0.00121534	0.0313673	0.00256378	0.00175444	0.00080933
591853.31	2356785.75	0.01600223	0.00235089	0.00147731	0.00087359	0.02947358	0.00234554	0.0017128	0.00063275
591789.06	2356862.25	0.0163187	0.00214886	0.00149272	0.00065614	0.02706898	0.00213795	0.0016234	0.00051455
591724.75	2356938.75	0.01581592	0.00193907	0.00143029	0.00050878	0.02462124	0.00194209	0.00151344	0.00042865
591660.50	2357015.50	0.01485541	0.0017331	0.00132798	0.00040512	0.02224046	0.00175498	0.00139293	0.00036205
591114.13	2357666.50	0.00705522	0.00069046	0.00058126	0.0001092	0.00999531	0.00074067	0.00062371	0.00011695
592139.00	2356499.25	0.00152233	0.00410831	0.00012021	0.00398811	0.03485753	0.00411102	0.00172769	0.00238334
592089.00	2356585.75	0.00635914	0.00264551	0.00055684	0.00208868	0.03405448	0.00342715	0.00182398	0.00160317
592039.00	2356672.50	0.01145245	0.00230582	0.00102287	0.00128296	0.03528883	0.00317692	0.00205337	0.00112356
591989.00	2356759.00	0.01506945	0.0022199	0.00135263	0.00086728	0.03475623	0.00305362	0.00217791	0.00087572
591939.00	2356845.50	0.01665909	0.00210669	0.00148409	0.0006226	0.03280481	0.00288928	0.00218165	0.00070764
591889.00	2356932.25	0.0168995	0.00195133	0.00148754	0.0004638	0.03023747	0.00267169	0.00209742	0.00057427
591839.00	2357018.75	0.0160024	0.00174869	0.0013907	0.00035799	0.02698985	0.00240305	0.0019356	0.00046746
591789.00	2357105.50	0.01483966	0.00155746	0.00127386	0.00028361	0.02397764	0.00213582	0.00175363	0.00038219
591739.00	2357192.00	0.01359957	0.00138399	0.00115394	0.00023005	0.02126518	0.00188404	0.00156882	0.00031522
591689.00	2357278.75	0.01230827	0.00122367	0.00103334	0.00019033	0.01875303	0.00165323	0.00139071	0.00026253
592170.63	2356514.00	0.00177219	0.00443897	0.00014692	0.00429207	0.03228957	0.00419039	0.00163061	0.00255979
592136.38	2356608.00	0.00729719	0.00292621	0.00064257	0.00228364	0.03493364	0.00366656	0.00198994	0.00167662
592102.19	2356702.00	0.01291848	0.00254959	0.0011388	0.00141079	0.03880453	0.00375447	0.00248824	0.00126623
592068.00	2356795.75	0.01642536	0.00239786	0.00144898	0.00094888	0.03824897	0.00373697	0.00273627	0.00100071
592033.81	2356889.75	0.01790884	0.0022391	0.00156274	0.00067636	0.03561856	0.00349506	0.00272624	0.00076882
591999.56	2356983.75	0.01794124	0.0020512	0.00154549	0.00050571	0.03194729	0.00312077	0.00253669	0.00058408
591965.38	2357077.75	0.01702909	0.00183983	0.00144828	0.00039156	0.02785334	0.00269369	0.00224457	0.00044912
591931.19	2357171.75	0.01578807	0.0016386	0.00132688	0.00031172	0.02409859	0.00229169	0.00194062	0.00035107
591897.00	2357265.75	0.01442741	0.00145321	0.00119931	0.0002539	0.02084458	0.00193944	0.0016605	0.00027895
591862.75	2357359.75	0.01314068	0.00129263	0.0010808	0.00021183	0.01818415	0.00164753	0.00142241	0.00022512
591828.56	2357453.75	0.01196622	0.00115377	0.0009742	0.00017957	0.01604257	0.00141013	0.00122577	0.00018436
591794.38	2357547.50	0.01091093	0.00103431	0.0008794	0.00015491	0.01429425	0.00121748	0.00106437	0.00015311
591640.44	2357970.50	0.0074459	0.00065807	0.0005742	0.00008388	0.00945002	0.00069924	0.00062267	0.00007657
591554.94	2358205.50	0.00619662	0.00052878	0.00046549	0.0000633	0.00789149	0.00054666	0.0004903	0.00005636
592204.25	2356523.00	0.00160627	0.00562854	0.00012778	0.00550078	0.0300203	0.00431552	0.00155187	0.00276365
592186.94	2356621.50	0.00618885	0.00353751	0.0005181	0.00301942	0.0357259	0.00406968	0.00218913	0.00188055
592169.56	2356720.00	0.01082395	0.00280004	0.0008948	0.00190523	0.04154279	0.00446498	0.00297837	0.00148662
592152.19	2356818.50	0.01344895	0.00243448	0.00112808	0.0013064	0.04092103	0.00439173	0.00330792	0.00108381
592134.81	2356917.00	0.01458243	0.00215613	0.00120768	0.00094845	0.03728753	0.0039003	0.00314124	0.00075906
592117.44	2357015.25	0.01448452	0.00189634	0.0011819	0.00071444	0.03251678	0.00328663	0.00274022	0.00054642
592100.06	2357113.75	0.01374496	0.00165965	0.00110477	0.00055488	0.02810119	0.00272438	0.0023239	0.00040047
592082.75	2357212.25	0.01274227	0.00145141	0.00100956	0.00044185	0.02450434	0.00227573	0.00197524	0.00030049
592065.38	2357310.75	0.0116376	0.00126883	0.00090979	0.00035904	0.02159315	0.00192891	0.00169632	0.00023258
592048.00	2357409.25	0.01066552	0.00111902	0.0008223	0.00029671	0.01938517	0.00167013	0.00148306	0.00018707
592030.63	2357507.75	0.00970365	0.00098755	0.00073871	0.00024884	0.01747343	0.00146134	0.00130544	0.0001559
592013.25	2357606.25	0.00888579	0.00087906	0.00066776	0.0002113	0.01594036	0.00129567	0.0011619	0.00013377
591995.88	2357704.75	0.00812574	0.00078511	0.00060354	0.00018157	0.01457321	0.00115517	0.00103845	0.00011673
591978.50	2357803.25	0.00745416	0.00070476	0.00054726	0.0001575	0.01338006	0.00103568	0.00093256	0.00010312
593158.25	2357097.25	0.0083138	0.00082703	0.00061391	0.00021312	0.02101947	0.00179705	0.00139765	0.0003994
594947.25	2356803.50	0.0035815	0.00028184	0.00025959	0.00002225	0.00717225	0.00046123	0.0004308	0.00003043
593617.75	2356083.00	0.01158068	0.00110682	0.00089033	0.0002165	0.03432035	0.00312831	0.00268757	0.00044074
592239.00	2357526.00	0.0069708	0.00067494	0.00047697	0.00019797	0.02008964	0.0016842	0.00147981	0.00020439
592239.00	2357626.00	0.00637526	0.00059925	0.00042992	0.00016933	0.01785824	0.00146298	0.00128002	0.00018295

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
592395.25	2357212.25	0.00880135	0.00088922	0.00061162	0.0002776	0.0302821	0.00279455	0.00234167	0.00045287
592447.38	2357507.75	0.00682019	0.00061494	0.0004545	0.00016045	0.01786002	0.00150973	0.001229	0.00028074
592464.75	2357606.25	0.00625725	0.00054999	0.00041193	0.00013806	0.01516732	0.00124145	0.00100595	0.0002355
592683.63	2357547.50	0.00751392	0.00064007	0.00050101	0.00013906	0.01273923	0.00098665	0.00078115	0.0002055
593138.88	2357398.50	0.00654393	0.0005998	0.00044708	0.00015272	0.01542156	0.00111952	0.0009432	0.00017632
593234.88	2357161.50	0.00768736	0.00074502	0.00056417	0.00018085	0.01865048	0.0015445	0.00122232	0.00032219
593311.44	2357226.00	0.00711165	0.00067369	0.0005186	0.0001551	0.0166913	0.00134146	0.00107781	0.00026365
593105.00	2356826.00	0.01055071	0.00109899	0.00083087	0.00026813	0.02951279	0.00292564	0.00220183	0.00072381
593191.63	2356876.00	0.00977347	0.00099418	0.00077044	0.00022374	0.02676935	0.00253747	0.00198799	0.00054948
593278.25	2356926.00	0.0090701	0.00090213	0.00071243	0.0001897	0.02403508	0.00219254	0.00176148	0.00043106
593364.81	2356976.00	0.00838541	0.00081811	0.00065606	0.00016205	0.02120846	0.00188792	0.00154292	0.000345
593451.44	2357026.00	0.00772367	0.00074188	0.00060235	0.00013953	0.01873292	0.00163244	0.00135095	0.00028149
593754.56	2357201.00	0.00592434	0.00054397	0.00045509	0.00008888	0.01274612	0.00103966	0.0008835	0.00015616
593084.75	2356633.75	0.01136562	0.00111004	0.00085951	0.00025052	0.03527302	0.00355764	0.00271814	0.0008395
593178.69	2356668.00	0.01054084	0.00100356	0.00080165	0.00020191	0.03287931	0.00314613	0.00254119	0.00060494
593272.69	2356702.25	0.00969598	0.00090432	0.00073809	0.00016623	0.02928778	0.00270557	0.00225534	0.00045023
593366.63	2356736.50	0.00893117	0.00081816	0.00067938	0.00013878	0.02586869	0.00231466	0.00196897	0.00034569
593460.63	2356770.75	0.00824858	0.00074371	0.00062627	0.00011744	0.02284768	0.00198487	0.00171257	0.00027229
593648.56	2356839.00	0.00702697	0.00061643	0.0005295	0.00008694	0.01785194	0.00147457	0.00129643	0.00017814
593125.31	2356482.25	0.01200332	0.00114702	0.00092946	0.00021756	0.03727946	0.00349608	0.00284641	0.00064967
593223.81	2356499.75	0.01120256	0.00105558	0.00087777	0.00017781	0.03562616	0.00325493	0.00278328	0.00047165
593322.31	2356517.00	0.01041463	0.00096875	0.00082171	0.00014705	0.0324558	0.0029	0.00254447	0.00035553
593420.75	2356534.50	0.00965759	0.00088808	0.00076441	0.00012367	0.02904662	0.00253832	0.00226246	0.00027586
593962.44	2356630.00	0.00644486	0.00056045	0.0005029	0.00005755	0.01568997	0.00122983	0.00113196	0.00009787
594208.63	2356673.25	0.00544909	0.00046211	0.00041844	0.00004367	0.01234575	0.00092237	0.00085369	0.00006868
602087.06	2358062.50	0.00072311	0.00003596	0.00003391	0.00000204	0.00115595	0.00004091	0.00003871	0.0000022
593239.00	2356326.00	0.01302883	0.00126348	0.00102349	0.00023998	0.04495459	0.00430043	0.00336556	0.00093488
593339.00	2356326.00	0.0123005	0.001174	0.00097278	0.00020122	0.04116617	0.00379067	0.00310398	0.0006867
593439.00	2356326.00	0.0115034	0.00108716	0.00091728	0.00016987	0.03692994	0.00330793	0.00278632	0.00052161
593539.00	2356326.00	0.01081225	0.00100814	0.00086297	0.00014516	0.03318849	0.00288708	0.00247935	0.00040773
593639.00	2356326.00	0.01014991	0.00093375	0.00080846	0.00012529	0.02985379	0.00252811	0.00220182	0.0003263
594239.00	2356326.00	0.00713937	0.00060587	0.00054549	0.00006038	0.01672665	0.0012463	0.00112942	0.00011688
594739.00	2356326.00	0.00552728	0.00044101	0.00040349	0.00003752	0.01130244	0.00077446	0.00071187	0.00006258
594989.00	2356326.00	0.0049126	0.00038167	0.00035123	0.00003045	0.00956689	0.00063042	0.0005823	0.00004811
597239.00	2356326.00	0.00224671	0.0001434	0.00013533	0.00000807	0.00347686	0.00017589	0.00016598	0.00000991
593716.19	2356065.50	0.01081147	0.00101753	0.0008291	0.00018843	0.03035762	0.00271227	0.00234452	0.00036776
593962.44	2356022.00	0.00919785	0.00083474	0.0006972	0.00013755	0.02290875	0.00194434	0.00170173	0.00024261
595193.44	2355805.00	0.00474041	0.00037083	0.0003268	0.00004404	0.00849218	0.00058003	0.00052307	0.00005695
590739.00	2358924.00	0.00303606	0.00023391	0.00020923	0.00002469	0.00439862	0.00025452	0.00022593	0.0000286
591469.44	2358440.25	0.00526803	0.00043419	0.00038485	0.00004934	0.00675547	0.00044135	0.00039814	0.00004321
591383.94	2358675.25	0.00453385	0.00036214	0.00032265	0.00003949	0.00584395	0.00036493	0.00033074	0.00003418
593538.06	2357076.00	0.00712495	0.00067465	0.00055342	0.00012123	0.01660491	0.001419	0.00118562	0.00023339
589160.81	2364783.25	0.00087047	0.00004776	0.00004476	0.00000301	0.00123181	0.00004931	0.00004646	0.00000286
592239.00	2357726.00	0.00583537	0.00053331	0.00038829	0.00014502	0.01589295	0.00127096	0.00110713	0.00016382
592482.13	2357704.75	0.00578168	0.00049542	0.00037595	0.00011947	0.01310818	0.00103337	0.00083542	0.00019795
592717.81	2357641.50	0.00692358	0.00057588	0.00045607	0.00011981	0.01145665	0.00085255	0.00068341	0.00016914
593203.19	2357475.00	0.00604112	0.00054093	0.00040867	0.00013226	0.01368029	0.0009736	0.00082116	0.00015245
593388.06	2357290.25	0.00657055	0.00060995	0.00047579	0.00013417	0.01494338	0.00116877	0.00095071	0.00021806
593971.06	2357326.00	0.0049741	0.00044232	0.00037515	0.00006718	0.00995852	0.00077583	0.00066631	0.00010951
593554.56	2356804.75	0.00761914	0.00067659	0.00057607	0.00010052	0.02019838	0.00170576	0.00148764	0.00021812
593519.25	2356551.75	0.00894801	0.00081466	0.00070938	0.00010528	0.02597555	0.00222366	0.00200247	0.0002212
593617.75	2356569.00	0.00828327	0.00074722	0.00065658	0.00009064	0.02310883	0.00193814	0.00175852	0.00017962
593716.19	2356586.50	0.00768731	0.00068648	0.00060767	0.00007881	0.02059418	0.00169356	0.00154504	0.00014853
594454.81	2356716.75	0.00467378	0.00038653	0.00035247	0.00003406	0.01004517	0.00071384	0.00066323	0.00005061
601102.25	2357888.75	0.00081149	0.00004163	0.00003928	0.00000235	0.00131683	0.00004776	0.00004522	0.00000255
593739.00	2356326.00	0.00953424	0.00086555	0.00075647	0.00010908	0.02687799	0.0022216	0.0019555	0.0002661
593989.00	2356326.00	0.00821733	0.00072102	0.00064136	0.00007966	0.02098187	0.0016404	0.00146979	0.0001706
594489.00	2356326.00	0.00625254	0.00051438	0.00046732	0.00004706	0.01361768	0.00097184	0.00088779	0.00008404
595239.00	2356326.00	0.00440384	0.00033326	0.00030815	0.00002511	0.00821509	0.00052136	0.00048352	0.00003784
596239.00	2356326.00	0.00302862	0.00020882	0.00019563	0.00001319	0.00501043	0.0002796	0.00026221	0.00001739
591298.44	2358910.25	0.00397445	0.00030742	0.00027513	0.00003229	0.00515995	0.00030792	0.00028021	0.00002771
591935.13	2358049.50	0.00610072	0.00054917	0.00043487	0.0001143	0.01095585	0.00080296	0.00072441	0.00007854
591891.69	2358295.50	0.00511379	0.00043967	0.00035328	0.00008639	0.0091393	0.00063609	0.00057422	0.00006188
591848.31	2358541.75	0.00436169	0.00035933	0.00029196	0.00006737	0.00772341	0.00051325	0.00046327	0.00004999
592989.00	2357625.00	0.00601679	0.00048743	0.00039289	0.00009454	0.01437712	0.00100056	0.00084687	0.00015369
592239.00	2357826.00	0.00535735	0.00047724	0.00035182	0.00012542	0.01418975	0.00110638	0.00095972	0.00014665
592499.50	2357803.25	0.00536596	0.00044884	0.00034471	0.00010414	0.01146788	0.00087029	0.00070308	0.00016721
594701.00	2356760.00	0.00405325	0.000327	0.00029981	0.00002719	0.00836886	0.00056577	0.00052725	0.00003852
598147.88	2357368.00	0.00128812	0.00007679	0.00007233	0.00000446	0.00220301	0.00009315	0.00008817	0.00000498
600117.44	2357715.25	0.00092269	0.00004931	0.00004652	0.00000278	0.00151572	0.00005716	0.00005414	0.00000302

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
595739.00	2356326.00	0.00360634	0.00025983	0.0002421	0.00001773	0.00627298	0.00037199	0.0003473	0.00002469
591212.94	2359145.00	0.00351356	0.00026419	0.00023735	0.00002684	0.00458183	0.00026397	0.00024104	0.00002293
590699.94	2360554.50	0.00201585	0.00013209	0.00012092	0.00001117	0.00268848	0.00013218	0.00012241	0.00000977
591631.25	2359772.75	0.00240121	0.00016587	0.00013941	0.00002647	0.00400234	0.00022002	0.00019862	0.00002139
593579.56	2357451.00	0.00550018	0.00048835	0.000391	0.00009735	0.01174118	0.00086488	0.00072003	0.00014486
594187.56	2357451.00	0.004246	0.00036693	0.00031453	0.0000524	0.00809456	0.00060167	0.00052086	0.00008081
599132.63	2357541.50	0.00107506	0.00006031	0.00005688	0.00000343	0.00179743	0.00007113	0.00006737	0.00000376
591041.94	2359615.00	0.00283784	0.00020222	0.00018301	0.00001922	0.00373121	0.00020173	0.00018525	0.00001647
592752.00	2357735.50	0.00640679	0.00052102	0.00041697	0.00010405	0.01046672	0.00075107	0.00060887	0.0001422
591804.88	2358788.00	0.0037875	0.00029929	0.00024537	0.00005392	0.00661971	0.00042114	0.00038003	0.00004112
592239.00	2358076.00	0.00439676	0.00036984	0.00027943	0.00009042	0.01092146	0.00079581	0.00068419	0.00011162
601635.94	2359746.25	0.00066753	0.00003187	0.00002979	0.00000209	0.00111604	0.00003694	0.00003467	0.00000227
595193.44	2356847.00	0.00318191	0.00024435	0.00022591	0.00001844	0.00621953	0.00038109	0.00035667	0.00002442
595685.81	2356933.75	0.00256555	0.00018802	0.00017486	0.00001315	0.00483728	0.00027189	0.00025538	0.00001651
596670.63	2357107.50	0.00183707	0.00012313	0.00011539	0.00000774	0.00330079	0.00016139	0.0001523	0.00000909
597163.06	2357194.25	0.00160453	0.00010319	0.00009693	0.00000626	0.00283015	0.00013098	0.00012379	0.00000719
590870.94	2360084.75	0.00236781	0.00016091	0.00014653	0.00001438	0.00312851	0.00016048	0.00014808	0.0000124
594588.25	2357181.00	0.00362165	0.00028235	0.00025312	0.00002923	0.00726165	0.00047642	0.00043286	0.00004356
592239.00	2358326.00	0.00369144	0.00029468	0.00022682	0.00006785	0.00871352	0.00059049	0.00050448	0.00008601
592542.88	2358049.50	0.00452855	0.00035842	0.00028231	0.00007611	0.00864225	0.00059597	0.00048303	0.00011295
593114.00	2357841.50	0.00490198	0.00038019	0.00031145	0.00006874	0.01156732	0.00074339	0.0006398	0.00010359
593239.00	2358058.00	0.00409365	0.00030433	0.00025285	0.00005147	0.00943401	0.00056155	0.00048887	0.00007268
593363.88	2357666.50	0.00503331	0.00042674	0.00033092	0.00009583	0.01043381	0.00070677	0.0005968	0.00010997
594404.06	2357576.00	0.00367798	0.00030919	0.00026725	0.00004194	0.00676594	0.00047926	0.00041746	0.0000618
596178.25	2357020.50	0.00214165	0.00014998	0.0001401	0.00000988	0.00393119	0.0002051	0.00019316	0.00001194
592837.56	2357970.50	0.00536772	0.00041452	0.00033885	0.00007567	0.00874024	0.00057802	0.00047972	0.00009831
592923.06	2358205.50	0.00460035	0.00033788	0.00028071	0.00005717	0.00757191	0.00046296	0.00039115	0.00007181
593364.00	2358274.50	0.00347427	0.00024809	0.00020845	0.00003963	0.00777068	0.000432	0.0003793	0.00005271
593524.56	2357858.00	0.00426705	0.00034513	0.00027287	0.00007226	0.00832465	0.00053676	0.00045373	0.00008303
593771.06	2357611.50	0.00464604	0.00039746	0.00032417	0.00007329	0.00941765	0.00065905	0.00055691	0.00010214
593962.63	2357772.25	0.00396761	0.00032775	0.00027092	0.00005683	0.00765912	0.00051226	0.00043755	0.00007471
600899.25	2361326.00	0.0006449	0.00003407	0.00003137	0.0000027	0.00107471	0.00003877	0.00003581	0.00000296
599756.56	2359062.25	0.00083656	0.0000428	0.00003995	0.00000284	0.0014266	0.00005042	0.00004729	0.00000313
600696.25	2359404.25	0.00074046	0.00003648	0.00003408	0.0000024	0.00124833	0.00004256	0.00003994	0.00000261
591761.50	2359034.25	0.00331591	0.00025315	0.00020907	0.00004408	0.0057277	0.00035105	0.00031667	0.00003437
592239.00	2358576.00	0.00316031	0.00024012	0.0001875	0.00005261	0.00717808	0.0004522	0.00038481	0.0000674
592586.31	2358295.50	0.00388779	0.00029164	0.00023457	0.00005707	0.00686352	0.00043017	0.00035109	0.00007908
594823.13	2357266.50	0.00316238	0.00023986	0.00021617	0.00002368	0.00619452	0.00038421	0.00035049	0.00003372
592239.00	2359826.00	0.00173414	0.00010769	0.00008784	0.00001985	0.00361981	0.00016768	0.0001426	0.00002508
593685.25	2358049.50	0.00366285	0.00028358	0.00022755	0.00005603	0.00678381	0.00041742	0.00035351	0.00006391
591718.06	2359280.50	0.00294879	0.00021743	0.0001807	0.00003672	0.00503123	0.00029682	0.00026773	0.00002909
592239.00	2358826.00	0.00274586	0.00019953	0.00015762	0.00004191	0.00606513	0.00035646	0.00030273	0.00005372
593008.56	2358440.25	0.00394931	0.00027837	0.00023395	0.00004442	0.00663846	0.00037883	0.00032455	0.00005428
594620.56	2357701.00	0.00320494	0.00026262	0.00022862	0.00003399	0.00573716	0.00038755	0.00033947	0.00004808
594837.06	2357826.00	0.00284602	0.00022721	0.00019895	0.00002826	0.00500328	0.00032212	0.00028341	0.00003871
595058.06	2357352.00	0.00279453	0.00020629	0.0001868	0.00001949	0.005379	0.00031615	0.00028938	0.00002676
595527.94	2357523.00	0.00225642	0.00015816	0.00014432	0.00001384	0.00423735	0.00022623	0.00020826	0.00001797
595997.75	2357694.00	0.00188978	0.00012619	0.00011583	0.00001037	0.00348804	0.00017161	0.00015869	0.00001291
598816.88	2358720.25	0.00096397	0.00005167	0.00004817	0.0000035	0.00166468	0.00006177	0.00005787	0.0000039
590186.88	2361964.25	0.00139119	0.00008365	0.0000775	0.00000615	0.00189879	0.00008441	0.00007887	0.00000554
592629.69	2358541.75	0.00334853	0.00024059	0.00019654	0.00004405	0.00566008	0.00032569	0.00026824	0.00005745
593846.00	2358241.00	0.0032093	0.00023895	0.00019413	0.00004482	0.00574391	0.00033799	0.00028689	0.0000511
594154.13	2357933.00	0.00343891	0.0027539	0.00023012	0.00004528	0.00640494	0.00041046	0.00035346	0.000057
594345.63	2358093.75	0.00301728	0.00023483	0.000198	0.00003682	0.00546555	0.00033615	0.00029139	0.00004476
600033.25	2360826.00	0.00071834	0.00003911	0.00003597	0.00000314	0.00119444	0.00004456	0.0000411	0.00000346
596467.63	2357865.00	0.00162398	0.00010362	0.00009554	0.00000808	0.00295557	0.00013572	0.00012597	0.00000976
596937.44	2358036.00	0.00142203	0.00008701	0.0000805	0.00000651	0.00255554	0.00011077	0.00010312	0.00000765
597877.19	2358378.00	0.00114661	0.00006518	0.0000606	0.00000459	0.00201508	0.00007979	0.00007458	0.00000521
594537.13	2358254.25	0.00267816	0.00020295	0.00017245	0.0000305	0.00474494	0.0002805	0.00024451	0.00003599
593094.06	2358675.25	0.00347295	0.00023529	0.00019974	0.00003555	0.00597323	0.00031958	0.00027669	0.00004289
593489.00	2358491.00	0.00300272	0.00020698	0.00017548	0.0000315	0.00654433	0.00034304	0.00030323	0.00003981
594006.69	2358432.50	0.00283092	0.00020336	0.00016696	0.00003641	0.00492474	0.00027789	0.00023652	0.00004137
595703.13	2358326.00	0.0019015	0.00013818	0.0001232	0.00001498	0.0032142	0.00017575	0.00015705	0.0000187
596569.13	2358826.00	0.0014169	0.00009484	0.00008553	0.00000931	0.002365	0.0001141	0.00010311	0.000011
599167.19	2360326.00	0.00081368	0.00004596	0.00004217	0.00000379	0.00135078	0.00005253	0.00004833	0.0000042
596136.13	2358576.00	0.00162645	0.00011321	0.00010156	0.00001165	0.00272887	0.00013943	0.00012532	0.00001411
592239.00	2359076.00	0.00242311	0.0001687	0.00013458	0.00003413	0.00522793	0.00028772	0.00024422	0.0000435
592673.13	2358788.00	0.00295405	0.0002042	0.00016892	0.00003528	0.00488746	0.00026061	0.00021686	0.00004375
594920.19	2358575.75	0.00214998	0.00015525	0.00013354	0.0000217	0.00368722	0.00020298	0.00017863	0.00002434
595270.06	2358076.00	0.00228995	0.00017417	0.00015406	0.00002012	0.00392564	0.00023176	0.00020559	0.00002617

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598301.19	2359826.00	0.00094546	0.0000558	0.00005099	0.00000481	0.00157148	0.00006428	0.00005889	0.00000539
597435.13	2359326.00	0.00113482	0.00007074	0.00006428	0.00000647	0.00189	0.00008276	0.00007535	0.00000742
592239.00	2359326.00	0.00214151	0.00014325	0.0001152	0.00002805	0.00455377	0.00023593	0.00020026	0.00003567
592716.50	2359034.25	0.00258817	0.00017262	0.00014431	0.0000283	0.00421509	0.00020871	0.00017531	0.0000334
593614.00	2358707.50	0.00263917	0.00017607	0.00015042	0.00002566	0.00561663	0.00027972	0.00024862	0.00003111
594167.38	2358624.25	0.00253073	0.00017596	0.00014579	0.00003017	0.00430815	0.0002337	0.00019953	0.00003417
595686.19	2359218.50	0.00153297	0.0001018	0.00008921	0.00001259	0.00253508	0.0001237	0.00011037	0.00001333
591544.44	2360265.25	0.00201451	0.00013184	0.00011185	0.00001999	0.00330245	0.00017053	0.00015406	0.00001647
592846.75	2359772.75	0.00192147	0.00011695	0.00010013	0.00001682	0.0031571	0.00013127	0.00011305	0.00001823
593179.56	2358910.25	0.00310906	0.00020286	0.00017379	0.00002907	0.00545327	0.00027437	0.0002395	0.00003486
593739.00	2358924.00	0.00231858	0.00014993	0.0001291	0.00002082	0.00480089	0.0002285	0.0002042	0.0000243
594810.13	2359390.25	0.00173278	0.00010822	0.00009222	0.000016	0.00277679	0.00013231	0.00011447	0.00001784
595303.19	2358897.25	0.00179282	0.0001239	0.00010767	0.00001623	0.00300891	0.00015536	0.00013775	0.0000176
596069.25	2359540.00	0.00133668	0.00008559	0.00007553	0.00001005	0.00218723	0.00010162	0.00009115	0.00001047
592759.94	2359280.50	0.00232599	0.00015013	0.00012667	0.00002346	0.00378161	0.00017578	0.00014902	0.00002676
596835.25	2360182.75	0.0010631	0.00006394	0.00005704	0.00000689	0.00171547	0.00007372	0.00006667	0.00000705
593265.06	2359145.00	0.00278209	0.00017539	0.00015133	0.00002406	0.00496698	0.00023645	0.00020795	0.0000285
594488.75	2359007.25	0.00206109	0.0001352	0.00011376	0.00002144	0.00338304	0.00017114	0.00014706	0.00002408
590528.88	2361024.50	0.00175355	0.00011122	0.00010229	0.00000894	0.0023566	0.0001116	0.00010369	0.00000791
599899.44	2362754.00	0.00059237	0.00003088	0.00002809	0.00000278	0.00093242	0.00003446	0.00003163	0.00000283
593436.06	2359615.00	0.00230261	0.00013622	0.00011895	0.00001727	0.0042316	0.00018226	0.00016214	0.00002012
593989.00	2359357.00	0.0018769	0.00011488	0.00010015	0.00001472	0.00372251	0.00016429	0.00014807	0.00001622
595131.56	2359773.25	0.00149956	0.00008989	0.00007741	0.00001248	0.00236674	0.00010717	0.00009334	0.00001383
597601.31	2360825.50	0.00088214	0.00005053	0.00004544	0.0000051	0.00140929	0.00005736	0.00005219	0.00000517
598367.38	2361468.25	0.00075635	0.00004169	0.00003769	0.000004	0.0011998	0.0000469	0.00004285	0.00000405
599133.38	2362111.00	0.00066323	0.00003546	0.00003218	0.00000328	0.00104701	0.0000397	0.00003637	0.00000333
593607.06	2360084.75	0.00198028	0.00011077	0.0000977	0.00001307	0.00368878	0.00014605	0.00013099	0.00001506
591457.56	2360757.75	0.00171981	0.00010757	0.00009195	0.00001562	0.00278802	0.00013656	0.00012358	0.00001297
589844.88	2362903.75	0.00115154	0.00006676	0.00006216	0.0000046	0.00159501	0.00006794	0.0000637	0.00000424
595452.94	2360156.25	0.00131775	0.00007622	0.0000662	0.00001002	0.00205574	0.00008909	0.00007806	0.00001104
592933.56	2360265.25	0.00163643	0.00009463	0.0000819	0.00001272	0.00274236	0.00010402	0.00009067	0.00001335
592239.00	2360326.00	0.00147911	0.00008622	0.00007122	0.000015	0.00305306	0.00012835	0.00010975	0.0000186
596095.75	2360922.25	0.00105059	0.00005734	0.00005047	0.00000687	0.00160988	0.00006524	0.00005772	0.00000753
597381.31	2362454.25	0.00075631	0.0000383	0.0000342	0.0000041	0.00113995	0.00004252	0.00003805	0.00000448
594239.00	2359790.00	0.0015778	0.00009222	0.00008118	0.00001104	0.00303179	0.00012607	0.00011434	0.00001173
596738.50	2361688.25	0.00087481	0.00004575	0.00004063	0.00000512	0.00133169	0.00005133	0.00004573	0.00000559
598024.06	2363220.50	0.00066304	0.00003275	0.00002936	0.00000339	0.00099639	0.00003621	0.0000325	0.00000371
598666.88	2363986.50	0.00059214	0.00002866	0.00002575	0.00000291	0.00088702	0.00003159	0.00002841	0.00000318
588818.81	2365723.00	0.00077193	0.0000418	0.00003928	0.00000252	0.00108904	0.00004331	0.00004092	0.00000239
591370.75	2361250.00	0.00147581	0.00008877	0.00007626	0.00001252	0.00242459	0.00011215	0.00010191	0.00001024
592239.00	2360826.00	0.00126296	0.00006919	0.00005772	0.00001146	0.00262424	0.0001003	0.00008613	0.00001417
594489.00	2360223.00	0.00134502	0.00007554	0.00006708	0.00000845	0.00251375	0.00009923	0.0000906	0.00000864
593020.44	2360757.75	0.00139747	0.00007696	0.00006731	0.00000965	0.00247978	0.00008287	0.00007317	0.0000097
594739.00	2360656.25	0.00116793	0.00006278	0.00005621	0.00000657	0.00226397	0.00008078	0.00007439	0.00000638
590502.50	2366174.00	0.00070253	0.00003392	0.00003022	0.0000037	0.00110351	0.00003955	0.0000362	0.00000335
593778.06	2360554.50	0.00172832	0.00009179	0.00008157	0.00001023	0.00328229	0.00012059	0.00010887	0.00001172
596239.00	2363254.25	0.00119558	0.00003644	0.00003363	0.00000281	0.00256643	0.0000469	0.00004422	0.00000267
597239.00	2364986.25	0.00058094	0.00002583	0.00002371	0.00000212	0.00123532	0.00003211	0.00003006	0.00000205
595239.00	2361522.25	0.00095961	0.00004832	0.0000437	0.00000462	0.00198926	0.00006166	0.00005723	0.00000443
593949.13	2361024.50	0.00154233	0.00007762	0.0000694	0.00000821	0.00309835	0.00010254	0.00009312	0.00000942
592239.00	2361326.00	0.00116043	0.00005741	0.00004842	0.00000899	0.00302488	0.00008626	0.0000752	0.00001105
596739.00	2364120.25	0.00066751	0.00002928	0.00002686	0.00000242	0.00158098	0.00003761	0.00003528	0.00000233
593107.25	2361250.00	0.00123839	0.0000647	0.00005702	0.00000768	0.00251497	0.00007108	0.00006355	0.00000752
591197.13	2362234.75	0.00119325	0.00006657	0.00005784	0.00000873	0.00199952	0.00008262	0.00007536	0.00000726
589502.81	2363843.50	0.00099162	0.00005562	0.00005198	0.00000364	0.00139134	0.000057	0.0000536	0.0000034
590676.19	2365189.25	0.00262586	0.00004906	0.0000448	0.00000426	0.00174153	0.00004731	0.00004364	0.00000368
594975.19	2363843.50	0.00275541	0.00005136	0.00004786	0.0000035	0.00180292	0.00004951	0.00004551	0.000004
594291.13	2361964.25	0.00215486	0.00006537	0.00005968	0.00000569	0.00545381	0.00009366	0.00008704	0.00000662
595739.00	2362388.25	0.00093281	0.00004007	0.00003657	0.0000035	0.00258001	0.00005467	0.00005134	0.00000333
593280.88	2362234.75	0.0023001	0.00005753	0.00005227	0.00000526	0.00602575	0.00007568	0.00007065	0.00000502
592239.00	2362326.00	0.00121304	0.00004577	0.00003948	0.00000629	0.00456411	0.00007692	0.00006941	0.00000751
594633.13	2362903.75	0.00324753	0.00006202	0.00005767	0.00000435	0.00302841	0.00006553	0.00006052	0.00000501
595659.19	2365723.00	0.00208295	0.00003893	0.00003642	0.00000251	0.00134554	0.00003675	0.00003393	0.00000282
591023.44	2363219.75	0.00224226	0.000061	0.00005451	0.00000649	0.00337564	0.00007394	0.00006855	0.0000054
593454.56	2363219.75	0.00351662	0.00005439	0.00005041	0.00000398	0.00156902	0.00003986	0.0000361	0.00000376
590849.81	2364204.50	0.00297764	0.00005668	0.00005153	0.00000515	0.00192823	0.0000552	0.00005085	0.00000435
595317.19	2364783.25	0.00243196	0.00004467	0.00004175	0.00000293	0.00158731	0.00004249	0.00003918	0.0000033
592239.00	2363326.00	0.00283286	0.00004662	0.00004198	0.00000464	0.00137024	0.00004376	0.00003827	0.00000549
593628.19	2364204.50	0.00100314	0.00003211	0.00002893	0.00000318	0.00069565	0.00002838	0.00002538	0.000003
592239.00	2364326.00	0.00107283	0.00003046	0.00002677	0.00000369	0.00079357	0.00003321	0.0000289	0.0000043

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593975.50	2366174.00	0.00039446	0.00002079	0.00001849	0.0000023	0.00045429	0.0000201	0.00001792	0.00000218
592239.00	2366326.00	0.00098141	0.00002425	0.00002158	0.00000267	0.00065857	0.00002501	0.00002201	0.000003
593801.81	2365189.25	0.00107584	0.00002916	0.00002646	0.0000027	0.00065518	0.0000251	0.00002254	0.00000256
592239.00	2365326.00	0.00045931	0.00002255	0.00001951	0.00000304	0.00057	0.0000266	0.00002308	0.00000352
596202.50	2360140.75	0.00120359	0.00007145	0.00006358	0.00000787	0.00190751	0.00008264	0.00007433	0.0000083
596702.50	2360140.75	0.00109328	0.00006593	0.00005877	0.00000716	0.00176141	0.00007616	0.00006884	0.00000732
597202.50	2360140.75	0.00100538	0.00006079	0.00005434	0.00000645	0.00163574	0.00007	0.00006332	0.00000668
597702.50	2360140.75	0.00094469	0.00005672	0.000051	0.00000571	0.00154939	0.00006508	0.00005903	0.00000606
598202.50	2360140.75	0.00090199	0.00005333	0.00004834	0.00000499	0.00148979	0.00006109	0.00005567	0.00000542
598702.50	2360140.75	0.00086773	0.00005013	0.00004582	0.00000431	0.00144032	0.00005743	0.00005265	0.00000477
599202.50	2360140.75	0.00083357	0.00004681	0.00004313	0.00000368	0.00138667	0.00005367	0.00004955	0.00000412
599702.50	2360140.75	0.00079795	0.0000434	0.00004025	0.00000315	0.00132927	0.00004985	0.00004631	0.00000354
600202.50	2360140.75	0.00076085	0.00004004	0.00003731	0.00000273	0.00126845	0.00004608	0.00004302	0.00000306
600702.50	2360140.75	0.00072356	0.00003691	0.00003449	0.00000241	0.00120605	0.00004254	0.00003985	0.00000269
596202.50	2360640.75	0.00110985	0.00006207	0.00005515	0.00000692	0.00171176	0.00007085	0.00006317	0.00000768
596702.50	2360640.75	0.00104077	0.00005929	0.00005315	0.00000615	0.00163086	0.00006736	0.00006094	0.00000642
597202.50	2360640.75	0.00095848	0.00005536	0.00004967	0.00000569	0.00153029	0.00006298	0.00005719	0.00000579
597702.50	2360640.75	0.00088575	0.00005146	0.00004623	0.00000523	0.00142982	0.00005862	0.00005326	0.00000536
598202.50	2360640.75	0.00083455	0.00004834	0.00004359	0.00000475	0.00135968	0.00005502	0.00005007	0.00000495
598702.50	2360640.75	0.00080044	0.00004589	0.00004162	0.00000427	0.0013162	0.00005222	0.00004767	0.00000455
599202.50	2360640.75	0.0007763	0.00004372	0.0000399	0.00000382	0.00128637	0.00004981	0.00004566	0.00000415
599702.50	2360640.75	0.00075116	0.00004144	0.00003808	0.00000336	0.00124819	0.00004726	0.00004355	0.00000371
600202.50	2360640.75	0.00072657	0.00003908	0.00003613	0.00000295	0.00120889	0.00004463	0.00004134	0.00000328
600702.50	2360640.75	0.00070034	0.00003664	0.00003404	0.0000026	0.00116534	0.00004191	0.00003901	0.0000029
596202.50	2361140.75	0.0009941	0.00005352	0.0000471	0.00000641	0.00152323	0.00006066	0.00005372	0.00000694
596702.50	2361140.75	0.00097213	0.00005265	0.00004714	0.00000551	0.00148795	0.00005927	0.00005322	0.00000605
597202.50	2361140.75	0.00091636	0.00005046	0.00004549	0.00000497	0.00142324	0.00005667	0.00005151	0.00000516
597702.50	2361140.75	0.00084709	0.00004741	0.00004276	0.00000465	0.00133752	0.00005347	0.00004876	0.0000047
598202.50	2361140.75	0.00079001	0.00004446	0.00004011	0.00000435	0.00126341	0.00005028	0.00004584	0.00000443
598702.50	2361140.75	0.00075036	0.00004214	0.0000381	0.00000404	0.00121546	0.00004769	0.00004352	0.00000417
599202.50	2361140.75	0.000722	0.00004026	0.00003655	0.00000372	0.0011828	0.00004563	0.00004172	0.00000391
599702.50	2361140.75	0.00069939	0.00003859	0.0000352	0.00000339	0.00115446	0.00004378	0.00004016	0.00000362
600202.50	2361140.75	0.00068125	0.00003699	0.00003392	0.00000306	0.00113037	0.00004203	0.0000387	0.00000333
600702.50	2361140.75	0.00066532	0.00003534	0.00003257	0.00000277	0.00110808	0.00004024	0.00003719	0.00000305
596202.50	2361640.75	0.00089092	0.00004673	0.00004092	0.00000581	0.00138494	0.00005277	0.00004704	0.00000574
596702.50	2361640.75	0.00088289	0.00004627	0.00004109	0.00000518	0.00134619	0.00005197	0.0000463	0.00000567
597202.50	2361640.75	0.00086468	0.0000456	0.00004106	0.00000453	0.00131605	0.00005085	0.00004592	0.00000493
597702.50	2361640.75	0.00081845	0.00004385	0.00003971	0.00000414	0.00126213	0.00004886	0.00004458	0.00000428
598202.50	2361640.75	0.00076465	0.00004154	0.00003762	0.00000392	0.00119876	0.00004651	0.00004254	0.00000397
598702.50	2361640.75	0.00071691	0.00003923	0.00003551	0.00000372	0.001139	0.00004411	0.00004033	0.00000378
599202.50	2361640.75	0.00068206	0.00003733	0.00003383	0.0000035	0.00109791	0.00004208	0.00003848	0.0000036
599702.50	2361640.75	0.00065727	0.00003582	0.00003255	0.00000327	0.00107105	0.00004046	0.00003705	0.00000341
600202.50	2361640.75	0.00063962	0.00003456	0.00003151	0.00000304	0.00105334	0.00003912	0.0000359	0.00000322
600702.50	2361640.75	0.00062501	0.00003336	0.00003054	0.00000281	0.0010363	0.00003783	0.00003481	0.00000302
596202.50	2362140.75	0.00084332	0.00004082	0.00003607	0.00000476	0.00183001	0.00005003	0.00004574	0.00000429
596702.50	2362140.75	0.00080177	0.00004091	0.00003604	0.00000487	0.00129908	0.00004642	0.00004146	0.00000496
597202.50	2362140.75	0.0007999	0.00004101	0.00003664	0.00000437	0.00120765	0.00004563	0.00004084	0.00000479
597702.50	2362140.75	0.00077752	0.00004012	0.00003631	0.00000381	0.00117757	0.00004447	0.00004035	0.00000412
598202.50	2362140.75	0.00074004	0.00003875	0.00003522	0.00000353	0.00113486	0.00004296	0.00003932	0.00000364
598702.50	2362140.75	0.00069492	0.00003691	0.00003354	0.00000337	0.00108288	0.00004115	0.00003774	0.00000341
599202.50	2362140.75	0.00065719	0.0000351	0.00003186	0.00000324	0.00103831	0.0000393	0.00003601	0.00000329
599702.50	2362140.75	0.00062828	0.00003358	0.00003049	0.00000309	0.00100732	0.00003774	0.00003457	0.00000317
600202.50	2362140.75	0.00060748	0.00003236	0.00002943	0.00000293	0.00098761	0.00003649	0.00003344	0.00000304
600702.50	2362140.75	0.00059165	0.00003133	0.00002856	0.00000277	0.00097276	0.00003541	0.0000325	0.00000291
596202.50	2362640.75	0.00117478	0.0000393	0.00003561	0.00000368	0.00270968	0.00005063	0.00004736	0.00000327
596702.50	2362640.75	0.00077528	0.00003677	0.00003249	0.00000428	0.0016865	0.00004473	0.00004071	0.00000401
597202.50	2362640.75	0.00073493	0.00003704	0.00003281	0.00000424	0.00111564	0.00004117	0.00003673	0.00000444
597702.50	2362640.75	0.00072744	0.0000366	0.00003287	0.00000372	0.00109386	0.00004052	0.00003643	0.00000409
598202.50	2362640.75	0.00070714	0.00003582	0.00003253	0.00000329	0.0010677	0.00003954	0.00003602	0.00000353
598702.50	2362640.75	0.0006762	0.00003471	0.00003163	0.00000308	0.00103267	0.00003834	0.00003517	0.00000317
599202.50	2362640.75	0.00063971	0.00003324	0.00003028	0.00000297	0.00099018	0.0000369	0.00003389	0.00000301
599702.50	2362640.75	0.00060816	0.00003179	0.00002891	0.00000287	0.0009567	0.00003547	0.00003255	0.00000292
600202.50	2362640.75	0.00058211	0.0000305	0.00002774	0.00000276	0.00092869	0.00003418	0.00003135	0.00000283
600702.50	2362640.75	0.00057013	0.00002967	0.00002699	0.00000267	0.00093234	0.00003347	0.00003069	0.00000278
596202.50	2363140.75	0.00155602	0.00003908	0.00003619	0.00000289	0.00229523	0.00004552	0.0000428	0.00000272
596702.50	2363140.75	0.0006976	0.00003338	0.00002982	0.00000356	0.00135022	0.00003981	0.00003658	0.00000323
597202.50	2363140.75	0.0006783	0.00003365	0.00002973	0.00000392	0.00104741	0.00003749	0.00003365	0.00000384
597702.50	2363140.75	0.00067512	0.00003348	0.00002979	0.00000369	0.00101919	0.00003706	0.00003313	0.00000393
598202.50	2363140.75	0.0006663	0.00003299	0.00002976	0.00000323	0.0010002	0.00003643	0.00003288	0.00000354
598702.50	2363140.75	0.00064954	0.00003236	0.00002946	0.00000289	0.00097801	0.00003562	0.00003253	0.00000309

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
599202.50	2363140.75	0.00062336	0.00003142	0.00002869	0.00000273	0.00094865	0.00003462	0.0000318	0.00000282
599702.50	2363140.75	0.00059263	0.00003023	0.00002758	0.00000265	0.00091495	0.00003347	0.00003078	0.00000269
600202.50	2363140.75	0.00057153	0.00002913	0.00002654	0.0000026	0.00090164	0.00003244	0.00002979	0.00000265
600702.50	2363140.75	0.00055025	0.00002815	0.00002562	0.00000253	0.00088369	0.00003155	0.00002894	0.00000261
596202.50	2363640.75	0.00086757	0.00003324	0.00003077	0.00000247	0.00241696	0.00004589	0.00004335	0.00000254
596702.50	2363640.75	0.00065898	0.00003089	0.000028	0.00000289	0.00129672	0.00003745	0.00003478	0.00000267
597202.50	2363640.75	0.00063208	0.00003069	0.0000273	0.00000339	0.00102552	0.00003476	0.00003161	0.00000316
597702.50	2363640.75	0.0006298	0.00003085	0.00002731	0.00000354	0.00095793	0.00003414	0.00003057	0.00000357
598202.50	2363640.75	0.00062669	0.00003061	0.00002734	0.00000327	0.00093945	0.00003375	0.00003023	0.00000353
598702.50	2363640.75	0.00061634	0.00003008	0.00002722	0.00000286	0.00092219	0.00003312	0.00002999	0.00000313
599202.50	2363640.75	0.0006006	0.00002949	0.00002691	0.00000258	0.00090251	0.0000324	0.00002965	0.00000275
599702.50	2363640.75	0.00057779	0.0000287	0.00002625	0.00000245	0.00087711	0.00003157	0.00002904	0.00000253
600202.50	2363640.75	0.00056121	0.00002782	0.0000254	0.00000242	0.00087237	0.00003076	0.00002827	0.00000249
600702.50	2363640.75	0.00053724	0.00002687	0.0000245	0.00000237	0.00084935	0.00002991	0.00002747	0.00000243
596202.50	2364140.75	0.0010418	0.00003326	0.00003105	0.00000222	0.00259378	0.00004538	0.00004294	0.00000243
596702.50	2364140.75	0.00068989	0.00002943	0.00002706	0.00000238	0.00172651	0.0000385	0.00003619	0.00000231
597202.50	2364140.75	0.00059789	0.00002847	0.00002563	0.00000284	0.00098773	0.00003266	0.00003004	0.00000262
597702.50	2364140.75	0.00058814	0.00002836	0.00002517	0.00000319	0.00092595	0.00003172	0.00002868	0.00000305
598202.50	2364140.75	0.00058498	0.00002833	0.00002514	0.0000032	0.00088848	0.00003131	0.00002802	0.00000329
598702.50	2364140.75	0.00058033	0.00002801	0.00002512	0.0000029	0.00087191	0.0000309	0.00002775	0.00000315
599202.50	2364140.75	0.0005727	0.0000276	0.00002504	0.00000256	0.00085591	0.00003035	0.00002755	0.0000028
599702.50	2364140.75	0.0005598	0.0000271	0.00002476	0.00000235	0.00083906	0.00002972	0.00002722	0.0000025
600202.50	2364140.75	0.00054249	0.00002642	0.00002417	0.00000225	0.00082367	0.00002901	0.00002667	0.00000234
600702.50	2364140.75	0.00052664	0.0000257	0.00002348	0.00000222	0.00081761	0.00002838	0.00002609	0.00000229
596202.50	2364640.75	0.00188706	0.0000367	0.00003465	0.00000205	0.00131214	0.00003618	0.00003383	0.00000235
596702.50	2364640.75	0.00126877	0.00003192	0.00002989	0.00000203	0.00204758	0.0000382	0.0000361	0.0000021
597202.50	2364640.75	0.00058213	0.00002672	0.00002437	0.00000235	0.00112132	0.00003221	0.00003	0.00000222
597702.50	2364640.75	0.00055832	0.00002633	0.00002358	0.00000275	0.00093639	0.00003012	0.00002757	0.00000254
598202.50	2364640.75	0.00055046	0.00002634	0.00002336	0.00000299	0.00085232	0.00002926	0.00002633	0.00000292
598702.50	2364640.75	0.0005483	0.00002626	0.00002335	0.00000291	0.00082514	0.00002892	0.00002587	0.00000305
599202.50	2364640.75	0.0005437	0.00002593	0.00002331	0.00000262	0.00081159	0.00002852	0.00002566	0.00000286
599702.50	2364640.75	0.00053981	0.00002562	0.00002326	0.00000236	0.00080572	0.00002809	0.00002551	0.00000258
600202.50	2364640.75	0.00052328	0.00002504	0.0000229	0.00000214	0.00078321	0.00002744	0.00002516	0.00000227
600702.50	2364640.75	0.00050798	0.00002445	0.00002239	0.00000206	0.00076912	0.00002682	0.00002468	0.00000214
590370.00	2357440.00	0.00583591	0.00043656	0.00034262	0.00009393	0.00707673	0.0003708	0.00029678	0.00007401
590870.00	2357440.00	0.0077835	0.00071723	0.00057357	0.00014366	0.00948797	0.00060178	0.0004912	0.00011058
591370.00	2357440.00	0.00921026	0.00093632	0.0007778	0.00015852	0.01337731	0.00105921	0.00088542	0.00017379
591870.00	2357440.00	0.01213585	0.00118596	0.00098491	0.00020105	0.01657583	0.001458	0.00127055	0.00018745
592370.00	2357440.00	0.00701024	0.00064944	0.0004682	0.00018124	0.02166424	0.00186816	0.00157372	0.00029444
592870.00	2357440.00	0.00736829	0.00061914	0.00049074	0.0001284	0.01684037	0.00126128	0.00103815	0.00022313
593370.00	2357440.00	0.00594716	0.00053066	0.00041391	0.00011675	0.01283213	0.00095225	0.00077538	0.00017688
593870.00	2357440.00	0.00488999	0.00043445	0.00035926	0.0000752	0.00985322	0.00073968	0.00063081	0.00010888
594370.00	2357440.00	0.00393908	0.00033075	0.00028889	0.00004186	0.007474	0.00053908	0.00047267	0.00006641
594870.00	2357440.00	0.00304221	0.00023339	0.00021003	0.00002336	0.00577319	0.00036286	0.00032875	0.00003411
595370.00	2357440.00	0.00241568	0.00017205	0.00015663	0.00001542	0.00458326	0.00025166	0.0002314	0.00002026
595870.00	2357440.00	0.00201642	0.00013699	0.00012561	0.00001138	0.00380227	0.00019016	0.00017614	0.00001402
596370.00	2357440.00	0.0017524	0.00011511	0.00010626	0.00000884	0.00326438	0.00015356	0.00014308	0.00001048
596870.00	2357440.00	0.00156246	0.00009962	0.00009255	0.00000708	0.00285837	0.00012881	0.00012064	0.00000817
597370.00	2357440.00	0.00142229	0.00008809	0.00008228	0.00000581	0.00254498	0.00011092	0.00010433	0.00000659
597870.00	2357440.00	0.0013154	0.00007913	0.00007424	0.00000489	0.00229906	0.00009732	0.00009184	0.00000548
598370.00	2357440.00	0.00122312	0.00007161	0.00006742	0.00000419	0.00208889	0.00008631	0.00008165	0.00000466
598870.00	2357440.00	0.00114096	0.00006525	0.00006161	0.00000364	0.00191154	0.00007734	0.00007332	0.00000403
599370.00	2357440.00	0.00106986	0.00005982	0.00005662	0.00000321	0.00175135	0.00006982	0.0000663	0.00000352
599870.00	2357440.00	0.00100829	0.00005522	0.00005235	0.00000286	0.00162185	0.00006365	0.00006052	0.00000313
600370.00	2357440.00	0.00095153	0.00005119	0.00004861	0.00000258	0.00150909	0.00005842	0.00005561	0.00000282
600870.00	2357440.00	0.00090147	0.00004767	0.00004532	0.00000234	0.00140721	0.00005391	0.00005136	0.00000255
601370.00	2357440.00	0.00085737	0.00004456	0.00004241	0.00000215	0.00132059	0.00005002	0.00004769	0.00000233
601870.00	2357440.00	0.0008159	0.00004178	0.00003981	0.00000197	0.00124057	0.0000466	0.00004446	0.00000214
602370.00	2357440.00	0.0007789	0.00003931	0.00003748	0.00000183	0.00117154	0.0000436	0.00004162	0.00000198
602870.00	2357440.00	0.00074491	0.00003709	0.00003539	0.0000017	0.00110952	0.00004094	0.0000391	0.00000184
603370.00	2357440.00	0.00071359	0.00003508	0.00003349	0.00000159	0.00105372	0.00003857	0.00003685	0.00000172
603870.00	2357440.00	0.00068408	0.00003325	0.00003176	0.00000149	0.00100173	0.00003643	0.00003482	0.00000161
604370.00	2357440.00	0.00065728	0.00003159	0.00003019	0.0000014	0.00095573	0.00003452	0.00003301	0.00000151
604870.00	2357440.00	0.00063237	0.00003008	0.00002876	0.00000132	0.00091359	0.00003278	0.00003136	0.00000142
605370.00	2357440.00	0.0006092	0.00002869	0.00002744	0.00000125	0.00087493	0.0000312	0.00002986	0.00000134
605870.00	2357440.00	0.00058758	0.00002741	0.00002623	0.00000119	0.0008394	0.00002977	0.00002849	0.00000127
606370.00	2357440.00	0.00056737	0.00002624	0.00002511	0.00000113	0.00080666	0.00002845	0.00002724	0.00000121
606870.00	2357440.00	0.00054845	0.00002515	0.00002407	0.00000107	0.00077637	0.00002724	0.00002609	0.00000115
607370.00	2357440.00	0.0005307	0.00002414	0.00002311	0.00000103	0.00074828	0.00002613	0.00002503	0.0000011
607870.00	2357440.00	0.00051401	0.0000232	0.00002222	0.00000098	0.0007222	0.0000251	0.00002405	0.00000105

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2357440.00	0.00049831	0.00002233	0.00002139	0.00000094	0.00069792	0.00002415	0.00002314	0.00000101
608870.00	2357440.00	0.0004835	0.00002152	0.00002062	0.0000009	0.00067529	0.00002326	0.0000223	0.00000097
609370.00	2357440.00	0.00046949	0.00002076	0.00001989	0.00000087	0.00065413	0.00002244	0.00002151	0.00000093
609870.00	2357440.00	0.00045618	0.00002005	0.00001921	0.00000084	0.00063432	0.00002167	0.00002078	0.00000089
610370.00	2357440.00	0.00044369	0.00001938	0.00001858	0.00000081	0.00061575	0.00002096	0.0000201	0.00000086
610870.00	2357440.00	0.00043187	0.00001876	0.00001798	0.00000078	0.0005983	0.00002029	0.00001946	0.00000083
611370.00	2357440.00	0.00042066	0.00001817	0.00001741	0.00000075	0.00058189	0.00001966	0.00001886	0.0000008
611870.00	2357440.00	0.00041001	0.00001761	0.00001688	0.00000073	0.00056643	0.00001907	0.0000183	0.00000077
612370.00	2357440.00	0.00039986	0.00001708	0.00001638	0.0000007	0.00055184	0.00001852	0.00001777	0.00000075
612870.00	2357440.00	0.00039021	0.00001659	0.0000159	0.00000068	0.00053806	0.00001799	0.00001727	0.00000073
613370.00	2357440.00	0.00038102	0.00001612	0.00001545	0.00000066	0.00052502	0.0000175	0.00001679	0.0000007
613870.00	2357440.00	0.00037224	0.00001567	0.00001503	0.00000064	0.00051267	0.00001703	0.00001634	0.00000068
614370.00	2357440.00	0.00036386	0.00001524	0.00001462	0.00000062	0.00050097	0.00001658	0.00001592	0.00000066
614870.00	2357440.00	0.00035584	0.00001484	0.00001423	0.00000061	0.00048985	0.00001616	0.00001551	0.00000065
615370.00	2357440.00	0.00034841	0.00001446	0.00001387	0.00000059	0.00047999	0.00001577	0.00001514	0.00000063
615870.00	2357440.00	0.00034107	0.00001409	0.00001352	0.00000058	0.00046993	0.00001538	0.00001477	0.00000061
616370.00	2357440.00	0.00033383	0.00001374	0.00001318	0.00000056	0.00045979	0.00001501	0.00001441	0.0000006
616870.00	2357440.00	0.00032705	0.0000134	0.00001286	0.00000055	0.00045056	0.00001466	0.00001408	0.00000058
617370.00	2357440.00	0.00032059	0.00001309	0.00001255	0.00000053	0.00044186	0.00001432	0.00001375	0.00000057
617870.00	2357440.00	0.00031506	0.00001279	0.00001227	0.00000052	0.00043557	0.00001403	0.00001347	0.00000055
618370.00	2357440.00	0.00030945	0.0000125	0.00001199	0.00000051	0.0004279	0.00001371	0.00001317	0.00000054
618870.00	2357440.00	0.00030254	0.00001221	0.00001171	0.00000049	0.0004173	0.00001339	0.00001287	0.00000052
619370.00	2357440.00	0.00029354	0.000012	0.00001154	0.00000046	0.00044118	0.00001331	0.00001284	0.00000047
619870.00	2357440.00	0.00028764	0.00001172	0.00001127	0.00000045	0.00042034	0.00001295	0.00001249	0.00000046
590370.00	2357940.00	0.00481404	0.00041187	0.00034193	0.00006994	0.00621183	0.00036714	0.00030646	0.00006069
590870.00	2357940.00	0.00535852	0.00050103	0.00042693	0.0000741	0.00769353	0.00053718	0.00045692	0.00008027
591370.00	2357940.00	0.00645309	0.00056747	0.00050201	0.00006546	0.00880196	0.00066819	0.0005836	0.0000846
591870.00	2357940.00	0.00718954	0.00065643	0.00053417	0.00012226	0.01124213	0.00083944	0.00075719	0.00008225
592370.00	2357940.00	0.00457016	0.00037886	0.00028828	0.00009058	0.01140586	0.00085029	0.00070864	0.00014165
592870.00	2357940.00	0.00538869	0.00041331	0.00034009	0.00007322	0.00926283	0.00061439	0.00051239	0.00010201
593370.00	2357940.00	0.00416479	0.00032848	0.00026004	0.00006844	0.00872869	0.00053573	0.00046605	0.00006968
593870.00	2357940.00	0.00377039	0.00029809	0.00024519	0.0000529	0.00706038	0.0004499	0.00037819	0.00007171
594370.00	2357940.00	0.00316069	0.00025433	0.00021464	0.00003969	0.00574457	0.00037045	0.0003214	0.00004906
594870.00	2357940.00	0.0026886	0.00021319	0.0001856	0.00002759	0.00467221	0.00029531	0.00025919	0.00003612
595370.00	2357940.00	0.00231499	0.00017313	0.00015527	0.00001786	0.00404451	0.00023507	0.00021086	0.00002421
595870.00	2357940.00	0.00195965	0.00013594	0.00012417	0.00001177	0.00349027	0.0001817	0.00016633	0.00001537
596370.00	2357940.00	0.00166874	0.00010808	0.00009955	0.00000853	0.0030105	0.00014156	0.00013107	0.00001049
596870.00	2357940.00	0.00145275	0.00008929	0.00008256	0.00000673	0.00262991	0.00011441	0.00010651	0.0000079
597370.00	2357940.00	0.00129943	0.00007687	0.00007126	0.00000561	0.00234258	0.00009653	0.00009013	0.00000639
597870.00	2357940.00	0.00118255	0.00006796	0.00006315	0.0000048	0.00211018	0.00008384	0.00007848	0.00000536
598370.00	2357940.00	0.00109421	0.00006141	0.00005722	0.00000419	0.00192779	0.00007462	0.00007	0.00000463
598870.00	2357940.00	0.00102171	0.00005619	0.00005249	0.00000371	0.00177385	0.00006736	0.00006331	0.00000405
599370.00	2357940.00	0.00095996	0.00005185	0.00004855	0.0000033	0.00164057	0.00006142	0.00005783	0.00000359
599870.00	2357940.00	0.00090765	0.00004821	0.00004524	0.00000297	0.00152782	0.00005652	0.00005329	0.00000322
600370.00	2357940.00	0.00086181	0.00004507	0.00004237	0.0000027	0.00142935	0.00005234	0.00004943	0.00000292
600870.00	2357940.00	0.00082299	0.00004236	0.0000399	0.00000246	0.00134654	0.00004881	0.00004615	0.00000266
601370.00	2357940.00	0.0007859	0.0000399	0.00003764	0.00000226	0.00127052	0.00004567	0.00004322	0.00000244
601870.00	2357940.00	0.00075171	0.00003767	0.00003559	0.00000208	0.00119585	0.00004278	0.00004054	0.00000224
602370.00	2357940.00	0.00071887	0.00003568	0.00003375	0.00000193	0.00113093	0.00004032	0.00003823	0.00000208
602870.00	2357940.00	0.0006906	0.00003388	0.00003209	0.00000179	0.00107419	0.00003807	0.00003614	0.00000194
603370.00	2357940.00	0.00066402	0.00003224	0.00003056	0.00000168	0.00102182	0.00003605	0.00003424	0.00000181
603870.00	2357940.00	0.00063994	0.00003073	0.00002916	0.00000157	0.00097567	0.00003423	0.00003254	0.00000169
604370.00	2357940.00	0.00061744	0.00002935	0.00002788	0.00000148	0.00093335	0.00003257	0.00003099	0.00000159
604870.00	2357940.00	0.000596	0.00002808	0.00002669	0.00000139	0.00089334	0.00003105	0.00002956	0.0000015
605370.00	2357940.00	0.00057565	0.0000269	0.00002558	0.00000131	0.00085589	0.00002966	0.00002824	0.00000141
605870.00	2357940.00	0.00055697	0.0000258	0.00002456	0.00000124	0.0008224	0.00002838	0.00002704	0.00000134
606370.00	2357940.00	0.00053925	0.00002479	0.0000236	0.00000118	0.00079108	0.0000272	0.00002593	0.00000127
606870.00	2357940.00	0.00052262	0.00002384	0.00002272	0.00000112	0.00076216	0.00002612	0.00002491	0.00000121
607370.00	2357940.00	0.00050692	0.00002296	0.00002189	0.00000107	0.00073528	0.00002511	0.00002396	0.00000115
607870.00	2357940.00	0.00049208	0.00002213	0.00002111	0.00000102	0.00071023	0.00002418	0.00002308	0.0000011
608370.00	2357940.00	0.00047804	0.00002136	0.00002038	0.00000098	0.00068686	0.00002331	0.00002226	0.00000105
608870.00	2357940.00	0.00046472	0.00002063	0.00001969	0.00000094	0.00066502	0.0000225	0.00002149	0.00000101
609370.00	2357940.00	0.00045205	0.00001995	0.00001905	0.0000009	0.00064456	0.00002174	0.00002077	0.00000097
609870.00	2357940.00	0.00043994	0.00001931	0.00001844	0.00000087	0.00062538	0.00002103	0.0000201	0.00000093
610370.00	2357940.00	0.00042859	0.0000187	0.00001787	0.00000084	0.00060736	0.00002037	0.00001948	0.00000089
610870.00	2357940.00	0.00041812	0.00001814	0.00001733	0.0000008	0.00059121	0.00001976	0.0000189	0.00000086
611370.00	2357940.00	0.00040783	0.0000176	0.00001682	0.00000078	0.00057522	0.00001917	0.00001834	0.00000083
611870.00	2357940.00	0.00039802	0.00001709	0.00001634	0.00000075	0.00056014	0.00001862	0.00001782	0.0000008
612370.00	2357940.00	0.00038837	0.0000166	0.00001587	0.00000073	0.00054514	0.00001809	0.00001731	0.00000077
612870.00	2357940.00	0.00037944	0.00001614	0.00001543	0.0000007	0.00053169	0.00001759	0.00001684	0.00000075

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2357940.00	0.00037089	0.0000157	0.00001502	0.00000068	0.00051895	0.00001713	0.0000164	0.00000073
613870.00	2357940.00	0.00036272	0.00001528	0.00001462	0.00000066	0.00050687	0.00001668	0.00001598	0.0000007
614370.00	2357940.00	0.00035488	0.00001489	0.00001424	0.00000064	0.00049542	0.00001626	0.00001558	0.00000068
614870.00	2357940.00	0.00034737	0.00001451	0.00001388	0.00000062	0.00048453	0.00001586	0.0000152	0.00000066
615370.00	2357940.00	0.00034017	0.00001414	0.00001354	0.00000061	0.00047419	0.00001548	0.00001483	0.00000064
615870.00	2357940.00	0.00033328	0.0000138	0.00001321	0.00000059	0.00046434	0.00001511	0.00001448	0.00000063
616370.00	2357940.00	0.00032665	0.00001347	0.00001289	0.00000057	0.00045496	0.00001476	0.00001415	0.00000061
616870.00	2357940.00	0.00032068	0.00001316	0.0000126	0.00000056	0.00044714	0.00001444	0.00001385	0.0000006
617370.00	2357940.00	0.00031473	0.00001286	0.00001231	0.00000055	0.00043912	0.00001413	0.00001355	0.00000058
617870.00	2357940.00	0.0003086	0.00001256	0.00001203	0.00000053	0.00043013	0.00001381	0.00001324	0.00000057
618370.00	2357940.00	0.00030307	0.00001229	0.00001177	0.00000052	0.00042276	0.00001352	0.00001296	0.00000055
618870.00	2357940.00	0.00029546	0.000012	0.0000115	0.0000005	0.00041036	0.00001319	0.00001267	0.00000052
619370.00	2357940.00	0.00028908	0.00001183	0.00001136	0.00000046	0.00045285	0.00001322	0.00001274	0.00000048
619870.00	2357940.00	0.00030327	0.00001177	0.00001133	0.00000044	0.00056927	0.00001351	0.00001306	0.00000045
590370.00	2358440.00	0.003542	0.00030522	0.00026333	0.0000419	0.00519921	0.00032144	0.00027659	0.00004485
590870.00	2358440.00	0.00384351	0.00032206	0.00028258	0.00003948	0.00570964	0.00037642	0.00032988	0.00004655
591370.00	2358440.00	0.0050836	0.00041675	0.00037278	0.00004397	0.00646429	0.00041951	0.00037607	0.00004344
591870.00	2358440.00	0.00464201	0.00038845	0.00031394	0.0000745	0.00828387	0.00056042	0.00050574	0.00005468
592370.00	2358440.00	0.00326463	0.00024554	0.00019327	0.00005227	0.00731919	0.00046412	0.00038654	0.00007758
592870.00	2358440.00	0.00406899	0.00029405	0.00024353	0.00005053	0.00599973	0.00034604	0.00029157	0.00005446
593370.00	2358440.00	0.00323711	0.00022261	0.00019054	0.00003207	0.00730874	0.00039023	0.0003433	0.00004693
593870.00	2358440.00	0.0028696	0.00020627	0.0001677	0.00003857	0.00510551	0.00028448	0.00024536	0.00003912
594370.00	2358440.00	0.00265864	0.00019192	0.00016239	0.00002953	0.00462331	0.00026089	0.00022409	0.0000368
594870.00	2358440.00	0.00226653	0.00016752	0.00014379	0.00002373	0.00391429	0.00022206	0.00019508	0.00002698
595370.00	2358440.00	0.00197235	0.00014555	0.00012711	0.00001844	0.00332318	0.00018584	0.0001642	0.00002164
595870.00	2358440.00	0.00177691	0.00012692	0.00011334	0.00001358	0.0029907	0.00015898	0.00014231	0.00001667
596370.00	2358440.00	0.00160719	0.00010843	0.00009863	0.0000098	0.0027432	0.00013497	0.00012272	0.00001224
596870.00	2358440.00	0.00142884	0.00009064	0.00008352	0.00000713	0.00247034	0.00011235	0.00010366	0.0000087
597370.00	2358440.00	0.00127126	0.0000761	0.00007058	0.00000552	0.0022187	0.00009377	0.00008728	0.00000649
597870.00	2358440.00	0.00114833	0.00006544	0.00006084	0.0000046	0.00201146	0.00007994	0.00007469	0.00000525
598370.00	2358440.00	0.00105523	0.00005787	0.00005385	0.00000402	0.00184905	0.00007007	0.00006556	0.00000451
598870.00	2358440.00	0.00096821	0.00005171	0.00004815	0.00000356	0.00168568	0.00006202	0.0000581	0.00000392
599370.00	2358440.00	0.00090372	0.00004726	0.00004403	0.00000323	0.00156142	0.00005619	0.00005267	0.00000352
599870.00	2358440.00	0.0008505	0.00004374	0.00004078	0.00000296	0.00145593	0.00005159	0.00004839	0.0000032
600370.00	2358440.00	0.00080796	0.00004094	0.00003821	0.00000273	0.00137049	0.00004796	0.00004501	0.00000295
600870.00	2358440.00	0.00077125	0.00003858	0.00003605	0.00000253	0.00129947	0.00004497	0.00004224	0.00000273
601370.00	2358440.00	0.00073634	0.00003644	0.00003409	0.00000235	0.00122579	0.0000422	0.00003967	0.00000253
601870.00	2358440.00	0.00070473	0.00003453	0.00003235	0.00000218	0.00115878	0.00003975	0.0000374	0.00000235
602370.00	2358440.00	0.000676	0.00003282	0.00003078	0.00000204	0.00109831	0.00003756	0.00003537	0.00000219
602870.00	2358440.00	0.00065082	0.00003128	0.00002937	0.0000019	0.00104656	0.00003562	0.00003358	0.00000204
603370.00	2358440.00	0.00062942	0.00002988	0.0000281	0.00000178	0.0010012	0.00003385	0.00003193	0.00000191
603870.00	2358440.00	0.00060694	0.00002858	0.00002691	0.00000168	0.00095889	0.00003228	0.00003048	0.0000018
604370.00	2358440.00	0.000585	0.00002738	0.0000258	0.00000158	0.00091426	0.00003079	0.0000291	0.00000169
604870.00	2358440.00	0.00056678	0.00002628	0.00002479	0.00000149	0.00087902	0.00002946	0.00002786	0.0000016
605370.00	2358440.00	0.00054756	0.00002524	0.00002383	0.00000141	0.00084093	0.00002819	0.00002668	0.00000151
605870.00	2358440.00	0.00053049	0.00002428	0.00002295	0.00000133	0.00080832	0.00002704	0.00002561	0.00000143
606370.00	2358440.00	0.00051461	0.00002339	0.00002212	0.00000126	0.00077853	0.00002598	0.00002462	0.00000136
606870.00	2358440.00	0.00049949	0.00002255	0.00002135	0.0000012	0.00075049	0.000025	0.00002371	0.00000129
607370.00	2358440.00	0.00048527	0.00002177	0.00002063	0.00000115	0.00072457	0.00002408	0.00002285	0.00000123
607870.00	2358440.00	0.00047181	0.00002104	0.00001995	0.00000109	0.00070036	0.00002323	0.00002206	0.00000117
608370.00	2358440.00	0.00045914	0.00002035	0.00001931	0.00000104	0.00067801	0.00002244	0.00002132	0.00000112
608870.00	2358440.00	0.00044688	0.0000197	0.0000187	0.000001	0.0006565	0.00002169	0.00002062	0.00000107
609370.00	2358440.00	0.00043528	0.00001909	0.00001813	0.00000096	0.0006366	0.000021	0.00001997	0.00000103
609870.00	2358440.00	0.00042451	0.00001851	0.00001759	0.00000092	0.00061877	0.00002036	0.00001937	0.00000099
610370.00	2358440.00	0.00041384	0.00001796	0.00001708	0.00000089	0.00060048	0.00001973	0.00001879	0.00000095
610870.00	2358440.00	0.00040417	0.00001745	0.0000166	0.00000085	0.00058455	0.00001916	0.00001825	0.00000091
611370.00	2358440.00	0.00039469	0.00001696	0.00001614	0.00000082	0.0005689	0.00001862	0.00001774	0.00000088
611870.00	2358440.00	0.00038535	0.00001649	0.0000157	0.00000079	0.00055334	0.00001809	0.00001725	0.00000085
612370.00	2358440.00	0.00037669	0.00001604	0.00001528	0.00000076	0.00053938	0.00001761	0.00001679	0.00000082
612870.00	2358440.00	0.00036841	0.00001562	0.00001488	0.00000074	0.00052617	0.00001715	0.00001636	0.00000079
613370.00	2358440.00	0.00036047	0.00001522	0.0000145	0.00000072	0.00051365	0.00001671	0.00001594	0.00000076
613870.00	2358440.00	0.00035286	0.00001484	0.00001414	0.00000069	0.00050178	0.00001629	0.00001555	0.00000074
614370.00	2358440.00	0.00034554	0.00001447	0.0000138	0.00000067	0.00049051	0.00001589	0.00001518	0.00000072
614870.00	2358440.00	0.00033857	0.00001412	0.00001347	0.00000065	0.00047999	0.00001552	0.00001482	0.0000007
615370.00	2358440.00	0.00033227	0.00001379	0.00001315	0.00000063	0.00047101	0.00001517	0.0000145	0.00000068
615870.00	2358440.00	0.00032552	0.00001346	0.00001285	0.00000062	0.00046047	0.00001482	0.00001416	0.00000066
616370.00	2358440.00	0.00031918	0.00001315	0.00001255	0.0000006	0.00045089	0.00001448	0.00001384	0.00000064
616870.00	2358440.00	0.0003133	0.00001286	0.00001227	0.00000058	0.00044239	0.00001417	0.00001354	0.00000062
617370.00	2358440.00	0.00030756	0.00001257	0.000012	0.00000057	0.00043393	0.00001386	0.00001326	0.0000006
617870.00	2358440.00	0.00030271	0.00001231	0.00001175	0.00000055	0.00042808	0.00001358	0.000013	0.00000059

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2358440.00	0.00029748	0.00001204	0.0000115	0.00000054	0.0004197	0.0000133	0.00001272	0.00000057
618870.00	2358440.00	0.00028876	0.00001175	0.00001124	0.00000052	0.00040551	0.00001297	0.00001242	0.00000054
619370.00	2358440.00	0.00028231	0.0000115	0.00001101	0.0000005	0.00039848	0.0000127	0.00001218	0.00000052
619870.00	2358440.00	0.00027668	0.00001127	0.00001079	0.00000048	0.00039553	0.00001247	0.00001197	0.0000005
590370.00	2358940.00	0.00266537	0.0002111	0.00018508	0.00002603	0.00415169	0.00024294	0.00021389	0.00002904
590870.00	2358940.00	0.00323356	0.00024739	0.00022299	0.00002439	0.00446409	0.00025674	0.00022911	0.00002762
591370.00	2358940.00	0.00395782	0.00030591	0.00027169	0.00003422	0.00524865	0.00031586	0.00028823	0.00002763
591870.00	2358940.00	0.00327489	0.00025181	0.00020374	0.00004807	0.00608537	0.00037685	0.0003369	0.00003994
592370.00	2358940.00	0.00246782	0.00017102	0.00013741	0.00003362	0.0052984	0.00029059	0.00024315	0.00004744
592870.00	2358940.00	0.00303448	0.00020486	0.0001722	0.00003265	0.004436	0.00022405	0.00019057	0.00003348
593370.00	2358940.00	0.00276891	0.00017623	0.00015333	0.0000229	0.00579808	0.00028135	0.00024846	0.00003289
593870.00	2358940.00	0.0022328	0.00014573	0.00012353	0.0000222	0.00429025	0.00020727	0.00018514	0.00002213
594370.00	2358940.00	0.00214597	0.0001422	0.00011881	0.00002339	0.00355653	0.0001816	0.0001562	0.0000254
594870.00	2358940.00	0.00199798	0.00013411	0.00011571	0.0000184	0.00332023	0.00016967	0.00014818	0.00002149
595370.00	2358940.00	0.00174804	0.00012018	0.00010459	0.00001559	0.00292711	0.00014984	0.000133	0.00001684
595870.00	2358940.00	0.00155102	0.00010687	0.00009391	0.00001296	0.00257711	0.00013023	0.00011597	0.00001426
596370.00	2358940.00	0.00142297	0.00009622	0.00008583	0.0000104	0.00236278	0.00011543	0.00010354	0.00001189
596870.00	2358940.00	0.00133129	0.00008649	0.00007829	0.0000082	0.00223667	0.00010327	0.00009353	0.00000974
597370.00	2358940.00	0.00122187	0.00007594	0.00006976	0.00000618	0.00205945	0.0000905	0.00008319	0.00000731
597870.00	2358940.00	0.00112166	0.00006624	0.00006141	0.00000483	0.0019057	0.00007896	0.00007332	0.00000564
598370.00	2358940.00	0.00102897	0.00005788	0.00005391	0.00000397	0.00175744	0.00006893	0.00006439	0.00000454
598870.00	2358940.00	0.00094987	0.00005121	0.00004778	0.00000343	0.00162591	0.00006083	0.00005698	0.00000384
599370.00	2358940.00	0.00088161	0.00004597	0.0000429	0.00000307	0.00150834	0.0000544	0.00005102	0.00000338
599870.00	2358940.00	0.00082587	0.00004194	0.00003913	0.00000281	0.00140995	0.00004943	0.00004636	0.00000307
600370.00	2358940.00	0.00078112	0.00003885	0.00003623	0.00000263	0.00132964	0.0000456	0.00004275	0.00000285
600870.00	2358940.00	0.00074203	0.00003631	0.00003385	0.00000246	0.0012562	0.00004242	0.00003976	0.00000266
601370.00	2358940.00	0.00070699	0.00003416	0.00003184	0.00000232	0.00119071	0.00003977	0.00003727	0.0000025
601870.00	2358940.00	0.0006747	0.00003225	0.00003007	0.00000218	0.001122	0.00003728	0.00003494	0.00000234
602370.00	2358940.00	0.00064978	0.00003074	0.00002868	0.00000207	0.0010735	0.00003541	0.00003319	0.00000221
602870.00	2358940.00	0.00062426	0.00002933	0.00002738	0.00000195	0.00102482	0.00003368	0.00003158	0.00000209
603370.00	2358940.00	0.00060189	0.00002805	0.00002621	0.00000185	0.00097981	0.00003208	0.0000301	0.00000198
603870.00	2358940.00	0.00058122	0.00002689	0.00002514	0.00000175	0.00093839	0.00003063	0.00002876	0.00000187
604370.00	2358940.00	0.00056178	0.00002581	0.00002416	0.00000166	0.0008994	0.0000293	0.00002753	0.00000177
604870.00	2358940.00	0.00054384	0.00002482	0.00002325	0.00000157	0.00086362	0.00002808	0.0000264	0.00000168
605370.00	2358940.00	0.00052749	0.0000239	0.00002241	0.00000149	0.00083186	0.00002696	0.00002536	0.0000016
605870.00	2358940.00	0.00051043	0.00002302	0.0000216	0.00000142	0.00079771	0.00002589	0.00002437	0.00000152
606370.00	2358940.00	0.00049509	0.00002221	0.00002086	0.00000135	0.00076788	0.00002491	0.00002347	0.00000145
606870.00	2358940.00	0.00048104	0.00002145	0.00002017	0.00000129	0.00074115	0.00002401	0.00002263	0.00000138
607370.00	2358940.00	0.00046774	0.00002074	0.00001952	0.00000123	0.00071613	0.00002317	0.00002185	0.00000131
607870.00	2358940.00	0.00045552	0.00002008	0.00001891	0.00000117	0.00069372	0.00002239	0.00002114	0.00000125
608370.00	2358940.00	0.00044316	0.00001945	0.00001833	0.00000112	0.0006707	0.00002164	0.00002044	0.0000012
608870.00	2358940.00	0.00043177	0.00001885	0.00001778	0.00000107	0.00065004	0.00002095	0.0000198	0.00000115
609370.00	2358940.00	0.00042087	0.00001829	0.00001727	0.00000103	0.00063061	0.0000203	0.0000192	0.0000011
609870.00	2358940.00	0.00041047	0.00001776	0.00001678	0.00000099	0.00061231	0.00001969	0.00001864	0.00000106
610370.00	2358940.00	0.00040124	0.00001727	0.00001632	0.00000095	0.00059646	0.00001914	0.00001813	0.00000101
610870.00	2358940.00	0.00039142	0.00001678	0.00001587	0.00000091	0.00057877	0.00001858	0.0000176	0.00000098
611370.00	2358940.00	0.00038253	0.00001633	0.00001545	0.00000088	0.00056339	0.00001807	0.00001713	0.00000094
611870.00	2358940.00	0.00037405	0.0000159	0.00001506	0.00000085	0.00054884	0.00001759	0.00001668	0.00000091
612370.00	2358940.00	0.00036592	0.00001549	0.00001468	0.00000082	0.00053506	0.00001713	0.00001626	0.00000087
612870.00	2358940.00	0.00035829	0.0000151	0.00001432	0.00000079	0.00052245	0.0000167	0.00001586	0.00000084
613370.00	2358940.00	0.0003512	0.00001474	0.00001398	0.00000076	0.00051114	0.00001631	0.00001549	0.00000082
613870.00	2358940.00	0.0003435	0.00001437	0.00001363	0.00000074	0.00049789	0.00001589	0.0000151	0.00000079
614370.00	2358940.00	0.0003366	0.00001403	0.00001332	0.00000071	0.00048672	0.00001552	0.00001475	0.00000076
614870.00	2358940.00	0.00033073	0.00001372	0.00001302	0.00000069	0.00047829	0.00001519	0.00001445	0.00000074
615370.00	2358940.00	0.00032473	0.0000134	0.00001273	0.00000067	0.00046873	0.00001485	0.00001413	0.00000072
615870.00	2358940.00	0.00031814	0.0000131	0.00001245	0.00000065	0.00045813	0.00001452	0.00001382	0.0000007
616370.00	2358940.00	0.00031272	0.00001282	0.00001218	0.00000063	0.00044986	0.0000142	0.00001353	0.00000068
616870.00	2358940.00	0.00030622	0.00001253	0.00001191	0.00000061	0.00043897	0.00001388	0.00001323	0.00000066
617370.00	2358940.00	0.00030148	0.00001227	0.00001167	0.0000006	0.00043282	0.00001361	0.00001297	0.00000064
617870.00	2358940.00	0.00029496	0.00001199	0.00001141	0.00000058	0.0004209	0.00001329	0.00001268	0.00000061
618370.00	2358940.00	0.0002872	0.00001171	0.00001115	0.00000056	0.00040874	0.00001298	0.00001239	0.00000059
618870.00	2358940.00	0.00028139	0.00001146	0.00001093	0.00000054	0.00040111	0.00001271	0.00001215	0.00000057
619370.00	2358940.00	0.00027486	0.00001123	0.00001072	0.00000052	0.00040183	0.0000125	0.00001196	0.00000054
619870.00	2358940.00	0.00028202	0.00001119	0.00001071	0.00000049	0.0005277	0.00001291	0.00001241	0.0000005
590370.00	2359440.00	0.00226565	0.00016388	0.00014697	0.0000169	0.00341467	0.00017765	0.00015858	0.00001907
590870.00	2359440.00	0.0028276	0.00020441	0.00018599	0.00001842	0.00372217	0.00019924	0.0001812	0.00001804
591370.00	2359440.00	0.00308663	0.00022456	0.00019747	0.00002709	0.0043697	0.00025025	0.00022942	0.00002083
591870.00	2359440.00	0.00248933	0.00017639	0.00014345	0.00003294	0.00465196	0.00026119	0.00023134	0.00002985
592370.00	2359440.00	0.00193645	0.00012435	0.00010142	0.00002293	0.00407813	0.00019734	0.00016604	0.0000313
592870.00	2359440.00	0.00230261	0.00014585	0.00012421	0.00002164	0.00356228	0.00015945	0.0001368	0.00002265

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2359440.00	0.00246191	0.00014905	0.0001296	0.00001945	0.0044718	0.00019962	0.00017689	0.00002273
593870.00	2359440.00	0.00190238	0.00011393	0.00010086	0.00001307	0.00406263	0.00017325	0.00015603	0.00001723
594370.00	2359440.00	0.0017385	0.00010761	0.00009105	0.00001657	0.00295974	0.00013589	0.00012088	0.00001501
594870.00	2359440.00	0.00169853	0.0001055	0.00009015	0.00001535	0.00271579	0.00012853	0.00011131	0.00001722
595370.00	2359440.00	0.00159491	0.00010078	0.00008822	0.00001257	0.00257936	0.00012161	0.00010753	0.00001407
595870.00	2359440.00	0.00141823	0.00009165	0.00008067	0.00001098	0.00232529	0.0001097	0.0000982	0.0000115
596370.00	2359440.00	0.00127478	0.00008272	0.0000732	0.00000952	0.00209461	0.00009785	0.00008777	0.00001008
596870.00	2359440.00	0.00118473	0.00007595	0.00006787	0.00000809	0.00195618	0.00008894	0.00008011	0.00000884
597370.00	2359440.00	0.00111344	0.00006976	0.00006309	0.00000666	0.00184576	0.00008128	0.00007378	0.0000075
597870.00	2359440.00	0.00105532	0.00006381	0.00005838	0.00000542	0.00176003	0.0000743	0.00006808	0.00000622
598370.00	2359440.00	0.00099345	0.0000577	0.0000533	0.00000439	0.0016642	0.00006724	0.00006219	0.00000505
598870.00	2359440.00	0.00093094	0.00005183	0.0000482	0.00000363	0.0015652	0.0000605	0.00005635	0.00000415
599370.00	2359440.00	0.00086946	0.00004655	0.00004345	0.00000309	0.00146482	0.00005439	0.00005091	0.00000348
599870.00	2359440.00	0.00081488	0.0000421	0.00003936	0.00000274	0.00137391	0.00004919	0.00004615	0.00000304
600370.00	2359440.00	0.00076682	0.00003845	0.00003595	0.0000025	0.00129253	0.00004488	0.00004214	0.00000275
600870.00	2359440.00	0.0007261	0.00003553	0.00003319	0.00000234	0.00122252	0.0000414	0.00003885	0.00000254
601370.00	2359440.00	0.00068913	0.00003308	0.00003088	0.0000022	0.00115566	0.00003844	0.00003606	0.00000238
601870.00	2359440.00	0.00065843	0.00003114	0.00002903	0.0000021	0.00110343	0.00003613	0.00003387	0.00000227
602370.00	2359440.00	0.00063105	0.00002944	0.00002744	0.000002	0.0010502	0.00003404	0.00003188	0.00000215
602870.00	2359440.00	0.00060503	0.00002799	0.00002607	0.00000192	0.0010014	0.00003227	0.00003021	0.00000206
603370.00	2359440.00	0.00058291	0.00002672	0.00002489	0.00000183	0.00095877	0.00003071	0.00002874	0.00000196
603870.00	2359440.00	0.00056366	0.0000256	0.00002385	0.00000176	0.00091918	0.00002928	0.00002741	0.00000188
604370.00	2359440.00	0.00054402	0.00002456	0.00002288	0.00000168	0.00088031	0.00002799	0.0000262	0.00000179
604870.00	2359440.00	0.00052771	0.00002366	0.00002205	0.00000161	0.00084893	0.0000269	0.00002518	0.00000172
605370.00	2359440.00	0.00051079	0.0000228	0.00002126	0.00000154	0.00081812	0.00002588	0.00002424	0.00000164
605870.00	2359440.00	0.00049522	0.000022	0.00002053	0.00000147	0.00078757	0.00002491	0.00002334	0.00000157
606370.00	2359440.00	0.00048013	0.00002124	0.00001984	0.00000141	0.00075786	0.00002399	0.00002248	0.00000151
606870.00	2359440.00	0.00046675	0.00002055	0.0000192	0.00000135	0.00073235	0.00002315	0.00002171	0.00000144
607370.00	2359440.00	0.00045407	0.00001989	0.0000186	0.00000129	0.0007084	0.00002237	0.00002099	0.00000138
607870.00	2359440.00	0.00044243	0.00001928	0.00001804	0.00000124	0.00068692	0.00002165	0.00002033	0.00000132
608370.00	2359440.00	0.00043062	0.00001869	0.0000175	0.00000119	0.00066467	0.00002095	0.00001968	0.00000127
608870.00	2359440.00	0.00041973	0.00001814	0.000017	0.00000114	0.00064467	0.0000203	0.00001909	0.00000122
609370.00	2359440.00	0.00040968	0.00001762	0.00001653	0.00000109	0.00062692	0.00001971	0.00001854	0.00000117
609870.00	2359440.00	0.00039953	0.00001712	0.00001607	0.00000105	0.00060843	0.00001913	0.00001801	0.00000112
610370.00	2359440.00	0.00039036	0.00001665	0.00001564	0.00000101	0.00059202	0.0000186	0.00001751	0.00000108
610870.00	2359440.00	0.00038133	0.00001621	0.00001523	0.00000097	0.00057572	0.00001808	0.00001704	0.00000104
611370.00	2359440.00	0.00037294	0.00001578	0.00001485	0.00000094	0.00056091	0.0000176	0.0000166	0.000001
611870.00	2359440.00	0.00036481	0.00001538	0.00001448	0.0000009	0.00054657	0.00001714	0.00001618	0.00000097
612370.00	2359440.00	0.00035702	0.000015	0.00001412	0.00000087	0.00053296	0.00001671	0.00001578	0.00000093
612870.00	2359440.00	0.00034957	0.00001463	0.00001379	0.00000084	0.00052004	0.0000163	0.0000154	0.0000009
613370.00	2359440.00	0.00034214	0.00001427	0.00001346	0.00000081	0.000507	0.00001589	0.00001502	0.00000087
613870.00	2359440.00	0.00033607	0.00001395	0.00001316	0.00000079	0.00049765	0.00001555	0.00001471	0.00000084
614370.00	2359440.00	0.00032866	0.00001362	0.00001286	0.00000076	0.00048426	0.00001516	0.00001435	0.00000081
614870.00	2359440.00	0.00032239	0.00001331	0.00001257	0.00000074	0.00047384	0.00001482	0.00001404	0.00000079
615370.00	2359440.00	0.00031644	0.00001302	0.0000123	0.00000071	0.00046409	0.0000145	0.00001374	0.00000076
615870.00	2359440.00	0.00031142	0.00001275	0.00001205	0.00000069	0.00045687	0.00001421	0.00001347	0.00000074
616370.00	2359440.00	0.00030595	0.00001247	0.0000118	0.00000067	0.00044675	0.0000139	0.00001318	0.00000072
616870.00	2359440.00	0.00029912	0.00001218	0.00001153	0.00000065	0.00043487	0.00001358	0.00001289	0.00000069
617370.00	2359440.00	0.00029509	0.00001196	0.00001132	0.00000064	0.00043046	0.00001335	0.00001267	0.00000068
617870.00	2359440.00	0.0002872	0.00001166	0.00001105	0.00000061	0.0004153	0.000013	0.00001235	0.00000065
618370.00	2359440.00	0.00027883	0.00001138	0.0000108	0.00000058	0.00040584	0.00001271	0.00001209	0.00000061
618870.00	2359440.00	0.00027319	0.00001115	0.00001059	0.00000056	0.0004084	0.0000125	0.00001191	0.00000059
619370.00	2359440.00	0.00026898	0.00001095	0.00001041	0.00000054	0.00041403	0.00001232	0.00001175	0.00000057
619870.00	2359440.00	0.00026516	0.00001076	0.00001023	0.00000053	0.00041578	0.00001212	0.00001157	0.00000055
590370.00	2359940.00	0.0020585	0.0001403	0.00012806	0.00001225	0.00290241	0.00014055	0.00012738	0.00001318
590870.00	2359940.00	0.00246196	0.00016983	0.00015473	0.0000151	0.00324136	0.00016782	0.00015451	0.00001332
591370.00	2359940.00	0.00245659	0.0001683	0.00014672	0.00002158	0.00365461	0.00019887	0.00018212	0.00001675
591870.00	2359940.00	0.00197907	0.00012996	0.00010636	0.0000236	0.00369997	0.00018843	0.00016584	0.00002259
592370.00	2359940.00	0.00161673	0.00009711	0.00008022	0.00001689	0.00336997	0.00014649	0.00012427	0.00002222
592870.00	2359940.00	0.00180956	0.00010815	0.00009293	0.00001521	0.00300216	0.00012088	0.00010451	0.00001637
593370.00	2359940.00	0.00216187	0.00012604	0.00011002	0.00001602	0.00355568	0.00014562	0.00012947	0.00001616
593870.00	2359940.00	0.00176921	0.00009929	0.00008871	0.00001058	0.00381299	0.00014983	0.00013525	0.00001459
594370.00	2359940.00	0.00147195	0.00008502	0.00007481	0.00001021	0.002739	0.00011256	0.00010232	0.00001024
594870.00	2359940.00	0.00143267	0.00008444	0.00007203	0.00001241	0.0023098	0.00010105	0.00008927	0.00001178
595370.00	2359940.00	0.00140282	0.00008279	0.00007197	0.00001082	0.00219862	0.00009765	0.00008546	0.00001219
595870.00	2359940.00	0.00131603	0.00007907	0.00007001	0.00000906	0.0020869	0.00009243	0.0000826	0.00000984
596370.00	2359940.00	0.00119177	0.00007305	0.00006489	0.00000816	0.00192307	0.00008512	0.00007673	0.00000839
596870.00	2359940.00	0.00108513	0.00006687	0.00005956	0.0000073	0.00176669	0.00007755	0.00006999	0.00000757
597370.00	2359940.00	0.00100896	0.00006184	0.00005544	0.0000064	0.00165184	0.0000713	0.00006451	0.00000679
597870.00	2359940.00	0.00096078	0.00005794	0.00005239	0.00000555	0.00158588	0.00006662	0.00006057	0.00000604

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2359940.00	0.00092097	0.00005418	0.00004945	0.00000473	0.0015285	0.00006227	0.000057	0.00000526
598870.00	2359940.00	0.00088103	0.00005029	0.00004631	0.00000398	0.00146622	0.00005784	0.00005335	0.00000448
599370.00	2359940.00	0.00083997	0.00004633	0.00004296	0.00000336	0.00140045	0.00005336	0.00004956	0.0000038
599870.00	2359940.00	0.00079716	0.00004245	0.00003957	0.00000289	0.00133084	0.000049	0.00004576	0.00000324
600370.00	2359940.00	0.00075577	0.0000389	0.00003636	0.00000254	0.00126272	0.00004498	0.00004214	0.00000284
600870.00	2359940.00	0.00071602	0.00003577	0.00003347	0.0000023	0.00119566	0.00004138	0.00003885	0.00000253
601370.00	2359940.00	0.00067964	0.00003308	0.00003096	0.00000212	0.00113328	0.00003827	0.00003595	0.00000232
601870.00	2359940.00	0.00064783	0.00003084	0.00002884	0.000002	0.00107831	0.00003565	0.00003348	0.00000217
602370.00	2359940.00	0.00061825	0.00002891	0.00002701	0.0000019	0.00102515	0.00003335	0.00003131	0.00000205
602870.00	2359940.00	0.0005946	0.00002736	0.00002554	0.00000183	0.00098389	0.00003153	0.00002956	0.00000197
603370.00	2359940.00	0.00057151	0.00002598	0.00002422	0.00000176	0.00094198	0.00002988	0.00002799	0.00000189
603870.00	2359940.00	0.00055043	0.00002478	0.00002308	0.0000017	0.00090472	0.00002845	0.00002663	0.00000182
604370.00	2359940.00	0.0005311	0.00002373	0.00002208	0.00000164	0.00086788	0.00002718	0.00002542	0.00000176
604870.00	2359940.00	0.00051435	0.00002279	0.00002121	0.00000159	0.00083644	0.00002604	0.00002434	0.00000169
605370.00	2359940.00	0.00049881	0.00002195	0.00002042	0.00000153	0.00080454	0.00002498	0.00002335	0.00000163
605870.00	2359940.00	0.00048331	0.00002118	0.0000197	0.00000148	0.00077704	0.00002408	0.0000225	0.00000158
606370.00	2359940.00	0.00046859	0.00002045	0.00001903	0.00000143	0.00074828	0.0000232	0.00002168	0.00000152
606870.00	2359940.00	0.00045529	0.00001979	0.00001841	0.00000138	0.00072289	0.0000224	0.00002093	0.00000147
607370.00	2359940.00	0.00044437	0.00001919	0.00001787	0.00000133	0.00070357	0.00002169	0.00002028	0.00000141
607870.00	2359940.00	0.00043229	0.00001861	0.00001733	0.00000128	0.00068059	0.000021	0.00001964	0.00000136
608370.00	2359940.00	0.0004209	0.00001805	0.00001682	0.00000123	0.00065917	0.00002034	0.00001903	0.00000131
608870.00	2359940.00	0.00041034	0.00001753	0.00001635	0.00000119	0.00063982	0.00001973	0.00001847	0.00000127
609370.00	2359940.00	0.00040027	0.00001704	0.0000159	0.00000114	0.00062178	0.00001917	0.00001794	0.00000122
609870.00	2359940.00	0.0003906	0.00001658	0.00001547	0.0000011	0.0006041	0.00001862	0.00001744	0.00000118
610370.00	2359940.00	0.00038176	0.00001614	0.00001507	0.00000106	0.00058825	0.00001812	0.00001698	0.00000114
610870.00	2359940.00	0.00037313	0.00001571	0.00001469	0.00000103	0.00057269	0.00001763	0.00001654	0.0000011
611370.00	2359940.00	0.00036493	0.00001531	0.00001432	0.00000099	0.00055805	0.00001718	0.00001612	0.00000106
611870.00	2359940.00	0.00035738	0.00001494	0.00001398	0.00000096	0.00054499	0.00001676	0.00001573	0.00000102
612370.00	2359940.00	0.00034923	0.00001456	0.00001364	0.00000092	0.00052994	0.00001632	0.00001533	0.00000099
612870.00	2359940.00	0.00034238	0.00001422	0.00001333	0.00000089	0.00051833	0.00001594	0.00001499	0.00000095
613370.00	2359940.00	0.00033569	0.00001389	0.00001302	0.00000086	0.00050698	0.00001558	0.00001465	0.00000092
613870.00	2359940.00	0.000329	0.00001357	0.00001273	0.00000084	0.00049545	0.00001522	0.00001433	0.00000089
614370.00	2359940.00	0.00032251	0.00001326	0.00001245	0.00000081	0.0004843	0.00001488	0.00001401	0.00000087
614870.00	2359940.00	0.00031595	0.00001296	0.00001218	0.00000078	0.00047249	0.00001453	0.00001369	0.00000084
615370.00	2359940.00	0.00031003	0.00001268	0.00001192	0.00000076	0.00046234	0.00001421	0.0000134	0.00000081
615870.00	2359940.00	0.00030481	0.00001241	0.00001168	0.00000074	0.00045397	0.00001393	0.00001315	0.00000079
616370.00	2359940.00	0.00029654	0.00001209	0.00001138	0.00000071	0.00043791	0.00001355	0.0000128	0.00000075
616870.00	2359940.00	0.00029016	0.00001182	0.00001113	0.00000068	0.0004274	0.00001325	0.00001253	0.00000072
617370.00	2359940.00	0.00028547	0.00001158	0.00001092	0.00000066	0.00041978	0.00001299	0.00001229	0.0000007
617870.00	2359940.00	0.00027877	0.00001132	0.00001068	0.00000064	0.00041043	0.00001271	0.00001203	0.00000068
618370.00	2359940.00	0.00027972	0.00001118	0.00001057	0.0000006	0.00051585	0.00001299	0.00001235	0.00000063
618870.00	2359940.00	0.00028573	0.00001107	0.00001049	0.00000058	0.00058764	0.00001311	0.0000125	0.00000061
619370.00	2359940.00	0.00026597	0.0000107	0.00001013	0.00000058	0.00044678	0.00001223	0.00001163	0.0000006
619870.00	2359940.00	0.00026329	0.00001053	0.00000997	0.00000056	0.00045379	0.00001206	0.00001148	0.00000058
590370.00	2360440.00	0.00188847	0.00012394	0.00011406	0.00000988	0.00256128	0.00012076	0.00011099	0.00000977
590870.00	2360440.00	0.00213128	0.00014061	0.00012778	0.00001284	0.00286983	0.00014458	0.00013378	0.00001081
591370.00	2360440.00	0.00199972	0.00012988	0.00011248	0.00001739	0.00308341	0.00015869	0.00014479	0.0000139
591870.00	2360440.00	0.00165303	0.00010156	0.00008382	0.00001774	0.00309772	0.00014355	0.00012583	0.00001772
592370.00	2360440.00	0.00137329	0.00007759	0.00006477	0.00001283	0.00285511	0.0001131	0.00009662	0.00001648
592870.00	2360440.00	0.00147624	0.00008353	0.00007223	0.0000113	0.00261166	0.00009583	0.00008344	0.0000124
593370.00	2360440.00	0.00183908	0.00010366	0.00009098	0.00001268	0.00295194	0.00011038	0.00009854	0.00001184
593870.00	2360440.00	0.00168565	0.00008983	0.00008018	0.00000965	0.00339908	0.0001259	0.00011384	0.00001206
594370.00	2360440.00	0.00131739	0.00007092	0.00006418	0.00000674	0.00281912	0.0000989	0.00009068	0.00000822
594870.00	2360440.00	0.00121121	0.00006754	0.00005902	0.00000852	0.00207162	0.00008216	0.0000747	0.00000747
595370.00	2360440.00	0.00121523	0.00006866	0.00005923	0.00000943	0.00190424	0.00007975	0.00007031	0.00000944
595870.00	2360440.00	0.00118589	0.00006707	0.00005908	0.00000799	0.00183291	0.0000773	0.00006834	0.00000895
596370.00	2360440.00	0.00112374	0.00006468	0.00005775	0.00000693	0.00175913	0.000074	0.00006661	0.00000739
596870.00	2360440.00	0.0010328	0.00006045	0.00005409	0.00000635	0.00164852	0.00006911	0.00006262	0.00000649
597370.00	2360440.00	0.00094828	0.00005592	0.0000501	0.00000582	0.00153186	0.00006397	0.00005802	0.00000595
597870.00	2360440.00	0.000889	0.00005227	0.00004702	0.00000526	0.00145028	0.00005971	0.00005423	0.00000548
598370.00	2360440.00	0.00084709	0.00004933	0.00004464	0.00000469	0.00139297	0.00005628	0.00005128	0.000005
598870.00	2360440.00	0.00081588	0.00004673	0.0000426	0.00000413	0.00134967	0.0000533	0.00004881	0.0000045
599370.00	2360440.00	0.00078854	0.00004415	0.00004055	0.00000361	0.00130903	0.00005041	0.00004642	0.00000399
599870.00	2360440.00	0.00076098	0.00004146	0.00003833	0.00000314	0.00126561	0.00004741	0.00004391	0.0000035
600370.00	2360440.00	0.00073214	0.0000387	0.00003596	0.00000274	0.00121879	0.00004434	0.00004127	0.00000307
600870.00	2360440.00	0.00070048	0.00003597	0.00003356	0.00000241	0.00116512	0.00004128	0.00003859	0.00000269
601370.00	2360440.00	0.00066961	0.00003342	0.00003125	0.00000217	0.00111278	0.0000384	0.000036	0.0000024
601870.00	2360440.00	0.00064001	0.00003112	0.00002913	0.00000199	0.00106202	0.00003578	0.0000336	0.00000218
602370.00	2360440.00	0.00061263	0.0000291	0.00002724	0.00000186	0.00101489	0.00003346	0.00003144	0.00000203
602870.00	2360440.00	0.00058721	0.00002734	0.00002558	0.00000176	0.00097298	0.00003146	0.00002955	0.00000192

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2360440.00	0.0005636	0.0000258	0.00002412	0.00000168	0.00093091	0.00002966	0.00002784	0.00000182
603870.00	2360440.00	0.0005416	0.00002443	0.00002282	0.00000162	0.00088834	0.00002802	0.00002628	0.00000174
604370.00	2360440.00	0.00052313	0.0000233	0.00002173	0.00000157	0.00085617	0.0000267	0.00002502	0.00000168
604870.00	2360440.00	0.00050549	0.00002229	0.00002076	0.00000153	0.00082283	0.00002547	0.00002384	0.00000163
605370.00	2360440.00	0.00048908	0.00002139	0.00001991	0.00000148	0.00079471	0.00002443	0.00002285	0.00000158
605870.00	2360440.00	0.00047353	0.00002059	0.00001914	0.00000144	0.00076534	0.00002347	0.00002193	0.00000154
606370.00	2360440.00	0.00045877	0.00001985	0.00001844	0.0000014	0.00073695	0.00002257	0.00002108	0.00000149
606870.00	2360440.00	0.000446	0.00001919	0.00001783	0.00000136	0.00071329	0.00002178	0.00002033	0.00000145
607370.00	2360440.00	0.00043586	0.0000186	0.00001728	0.00000132	0.00069479	0.00002108	0.00001967	0.00000141
607870.00	2360440.00	0.00042351	0.00001803	0.00001675	0.00000128	0.00067249	0.00002042	0.00001905	0.00000137
608370.00	2360440.00	0.00041228	0.0000175	0.00001625	0.00000125	0.00065141	0.00001978	0.00001845	0.00000133
608870.00	2360440.00	0.00040211	0.000017	0.0000158	0.00000121	0.00063297	0.0000192	0.00001791	0.00000129
609370.00	2360440.00	0.00039264	0.00001654	0.00001537	0.00000117	0.00061648	0.00001867	0.00001742	0.00000125
609870.00	2360440.00	0.00038328	0.0000161	0.00001497	0.00000113	0.00059934	0.00001815	0.00001694	0.00000121
610370.00	2360440.00	0.00037509	0.00001569	0.00001459	0.0000011	0.00058512	0.00001769	0.00001652	0.00000117
610870.00	2360440.00	0.00036653	0.00001529	0.00001422	0.00000106	0.00056956	0.00001723	0.00001609	0.00000113
611370.00	2360440.00	0.00035844	0.0000149	0.00001388	0.00000103	0.00055505	0.00001679	0.00001569	0.0000011
611870.00	2360440.00	0.00035105	0.00001455	0.00001355	0.000001	0.00054225	0.00001639	0.00001532	0.00000106
612370.00	2360440.00	0.00034409	0.0000142	0.00001324	0.00000097	0.00053048	0.000016	0.00001497	0.00000103
612870.00	2360440.00	0.00033471	0.00001381	0.00001288	0.00000093	0.000511	0.00001552	0.00001453	0.00000099
613370.00	2360440.00	0.00032886	0.00001351	0.00001261	0.0000009	0.00050159	0.0000152	0.00001424	0.00000096
613870.00	2360440.00	0.00032398	0.00001324	0.00001237	0.00000088	0.00049472	0.00001493	0.00001399	0.00000094
614370.00	2360440.00	0.00031665	0.00001294	0.00001209	0.00000085	0.00048191	0.00001458	0.00001367	0.00000091
614870.00	2360440.00	0.00031052	0.00001265	0.00001183	0.00000083	0.00047098	0.00001426	0.00001338	0.00000088
615370.00	2360440.00	0.00030572	0.00001239	0.00001159	0.0000008	0.00046276	0.00001397	0.00001312	0.00000086
615870.00	2360440.00	0.00029714	0.00001206	0.00001129	0.00000077	0.00044639	0.0000136	0.00001278	0.00000082
616370.00	2360440.00	0.00029003	0.00001178	0.00001103	0.00000075	0.00043426	0.00001328	0.00001249	0.00000079
616870.00	2360440.00	0.00028293	0.0000115	0.00001078	0.00000072	0.00042522	0.000013	0.00001224	0.00000076
617370.00	2360440.00	0.00027754	0.00001126	0.00001056	0.0000007	0.00041885	0.00001275	0.00001202	0.00000074
617870.00	2360440.00	0.00027628	0.00001108	0.00001042	0.00000067	0.00049058	0.00001288	0.00001218	0.0000007
618370.00	2360440.00	0.00028799	0.00001104	0.0000104	0.00000064	0.00061909	0.00001327	0.00001259	0.00000067
618870.00	2360440.00	0.00041141	0.00001167	0.00001105	0.00000061	0.00106031	0.00001493	0.00001429	0.00000064
619370.00	2360440.00	0.00030212	0.00001082	0.00001022	0.0000006	0.00074368	0.00001341	0.00001279	0.00000063
619870.00	2360440.00	0.0002623	0.00001033	0.00000973	0.00000059	0.00048145	0.00001199	0.00001137	0.00000062
590370.00	2360940.00	0.00172762	0.00010991	0.00010144	0.00000846	0.00232369	0.00010798	0.00010013	0.00000784
590870.00	2360940.00	0.00183663	0.00011654	0.00010542	0.00001111	0.00254416	0.00012492	0.0001157	0.00000922
591370.00	2360940.00	0.0016604	0.00010276	0.00008859	0.00001417	0.00263253	0.00012777	0.00011615	0.00001162
591870.00	2360940.00	0.00138413	0.00008011	0.00006647	0.00001364	0.00262173	0.00011176	0.00009769	0.00001407
592370.00	2360940.00	0.00118326	0.00006232	0.00005251	0.00000981	0.00262582	0.00009004	0.00007757	0.00001246
592870.00	2360940.00	0.00121824	0.00006453	0.00005615	0.00000838	0.00255143	0.00007737	0.00006814	0.00000923
593370.00	2360940.00	0.00155013	0.00008425	0.00007438	0.00000988	0.00262197	0.00008691	0.00007804	0.00000887
593870.00	2360940.00	0.00159479	0.00008151	0.00007267	0.00000884	0.00308402	0.00010491	0.0000951	0.00000981
594370.00	2360940.00	0.00145146	0.00006515	0.00005954	0.00000561	0.00475322	0.00010376	0.00009613	0.00000763
594870.00	2360940.00	0.00109214	0.00005743	0.00005171	0.00000571	0.00214158	0.00007374	0.0000681	0.00000564
595370.00	2360940.00	0.00104989	0.00005685	0.00004957	0.0000728	0.00171723	0.00006642	0.00005996	0.00000647
595870.00	2360940.00	0.00105367	0.00005746	0.00005012	0.00000734	0.00162453	0.00006552	0.00005788	0.00000764
596370.00	2360940.00	0.00103259	0.00005645	0.0000502	0.00000625	0.00158137	0.00006398	0.00005704	0.00000694
596870.00	2360940.00	0.00098109	0.00005446	0.00004894	0.00000552	0.00152178	0.0000614	0.00005558	0.00000582
597370.00	2360940.00	0.0009068	0.00005122	0.00004611	0.00000511	0.00143091	0.00005789	0.0000527	0.00000519
597870.00	2360940.00	0.0008386	0.00004778	0.00004302	0.00000476	0.00134054	0.00005417	0.00004933	0.00000484
598370.00	2360940.00	0.0007912	0.00004503	0.00004063	0.0000044	0.00128025	0.00005106	0.00004653	0.00000454
598870.00	2360940.00	0.00075815	0.00004285	0.00003883	0.00000402	0.0012404	0.00004862	0.00004439	0.00000423
599370.00	2360940.00	0.00073335	0.00004097	0.00003732	0.00000365	0.00120998	0.00004653	0.00004263	0.0000039
599870.00	2360940.00	0.00071275	0.00003915	0.00003588	0.00000327	0.00118211	0.00004453	0.00004097	0.00000356
600370.00	2360940.00	0.00069404	0.00003729	0.00003436	0.00000293	0.00115484	0.00004248	0.00003925	0.00000323
600870.00	2360940.00	0.00067238	0.00003529	0.00003269	0.0000026	0.00111871	0.00004025	0.00003737	0.00000288
601370.00	2360940.00	0.00064935	0.00003324	0.00003092	0.00000231	0.00107871	0.00003796	0.00003539	0.00000257
601870.00	2360940.00	0.00062797	0.00003125	0.00002916	0.0000021	0.00104361	0.00003576	0.00003342	0.00000234
602370.00	2360940.00	0.00060344	0.00002933	0.00002743	0.00000191	0.00100229	0.0000336	0.00003149	0.00000212
602870.00	2360940.00	0.00057932	0.00002756	0.00002579	0.00000176	0.000959	0.00003159	0.00002964	0.00000194
603370.00	2360940.00	0.00055636	0.00002595	0.00002429	0.00000165	0.00091758	0.00002974	0.00002793	0.00000181
603870.00	2360940.00	0.00053538	0.00002451	0.00002294	0.00000157	0.0008802	0.00002809	0.00002639	0.00000171
604370.00	2360940.00	0.00051611	0.00002325	0.00002174	0.00000151	0.0008458	0.00002663	0.000025	0.00000163
604870.00	2360940.00	0.00049795	0.0000221	0.00002065	0.00000145	0.00081096	0.00002525	0.00002369	0.00000155
605370.00	2360940.00	0.00048234	0.00002116	0.00001974	0.00000142	0.00078555	0.00002417	0.00002266	0.00000152
605870.00	2360940.00	0.00046566	0.00002026	0.00001888	0.00000138	0.00075359	0.00002311	0.00002164	0.00000148
606370.00	2360940.00	0.00045174	0.00001949	0.00001814	0.00000135	0.00072832	0.0000222	0.00002076	0.00000144
606870.00	2360940.00	0.00043884	0.00001879	0.00001747	0.00000132	0.00070486	0.00002137	0.00001997	0.0000014
607370.00	2360940.00	0.00042683	0.00001816	0.00001687	0.00000129	0.000683	0.00002062	0.00001925	0.00000137
607870.00	2360940.00	0.00041695	0.0000176	0.00001634	0.00000126	0.00066642	0.00001997	0.00001863	0.00000134

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2360940.00	0.00040595	0.00001707	0.00001584	0.00000123	0.00064606	0.00001934	0.00001804	0.00000131
608870.00	2360940.00	0.0003959	0.00001658	0.00001538	0.0000012	0.00062801	0.00001877	0.00001749	0.00000127
609370.00	2360940.00	0.00038608	0.00001611	0.00001494	0.00000117	0.00061038	0.00001823	0.00001699	0.00000124
609870.00	2360940.00	0.00037731	0.00001569	0.00001455	0.00000114	0.00059476	0.00001774	0.00001652	0.00000121
610370.00	2360940.00	0.00036909	0.00001529	0.00001418	0.00000111	0.00058036	0.00001727	0.00001609	0.00000118
610870.00	2360940.00	0.00035928	0.00001485	0.00001377	0.00000108	0.00055988	0.00001673	0.00001559	0.00000114
611370.00	2360940.00	0.00035214	0.0000145	0.00001346	0.00000105	0.00054785	0.00001635	0.00001523	0.00000111
611870.00	2360940.00	0.00034442	0.00001415	0.00001313	0.00000102	0.00053416	0.00001595	0.00001487	0.00000108
612370.00	2360940.00	0.000333	0.00001372	0.00001274	0.00000098	0.00051064	0.00001545	0.00001441	0.00000104
612870.00	2360940.00	0.00032571	0.0000134	0.00001244	0.00000095	0.00049809	0.00001509	0.00001408	0.00000101
613370.00	2360940.00	0.00031999	0.00001311	0.00001218	0.00000093	0.00048892	0.00001478	0.00001379	0.00000098
613870.00	2360940.00	0.00031551	0.00001286	0.00001196	0.00000091	0.00048274	0.00001451	0.00001355	0.00000096
614370.00	2360940.00	0.00031261	0.00001267	0.00001178	0.00000089	0.00048188	0.00001434	0.0000134	0.00000095
614870.00	2360940.00	0.0003068	0.0000124	0.00001154	0.00000086	0.00047191	0.00001405	0.00001313	0.00000092
615370.00	2360940.00	0.00030052	0.00001213	0.00001129	0.00000084	0.00046014	0.00001373	0.00001284	0.00000089
615870.00	2360940.00	0.00029079	0.00001177	0.00001096	0.0000008	0.00044095	0.00001332	0.00001247	0.00000085
616370.00	2360940.00	0.00028384	0.00001149	0.00001071	0.00000078	0.00043211	0.00001306	0.00001223	0.00000082
616870.00	2360940.00	0.00027858	0.00001126	0.0000105	0.00000076	0.00042514	0.00001281	0.00001201	0.0000008
617370.00	2360940.00	0.00027327	0.00001102	0.00001029	0.00000073	0.00042194	0.00001258	0.00001181	0.00000077
617870.00	2360940.00	0.00027261	0.00001086	0.00001016	0.0000007	0.00048782	0.00001268	0.00001194	0.00000074
618370.00	2360940.00	0.00045622	0.00001192	0.00001125	0.00000067	0.00113378	0.00001523	0.00001453	0.0000007
618870.00	2360940.00	0.00079849	0.00001338	0.00001273	0.00000065	0.00071895	0.00001267	0.000012	0.00000067
619370.00	2360940.00	0.0008197	0.00001303	0.00001241	0.00000062	0.00043623	0.00001104	0.00001039	0.00000065
619870.00	2360940.00	0.00037807	0.00001095	0.00001033	0.00000062	0.0010105	0.00001416	0.00001352	0.00000065
590370.00	2361440.00	0.00156267	0.00009675	0.00008937	0.00000738	0.002108	0.00009706	0.00009054	0.00000653
590870.00	2361440.00	0.00156585	0.00009597	0.00008656	0.00000941	0.00222263	0.00010686	0.00009928	0.00000758
591370.00	2361440.00	0.00139439	0.00008207	0.00007041	0.00001166	0.00234734	0.0001043	0.00009468	0.00000962
591870.00	2361440.00	0.00121919	0.0000655	0.00005471	0.00001079	0.00245964	0.00009114	0.00007972	0.00001142
592370.00	2361440.00	0.0011226	0.00005318	0.00004528	0.00000791	0.00333965	0.00008204	0.0000722	0.00000984
592870.00	2361440.00	0.00118028	0.00005346	0.00004682	0.00000665	0.00449571	0.00008018	0.00007284	0.00000734
593370.00	2361440.00	0.00141195	0.0000685	0.00006088	0.00000761	0.00401201	0.00008158	0.00007478	0.0000068
593870.00	2361440.00	0.0015135	0.00007335	0.00006548	0.00000787	0.00340181	0.00009158	0.0000837	0.00000788
594370.00	2361440.00	0.00138819	0.0000615	0.00005599	0.0000055	0.00416413	0.00009458	0.00008739	0.00000718
594870.00	2361440.00	0.00112007	0.00005221	0.00004787	0.00000434	0.00317522	0.00007541	0.00007038	0.00000503
595370.00	2361440.00	0.00094717	0.00004921	0.00004395	0.00000526	0.00164338	0.00005926	0.00005449	0.00000477
595870.00	2361440.00	0.00092854	0.00004896	0.00004278	0.00000618	0.00149728	0.00005609	0.00005035	0.00000574
596370.00	2361440.00	0.00093037	0.00004929	0.0000434	0.00000588	0.00142123	0.00005554	0.00004926	0.00000628
596870.00	2361440.00	0.000914	0.00004855	0.00004349	0.00000507	0.0013911	0.0000544	0.00004882	0.00000558
597370.00	2361440.00	0.00086976	0.00004687	0.00004235	0.00000453	0.00133912	0.00005235	0.00004761	0.00000474
597870.00	2361440.00	0.00081197	0.00004444	0.00004019	0.00000425	0.00127154	0.0000498	0.00004549	0.00000431
598370.00	2361440.00	0.00075747	0.00004183	0.00003781	0.00000402	0.00120299	0.00004709	0.00004301	0.00000407
598870.00	2361440.00	0.00071657	0.00003962	0.00003586	0.00000377	0.00115271	0.00004471	0.00004085	0.00000387
599370.00	2361440.00	0.00068749	0.00003787	0.00003437	0.00000351	0.00111911	0.00004281	0.00003916	0.00000365
599870.00	2361440.00	0.00066751	0.00003645	0.0000332	0.00000325	0.00109861	0.00004128	0.00003785	0.00000344
600370.00	2361440.00	0.00065075	0.00003509	0.00003211	0.00000298	0.00107845	0.00003982	0.00003662	0.0000032
600870.00	2361440.00	0.00063592	0.00003372	0.000031	0.00000272	0.00105785	0.00003833	0.00003536	0.00000296
601370.00	2361440.00	0.00062126	0.00003228	0.00002981	0.00000247	0.00103522	0.00003674	0.00003402	0.00000272
601870.00	2361440.00	0.00060279	0.00003072	0.0000285	0.00000222	0.0010015	0.00003498	0.00003252	0.00000245
602370.00	2361440.00	0.00058431	0.00002914	0.00002713	0.00000201	0.00096812	0.0000332	0.00003098	0.00000221
602870.00	2361440.00	0.00056807	0.00002761	0.00002576	0.00000185	0.0009411	0.00003151	0.00002946	0.00000205
603370.00	2361440.00	0.00054878	0.00002611	0.00002441	0.0000017	0.00090608	0.0000298	0.00002793	0.00000187
603870.00	2361440.00	0.00052794	0.00002468	0.0000231	0.00000158	0.00086833	0.00002819	0.00002646	0.00000174
604370.00	2361440.00	0.00051031	0.0000234	0.0000219	0.00000149	0.00083722	0.00002673	0.0000251	0.00000163
604870.00	2361440.00	0.00049308	0.00002222	0.0000208	0.00000142	0.00080633	0.00002538	0.00002384	0.00000154
605370.00	2361440.00	0.00047681	0.00002117	0.0000198	0.00000137	0.00077706	0.00002416	0.00002269	0.00000147
605870.00	2361440.00	0.00046075	0.00002021	0.00001888	0.00000132	0.00074716	0.00002304	0.00002162	0.00000142
606370.00	2361440.00	0.00044675	0.00001936	0.00001807	0.00000129	0.00072212	0.00002206	0.00002068	0.00000138
606870.00	2361440.00	0.00043358	0.00001861	0.00001735	0.00000126	0.00069836	0.00002118	0.00001983	0.00000135
607370.00	2361440.00	0.00042263	0.00001794	0.00001671	0.00000124	0.00067998	0.00002041	0.00001909	0.00000132
607870.00	2361440.00	0.00041115	0.00001733	0.00001612	0.00000121	0.00065923	0.00001969	0.0000184	0.00000129
608370.00	2361440.00	0.00040095	0.00001677	0.00001558	0.00000119	0.00064094	0.00001903	0.00001777	0.00000126
608870.00	2361440.00	0.00039005	0.00001624	0.00001507	0.00000116	0.00061949	0.00001838	0.00001714	0.00000123
609370.00	2361440.00	0.0003814	0.00001579	0.00001465	0.00000114	0.00060475	0.00001786	0.00001665	0.00000121
609870.00	2361440.00	0.00037244	0.00001535	0.00001423	0.00000112	0.0005886	0.00001735	0.00001617	0.00000119
610370.00	2361440.00	0.00036282	0.00001491	0.00001382	0.00000109	0.00057075	0.00001684	0.00001568	0.00000116
610870.00	2361440.00	0.00035201	0.00001446	0.0000134	0.00000107	0.0005491	0.0000163	0.00001517	0.00000113
611370.00	2361440.00	0.00034433	0.00001411	0.00001306	0.00000104	0.0005356	0.0000159	0.00001479	0.0000011
611870.00	2361440.00	0.00033493	0.00001372	0.00001271	0.00000102	0.00051721	0.00001545	0.00001438	0.00000107
612370.00	2361440.00	0.00032742	0.00001339	0.0000124	0.00000099	0.00050394	0.00001509	0.00001404	0.00000105
612870.00	2361440.00	0.00032712	0.00001325	0.00001227	0.00000098	0.0005107	0.00001499	0.00001395	0.00000104

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2361440.00	0.00031988	0.00001294	0.00001199	0.00000095	0.00049736	0.00001464	0.00001363	0.00000102
613870.00	2361440.00	0.00031129	0.00001259	0.00001166	0.00000092	0.00047933	0.00001422	0.00001324	0.00000098
614370.00	2361440.00	0.00030818	0.0000124	0.00001149	0.00000091	0.00047796	0.00001406	0.00001309	0.00000097
614870.00	2361440.00	0.00030305	0.00001214	0.00001126	0.00000088	0.00046853	0.00001377	0.00001283	0.00000094
615370.00	2361440.00	0.0002913	0.00001175	0.0000109	0.00000085	0.00044545	0.00001334	0.00001243	0.0000009
615870.00	2361440.00	0.00028581	0.00001151	0.00001068	0.00000083	0.00043718	0.00001308	0.0000122	0.00000088
616370.00	2361440.00	0.00027946	0.00001125	0.00001045	0.0000008	0.00044803	0.00001295	0.00001211	0.00000085
616870.00	2361440.00	0.00029285	0.00001124	0.00001047	0.00000077	0.0006343	0.00001365	0.00001284	0.00000081
617370.00	2361440.00	0.00027015	0.00001082	0.00001006	0.00000076	0.00043469	0.00001247	0.00001166	0.0000008
617870.00	2361440.00	0.00026555	0.00001061	0.00000987	0.00000074	0.00042104	0.0000122	0.00001141	0.00000078
618370.00	2361440.00	0.00027051	0.00001054	0.00000982	0.00000072	0.00052573	0.00001249	0.00001174	0.00000075
618870.00	2361440.00	0.00078445	0.00001317	0.00001249	0.00000068	0.00076607	0.00001274	0.00001203	0.00000071
619370.00	2361440.00	0.00068825	0.00001256	0.00001189	0.00000067	0.00089433	0.00001323	0.00001254	0.00000069
619870.00	2361440.00	0.00048243	0.00001072	0.00001008	0.00000064	0.00030351	0.00000998	0.00000931	0.00000066
590370.00	2361940.00	0.00139486	0.00008453	0.0000781	0.00000643	0.00190811	0.0000873	0.00008178	0.00000552
590870.00	2361940.00	0.00136479	0.00007997	0.00007181	0.00000816	0.00210114	0.0000928	0.00008632	0.00000648
591370.00	2361940.00	0.00128511	0.00006857	0.00005879	0.00000978	0.00265921	0.00009093	0.00008261	0.00000832
591870.00	2361940.00	0.00124117	0.00005669	0.0000479	0.00000879	0.00354645	0.00008536	0.0000759	0.00000947
592370.00	2361940.00	0.00120151	0.00004778	0.00004118	0.00000661	0.00468115	0.00008111	0.00007304	0.00000806
592870.00	2361940.00	0.00197007	0.00005217	0.00004666	0.00000551	0.00697394	0.00008486	0.00007878	0.00000608
593370.00	2361940.00	0.00215171	0.00006318	0.00005712	0.00000606	0.00637072	0.00008352	0.00007798	0.00000554
593870.00	2361940.00	0.00200204	0.00006904	0.00006224	0.00000679	0.00582419	0.00009285	0.00008647	0.00000638
594370.00	2361940.00	0.00228796	0.00006489	0.00005952	0.00000537	0.00524945	0.00009205	0.00008551	0.00000654
594870.00	2361940.00	0.00110439	0.00004922	0.0000453	0.00000392	0.00316483	0.00007252	0.00006759	0.00000493
595370.00	2361940.00	0.00093481	0.0000442	0.00004035	0.00000385	0.00231705	0.00005926	0.0000554	0.00000386
595870.00	2361940.00	0.00084478	0.00004289	0.00003809	0.00000479	0.00147016	0.00005049	0.00004623	0.00000426
596370.00	2361940.00	0.00084176	0.00004278	0.00003755	0.00000523	0.00150259	0.00004976	0.00004469	0.00000507
596870.00	2361940.00	0.00083303	0.00004308	0.00003824	0.00000484	0.00126546	0.00004817	0.00004293	0.00000525
597370.00	2361940.00	0.00081877	0.00004247	0.00003826	0.00000422	0.00123987	0.00004722	0.00004261	0.00000461
597870.00	2361940.00	0.00078212	0.00004111	0.0000373	0.00000382	0.00119718	0.00004563	0.00004164	0.00000399
598370.00	2361940.00	0.00073401	0.0000392	0.00003558	0.00000362	0.00114136	0.00004369	0.00004002	0.00000367
598870.00	2361940.00	0.00068918	0.00003714	0.00003368	0.00000346	0.00108665	0.0000416	0.0000381	0.0000035
599370.00	2361940.00	0.00065532	0.00003537	0.00003209	0.00000329	0.001048	0.00003977	0.0000364	0.00000336
599870.00	2361940.00	0.00063097	0.00003397	0.00003087	0.0000031	0.00102271	0.00003829	0.00003508	0.00000322
600370.00	2361940.00	0.00061329	0.00003282	0.0000299	0.00000292	0.00100587	0.00003709	0.00003402	0.00000306
600870.00	2361940.00	0.0006012	0.00003181	0.00002907	0.00000274	0.00099647	0.00003605	0.00003314	0.00000292
601370.00	2361940.00	0.00059019	0.0000308	0.00002825	0.00000255	0.00098678	0.00003502	0.00003224	0.00000277
601870.00	2361940.00	0.00057616	0.00002964	0.0000273	0.00000234	0.00096074	0.00003369	0.00003113	0.00000256
602370.00	2361940.00	0.00056141	0.00002844	0.0000263	0.00000213	0.00093364	0.00003232	0.00002998	0.00000234
602870.00	2361940.00	0.00054923	0.00002723	0.00002527	0.00000196	0.00091304	0.00003099	0.00002883	0.00000217
603370.00	2361940.00	0.00053365	0.00002597	0.00002417	0.0000018	0.00088534	0.00002959	0.0000276	0.00000199
603870.00	2361940.00	0.00051919	0.00002473	0.00002307	0.00000166	0.00085735	0.00002816	0.00002634	0.00000182
604370.00	2361940.00	0.00050199	0.00002351	0.00002197	0.00000154	0.00082574	0.00002678	0.00002509	0.00000169
604870.00	2361940.00	0.00048586	0.00002235	0.00002091	0.00000144	0.0007955	0.00002546	0.00002389	0.00000157
605370.00	2361940.00	0.00047074	0.00002129	0.00001992	0.00000136	0.000768	0.00002424	0.00002276	0.00000148
605870.00	2361940.00	0.00045663	0.00002031	0.00001901	0.0000013	0.00074293	0.00002313	0.00002173	0.00000141
606370.00	2361940.00	0.00044404	0.00001943	0.00001818	0.00000125	0.00072142	0.00002213	0.00002078	0.00000135
606870.00	2361940.00	0.00042947	0.0000186	0.00001739	0.00000122	0.00069351	0.00002116	0.00001986	0.0000013
607370.00	2361940.00	0.00041765	0.00001787	0.00001669	0.00000119	0.0006727	0.00002033	0.00001906	0.00000127
607870.00	2361940.00	0.00040584	0.00001721	0.00001605	0.00000116	0.00065117	0.00001955	0.00001831	0.00000124
608370.00	2361940.00	0.00039671	0.00001662	0.00001549	0.00000114	0.00063541	0.00001887	0.00001766	0.00000121
608870.00	2361940.00	0.00038562	0.00001607	0.00001495	0.00000112	0.00061604	0.00001824	0.00001705	0.00000119
609370.00	2361940.00	0.0003756	0.00001556	0.00001446	0.0000011	0.00059783	0.00001764	0.00001647	0.00000117
609870.00	2361940.00	0.00036716	0.00001512	0.00001403	0.00000108	0.00058333	0.00001713	0.00001598	0.00000115
610370.00	2361940.00	0.00035715	0.00001463	0.00001357	0.00000106	0.00056274	0.00001653	0.00001541	0.00000112
610870.00	2361940.00	0.00034602	0.00001417	0.00001313	0.00000104	0.00054029	0.00001597	0.00001488	0.00000109
611370.00	2361940.00	0.00033612	0.00001375	0.00001274	0.00000102	0.00052109	0.00001549	0.00001443	0.00000107
611870.00	2361940.00	0.00032641	0.00001336	0.00001237	0.00000099	0.00051184	0.00001517	0.00001413	0.00000104
612370.00	2361940.00	0.00032339	0.00001313	0.00001215	0.00000098	0.00049992	0.0000148	0.00001376	0.00000103
612870.00	2361940.00	0.00032269	0.00001298	0.00001201	0.00000097	0.00050552	0.0000147	0.00001366	0.00000103
613370.00	2361940.00	0.00031621	0.00001269	0.00001174	0.00000095	0.00049432	0.00001437	0.00001336	0.00000101
613870.00	2361940.00	0.00031014	0.00001242	0.00001148	0.00000093	0.00048406	0.00001407	0.00001308	0.00000099
614370.00	2361940.00	0.0002979	0.00001199	0.00001109	0.0000009	0.00045791	0.00001359	0.00001263	0.00000095
614870.00	2361940.00	0.00029579	0.00001182	0.00001093	0.00000089	0.00045564	0.00001338	0.00001244	0.00000094
615370.00	2361940.00	0.0002863	0.00001149	0.00001063	0.00000086	0.00044337	0.0000131	0.00001219	0.00000091
615870.00	2361940.00	0.00028137	0.00001127	0.00001042	0.00000084	0.00043537	0.00001285	0.00001196	0.00000089
616370.00	2361940.00	0.00028155	0.00001111	0.00001029	0.00000082	0.00051206	0.00001306	0.0000122	0.00000086
616870.00	2361940.00	0.0003908	0.00001176	0.00001097	0.00000079	0.00109941	0.00001548	0.00001465	0.00000083
617370.00	2361940.00	0.0003969	0.00001161	0.00001084	0.00000077	0.00110595	0.00001528	0.00001447	0.00000081
617870.00	2361940.00	0.0002677	0.0000105	0.00000974	0.00000076	0.00048517	0.00001232	0.00001152	0.0000008

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2361940.00	0.00026344	0.00001031	0.00000957	0.00000074	0.00047707	0.00001209	0.0000113	0.00000078
618870.00	2361940.00	0.00047887	0.00001154	0.00001083	0.00000072	0.0011111	0.00001454	0.0000138	0.00000075
619370.00	2361940.00	0.00062807	0.00001213	0.00001143	0.0000007	0.00098821	0.0000136	0.00001288	0.00000073
619870.00	2361940.00	0.00041898	0.00001023	0.00000956	0.00000067	0.00029121	0.00000977	0.00000907	0.0000007
590370.00	2362440.00	0.00128643	0.00007529	0.0000692	0.00000609	0.00178998	0.00007983	0.00007454	0.00000528
590870.00	2362440.00	0.00121522	0.00006938	0.00006191	0.00000747	0.00182715	0.00008082	0.00007471	0.00000611
591370.00	2362440.00	0.00114479	0.00005895	0.00005058	0.00000837	0.00235062	0.00007778	0.00007036	0.00000742
591870.00	2362440.00	0.00238548	0.00005825	0.00005092	0.00000733	0.00503977	0.00008259	0.00007458	0.00000801
592370.00	2362440.00	0.00135001	0.00004437	0.00003871	0.00000566	0.00536036	0.00007737	0.00007058	0.00000679
592870.00	2362440.00	0.00312542	0.00005472	0.00005	0.00000472	0.00533248	0.00006846	0.00006325	0.00000521
593370.00	2362440.00	0.0030396	0.00006124	0.00005622	0.00000501	0.00505424	0.00006784	0.00006314	0.0000047
593870.00	2362440.00	0.0029048	0.00006801	0.00006221	0.0000058	0.00486656	0.00007632	0.00007105	0.00000526
594370.00	2362440.00	0.0024547	0.00006326	0.00005805	0.00000521	0.00475363	0.00008185	0.00007608	0.00000577
594870.00	2362440.00	0.00253489	0.00005631	0.00005259	0.00000372	0.00352928	0.00006952	0.00006475	0.00000477
595370.00	2362440.00	0.00106402	0.0000424	0.00003921	0.00000319	0.00319323	0.00006159	0.000058	0.00000358
595870.00	2362440.00	0.00094252	0.0000395	0.00003592	0.00000358	0.00260403	0.00005351	0.00005021	0.0000033
596370.00	2362440.00	0.00085742	0.00003857	0.00003424	0.00000433	0.00214187	0.00004906	0.00004516	0.0000039
596870.00	2362440.00	0.0007608	0.00003827	0.00003376	0.00000452	0.00126659	0.00004363	0.00003907	0.00000456
597370.00	2362440.00	0.00075805	0.00003841	0.0000343	0.00000411	0.00114276	0.00004265	0.00003816	0.00000449
597870.00	2362440.00	0.00074079	0.00003768	0.0000341	0.00000358	0.00111746	0.00004169	0.00003779	0.0000039
598370.00	2362440.00	0.00071024	0.00003659	0.0000333	0.00000329	0.00108231	0.00004044	0.00003702	0.00000342
598870.00	2362440.00	0.00067097	0.00003507	0.00003192	0.00000315	0.00103803	0.00003893	0.00003574	0.00000319
599370.00	2362440.00	0.00063363	0.00003341	0.00003037	0.00000304	0.00099341	0.00003729	0.00003421	0.00000308
599870.00	2362440.00	0.00060512	0.00003198	0.00002906	0.00000292	0.00096283	0.00003584	0.00003286	0.00000298
600370.00	2362440.00	0.00058834	0.00003093	0.00002813	0.0000028	0.0009543	0.00003482	0.00003193	0.0000029
600870.00	2362440.00	0.0005716	0.00002994	0.00002728	0.00000266	0.00093776	0.00003381	0.00003102	0.00000279
601370.00	2362440.00	0.00055938	0.00002911	0.00002658	0.00000253	0.00092814	0.000033	0.00003031	0.00000269
601870.00	2362440.00	0.00054762	0.00002824	0.00002586	0.00000238	0.00091274	0.00003206	0.0000295	0.00000256
602370.00	2362440.00	0.00053816	0.00002737	0.00002515	0.00000222	0.00089888	0.00003109	0.00002868	0.00000241
602870.00	2362440.00	0.00052564	0.00002643	0.00002437	0.00000206	0.00087675	0.00003004	0.00002778	0.00000226
603370.00	2362440.00	0.00051401	0.00002545	0.00002354	0.0000019	0.00085483	0.00002893	0.00002683	0.0000021
603870.00	2362440.00	0.00050209	0.00002443	0.00002267	0.00000176	0.00083198	0.00002778	0.00002584	0.00000194
604370.00	2362440.00	0.00048956	0.0000234	0.00002177	0.00000162	0.00080841	0.0000266	0.00002481	0.00000179
604870.00	2362440.00	0.00047788	0.00002239	0.00002088	0.0000015	0.00078811	0.00002547	0.00002382	0.00000166
605370.00	2362440.00	0.00046472	0.00002139	0.00001999	0.0000014	0.00076333	0.00002433	0.0000228	0.00000154
605870.00	2362440.00	0.0004519	0.00002044	0.00001912	0.00000132	0.00073972	0.00002325	0.00002181	0.00000144
606370.00	2362440.00	0.00043788	0.00001953	0.00001827	0.00000125	0.00071224	0.0000222	0.00002084	0.00000136
606870.00	2362440.00	0.00042538	0.0000187	0.00001749	0.0000012	0.00068919	0.00002125	0.00001995	0.00000129
607370.00	2362440.00	0.00041428	0.00001794	0.00001678	0.00000116	0.00066985	0.00002039	0.00001915	0.00000124
607870.00	2362440.00	0.0004023	0.00001723	0.0000161	0.00000112	0.00064742	0.00001956	0.00001836	0.0000012
608370.00	2362440.00	0.00039162	0.00001659	0.00001549	0.0000011	0.0006283	0.00001883	0.00001766	0.00000117
608870.00	2362440.00	0.00038146	0.00001601	0.00001493	0.00000108	0.00061032	0.00001816	0.00001701	0.00000114
609370.00	2362440.00	0.00037194	0.00001547	0.00001442	0.00000106	0.00059344	0.00001754	0.00001642	0.00000112
609870.00	2362440.00	0.00036348	0.00001499	0.00001395	0.00000104	0.00057898	0.00001699	0.00001589	0.0000011
610370.00	2362440.00	0.00035276	0.00001447	0.00001345	0.00000102	0.0005568	0.00001635	0.00001528	0.00000107
610870.00	2362440.00	0.00034532	0.00001407	0.00001307	0.000001	0.00054416	0.0000159	0.00001484	0.00000106
611370.00	2362440.00	0.0003347	0.00001362	0.00001264	0.00000098	0.00052305	0.00001536	0.00001432	0.00000103
611870.00	2362440.00	0.00032269	0.00001314	0.00001219	0.00000095	0.00051471	0.00001497	0.00001397	0.00000099
612370.00	2362440.00	0.0003171	0.00001283	0.00001189	0.00000094	0.00051908	0.0000147	0.00001372	0.00000098
612870.00	2362440.00	0.00031046	0.00001255	0.00001162	0.00000093	0.00048244	0.00001421	0.00001323	0.00000098
613370.00	2362440.00	0.00031258	0.00001247	0.00001153	0.00000094	0.00049031	0.00001413	0.00001313	0.00000099
613870.00	2362440.00	0.00030238	0.00001208	0.00001117	0.00000091	0.00046736	0.00001364	0.00001268	0.00000096
614370.00	2362440.00	0.0002977	0.00001184	0.00001094	0.0000009	0.0004604	0.00001339	0.00001244	0.00000095
614870.00	2362440.00	0.00028779	0.0000115	0.00001062	0.00000087	0.00045593	0.00001315	0.00001223	0.00000092
615370.00	2362440.00	0.00028278	0.00001127	0.00001041	0.00000086	0.00044835	0.0000129	0.000012	0.0000009
615870.00	2362440.00	0.00027817	0.00001105	0.00001021	0.00000084	0.00044667	0.00001269	0.00001181	0.00000088
616370.00	2362440.00	0.00028173	0.00001094	0.00001012	0.00000082	0.00052856	0.0000129	0.00001204	0.00000086
616870.00	2362440.00	0.00035767	0.00001136	0.00001056	0.0000008	0.00097622	0.00001473	0.0000139	0.00000084
617370.00	2362440.00	0.00087927	0.00001373	0.00001295	0.00000078	0.00062163	0.00001222	0.00001141	0.00000081
617870.00	2362440.00	0.00087568	0.0000136	0.00001284	0.00000077	0.00069411	0.0000124	0.0000116	0.0000008
618370.00	2362440.00	0.00026817	0.00001022	0.00000946	0.00000076	0.00053122	0.00001215	0.00001136	0.00000079
618870.00	2362440.00	0.0003342	0.00001056	0.00000983	0.00000074	0.00092366	0.00001374	0.00001297	0.00000077
619370.00	2362440.00	0.00078024	0.00001232	0.00001161	0.00000071	0.0004122	0.00001047	0.00000972	0.00000074
619870.00	2362440.00	0.0008683	0.00001279	0.00001209	0.0000007	0.00053924	0.00001097	0.00001024	0.00000073
590370.00	2362940.00	0.00116117	0.00006632	0.00006077	0.00000554	0.00163916	0.00007203	0.00006726	0.00000476
590870.00	2362940.00	0.00109121	0.00005967	0.00005302	0.00000665	0.00176561	0.0000714	0.00006595	0.00000545
591370.00	2362940.00	0.00339732	0.00006622	0.000059	0.00000722	0.0029473	0.00007039	0.00006382	0.00000657
591870.00	2362940.00	0.00397208	0.00006152	0.00005527	0.00000624	0.00222182	0.00005831	0.00005139	0.00000692
592370.00	2362940.00	0.00431773	0.00005873	0.00005389	0.00000483	0.00288752	0.00005489	0.00004912	0.00000576
592870.00	2362940.00	0.00447004	0.00005789	0.00005378	0.00000411	0.00273495	0.00004876	0.00004424	0.00000452

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2362940.00	0.00385174	0.00005802	0.00005381	0.00000421	0.00174354	0.00004246	0.00003844	0.00000402
593870.00	2362940.00	0.00398514	0.00006748	0.00006254	0.00000495	0.00267236	0.00005542	0.000051	0.00000442
594370.00	2362940.00	0.00366679	0.00006647	0.00006156	0.00000491	0.00267135	0.00006237	0.00005733	0.00000504
594870.00	2362940.00	0.0030873	0.00005741	0.00005369	0.00000372	0.00238018	0.00005954	0.00005493	0.0000046
595370.00	2362940.00	0.00168547	0.00004473	0.00004182	0.00000291	0.00327344	0.00005911	0.00005561	0.0000035
595870.00	2362940.00	0.00218105	0.00004405	0.00004126	0.00000279	0.00167048	0.00004417	0.00004137	0.00000281
596370.00	2362940.00	0.00108949	0.00003697	0.00003356	0.00000341	0.00257524	0.00004781	0.00004476	0.00000305
596870.00	2362940.00	0.00071774	0.00003461	0.00003063	0.00000398	0.00140038	0.00004099	0.00003727	0.00000373
597370.00	2362940.00	0.00069996	0.00003495	0.00003095	0.000004	0.0010617	0.00003876	0.00003461	0.00000415
597870.00	2362940.00	0.00069208	0.00003448	0.00003094	0.00000353	0.00104074	0.00003815	0.00003428	0.00000387
598370.00	2362940.00	0.00067674	0.00003385	0.00003074	0.00000311	0.00101893	0.00003734	0.00003397	0.00000336
598870.00	2362940.00	0.00065134	0.00003296	0.00003007	0.00000289	0.00098937	0.00003633	0.00003333	0.00000301
599370.00	2362940.00	0.0006195	0.00003173	0.00002894	0.00000279	0.00095271	0.0000351	0.00003226	0.00000284
599870.00	2362940.00	0.00058806	0.00003039	0.00002768	0.00000271	0.00091802	0.00003381	0.00003106	0.00000275
600370.00	2362940.00	0.00057043	0.00002936	0.00002671	0.00000264	0.00091195	0.00003286	0.00003015	0.00000271
600870.00	2362940.00	0.00055098	0.0000284	0.00002585	0.00000256	0.00089471	0.00003196	0.00002932	0.00000265
601370.00	2362940.00	0.00053436	0.00002753	0.00002508	0.00000245	0.0008759	0.00003107	0.00002851	0.00000256
601870.00	2362940.00	0.00052174	0.00002677	0.00002443	0.00000234	0.00086205	0.00003029	0.00002781	0.00000247
602370.00	2362940.00	0.00051125	0.00002606	0.00002383	0.00000222	0.00084932	0.00002953	0.00002716	0.00000237
602870.00	2362940.00	0.0005019	0.00002535	0.00002325	0.0000021	0.00083612	0.00002876	0.00002649	0.00000226
603370.00	2362940.00	0.00049291	0.00002461	0.00002264	0.00000197	0.00082126	0.00002794	0.00002579	0.00000214
603870.00	2362940.00	0.00048515	0.00002384	0.000022	0.00000184	0.00080795	0.00002707	0.00002506	0.00000201
604370.00	2362940.00	0.0004745	0.00002301	0.0000213	0.00000171	0.00078831	0.00002615	0.00002426	0.00000188
604870.00	2362940.00	0.00046396	0.00002215	0.00002056	0.00000159	0.00076756	0.00002517	0.00002341	0.00000175
605370.00	2362940.00	0.00045447	0.00002131	0.00001983	0.00000148	0.00075084	0.00002421	0.00002259	0.00000163
605870.00	2362940.00	0.00044387	0.00002045	0.00001907	0.00000138	0.00073068	0.00002323	0.00002172	0.00000151
606370.00	2362940.00	0.00043123	0.00001959	0.0000183	0.0000013	0.00070481	0.00002225	0.00002083	0.00000141
606870.00	2362940.00	0.00042013	0.00001879	0.00001757	0.00000122	0.00068388	0.00002133	0.00002	0.00000133
607370.00	2362940.00	0.00041073	0.00001805	0.00001688	0.00000116	0.00066611	0.00002047	0.00001922	0.00000125
607870.00	2362940.00	0.00039893	0.00001732	0.00001621	0.00000112	0.00064498	0.00001966	0.00001846	0.0000012
608370.00	2362940.00	0.00038827	0.00001665	0.00001558	0.00000108	0.00062515	0.00001889	0.00001774	0.00000115
608870.00	2362940.00	0.00037837	0.00001604	0.00001499	0.00000105	0.00060734	0.00001819	0.00001707	0.00000112
609370.00	2362940.00	0.00036949	0.00001549	0.00001446	0.00000102	0.00059195	0.00001756	0.00001647	0.00000109
609870.00	2362940.00	0.00036111	0.00001498	0.00001398	0.000001	0.00057759	0.00001698	0.00001592	0.00000106
610370.00	2362940.00	0.00034822	0.00001438	0.00001341	0.00000097	0.00054996	0.00001624	0.00001522	0.00000102
610870.00	2362940.00	0.00034193	0.00001398	0.00001302	0.00000096	0.00054003	0.0000158	0.00001479	0.00000101
611370.00	2362940.00	0.0003297	0.00001347	0.00001254	0.00000093	0.0005155	0.00001519	0.00001421	0.00000098
611870.00	2362940.00	0.00032124	0.00001307	0.00001215	0.00000092	0.00050093	0.00001475	0.00001379	0.00000096
612370.00	2362940.00	0.00031897	0.00001283	0.00001191	0.00000092	0.00049884	0.00001448	0.00001351	0.00000097
612870.00	2362940.00	0.00031307	0.00001253	0.00001161	0.00000091	0.00048911	0.00001414	0.00001318	0.00000096
613370.00	2362940.00	0.00030714	0.00001223	0.00001133	0.0000009	0.00047911	0.00001381	0.00001286	0.00000095
613870.00	2362940.00	0.00029629	0.00001184	0.00001096	0.00000088	0.00045846	0.00001338	0.00001246	0.00000092
614370.00	2362940.00	0.00028992	0.00001155	0.00001068	0.00000087	0.00045884	0.00001316	0.00001226	0.0000009
614870.00	2362940.00	0.00029278	0.00001139	0.00001054	0.00000085	0.00053205	0.00001332	0.00001244	0.00000089
615370.00	2362940.00	0.00031699	0.00001142	0.00001058	0.00000084	0.00072234	0.00001399	0.00001312	0.00000087
615870.00	2362940.00	0.0003289	0.00001132	0.0000105	0.00000082	0.00080278	0.00001413	0.00001328	0.00000086
616370.00	2362940.00	0.0002752	0.00001071	0.00000989	0.00000082	0.00048229	0.00001245	0.00001159	0.00000085
616870.00	2362940.00	0.00058387	0.00001241	0.00001162	0.0000008	0.0009931	0.00001423	0.00001341	0.00000083
617370.00	2362940.00	0.00083311	0.00001339	0.00001261	0.00000078	0.00069842	0.00001247	0.00001165	0.00000081
617870.00	2362940.00	0.00067221	0.00001198	0.00001122	0.00000077	0.0003656	0.00001056	0.00000976	0.0000008
618370.00	2362940.00	0.0005892	0.00001193	0.00001117	0.00000076	0.0009627	0.00001353	0.00001274	0.00000079
618870.00	2362940.00	0.00027656	0.00001	0.00000926	0.00000075	0.00061811	0.00001218	0.0000114	0.00000078
619370.00	2362940.00	0.00044363	0.00001087	0.00001014	0.00000073	0.0010162	0.00001361	0.00001285	0.00000076
619870.00	2362940.00	0.00084373	0.00001247	0.00001176	0.00000071	0.00047821	0.00001053	0.00000979	0.00000074
590370.00	2363440.00	0.00104658	0.0000582	0.00005327	0.00000494	0.00155446	0.00006536	0.00006121	0.00000415
590870.00	2363440.00	0.00207213	0.00005927	0.00005334	0.00000593	0.00321786	0.00007162	0.00006676	0.00000486
591370.00	2363440.00	0.0026568	0.00005497	0.00004863	0.00000634	0.00148039	0.00005467	0.00004873	0.00000594
591870.00	2363440.00	0.00362042	0.00005524	0.00004981	0.00000544	0.00193815	0.00005125	0.00004522	0.00000603
592370.00	2363440.00	0.00192726	0.00003918	0.00003496	0.00000421	0.00108616	0.00003943	0.00003443	0.000005
592870.00	2363440.00	0.00176455	0.00003646	0.00003287	0.00000359	0.00098064	0.00003438	0.00003045	0.00000393
593370.00	2363440.00	0.00238842	0.00004395	0.00004029	0.00000366	0.00113971	0.00003497	0.00003142	0.00000355
593870.00	2363440.00	0.00339632	0.00005761	0.00005337	0.00000424	0.00167921	0.00004376	0.00003995	0.0000038
594370.00	2363440.00	0.00327061	0.0000596	0.00005509	0.00000451	0.00186671	0.00005149	0.00004712	0.00000437
594870.00	2363440.00	0.00296619	0.00005491	0.00005118	0.00000373	0.00200942	0.00005382	0.00004948	0.00000434
595370.00	2363440.00	0.00242805	0.0000477	0.00004487	0.00000283	0.00242082	0.00005228	0.0000488	0.00000347
595870.00	2363440.00	0.00133322	0.0000381	0.00003559	0.00000251	0.00280743	0.00005018	0.00004742	0.00000276
596370.00	2363440.00	0.00082079	0.00003311	0.00003035	0.00000276	0.00222446	0.0000445	0.00004188	0.00000262
596870.00	2363440.00	0.00066815	0.00003169	0.00002837	0.00000332	0.00129199	0.00003776	0.00003475	0.00000302
597370.00	2363440.00	0.00064776	0.00003186	0.00002818	0.00000368	0.00100497	0.0000355	0.00003192	0.00000358
597870.00	2363440.00	0.00064574	0.00003177	0.00002825	0.00000352	0.00097406	0.00003511	0.00003139	0.00000373

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2363440.00	0.00063872	0.00003134	0.00002823	0.00000311	0.0009566	0.00003456	0.00003115	0.00000341
598870.00	2363440.00	0.00062489	0.00003077	0.00002801	0.00000277	0.00093759	0.00003384	0.00003086	0.00000298
599370.00	2363440.00	0.00060176	0.00002998	0.0000274	0.00000258	0.00091187	0.00003298	0.0000303	0.00000268
599870.00	2363440.00	0.00057448	0.00002896	0.00002646	0.0000025	0.00088178	0.00003198	0.00002943	0.00000255
600370.00	2363440.00	0.00055713	0.00002802	0.00002555	0.00000248	0.00087735	0.00003115	0.00002861	0.00000254
600870.00	2363440.00	0.00053443	0.00002704	0.00002463	0.00000241	0.00085328	0.00003023	0.00002775	0.00000248
601370.00	2363440.00	0.00051584	0.00002617	0.00002384	0.00000234	0.00083375	0.00002939	0.00002697	0.00000242
601870.00	2363440.00	0.00050155	0.00002544	0.00002318	0.00000226	0.00081951	0.00002867	0.00002631	0.00000236
602370.00	2363440.00	0.00048974	0.00002478	0.00002261	0.00000217	0.00080642	0.00002799	0.00002571	0.00000229
602870.00	2363440.00	0.00048026	0.00002418	0.0000221	0.00000208	0.00079559	0.00002737	0.00002516	0.00000221
603370.00	2363440.00	0.00047257	0.00002358	0.00002161	0.00000198	0.0007857	0.00002671	0.0000246	0.00000211
603870.00	2363440.00	0.00046577	0.00002301	0.00002113	0.00000188	0.00077849	0.00002611	0.00002408	0.00000203
604370.00	2363440.00	0.00045796	0.00002238	0.0000206	0.00000177	0.00076521	0.00002541	0.00002348	0.00000193
604870.00	2363440.00	0.00044904	0.00002169	0.00002003	0.00000167	0.00074716	0.00002463	0.00002281	0.00000182
605370.00	2363440.00	0.00044127	0.000021	0.00001944	0.00000156	0.0007331	0.00002386	0.00002215	0.00000171
605870.00	2363440.00	0.00043228	0.00002026	0.00001881	0.00000145	0.00071392	0.00002299	0.0000214	0.00000158
606370.00	2363440.00	0.00042238	0.00001953	0.00001816	0.00000136	0.00069467	0.00002216	0.00002067	0.00000149
606870.00	2363440.00	0.00041295	0.0000188	0.00001752	0.00000128	0.00067624	0.00002132	0.00001993	0.00000139
607370.00	2363440.00	0.00040371	0.00001809	0.00001689	0.0000012	0.00065878	0.00002052	0.00001921	0.00000131
607870.00	2363440.00	0.0003948	0.00001741	0.00001627	0.00000114	0.00064254	0.00001975	0.00001852	0.00000123
608370.00	2363440.00	0.00038514	0.00001675	0.00001567	0.00000109	0.00062417	0.000019	0.00001783	0.00000117
608870.00	2363440.00	0.00037498	0.00001612	0.00001508	0.00000105	0.00060441	0.00001827	0.00001715	0.00000112
609370.00	2363440.00	0.00036598	0.00001554	0.00001453	0.00000101	0.0005879	0.00001761	0.00001653	0.00000108
609870.00	2363440.00	0.00035747	0.00001501	0.00001403	0.00000098	0.00057261	0.000017	0.00001596	0.00000104
610370.00	2363440.00	0.00035034	0.00001452	0.00001357	0.00000096	0.00056055	0.00001645	0.00001544	0.00000102
610870.00	2363440.00	0.00034191	0.00001406	0.00001312	0.00000094	0.00054543	0.00001592	0.00001493	0.00000099
611370.00	2363440.00	0.00032964	0.00001351	0.0000126	0.0000009	0.00051912	0.00001524	0.00001429	0.00000095
611870.00	2363440.00	0.00031963	0.00001305	0.00001216	0.00000088	0.00050059	0.00001472	0.0000138	0.00000092
612370.00	2363440.00	0.00031125	0.00001264	0.00001178	0.00000087	0.0004884	0.00001429	0.00001339	0.0000009
612870.00	2363440.00	0.00030472	0.00001228	0.00001143	0.00000085	0.00049056	0.000014	0.00001312	0.00000088
613370.00	2363440.00	0.00030584	0.00001203	0.0000112	0.00000083	0.00055026	0.00001402	0.00001316	0.00000086
613870.00	2363440.00	0.00029285	0.00001168	0.00001085	0.00000084	0.00046579	0.0000133	0.00001242	0.00000087
614370.00	2363440.00	0.00028834	0.00001145	0.00001061	0.00000084	0.0004466	0.00001293	0.00001206	0.00000088
614870.00	2363440.00	0.00028519	0.00001119	0.00001037	0.00000082	0.00048045	0.00001289	0.00001203	0.00000085
615370.00	2363440.00	0.00036649	0.0000116	0.0000108	0.0000008	0.00087225	0.00001442	0.00001359	0.00000083
615870.00	2363440.00	0.00056341	0.00001249	0.0000117	0.00000079	0.00092799	0.00001417	0.00001335	0.00000082
616370.00	2363440.00	0.00060279	0.0000125	0.00001171	0.00000079	0.00090097	0.0000138	0.00001299	0.00000081
616870.00	2363440.00	0.00029695	0.00001059	0.00000981	0.00000078	0.0006544	0.00001285	0.00001204	0.00000082
617370.00	2363440.00	0.00082573	0.00001297	0.0000122	0.00000077	0.00047607	0.00001118	0.00001038	0.0000008
617870.00	2363440.00	0.00076468	0.00001272	0.00001196	0.00000076	0.00069664	0.00001215	0.00001136	0.00000079
618370.00	2363440.00	0.00062524	0.00001141	0.00001066	0.00000075	0.00034819	0.00001014	0.00000937	0.00000078
618870.00	2363440.00	0.00080979	0.0000124	0.00001166	0.00000074	0.00045361	0.00001057	0.0000098	0.00000077
619370.00	2363440.00	0.00040608	0.0000105	0.00000977	0.00000073	0.00094902	0.00001317	0.0000124	0.00000076
619870.00	2363440.00	0.0003638	0.00001013	0.00000941	0.00000072	0.00091352	0.00001291	0.00001216	0.00000075
590370.00	2363940.00	0.00231717	0.00006013	0.00005571	0.00000443	0.00239515	0.00006409	0.00006043	0.00000366
590870.00	2363940.00	0.0027636	0.00005806	0.00005264	0.00000542	0.00247707	0.00006105	0.0000565	0.00000454
591370.00	2363940.00	0.00213759	0.00004743	0.0000418	0.00000563	0.00111837	0.00004701	0.0000416	0.00000541
591870.00	2363940.00	0.0020104	0.00004135	0.00003656	0.00000479	0.00102601	0.00004099	0.00003564	0.00000535
592370.00	2363940.00	0.00129732	0.00003259	0.00002883	0.00000376	0.00084496	0.00003446	0.00003004	0.00000442
592870.00	2363940.00	0.00115215	0.00002992	0.0000267	0.00000322	0.00076227	0.00003008	0.00002657	0.00000351
593370.00	2363940.00	0.00145686	0.0000342	0.00003096	0.00000323	0.00078183	0.00002949	0.00002632	0.00000317
593870.00	2363940.00	0.00221922	0.00004528	0.00004162	0.00000367	0.00105145	0.00003521	0.00003188	0.00000333
594370.00	2363940.00	0.00312337	0.0000551	0.00005104	0.00000406	0.00173591	0.00004591	0.00004209	0.00000382
594870.00	2363940.00	0.00266657	0.00005112	0.00004746	0.00000367	0.0016562	0.00004796	0.00004396	0.00000401
595370.00	2363940.00	0.00140179	0.00004097	0.00003808	0.00000289	0.00346523	0.00005751	0.00005405	0.00000346
595870.00	2363940.00	0.00106233	0.00003537	0.00003299	0.00000238	0.00288045	0.00005003	0.00004727	0.00000276
596370.00	2363940.00	0.00073865	0.00003109	0.00002874	0.00000235	0.00193082	0.00004176	0.00003934	0.00000242
596870.00	2363940.00	0.00062243	0.00002952	0.00002678	0.00000274	0.00108149	0.00003465	0.0000321	0.00000256
597370.00	2363940.00	0.0006071	0.0000293	0.0000261	0.0000032	0.00096757	0.00003301	0.00003003	0.00000298
597870.00	2363940.00	0.00060276	0.00002932	0.00002596	0.00000336	0.0009214	0.00003247	0.00002911	0.00000336
598370.00	2363940.00	0.00059896	0.00002908	0.00002596	0.00000313	0.00090113	0.00003209	0.00002874	0.00000335
598870.00	2363940.00	0.00059228	0.00002868	0.00002592	0.00000276	0.0008854	0.00003157	0.00002854	0.00000303
599370.00	2363940.00	0.00057952	0.00002817	0.00002569	0.00000248	0.0008682	0.00003092	0.00002826	0.00000266
599870.00	2363940.00	0.00056614	0.00002755	0.00002517	0.00000238	0.00086129	0.00003026	0.00002777	0.00000249
600370.00	2363940.00	0.00054509	0.00002672	0.00002442	0.00000231	0.00084249	0.00002948	0.0000271	0.00000238
600870.00	2363940.00	0.00051793	0.00002576	0.00002352	0.00000224	0.00080674	0.00002854	0.00002625	0.00000229
601370.00	2363940.00	0.000492	0.00002473	0.00002259	0.00000215	0.00088106	0.00002848	0.0000263	0.00000218
601870.00	2363940.00	0.0004707	0.00002391	0.00002181	0.0000021	0.00076935	0.00002693	0.00002477	0.00000215
602370.00	2363940.00	0.00046316	0.00002331	0.00002129	0.00000202	0.00085549	0.00002695	0.00002488	0.00000207
602870.00	2363940.00	0.00045183	0.00002275	0.0000208	0.00000195	0.000824	0.00002624	0.00002423	0.00000201

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2363940.00	0.00044028	0.00002223	0.00002035	0.00000189	0.0007443	0.00002522	0.00002325	0.00000196
603870.00	2363940.00	0.00044205	0.00002187	0.00002008	0.00000179	0.00086046	0.00002559	0.00002372	0.00000187
604370.00	2363940.00	0.00043387	0.00002141	0.0000197	0.00000171	0.00082223	0.00002494	0.00002314	0.00000179
604870.00	2363940.00	0.00042268	0.00002087	0.00001924	0.00000163	0.00073104	0.00002387	0.00002214	0.00000173
605370.00	2363940.00	0.0004249	0.00002047	0.00001895	0.00000153	0.00081225	0.00002394	0.00002232	0.00000162
605870.00	2363940.00	0.00041713	0.00001991	0.00001848	0.00000143	0.00077311	0.00002316	0.00002163	0.00000153
606370.00	2363940.00	0.00040432	0.00001924	0.00001788	0.00000136	0.00068837	0.000022	0.00002055	0.00000145
606870.00	2363940.00	0.00040532	0.00001874	0.00001749	0.00000125	0.00075123	0.00002183	0.0000205	0.00000133
607370.00	2363940.00	0.00039559	0.00001808	0.00001691	0.00000117	0.00071479	0.00002097	0.00001973	0.00000124
607870.00	2363940.00	0.000381	0.00001735	0.00001623	0.00000112	0.00063631	0.00001981	0.00001862	0.00000119
608370.00	2363940.00	0.0003805	0.00001681	0.00001577	0.00000103	0.00068866	0.00001953	0.00001844	0.00000109
608870.00	2363940.00	0.00037003	0.00001617	0.00001518	0.00000098	0.00066216	0.00001876	0.00001773	0.00000103
609370.00	2363940.00	0.00035532	0.0000155	0.00001454	0.00000096	0.00058487	0.00001767	0.00001666	0.000001
609870.00	2363940.00	0.0003546	0.000015	0.00001411	0.0000009	0.00064082	0.00001746	0.00001653	0.00000093
610370.00	2363940.00	0.00035009	0.0000145	0.00001363	0.00000086	0.00065045	0.00001696	0.00001607	0.00000089
610870.00	2363940.00	0.00033085	0.0000139	0.00001304	0.00000086	0.00053827	0.00001583	0.00001493	0.0000009
611370.00	2363940.00	0.00033164	0.00001351	0.00001268	0.00000083	0.00059915	0.00001572	0.00001487	0.00000085
611870.00	2363940.00	0.00032769	0.00001311	0.0000123	0.00000081	0.0006072	0.00001533	0.0000145	0.00000083
612370.00	2363940.00	0.00030991	0.00001263	0.00001181	0.00000082	0.00050689	0.00001441	0.00001357	0.00000084
612870.00	2363940.00	0.00031822	0.00001238	0.00001159	0.00000079	0.00060614	0.00001456	0.00001374	0.00000081
613370.00	2363940.00	0.00032979	0.00001218	0.0000114	0.00000078	0.0006793	0.00001454	0.00001374	0.0000008
613870.00	2363940.00	0.00034769	0.00001203	0.00001126	0.00000078	0.00074131	0.00001447	0.00001367	0.00000079
614370.00	2363940.00	0.00031405	0.00001157	0.00001079	0.00000078	0.00063678	0.00001377	0.00001297	0.0000008
614870.00	2363940.00	0.00027995	0.00001107	0.00001028	0.00000079	0.00044255	0.00001257	0.00001175	0.00000082
615370.00	2363940.00	0.00027516	0.00001082	0.00001004	0.00000078	0.00043806	0.00001231	0.0000115	0.00000081
615870.00	2363940.00	0.00044816	0.00001175	0.00001099	0.00000076	0.0008993	0.00001404	0.00001326	0.00000078
616370.00	2363940.00	0.00077039	0.00001289	0.00001214	0.00000075	0.00046015	0.00001135	0.00001059	0.00000077
616870.00	2363940.00	0.0007587	0.0000126	0.00001185	0.00000074	0.00043899	0.00001104	0.00001027	0.00000077
617370.00	2363940.00	0.00081504	0.00001278	0.00001204	0.00000074	0.0004743	0.00001105	0.00001029	0.00000076
617870.00	2363940.00	0.00082628	0.00001276	0.00001202	0.00000074	0.00053207	0.00001118	0.00001042	0.00000076
618370.00	2363940.00	0.00035714	0.0000098	0.00000907	0.00000073	0.00028312	0.00000961	0.00000885	0.00000075
618870.00	2363940.00	0.00061329	0.00001106	0.00001034	0.00000072	0.00034667	0.00000985	0.0000091	0.00000075
619370.00	2363940.00	0.00051015	0.00001035	0.00000963	0.00000072	0.00031443	0.0000095	0.00000876	0.00000074
619870.00	2363940.00	0.00079831	0.00001189	0.00001118	0.00000071	0.0004302	0.00001002	0.00000929	0.00000073
590370.00	2364440.00	0.00239676	0.00005494	0.00005079	0.00000415	0.00137927	0.00005294	0.00004954	0.00000341
590870.00	2364440.00	0.00224151	0.00004943	0.00004445	0.00000498	0.00120622	0.00004807	0.00004382	0.00000425
591370.00	2364440.00	0.00195762	0.000043	0.00003798	0.00000502	0.0010259	0.00004228	0.00003734	0.00000494
591870.00	2364440.00	0.00086439	0.00003136	0.00002709	0.00000428	0.00077346	0.00003565	0.00003086	0.00000479
592370.00	2364440.00	0.00103331	0.000029	0.00002559	0.00000341	0.00076533	0.00003136	0.0000274	0.00000396
592870.00	2364440.00	0.00064559	0.00002462	0.00002171	0.00000291	0.00064576	0.00002699	0.00002382	0.00000317
593370.00	2364440.00	0.00062379	0.00002576	0.00002287	0.00000289	0.00060952	0.00002565	0.00002282	0.00000284
593870.00	2364440.00	0.00145432	0.00003651	0.00003329	0.00000322	0.00078316	0.00002991	0.00002694	0.00000297
594370.00	2364440.00	0.00240273	0.00004687	0.00004323	0.00000364	0.00123361	0.00003849	0.00003513	0.00000336
594870.00	2364440.00	0.00293474	0.00005119	0.00004769	0.0000035	0.00190073	0.00004627	0.00004263	0.00000364
595370.00	2364440.00	0.00217912	0.00004338	0.00004053	0.00000285	0.00144152	0.00004271	0.00003936	0.00000335
595870.00	2364440.00	0.00207585	0.00004043	0.00003813	0.0000023	0.00203744	0.00004329	0.00004057	0.00000272
596370.00	2364440.00	0.00149335	0.00003472	0.00003263	0.00000208	0.00210517	0.00004044	0.00003818	0.00000226
596870.00	2364440.00	0.00068406	0.00002832	0.00002607	0.00000226	0.00175392	0.00003727	0.00003507	0.00000219
597370.00	2364440.00	0.00057615	0.00002726	0.00002457	0.00000269	0.0009469	0.00003122	0.00002873	0.00000249
597870.00	2364440.00	0.00056619	0.00002709	0.00002407	0.00000302	0.0009019	0.00003039	0.00002752	0.00000287
598370.00	2364440.00	0.00056293	0.00002709	0.00002403	0.00000306	0.00085509	0.00002992	0.00002678	0.00000313
598870.00	2364440.00	0.00055894	0.00002681	0.000024	0.00000281	0.00083868	0.00002955	0.00002651	0.00000304
599370.00	2364440.00	0.00055266	0.00002644	0.00002395	0.00000249	0.00082429	0.00002905	0.00002632	0.00000273
599870.00	2364440.00	0.0005418	0.00002599	0.00002372	0.00000226	0.00080983	0.00002848	0.00002605	0.00000243
600370.00	2364440.00	0.0005256	0.00002538	0.00002323	0.00000215	0.00079329	0.00002783	0.00002559	0.00000224
600870.00	2364440.00	0.00050662	0.00002466	0.00002256	0.0000021	0.00077546	0.00002714	0.00002498	0.00000215
601370.00	2364440.00	0.00065812	0.00002501	0.00002302	0.00000199	0.00128857	0.00002919	0.00002717	0.00000201
601870.00	2364440.00	0.00058877	0.00002392	0.00002196	0.00000197	0.0012694	0.00002847	0.00002648	0.00000199
602370.00	2364440.00	0.00058193	0.00002329	0.00002137	0.00000192	0.00124928	0.00002767	0.00002572	0.00000196
602870.00	2364440.00	0.00060977	0.00002296	0.00002109	0.00000186	0.00121415	0.00002684	0.00002493	0.0000019
603370.00	2364440.00	0.00056878	0.00002228	0.00002048	0.00000181	0.00122807	0.00002651	0.00002466	0.00000185
603870.00	2364440.00	0.00056077	0.00002185	0.00002011	0.00000174	0.00121047	0.00002602	0.00002423	0.00000179
604370.00	2364440.00	0.00059737	0.00002173	0.00002006	0.00000167	0.00119595	0.0000255	0.00002377	0.00000173
604870.00	2364440.00	0.00055739	0.00002114	0.00001954	0.00000161	0.00119065	0.0000252	0.00002353	0.00000167
605370.00	2364440.00	0.00054785	0.00002073	0.0000192	0.00000153	0.00117193	0.00002475	0.00002314	0.0000016
605870.00	2364440.00	0.00058146	0.00002057	0.00001912	0.00000145	0.00114443	0.00002414	0.00002262	0.00000153
606370.00	2364440.00	0.00053543	0.00001987	0.0000185	0.00000137	0.00111635	0.00002363	0.00002219	0.00000145
606870.00	2364440.00	0.00052779	0.00001938	0.00001809	0.00000129	0.00108225	0.00002298	0.00002162	0.00000136
607370.00	2364440.00	0.00055461	0.00001907	0.00001786	0.0000012	0.00104016	0.00002219	0.00002092	0.00000127
607870.00	2364440.00	0.00050944	0.00001829	0.00001716	0.00000113	0.00100995	0.00002155	0.00002035	0.00000119

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2364440.00	0.0004995	0.0000177	0.00001664	0.00000106	0.00097447	0.00002079	0.00001968	0.00000111
608870.00	2364440.00	0.00052184	0.0000173	0.00001631	0.00000099	0.00093571	0.00001996	0.00001893	0.00000103
609370.00	2364440.00	0.00047933	0.00001652	0.00001558	0.00000094	0.00091455	0.00001932	0.00001835	0.00000097
609870.00	2364440.00	0.00046864	0.00001595	0.00001507	0.00000089	0.000939	0.0000189	0.00001798	0.00000092
610370.00	2364440.00	0.00049204	0.00001558	0.00001474	0.00000084	0.00088943	0.00001803	0.00001717	0.00000086
610870.00	2364440.00	0.00045879	0.00001491	0.0000141	0.00000081	0.00087071	0.00001744	0.00001661	0.00000083
611370.00	2364440.00	0.00040817	0.00001416	0.00001337	0.00000079	0.00083884	0.00001688	0.00001607	0.00000081
611870.00	2364440.00	0.00048028	0.00001413	0.00001337	0.00000076	0.00078336	0.00001597	0.0000152	0.00000077
612370.00	2364440.00	0.0004684	0.00001368	0.00001293	0.00000075	0.00077671	0.00001551	0.00001476	0.00000076
612870.00	2364440.00	0.00040486	0.00001299	0.00001225	0.00000074	0.00079745	0.00001533	0.00001458	0.00000075
613370.00	2364440.00	0.00051372	0.00001322	0.0000125	0.00000072	0.00072093	0.00001441	0.00001367	0.00000073
613870.00	2364440.00	0.00037383	0.00001222	0.00001149	0.00000073	0.00080335	0.00001476	0.00001401	0.00000075
614370.00	2364440.00	0.00028633	0.00001133	0.00001058	0.00000075	0.00047696	0.00001297	0.0000122	0.00000077
614870.00	2364440.00	0.00034655	0.00001152	0.0000108	0.00000073	0.00074814	0.00001392	0.00001317	0.00000074
615370.00	2364440.00	0.00034344	0.00001127	0.00001055	0.00000073	0.00074612	0.00001364	0.00001289	0.00000074
615870.00	2364440.00	0.00027085	0.00001053	0.00000979	0.00000074	0.00044846	0.00001205	0.00001129	0.00000076
616370.00	2364440.00	0.0003251	0.00001074	0.00001002	0.00000072	0.00071176	0.00001301	0.00001227	0.00000074
616870.00	2364440.00	0.00074509	0.00001269	0.00001198	0.00000071	0.00061934	0.00001193	0.00001121	0.00000073
617370.00	2364440.00	0.00078189	0.0000125	0.0000118	0.0000007	0.00046241	0.0000109	0.00001018	0.00000072
617870.00	2364440.00	0.00056027	0.000011	0.0000103	0.0000007	0.00034793	0.00001006	0.00000934	0.00000072
618370.00	2364440.00	0.00071125	0.00001201	0.0000113	0.0000007	0.00063121	0.00001144	0.00001072	0.00000072
618870.00	2364440.00	0.0003197	0.00000933	0.00000863	0.0000007	0.00026743	0.00000924	0.00000852	0.00000071
619370.00	2364440.00	0.0002733	0.00000892	0.00000822	0.00000069	0.0002488	0.00000898	0.00000826	0.00000071
619870.00	2364440.00	0.00030003	0.00000895	0.00000826	0.00000069	0.00025621	0.00000888	0.00000817	0.00000071
590370.00	2364940.00	0.00204135	0.00005	0.000046	0.000004	0.00225071	0.0000543	0.00005096	0.00000335
590870.00	2364940.00	0.00140601	0.0000407	0.00003609	0.00000461	0.00087449	0.00004178	0.00003776	0.00000402
591370.00	2364940.00	0.00092722	0.00003364	0.00002909	0.00000456	0.00076652	0.00003693	0.00003237	0.00000456
591870.00	2364940.00	0.00072965	0.00002837	0.00002451	0.00000386	0.00071015	0.00003251	0.00002819	0.00000432
592370.00	2364940.00	0.0005305	0.0000238	0.00002072	0.00000308	0.00062957	0.00002797	0.0000244	0.00000357
592870.00	2364940.00	0.00052	0.00002224	0.00001957	0.00000267	0.00058669	0.00002484	0.00002194	0.0000029
593370.00	2364940.00	0.0006602	0.0000242	0.00002155	0.00000265	0.00058938	0.000024	0.00002138	0.00000263
593870.00	2364940.00	0.00135017	0.00003289	0.00003001	0.00000288	0.00072827	0.00002713	0.00002443	0.0000027
594370.00	2364940.00	0.00103543	0.0000345	0.00003125	0.00000325	0.00073619	0.00003102	0.00002805	0.00000297
594870.00	2364940.00	0.00171615	0.00004067	0.00003735	0.00000333	0.00102443	0.00003691	0.0000336	0.00000331
595370.00	2364940.00	0.00212403	0.00004199	0.00003913	0.00000285	0.00135722	0.00004016	0.00003694	0.00000322
595870.00	2364940.00	0.00214004	0.00003957	0.00003728	0.00000229	0.00152893	0.00003918	0.00003647	0.00000271
596370.00	2364940.00	0.00150514	0.0000341	0.00003211	0.00000199	0.00210734	0.00003977	0.00003752	0.00000225
596870.00	2364940.00	0.00087942	0.00002861	0.00002664	0.00000196	0.0021504	0.00003804	0.00003602	0.00000202
597370.00	2364940.00	0.00056344	0.00002567	0.00002343	0.00000224	0.00108886	0.00003095	0.00002884	0.00000212
597870.00	2364940.00	0.00054174	0.00002526	0.00002265	0.0000026	0.00094407	0.00002917	0.00002676	0.00000241
598370.00	2364940.00	0.00053109	0.0000252	0.00002236	0.00000284	0.00084437	0.0000282	0.00002544	0.00000277
598870.00	2364940.00	0.0005292	0.0000252	0.00002239	0.00000281	0.00079613	0.00002774	0.00002481	0.00000293
599370.00	2364940.00	0.00052423	0.00002487	0.00002232	0.00000255	0.00078407	0.00002737	0.0000246	0.00000277
599870.00	2364940.00	0.00051796	0.0000245	0.00002224	0.00000226	0.00077134	0.0000269	0.00002442	0.00000247
600370.00	2364940.00	0.00050968	0.00002412	0.00002203	0.00000209	0.00076202	0.0000264	0.00002416	0.00000224
600870.00	2364940.00	0.00049524	0.00002357	0.00002158	0.00000199	0.00074825	0.00002583	0.00002375	0.00000208
601370.00	2364940.00	0.00061703	0.00002389	0.00002202	0.00000186	0.0012355	0.0000279	0.00002602	0.00000188
601870.00	2364940.00	0.00059628	0.00002323	0.00002138	0.00000185	0.00126912	0.00002755	0.00002568	0.00000187
602370.00	2364940.00	0.00060257	0.00002269	0.00002086	0.00000183	0.00123566	0.0000267	0.00002485	0.00000185
602870.00	2364940.00	0.00058053	0.00002202	0.00002023	0.00000179	0.00116959	0.00002578	0.00002395	0.00000182
603370.00	2364940.00	0.00057883	0.00002156	0.00001981	0.00000175	0.0011421	0.00002511	0.00002332	0.00000179
603870.00	2364940.00	0.00058935	0.00002124	0.00001954	0.0000017	0.00113616	0.00002463	0.00002289	0.00000174
604370.00	2364940.00	0.00057082	0.00002079	0.00001914	0.00000165	0.00112905	0.00002426	0.00002256	0.00000169
604870.00	2364940.00	0.00056784	0.00002046	0.00001886	0.00000159	0.0011238	0.00002391	0.00002226	0.00000164
605370.00	2364940.00	0.00056456	0.00002014	0.0000186	0.00000154	0.00111572	0.00002356	0.00002197	0.00000159
605870.00	2364940.00	0.00056049	0.00001981	0.00001834	0.00000148	0.00110292	0.00002319	0.00002166	0.00000154
606370.00	2364940.00	0.00055535	0.00001946	0.00001806	0.00000141	0.00108466	0.00002277	0.0000213	0.00000148
606870.00	2364940.00	0.00054906	0.00001909	0.00001775	0.00000134	0.00106123	0.0000223	0.00002089	0.00000141
607370.00	2364940.00	0.00054167	0.00001867	0.0000174	0.00000127	0.00103368	0.00002177	0.00002044	0.00000134
607870.00	2364940.00	0.00053335	0.00001822	0.00001702	0.00000119	0.00100336	0.00002119	0.00001993	0.00000126
608370.00	2364940.00	0.00052428	0.00001774	0.00001661	0.00000112	0.00097166	0.00002057	0.00001939	0.00000118
608870.00	2364940.00	0.00051469	0.00001723	0.00001617	0.00000105	0.00093974	0.00001992	0.00001882	0.00000111
609370.00	2364940.00	0.00049494	0.00001664	0.00001565	0.00000099	0.00091131	0.00001929	0.00001825	0.00000104
609870.00	2364940.00	0.00052452	0.00001637	0.00001544	0.00000093	0.00092625	0.00001882	0.00001785	0.00000097
610370.00	2364940.00	0.00045308	0.00001548	0.0000146	0.00000088	0.00091275	0.00001833	0.00001741	0.00000092
610870.00	2364940.00	0.00045312	0.00001502	0.00001418	0.00000084	0.00088427	0.00001766	0.0000168	0.00000086
611370.00	2364940.00	0.00052506	0.00001496	0.00001417	0.00000079	0.00080881	0.00001668	0.00001587	0.00000081
611870.00	2364940.00	0.00049955	0.00001439	0.00001363	0.00000076	0.00079957	0.00001618	0.00001541	0.00000078
612370.00	2364940.00	0.00038754	0.00001336	0.00001261	0.00000075	0.00079226	0.00001588	0.00001512	0.00000076
612870.00	2364940.00	0.00037682	0.00001293	0.0000122	0.00000073	0.00077003	0.00001537	0.00001462	0.00000074

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2364940.00	0.00042797	0.00001286	0.00001216	0.00000071	0.00077027	0.00001486	0.00001414	0.00000072
613870.00	2364940.00	0.00051621	0.00001306	0.00001237	0.00000069	0.000805	0.00001459	0.00001389	0.0000007
614370.00	2364940.00	0.00032077	0.00001163	0.00001092	0.0000007	0.00065013	0.0000138	0.00001309	0.00000072
614870.00	2364940.00	0.00033647	0.00001147	0.00001077	0.00000069	0.00070642	0.00001373	0.00001303	0.00000071
615370.00	2364940.00	0.0002853	0.00001086	0.00001016	0.0000007	0.00052048	0.00001262	0.0000119	0.00000072
615870.00	2364940.00	0.0004073	0.0000114	0.00001072	0.00000068	0.00080087	0.00001351	0.00001282	0.00000069
616370.00	2364940.00	0.00076646	0.00001287	0.0000122	0.00000066	0.00052614	0.00001162	0.00001095	0.00000067
616870.00	2364940.00	0.00030052	0.00001034	0.00000965	0.00000068	0.00062377	0.00001234	0.00001163	0.0000007
617370.00	2364940.00	0.00028949	0.00001008	0.0000094	0.00000068	0.00059215	0.00001198	0.00001128	0.0000007
617870.00	2364940.00	0.00073136	0.00001214	0.00001147	0.00000067	0.00055415	0.00001115	0.00001047	0.00000068
618370.00	2364940.00	0.00047075	0.00001027	0.00000961	0.00000066	0.00031179	0.00000958	0.00000891	0.00000067
618870.00	2364940.00	0.00066652	0.00001123	0.00001057	0.00000066	0.00038093	0.00000985	0.00000918	0.00000068
619370.00	2364940.00	0.00058019	0.00001057	0.00000991	0.00000066	0.00034012	0.00000946	0.00000878	0.00000068
619870.00	2364940.00	0.00050627	0.00001001	0.00000936	0.00000066	0.00031183	0.00000914	0.00000846	0.00000068
590370.00	2365440.00	0.00077424	0.00003912	0.00003521	0.00000392	0.00118215	0.00004514	0.00004171	0.00000343
590870.00	2365440.00	0.00220595	0.00004442	0.00004019	0.00000423	0.00231361	0.00004774	0.0000439	0.00000384
591370.00	2365440.00	0.00245753	0.00004113	0.00003703	0.0000041	0.00117014	0.00003718	0.00003302	0.00000416
591870.00	2365440.00	0.00119075	0.00002978	0.00002626	0.00000352	0.00076075	0.00003089	0.00002698	0.00000391
592370.00	2365440.00	0.0004224	0.00002114	0.00001832	0.00000282	0.00052769	0.00002476	0.0000215	0.00000326
592870.00	2365440.00	0.00038326	0.00001941	0.00001698	0.00000243	0.00048459	0.00002188	0.00001924	0.00000263
593370.00	2365440.00	0.00046474	0.00002107	0.00001865	0.00000243	0.00052057	0.00002189	0.00001948	0.00000241
593870.00	2365440.00	0.00054989	0.00002457	0.00002198	0.00000259	0.00054083	0.00002315	0.00002071	0.00000244
594370.00	2365440.00	0.00069712	0.00002932	0.0000264	0.00000291	0.00061862	0.00002715	0.00002448	0.00000267
594870.00	2365440.00	0.00101641	0.00003369	0.00003058	0.00000311	0.00076437	0.00003193	0.00002893	0.000003
595370.00	2365440.00	0.00151623	0.0000368	0.00003398	0.00000281	0.00098417	0.00003529	0.00003224	0.00000305
595870.00	2365440.00	0.00218656	0.00003971	0.00003738	0.00000232	0.0018989	0.00004037	0.00003768	0.0000027
596370.00	2365440.00	0.00111328	0.00003128	0.00002931	0.00000197	0.00246843	0.00004148	0.00003921	0.00000227
596870.00	2365440.00	0.00078268	0.0000273	0.00002548	0.00000182	0.00207628	0.0000372	0.00003523	0.00000197
597370.00	2365440.00	0.00058238	0.00002477	0.00002285	0.00000192	0.00135842	0.00003165	0.00002975	0.0000019
597870.00	2365440.00	0.00051718	0.00002387	0.00002165	0.00000223	0.00087395	0.00002758	0.0000255	0.00000208
598370.00	2365440.00	0.00051384	0.00002362	0.0000211	0.00000252	0.00093389	0.00002741	0.00002505	0.00000236
598870.00	2365440.00	0.00050035	0.00002362	0.00002094	0.00000268	0.00076874	0.00002614	0.00002348	0.00000267
599370.00	2365440.00	0.00049674	0.00002339	0.00002083	0.00000256	0.0007708	0.00002602	0.00002332	0.0000027
599870.00	2365440.00	0.00049237	0.00002311	0.0000208	0.00000231	0.00074474	0.00002555	0.00002303	0.00000252
600370.00	2365440.00	0.00048681	0.00002281	0.00002073	0.00000207	0.00072552	0.00002504	0.00002278	0.00000225
600870.00	2365440.00	0.00047842	0.00002245	0.00002053	0.00000192	0.00071355	0.00002456	0.00002251	0.00000205
601370.00	2365440.00	0.00056722	0.00002265	0.00002089	0.00000175	0.00125957	0.00002704	0.00002525	0.0000018
601870.00	2365440.00	0.00052863	0.0000203	0.0000203	0.00000174	0.00120943	0.00002649	0.00002473	0.00000176
602370.00	2365440.00	0.00055748	0.00002173	0.00002001	0.00000172	0.00119722	0.00002578	0.00002404	0.00000174
602870.00	2365440.00	0.00054729	0.00002115	0.00001945	0.00000171	0.00111583	0.00002479	0.00002306	0.00000173
603370.00	2365440.00	0.00055804	0.00002076	0.00001908	0.00000168	0.00110164	0.00002416	0.00002245	0.00000171
603870.00	2365440.00	0.00053681	0.00002024	0.00001859	0.00000165	0.00110912	0.00002379	0.00002211	0.00000168
604370.00	2365440.00	0.00054686	0.00001994	0.00001833	0.00000161	0.00107041	0.00002317	0.00002152	0.00000165
604870.00	2365440.00	0.00054381	0.00001962	0.00001805	0.00000157	0.00106581	0.00002282	0.00002121	0.00000161
605370.00	2365440.00	0.00054155	0.00001933	0.00001781	0.00000152	0.00107204	0.00002256	0.000021	0.00000157
605870.00	2365440.00	0.00053895	0.00001905	0.00001757	0.00000147	0.00106624	0.00002227	0.00002074	0.00000152
606370.00	2365440.00	0.00052833	0.00001872	0.0000173	0.00000142	0.00105078	0.00002193	0.00002045	0.00000148
606870.00	2365440.00	0.00053153	0.00001846	0.0000171	0.00000137	0.00103413	0.00002156	0.00002013	0.00000142
607370.00	2365440.00	0.00052649	0.00001814	0.00001684	0.00000131	0.0010159	0.00002117	0.0000198	0.00000137
607870.00	2365440.00	0.00051769	0.00001778	0.00001653	0.00000124	0.00099393	0.00002073	0.00001942	0.00000131
608370.00	2365440.00	0.00052139	0.00001746	0.00001628	0.00000118	0.0009719	0.00002025	0.00001901	0.00000124
608870.00	2365440.00	0.00052907	0.00001717	0.00001606	0.00000111	0.00100327	0.00002002	0.00001884	0.00000117
609370.00	2365440.00	0.00047353	0.00001646	0.0000154	0.00000105	0.00098589	0.00001959	0.00001848	0.00000111
609870.00	2365440.00	0.00048581	0.00001613	0.00001514	0.00000099	0.0009502	0.00001894	0.0000179	0.00000104
610370.00	2365440.00	0.00054824	0.00001605	0.00001513	0.00000093	0.00086361	0.00001796	0.000017	0.00000097
610870.00	2365440.00	0.00039489	0.00001474	0.00001385	0.00000089	0.00084963	0.00001767	0.00001674	0.00000093
611370.00	2365440.00	0.00054061	0.00001515	0.00001433	0.00000082	0.00079502	0.0000167	0.00001585	0.00000085
611870.00	2365440.00	0.00032689	0.00001345	0.00001263	0.00000082	0.0006244	0.00001574	0.00001489	0.00000085
612370.00	2365440.00	0.00062105	0.00001469	0.00001395	0.00000074	0.00061023	0.00001481	0.00001406	0.00000075
612870.00	2365440.00	0.00040608	0.00001326	0.00001252	0.00000073	0.00084797	0.00001587	0.00001512	0.00000075
613370.00	2365440.00	0.00054927	0.00001358	0.00001289	0.00000069	0.00064702	0.00001422	0.00001352	0.0000007
613870.00	2365440.00	0.00035269	0.00001223	0.00001153	0.0000007	0.00073711	0.00001461	0.0000139	0.00000071
614370.00	2365440.00	0.0004884	0.0000127	0.00001203	0.00000067	0.00081617	0.00001446	0.00001379	0.00000068
614870.00	2365440.00	0.00043203	0.00001209	0.00001143	0.00000066	0.00080429	0.00001413	0.00001346	0.00000067
615370.00	2365440.00	0.00074448	0.00001321	0.00001259	0.00000063	0.00050046	0.00001203	0.0000114	0.00000063
615870.00	2365440.00	0.0007504	0.00001304	0.00001241	0.00000063	0.00052495	0.0000119	0.00001127	0.00000063
616370.00	2365440.00	0.00038309	0.00001104	0.00001039	0.00000065	0.00075794	0.00001308	0.00001243	0.00000065
616870.00	2365440.00	0.0005261	0.00001114	0.00001053	0.00000061	0.00034751	0.00001034	0.00000973	0.00000061
617370.00	2365440.00	0.00061141	0.00001142	0.0000108	0.00000061	0.00037874	0.00001033	0.00000971	0.00000062
617870.00	2365440.00	0.00040815	0.00001055	0.00000992	0.00000064	0.00075064	0.00001231	0.00001166	0.00000065

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2365440.00	0.00048958	0.00001079	0.00001016	0.00000064	0.00072182	0.00001189	0.00001124	0.00000065
618870.00	2365440.00	0.00064103	0.00001105	0.00001043	0.00000062	0.00037972	0.0000098	0.00000916	0.00000063
619370.00	2365440.00	0.00042189	0.00000963	0.00000901	0.00000062	0.000289	0.00000907	0.00000844	0.00000063
619870.00	2365440.00	0.00028479	0.00000868	0.00000806	0.00000062	0.00024045	0.00000861	0.00000798	0.00000063
590370.00	2365940.00	0.000728	0.000036	0.0000323	0.0000037	0.00112331	0.00004167	0.00003838	0.00000329
590870.00	2365940.00	0.0007133	0.00003261	0.00002868	0.00000393	0.00136067	0.00004066	0.00003698	0.00000368
591370.00	2365940.00	0.001311	0.00003384	0.00003009	0.00000375	0.00304004	0.0000462	0.00004236	0.00000383
591870.00	2365940.00	0.00270261	0.00003779	0.00003454	0.00000325	0.00122213	0.00003203	0.00002846	0.00000358
592370.00	2365940.00	0.00080198	0.0000234	0.00002071	0.00000268	0.00063812	0.00002516	0.00002212	0.00000303
592870.00	2365940.00	0.00035512	0.00001806	0.00001581	0.00000225	0.0004527	0.00002036	0.00001793	0.00000243
593370.00	2365940.00	0.00037004	0.00001865	0.00001641	0.00000224	0.00044015	0.00001953	0.0000173	0.00000223
593870.00	2365940.00	0.00038616	0.0000207	0.00001836	0.00000234	0.00044575	0.00002012	0.0000179	0.00000222
594370.00	2365940.00	0.00058492	0.0000262	0.00002357	0.00000263	0.00055833	0.00002444	0.00002201	0.00000243
594870.00	2365940.00	0.00103292	0.00003186	0.000029	0.00000286	0.00072738	0.00002938	0.00002666	0.00000272
595370.00	2365940.00	0.00177737	0.00003714	0.00003442	0.00000273	0.00107502	0.00003402	0.00003116	0.00000285
595870.00	2365940.00	0.00217829	0.00003848	0.00003616	0.00000232	0.00149496	0.00003664	0.000034	0.00000264
596370.00	2365940.00	0.00143653	0.00003273	0.00003077	0.00000196	0.00223211	0.00003914	0.00003688	0.00000227
596870.00	2365940.00	0.00089176	0.0000275	0.00002575	0.00000175	0.00215819	0.00003684	0.0000349	0.00000195
597370.00	2365940.00	0.00063626	0.00002443	0.00002271	0.00000172	0.00165713	0.00003253	0.00003074	0.00000178
597870.00	2365940.00	0.00050961	0.00002279	0.00002088	0.0000019	0.00097671	0.00002742	0.00002559	0.00000183
598370.00	2365940.00	0.00050002	0.00002236	0.00002018	0.00000218	0.00097165	0.00002654	0.00002452	0.00000202
598870.00	2365940.00	0.00048591	0.00002219	0.00001975	0.00000243	0.0008797	0.00002564	0.00002332	0.00000232
599370.00	2365940.00	0.00047729	0.00002209	0.00001959	0.0000025	0.00080942	0.00002508	0.00002256	0.00000252
599870.00	2365940.00	0.00047125	0.00002189	0.00001953	0.00000235	0.00075604	0.00002457	0.00002207	0.0000025
600370.00	2365940.00	0.00046525	0.0000216	0.00001948	0.00000211	0.00071313	0.00002398	0.00002168	0.00000231
600870.00	2365940.00	0.00046018	0.00002134	0.00001943	0.00000192	0.00068405	0.0000234	0.00002132	0.00000208
601370.00	2365940.00	0.0005917	0.00002181	0.00002012	0.00000169	0.00123406	0.0000257	0.00002394	0.00000177
601870.00	2365940.00	0.00056402	0.00002141	0.00001978	0.00000163	0.00122315	0.00002542	0.00002374	0.00000167
602370.00	2365940.00	0.00055841	0.00002101	0.0000194	0.00000162	0.00109768	0.00002437	0.00002273	0.00000164
602870.00	2365940.00	0.00051888	0.00002037	0.00001875	0.00000161	0.00107502	0.00002391	0.00002227	0.00000163
603370.00	2365940.00	0.00054159	0.00002006	0.00001846	0.0000016	0.00105057	0.00002324	0.00002161	0.00000163
603870.00	2365940.00	0.00054038	0.00001965	0.00001806	0.00000158	0.00103585	0.0000227	0.00002109	0.00000161
604370.00	2365940.00	0.00053439	0.00001926	0.0000177	0.00000156	0.00103034	0.00002227	0.00002068	0.00000159
604870.00	2365940.00	0.0004731	0.00001858	0.00001704	0.00000153	0.00102542	0.00002203	0.00002046	0.00000157
605370.00	2365940.00	0.00041135	0.0000179	0.0000164	0.0000015	0.00093672	0.00002147	0.00001993	0.00000154
605870.00	2365940.00	0.0005173	0.00001831	0.00001685	0.00000146	0.00100607	0.00002126	0.00001976	0.00000149
606370.00	2365940.00	0.00051521	0.00001806	0.00001664	0.00000141	0.00100238	0.000021	0.00001954	0.00000146
606870.00	2365940.00	0.00051276	0.00001781	0.00001644	0.00000137	0.00099628	0.00002073	0.00001931	0.00000142
607370.00	2365940.00	0.00050961	0.00001755	0.00001623	0.00000132	0.00098655	0.00002044	0.00001907	0.00000138
607870.00	2365940.00	0.00050591	0.00001728	0.00001601	0.00000127	0.00098354	0.00002017	0.00001885	0.00000133
608370.00	2365940.00	0.00046966	0.00001682	0.0000156	0.00000122	0.00104109	0.00002027	0.00001899	0.00000128
608870.00	2365940.00	0.00049935	0.00001671	0.00001555	0.00000116	0.0010095	0.00001974	0.00001852	0.00000122
609370.00	2365940.00	0.00046102	0.00001617	0.00001507	0.00000111	0.00098685	0.00001935	0.00001819	0.00000116
609870.00	2365940.00	0.00043471	0.00001568	0.00001463	0.00000105	0.00094991	0.00001885	0.00001775	0.00000111
610370.00	2365940.00	0.00036799	0.00001489	0.00001389	0.000001	0.0008081	0.0000179	0.00001684	0.00000106
610870.00	2365940.00	0.0005414	0.00001557	0.00001465	0.00000093	0.00083065	0.00001731	0.00001634	0.00000097
611370.00	2365940.00	0.00065014	0.00001572	0.00001485	0.00000086	0.00063499	0.00001583	0.00001494	0.0000009
611870.00	2365940.00	0.00034425	0.00001365	0.0000128	0.00000085	0.0007169	0.00001623	0.00001534	0.00000089
612370.00	2365940.00	0.00048471	0.00001413	0.00001334	0.00000079	0.00078596	0.0000159	0.00001509	0.00000081
612870.00	2365940.00	0.00045952	0.00001368	0.00001293	0.00000075	0.00087902	0.00001607	0.00001529	0.00000078
613370.00	2365940.00	0.00037919	0.00001284	0.00001211	0.00000073	0.00079711	0.00001536	0.00001462	0.00000075
613870.00	2365940.00	0.00032681	0.00001215	0.00001144	0.00000071	0.00066413	0.0000144	0.00001367	0.00000073
614370.00	2365940.00	0.00027984	0.00001147	0.00001075	0.00000072	0.00044913	0.00001299	0.00001224	0.00000075
614870.00	2365940.00	0.00074174	0.0000137	0.00001307	0.00000063	0.00058056	0.00001289	0.00001226	0.00000063
615370.00	2365940.00	0.0006639	0.0000128	0.0000122	0.0000006	0.00044511	0.0000118	0.0000112	0.0000006
615870.00	2365940.00	0.00062903	0.00001229	0.0000117	0.00000059	0.00040933	0.00001129	0.0000107	0.00000059
616370.00	2365940.00	0.00070189	0.0000125	0.00001191	0.00000059	0.00045815	0.00001131	0.00001072	0.00000059
616870.00	2365940.00	0.00046799	0.00001129	0.00001068	0.00000061	0.00073228	0.00001264	0.00001203	0.00000061
617370.00	2365940.00	0.00050697	0.00001085	0.00001028	0.00000057	0.00033904	0.00001011	0.00000953	0.00000057
617870.00	2365940.00	0.00036697	0.00000982	0.00000925	0.00000057	0.00027944	0.00000951	0.00000895	0.00000057
618370.00	2365940.00	0.00069064	0.00001165	0.00001106	0.00000059	0.00049121	0.00001061	0.00001001	0.0000006
618870.00	2365940.00	0.00050443	0.00001065	0.00001005	0.0000006	0.00067194	0.00001142	0.00001081	0.00000061
619370.00	2365940.00	0.00066665	0.0000112	0.00001061	0.00000059	0.00051007	0.00001033	0.00000973	0.0000006
619870.00	2365940.00	0.00063459	0.00001069	0.0000101	0.00000059	0.00038366	0.00000946	0.00000886	0.0000006
590370.00	2366440.00	0.00068709	0.00003318	0.0000297	0.00000349	0.00112142	0.00003915	0.00003603	0.00000312
590870.00	2366440.00	0.00066928	0.00003028	0.00002662	0.00000366	0.00122742	0.00003736	0.00003387	0.00000349
591370.00	2366440.00	0.00143077	0.0000329	0.00002944	0.00000346	0.00285471	0.00004284	0.00003928	0.00000356
591870.00	2366440.00	0.00171145	0.00003016	0.00002717	0.000003	0.00082924	0.0000279	0.00002459	0.00000331
592370.00	2366440.00	0.00055066	0.00002061	0.00001812	0.00000249	0.00056621	0.00002321	0.0000204	0.00000281
592870.00	2366440.00	0.00033686	0.00001702	0.00001491	0.00000211	0.00042394	0.00001911	0.00001683	0.00000227

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2366440.00	0.00033603	0.00001722	0.00001514	0.00000208	0.00040229	0.00001814	0.00001607	0.00000207
593870.00	2366440.00	0.00037172	0.00001927	0.00001708	0.00000218	0.00041782	0.00001883	0.00001674	0.00000209
594370.00	2366440.00	0.0005772	0.00002428	0.00002188	0.0000024	0.00053221	0.00002254	0.00002029	0.00000225
594870.00	2366440.00	0.00087221	0.00002888	0.00002625	0.00000263	0.00065667	0.0000267	0.00002422	0.00000248
595370.00	2366440.00	0.00120295	0.00003196	0.00002933	0.00000262	0.00079708	0.00002989	0.00002723	0.00000266
595870.00	2366440.00	0.00125893	0.0000316	0.00002929	0.00000231	0.00086932	0.00003092	0.00002835	0.00000257
596370.00	2366440.00	0.00185219	0.00003442	0.00003246	0.00000196	0.00175178	0.0000355	0.00003325	0.00000225
596870.00	2366440.00	0.00101355	0.00002785	0.00002613	0.00000171	0.00214675	0.00003607	0.00003412	0.00000194
597370.00	2366440.00	0.00055702	0.00002338	0.00002175	0.00000163	0.00124243	0.00002993	0.00002817	0.00000176
597870.00	2366440.00	0.00057131	0.00002246	0.0000208	0.00000166	0.0014293	0.00002922	0.00002756	0.00000166
598370.00	2366440.00	0.00050558	0.00002146	0.00001959	0.00000187	0.00111431	0.00002649	0.00002473	0.00000176
598870.00	2366440.00	0.00048293	0.0000211	0.00001895	0.00000214	0.0009896	0.00002521	0.00002322	0.000002
599370.00	2366440.00	0.00046484	0.00002094	0.0000186	0.00000234	0.0008652	0.00002429	0.00002202	0.00000226
599870.00	2366440.00	0.00045699	0.00002081	0.00001847	0.00000234	0.00080543	0.00002382	0.00002143	0.0000024
600370.00	2366440.00	0.00044578	0.00002057	0.00001839	0.00000218	0.0006967	0.00002296	0.00002062	0.00000234
600870.00	2366440.00	0.0004406	0.00002028	0.00001833	0.00000196	0.00066268	0.00002238	0.00002024	0.00000213
601370.00	2366440.00	0.00043993	0.00001998	0.00001825	0.00000173	0.00074401	0.00002267	0.0000208	0.00000187
601870.00	2366440.00	0.00053846	0.00002038	0.0000188	0.00000158	0.00116645	0.0000242	0.00002255	0.00000165
602370.00	2366440.00	0.00046694	0.00001972	0.00001818	0.00000154	0.00104089	0.00002353	0.00002195	0.00000158
602870.00	2366440.00	0.00051128	0.00001968	0.00001816	0.00000152	0.00103687	0.00002295	0.0000214	0.00000154
603370.00	2366440.00	0.00051727	0.00001936	0.00001784	0.00000152	0.0010203	0.00002246	0.00002092	0.00000154
603870.00	2366440.00	0.00051263	0.00001894	0.00001743	0.00000151	0.00099954	0.00002194	0.00002041	0.00000153
604370.00	2366440.00	0.00051383	0.00001859	0.00001709	0.0000015	0.00099214	0.00002149	0.00001997	0.00000152
604870.00	2366440.00	0.00050887	0.00001827	0.00001679	0.00000148	0.00106838	0.00002155	0.00002004	0.00000151
605370.00	2366440.00	0.00051272	0.00001798	0.00001653	0.00000145	0.00098546	0.00002078	0.00001929	0.00000148
605870.00	2366440.00	0.00051259	0.00001772	0.00001629	0.00000143	0.00096181	0.00002038	0.00001892	0.00000146
606370.00	2366440.00	0.00048985	0.00001736	0.00001596	0.00000139	0.00096396	0.00002018	0.00001876	0.00000143
606870.00	2366440.00	0.00046879	0.00001703	0.00001567	0.00000136	0.00100281	0.00002022	0.00001882	0.0000014
607370.00	2366440.00	0.00049313	0.00001696	0.00001564	0.00000132	0.00098659	0.00001987	0.0000185	0.00000136
607870.00	2366440.00	0.00042356	0.00001633	0.00001504	0.00000129	0.00095644	0.00001964	0.00001831	0.00000133
608370.00	2366440.00	0.00048886	0.00001652	0.00001528	0.00000124	0.00100188	0.00001952	0.00001823	0.00000129
608870.00	2366440.00	0.00041461	0.00001584	0.00001464	0.0000012	0.0009735	0.0000193	0.00001804	0.00000125
609370.00	2366440.00	0.00048183	0.000016	0.00001486	0.00000114	0.00097429	0.00001888	0.00001769	0.0000012
609870.00	2366440.00	0.00061211	0.00001642	0.00001534	0.00000108	0.0007947	0.00001754	0.0000164	0.00000113
610370.00	2366440.00	0.00045148	0.00001527	0.00001423	0.00000104	0.00093038	0.00001811	0.00001702	0.00000109
610870.00	2366440.00	0.0003806	0.00001453	0.00001353	0.00000099	0.00085165	0.00001753	0.00001648	0.00000105
611370.00	2366440.00	0.00053761	0.00001511	0.00001419	0.00000093	0.00079606	0.00001665	0.00001568	0.00000097
611870.00	2366440.00	0.00053532	0.00001477	0.00001389	0.00000088	0.00076487	0.00001613	0.00001522	0.00000091
612370.00	2366440.00	0.0004806	0.0000142	0.00001336	0.00000084	0.00090638	0.00001659	0.00001572	0.00000087
612870.00	2366440.00	0.00042997	0.00001357	0.00001277	0.0000008	0.00087549	0.00001614	0.00001531	0.00000083
613370.00	2366440.00	0.00036867	0.00001285	0.00001209	0.00000076	0.00078532	0.0000154	0.00001461	0.00000079
613870.00	2366440.00	0.00030292	0.00001206	0.00001132	0.00000074	0.00057445	0.00001407	0.0000133	0.00000077
614370.00	2366440.00	0.0004275	0.00001256	0.00001187	0.00000069	0.00081111	0.00001471	0.00001401	0.0000007
614870.00	2366440.00	0.00031282	0.00001154	0.00001086	0.00000068	0.00062854	0.00001362	0.00001293	0.00000069
615370.00	2366440.00	0.00073099	0.00001336	0.00001275	0.00000061	0.00050421	0.00001227	0.00001165	0.00000062
615870.00	2366440.00	0.00060763	0.00001229	0.00001171	0.00000058	0.00040598	0.00001138	0.0000108	0.00000058
616370.00	2366440.00	0.0005023	0.00001141	0.00001084	0.00000056	0.00034976	0.00001075	0.00001019	0.00000056
616870.00	2366440.00	0.00042387	0.00001068	0.00001013	0.00000055	0.00030934	0.00001023	0.00000969	0.00000055
617370.00	2366440.00	0.00064399	0.00001195	0.00001137	0.00000057	0.00057206	0.00001154	0.00001096	0.00000058
617870.00	2366440.00	0.00066161	0.00001164	0.00001108	0.00000056	0.00042994	0.0000105	0.00000994	0.00000056
618370.00	2366440.00	0.00038742	0.00000979	0.00000925	0.00000054	0.00028476	0.00000939	0.00000885	0.00000054
618870.00	2366440.00	0.00056434	0.00001063	0.00001008	0.00000055	0.00035785	0.00000965	0.0000091	0.00000055
619370.00	2366440.00	0.00066334	0.00001113	0.00001057	0.00000056	0.00045713	0.00001006	0.0000095	0.00000056
619870.00	2366440.00	0.00063761	0.00001073	0.00001018	0.00000056	0.00039992	0.00000955	0.00000899	0.00000056
590370.00	2366940.00	0.00099991	0.00003329	0.00003001	0.00000328	0.00229009	0.00004293	0.00003999	0.00000294
590870.00	2366940.00	0.000702	0.00002878	0.00002537	0.00000341	0.00168577	0.00003795	0.00003466	0.00000329
591370.00	2366940.00	0.00125985	0.00003034	0.00002712	0.00000321	0.00278157	0.00004065	0.00003732	0.00000333
591870.00	2366940.00	0.00157574	0.0000282	0.00002541	0.00000279	0.00077063	0.00002608	0.00002301	0.00000307
592370.00	2366940.00	0.00084544	0.00002172	0.00001936	0.00000236	0.00059978	0.0000225	0.00001986	0.00000263
592870.00	2366940.00	0.00036552	0.00001693	0.00001488	0.00000204	0.00044521	0.00001893	0.00001673	0.00000219
593370.00	2366940.00	0.00031408	0.00001605	0.00001412	0.00000194	0.00037468	0.00001694	0.000015	0.00000193
593870.00	2366940.00	0.00035681	0.00001795	0.00001591	0.00000204	0.00040299	0.00001774	0.00001578	0.00000196
594370.00	2366940.00	0.00059863	0.00002284	0.00002063	0.00000222	0.00051519	0.000021	0.00001891	0.00000209
594870.00	2366940.00	0.00080145	0.00002667	0.00002425	0.00000242	0.00061077	0.00002451	0.00002222	0.00000229
595370.00	2366940.00	0.00137062	0.00003162	0.00002914	0.00000248	0.00083212	0.00002839	0.00002592	0.00000247
595870.00	2366940.00	0.00188402	0.00003472	0.00003244	0.00000228	0.00116964	0.00003169	0.00002923	0.00000245
596370.00	2366940.00	0.00169165	0.00003317	0.0000312	0.00000197	0.00195659	0.00003579	0.00003356	0.00000223
596870.00	2366940.00	0.00099378	0.00002737	0.00002566	0.00000171	0.00217043	0.0000357	0.00003375	0.00000195
597370.00	2366940.00	0.00067189	0.00002378	0.00002222	0.00000156	0.00176201	0.00003209	0.00003037	0.00000172
597870.00	2366940.00	0.0006232	0.0000223	0.00002078	0.00000152	0.0015987	0.00002952	0.00002794	0.00000158

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2366940.00	0.00055111	0.00002106	0.00001943	0.00000163	0.00137136	0.00002713	0.00002555	0.00000158
598870.00	2366940.00	0.00049104	0.00002028	0.00001842	0.00000186	0.00111474	0.00002504	0.0000233	0.00000174
599370.00	2366940.00	0.00044732	0.00001987	0.00001776	0.00000211	0.00084154	0.00002319	0.00002119	0.00000199
599870.00	2366940.00	0.00044231	0.0000198	0.00001756	0.00000224	0.00081725	0.00002289	0.00002068	0.0000022
600370.00	2366940.00	0.00043261	0.00001963	0.00001744	0.00000219	0.00074004	0.00002233	0.00002005	0.00000228
600870.00	2366940.00	0.00042655	0.00001937	0.00001735	0.00000201	0.00068904	0.00002174	0.00001957	0.00000217
601370.00	2366940.00	0.00052117	0.00001971	0.00001795	0.00000176	0.00111363	0.00002343	0.00002152	0.00000191
601870.00	2366940.00	0.00057039	0.00001975	0.00001817	0.00000158	0.00109945	0.00002288	0.00002119	0.00000169
602370.00	2366940.00	0.0005652	0.00001953	0.00001806	0.00000148	0.0010904	0.00002257	0.00002103	0.00000154
602870.00	2366940.00	0.00050588	0.00001897	0.00001752	0.00000144	0.00100497	0.00002199	0.00002051	0.00000148
603370.00	2366940.00	0.00047703	0.00001854	0.00001711	0.00000144	0.00099788	0.00002175	0.00002029	0.00000146
603870.00	2366940.00	0.00048538	0.00001828	0.00001685	0.00000143	0.00101148	0.00002147	0.00002001	0.00000145
604370.00	2366940.00	0.00056911	0.00001841	0.00001698	0.00000143	0.00091803	0.00002046	0.00001902	0.00000145
604870.00	2366940.00	0.00048168	0.00001762	0.00001619	0.00000142	0.0010323	0.00002085	0.00001941	0.00000145
605370.00	2366940.00	0.0004649	0.00001723	0.00001582	0.00000141	0.00102216	0.0000205	0.00001907	0.00000144
605870.00	2366940.00	0.00050221	0.00001718	0.00001579	0.00000139	0.00099091	0.00001997	0.00001855	0.00000141
606370.00	2366940.00	0.000473	0.00001675	0.00001538	0.00000136	0.00091255	0.00001935	0.00001796	0.00000139
606870.00	2366940.00	0.00047305	0.00001654	0.0000152	0.00000134	0.00091342	0.00001913	0.00001777	0.00000137
607370.00	2366940.00	0.00042404	0.00001607	0.00001476	0.00000131	0.00095161	0.00001925	0.0000179	0.00000134
607870.00	2366940.00	0.00045141	0.00001605	0.00001478	0.00000128	0.00098251	0.00001915	0.00001784	0.00000131
608370.00	2366940.00	0.00045639	0.00001589	0.00001465	0.00000124	0.00097602	0.00001892	0.00001763	0.00000128
608870.00	2366940.00	0.00042885	0.00001554	0.00001433	0.0000012	0.00097052	0.00001875	0.0000175	0.00000125
609370.00	2366940.00	0.00045236	0.00001547	0.00001431	0.00000116	0.0009591	0.00001843	0.00001722	0.00000121
609870.00	2366940.00	0.0004218	0.00001508	0.00001395	0.00000112	0.00094291	0.00001818	0.00001701	0.00000117
610370.00	2366940.00	0.00033944	0.0000143	0.00001321	0.00000109	0.00074593	0.00001714	0.000016	0.00000114
610870.00	2366940.00	0.00057471	0.00001543	0.00001441	0.00000102	0.00076725	0.00001656	0.00001549	0.00000107
611370.00	2366940.00	0.00057821	0.00001517	0.0000142	0.00000097	0.00073302	0.00001611	0.0000151	0.00000102
611870.00	2366940.00	0.00060089	0.00001499	0.00001407	0.00000092	0.00066958	0.00001545	0.00001448	0.00000096
612370.00	2366940.00	0.00029238	0.00001284	0.00001191	0.00000093	0.00048208	0.00001456	0.00001358	0.00000099
612870.00	2366940.00	0.00059613	0.00001448	0.00001365	0.00000083	0.00083107	0.00001575	0.00001488	0.00000087
613370.00	2366940.00	0.00072057	0.00001478	0.000014	0.00000078	0.00067436	0.00001457	0.00001376	0.00000081
613870.00	2366940.00	0.00045205	0.00001308	0.00001232	0.00000076	0.00084169	0.00001524	0.00001446	0.00000078
614370.00	2366940.00	0.00071138	0.00001396	0.00001327	0.00000069	0.00050656	0.00001302	0.00001231	0.00000071
614870.00	2366940.00	0.00068541	0.00001366	0.00001299	0.00000067	0.00063752	0.00001342	0.00001273	0.00000068
615370.00	2366940.00	0.00031009	0.00001132	0.00001064	0.00000067	0.00062731	0.00001337	0.00001269	0.00000069
615870.00	2366940.00	0.00040812	0.00001164	0.00001101	0.00000063	0.00075547	0.00001355	0.00001291	0.00000064
616370.00	2366940.00	0.00059794	0.00001208	0.00001151	0.00000057	0.00040143	0.00001118	0.00001061	0.00000058
616870.00	2366940.00	0.00038763	0.00001056	0.00001002	0.00000054	0.00029332	0.00001025	0.00000971	0.00000054
617370.00	2366940.00	0.00032247	0.00000989	0.00000937	0.00000052	0.00026687	0.00000981	0.00000929	0.00000052
617870.00	2366940.00	0.00044341	0.00001041	0.00000989	0.00000053	0.00031337	0.00000987	0.00000935	0.00000052
618370.00	2366940.00	0.00053118	0.00001071	0.00001018	0.00000053	0.00035279	0.00000988	0.00000936	0.00000052
618870.00	2366940.00	0.00027345	0.00000892	0.00000842	0.0000005	0.00024164	0.00000895	0.00000846	0.0000005
619370.00	2366940.00	0.00043187	0.00000972	0.00000921	0.00000051	0.00030018	0.00000915	0.00000863	0.00000051
619870.00	2366940.00	0.00041161	0.00000942	0.00000891	0.00000051	0.00028852	0.00000889	0.00000838	0.00000051
590370.00	2367440.00	0.00206854	0.00003694	0.00003382	0.00000312	0.00118095	0.00003395	0.00003114	0.00000281
590870.00	2367440.00	0.00077706	0.00002786	0.00002467	0.0000032	0.00209976	0.00003809	0.00003497	0.00000312
591370.00	2367440.00	0.00207531	0.00003368	0.00003068	0.00000299	0.00207565	0.00003477	0.00003165	0.00000312
591870.00	2367440.00	0.00254737	0.00003332	0.0000307	0.00000262	0.00120469	0.00002748	0.00002461	0.00000287
592370.00	2367440.00	0.001396	0.00002429	0.00002204	0.00000225	0.00068476	0.00002216	0.00001968	0.00000248
592870.00	2367440.00	0.00051266	0.00001759	0.00001562	0.00000197	0.00049166	0.00001893	0.00001683	0.00000211
593370.00	2367440.00	0.00029847	0.00001517	0.00001334	0.00000183	0.00035319	0.00001604	0.00001421	0.00000184
593870.00	2367440.00	0.00033129	0.00001664	0.00001474	0.00000191	0.0003787	0.00001663	0.00001479	0.00000184
594370.00	2367440.00	0.00047993	0.00002041	0.00001836	0.00000205	0.00046557	0.00001922	0.00001727	0.00000195
594870.00	2367440.00	0.00084904	0.00002543	0.00002319	0.00000224	0.00059162	0.00002282	0.0000207	0.00000212
595370.00	2367440.00	0.00128957	0.00002966	0.00002733	0.00000234	0.0007688	0.00002632	0.00002402	0.0000023
595870.00	2367440.00	0.0021005	0.00003523	0.00003301	0.00000222	0.00132545	0.00003118	0.00002884	0.00000233
596370.00	2367440.00	0.00155836	0.00003191	0.00002994	0.00000197	0.00206857	0.00003545	0.00003326	0.00000219
596870.00	2367440.00	0.00099409	0.00002701	0.0000253	0.00000172	0.00217531	0.00003515	0.0000332	0.00000195
597370.00	2367440.00	0.00080977	0.00002436	0.00002283	0.00000153	0.001922	0.00003223	0.00003052	0.00000171
597870.00	2367440.00	0.00070864	0.00002247	0.00002103	0.00000144	0.00170137	0.00002949	0.00002795	0.00000154
598370.00	2367440.00	0.00057335	0.00002068	0.00001921	0.00000147	0.00144251	0.00002698	0.0000255	0.00000148
598870.00	2367440.00	0.00047161	0.00001946	0.00001782	0.00000163	0.00105439	0.00002411	0.00002256	0.00000155
599370.00	2367440.00	0.00047175	0.00001921	0.00001736	0.00000185	0.00107178	0.00002358	0.00002185	0.00000173
599870.00	2367440.00	0.00043472	0.00001889	0.00001683	0.00000206	0.00086202	0.00002223	0.00002026	0.00000197
600370.00	2367440.00	0.00042265	0.00001877	0.00001663	0.00000213	0.00077957	0.00002167	0.00001953	0.00000214
600870.00	2367440.00	0.00041455	0.00001856	0.00001651	0.00000205	0.00070635	0.00002104	0.00001888	0.00000215
601370.00	2367440.00	0.00048621	0.00001882	0.00001698	0.00000184	0.00104675	0.00002241	0.00002042	0.00000199
601870.00	2367440.00	0.00049757	0.00001864	0.00001701	0.00000164	0.00105892	0.00002212	0.00002034	0.00000178
602370.00	2367440.00	0.00048819	0.00001837	0.00001689	0.00000149	0.00105246	0.00002181	0.00002022	0.00000159
602870.00	2367440.00	0.00050326	0.00001827	0.00001687	0.0000014	0.0010192	0.00002131	0.00001986	0.00000146

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2367440.00	0.00049284	0.00001803	0.00001666	0.00000137	0.00100342	0.00002103	0.00001963	0.0000014
603870.00	2367440.00	0.00048587	0.00001774	0.00001638	0.00000136	0.00094111	0.00002045	0.00001907	0.00000138
604370.00	2367440.00	0.00044884	0.00001727	0.00001591	0.00000136	0.00100342	0.0000206	0.00001921	0.00000138
604870.00	2367440.00	0.0004408	0.00001692	0.00001556	0.00000136	0.00099002	0.00002021	0.00001883	0.00000138
605370.00	2367440.00	0.00048863	0.00001691	0.00001556	0.00000135	0.00097227	0.00001968	0.0000183	0.00000138
605870.00	2367440.00	0.00043835	0.00001636	0.00001501	0.00000134	0.00097306	0.00001949	0.00001812	0.00000137
606370.00	2367440.00	0.00044362	0.00001615	0.00001482	0.00000133	0.00096857	0.00001919	0.00001783	0.00000135
606870.00	2367440.00	0.0004315	0.00001585	0.00001454	0.00000131	0.00092045	0.00001872	0.00001739	0.00000134
607370.00	2367440.00	0.0004608	0.00001584	0.00001455	0.00000128	0.00093908	0.00001856	0.00001725	0.00000131
607870.00	2367440.00	0.00054174	0.00001609	0.00001484	0.00000125	0.00084141	0.00001775	0.00001647	0.00000128
608370.00	2367440.00	0.00043629	0.00001535	0.00001412	0.00000123	0.00095045	0.0000183	0.00001704	0.00000126
608870.00	2367440.00	0.00043169	0.00001515	0.00001395	0.0000012	0.00094497	0.00001811	0.00001687	0.00000124
609370.00	2367440.00	0.00048743	0.00001529	0.00001412	0.00000117	0.00090718	0.00001764	0.00001643	0.0000012
609870.00	2367440.00	0.00053277	0.00001534	0.00001421	0.00000113	0.00082982	0.00001701	0.00001584	0.00000117
610370.00	2367440.00	0.00044356	0.00001467	0.00001358	0.0000011	0.00091062	0.00001735	0.00001621	0.00000114
610870.00	2367440.00	0.00033045	0.00001376	0.00001269	0.00000107	0.00073139	0.0000165	0.00001539	0.00000112
611370.00	2367440.00	0.00030371	0.00001333	0.00001229	0.00000104	0.00057787	0.00001551	0.00001442	0.00000109
611870.00	2367440.00	0.00061802	0.00001489	0.00001393	0.00000096	0.00061325	0.00001498	0.00001398	0.000001
612370.00	2367440.00	0.0004935	0.00001411	0.00001318	0.00000093	0.00090754	0.00001636	0.0000154	0.00000097
612870.00	2367440.00	0.00056021	0.00001422	0.00001334	0.00000088	0.00085965	0.00001582	0.0000149	0.00000092
613370.00	2367440.00	0.00028178	0.00001218	0.0000113	0.00000088	0.00047786	0.00001389	0.00001296	0.00000092
613870.00	2367440.00	0.00056737	0.0000137	0.00001291	0.00000079	0.00079694	0.00001492	0.0000141	0.00000082
614370.00	2367440.00	0.00053562	0.00001294	0.00001222	0.00000072	0.00040077	0.00001244	0.0000117	0.00000074
614870.00	2367440.00	0.00045324	0.00001218	0.0000115	0.00000068	0.00036064	0.00001192	0.00001123	0.0000007
615370.00	2367440.00	0.00058131	0.00001265	0.00001201	0.00000065	0.00040139	0.00001185	0.00001119	0.00000066
615870.00	2367440.00	0.00068671	0.00001312	0.00001248	0.00000064	0.00057714	0.00001256	0.00001191	0.00000065
616370.00	2367440.00	0.00032544	0.00001096	0.00001032	0.00000064	0.00066799	0.00001301	0.00001236	0.00000065
616870.00	2367440.00	0.00068596	0.00001249	0.00001191	0.00000058	0.0004845	0.00001149	0.00001091	0.00000059
617370.00	2367440.00	0.00041419	0.00001058	0.00001005	0.00000054	0.000304	0.00001017	0.00000963	0.00000054
617870.00	2367440.00	0.00029837	0.00000961	0.0000091	0.00000051	0.00025655	0.00000961	0.0000091	0.00000051
618370.00	2367440.00	0.00034152	0.00000965	0.00000915	0.0000005	0.00026736	0.00000944	0.00000894	0.0000005
618870.00	2367440.00	0.00027469	0.00000901	0.00000852	0.00000049	0.000243	0.00000905	0.00000857	0.00000048
619370.00	2367440.00	0.00029203	0.00000892	0.00000843	0.00000048	0.00024372	0.00000885	0.00000837	0.00000048
619870.00	2367440.00	0.00019529	0.00000805	0.00000758	0.00000047	0.00021151	0.00000833	0.00000787	0.00000046
590370.00	2367940.00	0.00186541	0.00003401	0.00003103	0.00000298	0.00100348	0.00003106	0.00002833	0.00000272
590870.00	2367940.00	0.00223397	0.00003462	0.00003161	0.00000301	0.00135259	0.00003117	0.00002821	0.00000296
591370.00	2367940.00	0.00227132	0.00003251	0.00002971	0.0000028	0.0011072	0.00002772	0.00002478	0.00000294
591870.00	2367940.00	0.00202166	0.00002892	0.00002646	0.00000246	0.00089535	0.00002441	0.00002172	0.00000269
592370.00	2367940.00	0.00075895	0.00001954	0.00001744	0.00000211	0.00054985	0.00002021	0.00001789	0.00000233
592870.00	2367940.00	0.00044546	0.00001647	0.00001461	0.00000186	0.00046458	0.00001795	0.00001596	0.00000199
593370.00	2367940.00	0.00028599	0.0000144	0.00001267	0.00000173	0.00033725	0.00001525	0.00001351	0.00000174
593870.00	2367940.00	0.00031658	0.00001564	0.00001384	0.0000018	0.00036465	0.00001577	0.00001402	0.00000175
594370.00	2367940.00	0.00046953	0.0000191	0.00001718	0.00000192	0.00044842	0.00001804	0.00001621	0.00000183
594870.00	2367940.00	0.00094857	0.00002461	0.00002253	0.00000208	0.00058881	0.00002144	0.00001946	0.00000198
595370.00	2367940.00	0.00158453	0.00003015	0.00002795	0.00000219	0.00087391	0.00002556	0.00002342	0.00000214
595870.00	2367940.00	0.00210015	0.0000344	0.00003226	0.00000214	0.00145227	0.00003044	0.00002823	0.00000221
596370.00	2367940.00	0.00166921	0.00003181	0.00002985	0.00000195	0.00189456	0.00003326	0.00003113	0.00000213
596870.00	2367940.00	0.0012784	0.00002831	0.00002659	0.00000172	0.00197418	0.00003311	0.00003117	0.00000193
597370.00	2367940.00	0.00095249	0.00002494	0.00002343	0.00000152	0.00190218	0.00003149	0.00002978	0.00000171
597870.00	2367940.00	0.00075219	0.00002245	0.00002105	0.00000139	0.00171808	0.00002917	0.00002764	0.00000153
598370.00	2367940.00	0.0005921	0.00002042	0.00001905	0.00000137	0.00147959	0.00002676	0.00002534	0.00000142
598870.00	2367940.00	0.00052885	0.00001931	0.00001786	0.00000145	0.00130629	0.00002483	0.00002341	0.00000142
599370.00	2367940.00	0.00049147	0.00001868	0.00001705	0.00000162	0.00117926	0.00002345	0.00002192	0.00000152
599870.00	2367940.00	0.00045826	0.0000183	0.00001646	0.00000184	0.00104849	0.00002238	0.00002066	0.00000172
600370.00	2367940.00	0.00042223	0.00001801	0.00001601	0.000002	0.00086298	0.00002127	0.00001933	0.00000194
600870.00	2367940.00	0.00040378	0.00001779	0.00001576	0.00000203	0.00071912	0.00002031	0.00001826	0.00000206
601370.00	2367940.00	0.00047613	0.00001813	0.00001623	0.00000191	0.00101078	0.00002149	0.00001947	0.00000202
601870.00	2367940.00	0.00049576	0.00001803	0.00001631	0.00000171	0.00101763	0.00002121	0.00001935	0.00000186
602370.00	2367940.00	0.00048616	0.00001774	0.00001621	0.00000153	0.00101403	0.00002092	0.00001927	0.00000166
602870.00	2367940.00	0.00050068	0.00001761	0.00001621	0.0000014	0.00097663	0.0000204	0.00001891	0.00000148
603370.00	2367940.00	0.00049179	0.00001739	0.00001607	0.00000132	0.00096561	0.00002013	0.00001876	0.00000138
603870.00	2367940.00	0.00045776	0.00001704	0.00001575	0.0000013	0.00098618	0.00002013	0.0000188	0.00000133
604370.00	2367940.00	0.00046053	0.00001685	0.00001556	0.00000129	0.00097789	0.00001985	0.00001853	0.00000131
604870.00	2367940.00	0.00045927	0.00001659	0.0000153	0.00000129	0.000964	0.00001951	0.00001819	0.00000131
605370.00	2367940.00	0.00039013	0.0000159	0.00001461	0.0000013	0.00088926	0.00001903	0.00001771	0.00000132
605870.00	2367940.00	0.00053231	0.00001645	0.00001517	0.00000129	0.00084748	0.00001821	0.0000169	0.00000131
606370.00	2367940.00	0.00043175	0.00001567	0.00001438	0.00000128	0.00093255	0.00001855	0.00001724	0.00000131
606870.00	2367940.00	0.00039339	0.00001522	0.00001395	0.00000127	0.00090558	0.00001827	0.00001697	0.0000013
607370.00	2367940.00	0.00040899	0.00001512	0.00001387	0.00000126	0.00091693	0.00001806	0.00001678	0.00000128
607870.00	2367940.00	0.00047005	0.00001528	0.00001405	0.00000123	0.00087896	0.00001755	0.00001629	0.00000126

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2367940.00	0.0003296	0.00001426	0.00001304	0.00000122	0.00072666	0.00001698	0.00001572	0.00000125
608870.00	2367940.00	0.00031629	0.000014	0.0000128	0.0000012	0.00065932	0.0000165	0.00001527	0.00000124
609370.00	2367940.00	0.00055473	0.00001524	0.00001408	0.00000116	0.00075871	0.00001635	0.00001516	0.00000119
609870.00	2367940.00	0.00041123	0.00001432	0.00001318	0.00000113	0.00090013	0.00001713	0.00001595	0.00000117
610370.00	2367940.00	0.00038096	0.00001398	0.00001287	0.00000111	0.00087687	0.00001691	0.00001577	0.00000115
610870.00	2367940.00	0.00054939	0.00001472	0.00001365	0.00000106	0.00074127	0.00001579	0.00001468	0.0000011
611370.00	2367940.00	0.00054857	0.00001453	0.0000135	0.00000103	0.00072776	0.00001554	0.00001447	0.00000107
611870.00	2367940.00	0.00032881	0.00001311	0.0000121	0.00000101	0.00073869	0.0000158	0.00001475	0.00000106
612370.00	2367940.00	0.00028052	0.00001251	0.00001151	0.000001	0.00046861	0.0000142	0.00001314	0.00000106
612870.00	2367940.00	0.00060777	0.00001416	0.00001325	0.00000091	0.00054848	0.00001397	0.00001302	0.00000095
613370.00	2367940.00	0.00027513	0.00001204	0.00001112	0.00000092	0.00045919	0.00001368	0.0000127	0.00000097
613870.00	2367940.00	0.00052532	0.00001342	0.00001258	0.00000084	0.00082676	0.00001502	0.00001414	0.00000087
614370.00	2367940.00	0.00072152	0.00001414	0.00001335	0.00000079	0.00062474	0.00001364	0.00001283	0.00000082
614870.00	2367940.00	0.00073585	0.00001392	0.00001318	0.00000074	0.00056698	0.00001308	0.00001231	0.00000077
615370.00	2367940.00	0.00051704	0.00001231	0.00001163	0.00000068	0.00036291	0.00001166	0.00001096	0.0000007
615870.00	2367940.00	0.00030823	0.00001079	0.00001015	0.00000064	0.00029635	0.00001103	0.00001038	0.00000065
616370.00	2367940.00	0.00069248	0.0000129	0.00001227	0.00000064	0.00053133	0.00001209	0.00001144	0.00000065
616870.00	2367940.00	0.00049399	0.00001171	0.00001108	0.00000062	0.00069763	0.00001276	0.00001212	0.00000064
617370.00	2367940.00	0.00054972	0.00001174	0.00001114	0.0000006	0.00063921	0.00001217	0.00001157	0.0000006
617870.00	2367940.00	0.00058671	0.00001166	0.00001109	0.00000057	0.00058734	0.00001163	0.00001106	0.00000058
618370.00	2367940.00	0.00064843	0.00001165	0.00001111	0.00000054	0.00047296	0.00001076	0.00001022	0.00000054
618870.00	2367940.00	0.00059638	0.00001106	0.00001054	0.00000052	0.00039735	0.00001009	0.00000957	0.00000052
619370.00	2367940.00	0.00043892	0.00000992	0.00000942	0.00000049	0.000307	0.00000934	0.00000885	0.00000049
619870.00	2367940.00	0.00022544	0.00000837	0.00000791	0.00000046	0.00022352	0.00000857	0.00000811	0.00000045
590370.00	2368440.00	0.00131634	0.00002919	0.00002634	0.00000285	0.00071079	0.00002765	0.000025	0.00000264
590870.00	2368440.00	0.00061665	0.00002298	0.00002011	0.00000287	0.00054538	0.00002459	0.00002174	0.00000286
591370.00	2368440.00	0.00048231	0.00002027	0.00001763	0.00000264	0.0005146	0.00002253	0.00001972	0.00000281
591870.00	2368440.00	0.0006879	0.00001991	0.00001761	0.00000231	0.00054497	0.00002104	0.00001851	0.00000253
592370.00	2368440.00	0.00047412	0.00001702	0.00001504	0.00000198	0.0004805	0.00001878	0.00001659	0.00000219
592870.00	2368440.00	0.00029516	0.00001423	0.0000125	0.00000173	0.0003597	0.00001578	0.00001393	0.00000185
593370.00	2368440.00	0.00026369	0.00001336	0.00001173	0.00000163	0.00030747	0.00001413	0.00001249	0.00000164
593870.00	2368440.00	0.00029916	0.00001469	0.00001299	0.0000017	0.00034657	0.00001493	0.00001328	0.00000165
594370.00	2368440.00	0.00043934	0.00001775	0.00001595	0.0000018	0.00042601	0.00001693	0.0000152	0.00000173
594870.00	2368440.00	0.0007544	0.00002203	0.00002008	0.00000194	0.00052557	0.00001965	0.0000178	0.00000185
595370.00	2368440.00	0.00158662	0.00002884	0.00002678	0.00000206	0.00085297	0.000024	0.00002199	0.00000201
595870.00	2368440.00	0.0018181	0.00003102	0.00002896	0.00000206	0.00104819	0.00002663	0.00002453	0.0000021
596370.00	2368440.00	0.00190477	0.00003207	0.00003014	0.00000192	0.00147781	0.00002981	0.00002774	0.00000206
596870.00	2368440.00	0.00147767	0.00002895	0.00002724	0.00000172	0.00176027	0.00003103	0.00002912	0.00000191
597370.00	2368440.00	0.00095996	0.0000247	0.00002318	0.00000152	0.00190914	0.00003107	0.00002936	0.00000171
597870.00	2368440.00	0.00070505	0.00002189	0.00002051	0.00000138	0.0017076	0.00002889	0.00002736	0.00000153
598370.00	2368440.00	0.0005991	0.00002016	0.00001886	0.00000131	0.00148979	0.0000265	0.00002511	0.0000014
598870.00	2368440.00	0.00056918	0.00001917	0.00001784	0.00000132	0.00138095	0.00002476	0.00002343	0.00000134
599370.00	2368440.00	0.00050745	0.00001825	0.00001681	0.00000144	0.00123179	0.00002319	0.00002181	0.00000138
599870.00	2368440.00	0.0004643	0.00001769	0.00001607	0.00000163	0.00109425	0.00002197	0.00002045	0.00000152
600370.00	2368440.00	0.00042761	0.00001735	0.00001553	0.00000182	0.00094306	0.00002093	0.00001921	0.00000172
600870.00	2368440.00	0.00040174	0.0000171	0.00001516	0.00000194	0.00076718	0.00001979	0.00001789	0.0000019
601370.00	2368440.00	0.0005133	0.00001771	0.0000158	0.00000191	0.00095819	0.00002036	0.0000184	0.00000196
601870.00	2368440.00	0.00044378	0.00001716	0.00001537	0.00000179	0.00094777	0.00002036	0.00001845	0.0000019
602370.00	2368440.00	0.00047472	0.00001713	0.00001552	0.0000016	0.0009722	0.00002013	0.00001839	0.00000174
602870.00	2368440.00	0.00047515	0.00001691	0.00001547	0.00000144	0.00096633	0.00001981	0.00001826	0.00000155
603370.00	2368440.00	0.00048102	0.00001673	0.00001541	0.00000132	0.00088951	0.00001912	0.00001772	0.0000014
603870.00	2368440.00	0.00045666	0.00001647	0.00001521	0.00000126	0.00095527	0.00001934	0.00001803	0.00000131
604370.00	2368440.00	0.00037491	0.0000158	0.00001455	0.00000125	0.00077045	0.00001849	0.00001721	0.00000128
604870.00	2368440.00	0.00044275	0.00001605	0.00001482	0.00000123	0.00093454	0.00001886	0.00001761	0.00000125
605370.00	2368440.00	0.00044705	0.00001583	0.00001459	0.00000123	0.0008691	0.00001826	0.00001701	0.00000125
605870.00	2368440.00	0.000401	0.00001534	0.0000141	0.00000124	0.00089774	0.00001828	0.00001702	0.00000126
606370.00	2368440.00	0.00044631	0.00001537	0.00001413	0.00000123	0.00089587	0.00001789	0.00001663	0.00000125
606870.00	2368440.00	0.00056398	0.00001574	0.00001452	0.00000122	0.00070814	0.00001653	0.00001528	0.00000124
607370.00	2368440.00	0.00044624	0.00001494	0.00001373	0.00000122	0.00087428	0.00001732	0.00001608	0.00000124
607870.00	2368440.00	0.00044976	0.00001478	0.00001358	0.0000012	0.00086459	0.00001706	0.00001583	0.00000123
608370.00	2368440.00	0.00041466	0.00001442	0.00001324	0.00000119	0.00087765	0.00001702	0.00001581	0.00000121
608870.00	2368440.00	0.00045138	0.00001447	0.0000133	0.00000117	0.00085494	0.00001668	0.00001548	0.00000119
609370.00	2368440.00	0.00055149	0.00001483	0.00001369	0.00000114	0.00070432	0.00001565	0.00001448	0.00000117
609870.00	2368440.00	0.00047215	0.00001429	0.00001317	0.00000112	0.0008238	0.0000162	0.00001505	0.00000115
610370.00	2368440.00	0.00050906	0.00001433	0.00001324	0.0000011	0.00076555	0.00001572	0.00001459	0.00000113
610870.00	2368440.00	0.00028886	0.00001286	0.00001177	0.00000109	0.00054394	0.00001489	0.00001376	0.00000113
611370.00	2368440.00	0.00052692	0.00001412	0.00001308	0.00000104	0.00072286	0.00001519	0.00001412	0.00000107
611870.00	2368440.00	0.00036925	0.00001314	0.00001213	0.00000102	0.00086812	0.00001607	0.00001501	0.00000106
612370.00	2368440.00	0.00028097	0.00001233	0.00001133	0.000001	0.00051739	0.00001425	0.0000132	0.00000105
612870.00	2368440.00	0.00027445	0.00001212	0.00001111	0.000001	0.00045293	0.00001374	0.00001267	0.00000107

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2368440.00	0.00067699	0.00001428	0.00001338	0.0000009	0.00072069	0.00001447	0.00001352	0.00000094
613870.00	2368440.00	0.00064351	0.00001391	0.00001304	0.00000087	0.00073033	0.00001432	0.00001342	0.0000009
614370.00	2368440.00	0.00073195	0.00001398	0.00001316	0.00000082	0.00050332	0.00001287	0.00001202	0.00000085
614870.00	2368440.00	0.00062561	0.00001314	0.00001237	0.00000077	0.0004282	0.00001223	0.00001143	0.0000008
615370.00	2368440.00	0.00072397	0.00001356	0.00001281	0.00000075	0.00054361	0.00001266	0.00001188	0.00000077
615870.00	2368440.00	0.00069501	0.00001311	0.00001241	0.0000007	0.00048509	0.00001208	0.00001135	0.00000073
616370.00	2368440.00	0.00049414	0.0000117	0.00001104	0.00000065	0.00034678	0.00001107	0.0000104	0.00000067
616870.00	2368440.00	0.00032592	0.00001042	0.00000982	0.00000061	0.00027123	0.00001038	0.00000976	0.00000062
617370.00	2368440.00	0.00066773	0.00001228	0.00001167	0.00000061	0.00047275	0.00001131	0.00001069	0.00000062
617870.00	2368440.00	0.0005505	0.00001133	0.00001076	0.00000057	0.00037544	0.00001051	0.00000994	0.00000058
618370.00	2368440.00	0.00063211	0.00001159	0.00001103	0.00000056	0.00043513	0.00001062	0.00001006	0.00000056
618870.00	2368440.00	0.00039885	0.00000998	0.00000947	0.00000051	0.00029069	0.00000955	0.00000904	0.00000052
619370.00	2368440.00	0.00045562	0.00001011	0.0000096	0.0000005	0.00031697	0.00000949	0.00000898	0.0000005
619870.00	2368440.00	0.00019168	0.00000819	0.00000774	0.00000046	0.00021157	0.00000851	0.00000806	0.00000045
590370.00	2368940.00	0.00069996	0.00002535	0.00002264	0.00000272	0.00178308	0.00003341	0.00003083	0.00000258
590870.00	2368940.00	0.00161216	0.00002807	0.00002538	0.00000269	0.00078541	0.00002512	0.00002242	0.0000027
591370.00	2368940.00	0.00039661	0.00001865	0.00001615	0.0000025	0.00046305	0.0000209	0.00001824	0.00000267
591870.00	2368940.00	0.00049433	0.00001786	0.00001568	0.00000218	0.00048944	0.00001969	0.00001729	0.00000239
592370.00	2368940.00	0.00034814	0.00001519	0.00001332	0.00000187	0.0004209	0.00001717	0.0000151	0.00000207
592870.00	2368940.00	0.00028323	0.00001358	0.00001193	0.00000165	0.00034358	0.00001502	0.00001325	0.00000176
593370.00	2368940.00	0.0002544	0.00001274	0.0000112	0.00000155	0.0002992	0.00001353	0.00001197	0.00000156
593870.00	2368940.00	0.00028032	0.00001381	0.0000122	0.00000161	0.00032536	0.00001411	0.00001254	0.00000157
594370.00	2368940.00	0.00036913	0.00001617	0.00001447	0.0000017	0.0003911	0.00001575	0.00001411	0.00000164
594870.00	2368940.00	0.00062794	0.00001999	0.00001816	0.00000182	0.00048122	0.00001817	0.00001643	0.00000174
595370.00	2368940.00	0.00116289	0.00002497	0.00002303	0.00000194	0.00066836	0.00002144	0.00001956	0.00000188
595870.00	2368940.00	0.00176105	0.00002962	0.00002765	0.00000197	0.00099687	0.00002502	0.00002303	0.00000198
596370.00	2368940.00	0.00188752	0.00003107	0.00002919	0.00000188	0.00138053	0.0000281	0.00002612	0.00000199
596870.00	2368940.00	0.00151322	0.00002863	0.00002692	0.00000171	0.00167879	0.00002982	0.00002794	0.00000188
597370.00	2368940.00	0.00095899	0.0000244	0.00002287	0.00000152	0.00191179	0.00003059	0.00002888	0.00000171
597870.00	2368940.00	0.00076061	0.000022	0.00002063	0.00000137	0.00173563	0.0000286	0.00002707	0.00000153
598370.00	2368940.00	0.00073595	0.00002078	0.00001951	0.00000127	0.00155598	0.00002632	0.00002494	0.00000138
598870.00	2368940.00	0.00061769	0.00001917	0.00001792	0.00000124	0.00141654	0.00002456	0.00002327	0.00000129
599370.00	2368940.00	0.00054376	0.00001806	0.00001676	0.0000013	0.00128874	0.00002303	0.00002175	0.00000128
599870.00	2368940.00	0.00048879	0.00001732	0.00001589	0.00000144	0.00116615	0.00002178	0.00002042	0.00000136
600370.00	2368940.00	0.00043186	0.00001671	0.00001508	0.00000162	0.00089799	0.00001991	0.00001839	0.00000152
600870.00	2368940.00	0.00038441	0.00001635	0.00001455	0.0000018	0.00072275	0.00001891	0.00001719	0.00000172
601370.00	2368940.00	0.00047758	0.00001687	0.00001501	0.00000186	0.00089783	0.00001943	0.00001758	0.00000184
601870.00	2368940.00	0.0004496	0.00001665	0.00001483	0.00000182	0.00093416	0.0000196	0.00001772	0.00000188
602370.00	2368940.00	0.00047441	0.00001662	0.00001495	0.00000168	0.00093136	0.00001933	0.00001754	0.00000179
602870.00	2368940.00	0.0004449	0.00001624	0.00001474	0.00000151	0.00092563	0.00001914	0.00001751	0.00000163
603370.00	2368940.00	0.00046555	0.00001613	0.00001477	0.00000136	0.000858	0.00001844	0.00001699	0.00000146
603870.00	2368940.00	0.00044203	0.00001585	0.0000146	0.00000126	0.0009085	0.00001856	0.00001723	0.00000133
604370.00	2368940.00	0.0004402	0.00001571	0.00001451	0.0000012	0.00091455	0.00001841	0.00001716	0.00000125
604870.00	2368940.00	0.00050229	0.00001589	0.00001472	0.00000117	0.00085158	0.00001777	0.00001657	0.0000012
605370.00	2368940.00	0.00042653	0.00001531	0.00001413	0.00000118	0.00089102	0.00001794	0.00001675	0.0000012
605870.00	2368940.00	0.00041696	0.00001503	0.00001386	0.00000118	0.00083409	0.00001744	0.00001624	0.0000012
606370.00	2368940.00	0.00046683	0.00001511	0.00001393	0.00000118	0.00084396	0.00001717	0.00001598	0.0000012
606870.00	2368940.00	0.00040719	0.00001457	0.00001339	0.00000118	0.00086475	0.00001717	0.00001596	0.0000012
607370.00	2368940.00	0.00029795	0.00001363	0.00001243	0.0000012	0.00049817	0.00001535	0.00001412	0.00000123
607870.00	2368940.00	0.00034119	0.00001379	0.00001261	0.00000118	0.00077551	0.00001647	0.00001527	0.0000012
608370.00	2368940.00	0.00058299	0.00001489	0.00001374	0.00000115	0.00059088	0.00001496	0.00001378	0.00000117
608870.00	2368940.00	0.00038475	0.00001374	0.0000126	0.00000115	0.00084053	0.00001632	0.00001515	0.00000117
609370.00	2368940.00	0.00033048	0.00001327	0.00001213	0.00000113	0.00075941	0.00001592	0.00001476	0.00000116
609870.00	2368940.00	0.00036216	0.00001333	0.00001222	0.00000111	0.00082431	0.00001601	0.00001487	0.00000114
610370.00	2368940.00	0.00054262	0.00001415	0.00001306	0.00000108	0.00066304	0.00001478	0.00001367	0.00000111
610870.00	2368940.00	0.00037834	0.00001317	0.0000121	0.00000107	0.00083098	0.00001573	0.00001463	0.0000011
611370.00	2368940.00	0.00059435	0.0000141	0.00001306	0.00000103	0.00055161	0.00001392	0.00001285	0.00000106
611870.00	2368940.00	0.00026969	0.00001215	0.0000111	0.00000105	0.0004569	0.00001378	0.00001269	0.00000109
612370.00	2368940.00	0.00034259	0.00001256	0.00001156	0.000001	0.00080439	0.00001531	0.00001428	0.00000104
612870.00	2368940.00	0.00037825	0.00001264	0.00001167	0.00000097	0.00086048	0.00001537	0.00001436	0.00000101
613370.00	2368940.00	0.00026393	0.00001166	0.00001069	0.00000097	0.00044726	0.00001326	0.00001225	0.00000101
613870.00	2368940.00	0.00026294	0.00001149	0.00001056	0.00000093	0.00045219	0.00001311	0.00001213	0.00000098
614370.00	2368940.00	0.00063187	0.00001349	0.00001263	0.00000086	0.00070884	0.00001384	0.00001295	0.0000009
614870.00	2368940.00	0.00065272	0.00001319	0.00001238	0.00000081	0.00044102	0.00001219	0.00001134	0.00000084
615370.00	2368940.00	0.00053352	0.00001231	0.00001154	0.00000077	0.00036798	0.00001158	0.00001078	0.0000008
615870.00	2368940.00	0.0003636	0.00001107	0.00001035	0.00000072	0.00028617	0.0000109	0.00001015	0.00000075
616370.00	2368940.00	0.00042311	0.00001125	0.00001056	0.00000069	0.00030793	0.00001083	0.00001011	0.00000072
616870.00	2368940.00	0.00047032	0.00001133	0.00001067	0.00000066	0.00033016	0.00001074	0.00001006	0.00000068
617370.00	2368940.00	0.00032553	0.00001022	0.00000961	0.00000062	0.00026697	0.00001015	0.00000952	0.00000063
617870.00	2368940.00	0.00027868	0.00000972	0.00000914	0.00000058	0.00025251	0.00000983	0.00000924	0.00000059

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2368940.00	0.00023161	0.00000921	0.00000866	0.00000055	0.0002373	0.00000949	0.00000894	0.00000056
618870.00	2368940.00	0.00029486	0.0000094	0.00000887	0.00000053	0.00025022	0.00000938	0.00000885	0.00000054
619370.00	2368940.00	0.00025771	0.00000896	0.00000846	0.0000005	0.00023782	0.00000908	0.00000857	0.00000051
619870.00	2368940.00	0.00017552	0.00000816	0.00000769	0.00000046	0.00020149	0.0000085	0.00000803	0.00000046
590370.00	2369440.00	0.00052571	0.00002291	0.0000203	0.0000026	0.00090117	0.00002739	0.00002487	0.00000252
590870.00	2369440.00	0.00084855	0.00002384	0.00002129	0.00000255	0.00211713	0.00003211	0.00002953	0.00000258
591370.00	2369440.00	0.00211474	0.00002929	0.00002694	0.00000236	0.00139453	0.00002607	0.00002358	0.00000249
591870.00	2369440.00	0.0020121	0.0000266	0.0000245	0.00000209	0.00091698	0.00002176	0.00001949	0.00000228
592370.00	2369440.00	0.00113941	0.00002	0.00001817	0.00000184	0.00057929	0.00001824	0.00001624	0.000002
592870.00	2369440.00	0.00049613	0.00001522	0.00001358	0.00000164	0.00043936	0.00001598	0.00001424	0.00000174
593370.00	2369440.00	0.00025262	0.00001238	0.00001089	0.00000149	0.00029432	0.00001313	0.00001162	0.00000151
593870.00	2369440.00	0.00026482	0.00001303	0.0000115	0.00000153	0.00030542	0.00001335	0.00001186	0.00000149
594370.00	2369440.00	0.0003151	0.00001477	0.00001316	0.00000161	0.00035068	0.00001453	0.00001298	0.00000155
594870.00	2369440.00	0.00042136	0.00001738	0.00001566	0.00000171	0.00041142	0.0000165	0.00001486	0.00000164
595370.00	2369440.00	0.00100638	0.00002287	0.00002104	0.00000183	0.00059457	0.00001977	0.000018	0.00000177
595870.00	2369440.00	0.00160008	0.00002755	0.00002567	0.00000188	0.00089149	0.00002318	0.00002131	0.00000188
596370.00	2369440.00	0.00182521	0.00002992	0.00002809	0.00000183	0.00138288	0.000027	0.0000251	0.00000191
596870.00	2369440.00	0.00147852	0.0000279	0.0000262	0.0000017	0.00167694	0.0000289	0.00002706	0.00000184
597370.00	2369440.00	0.0012666	0.00002578	0.00002426	0.00000152	0.00165544	0.00002842	0.00002672	0.00000169
597870.00	2369440.00	0.00095238	0.00002291	0.00002154	0.00000136	0.00166929	0.00002764	0.00002611	0.00000153
598370.00	2369440.00	0.00082066	0.00002107	0.00001982	0.00000125	0.00152893	0.0000258	0.00002443	0.00000137
598870.00	2369440.00	0.00065452	0.00001915	0.00001796	0.00000119	0.00142342	0.00002429	0.00002302	0.00000127
599370.00	2369440.00	0.00056541	0.00001788	0.00001667	0.0000012	0.00130233	0.00002277	0.00002155	0.00000122
599870.00	2369440.00	0.00048161	0.00001685	0.00001556	0.00000129	0.00115306	0.00002135	0.0000201	0.00000125
600370.00	2369440.00	0.0004275	0.00001616	0.00001471	0.00000144	0.00089427	0.0000194	0.00001805	0.00000136
600870.00	2369440.00	0.00035506	0.00001563	0.00001399	0.00000165	0.00057366	0.00001762	0.00001606	0.00000156
601370.00	2369440.00	0.0004555	0.00001616	0.00001441	0.00000175	0.00087851	0.00001874	0.00001706	0.00000169
601870.00	2369440.00	0.00043273	0.000016	0.00001422	0.00000179	0.00090392	0.00001887	0.00001707	0.0000018
602370.00	2369440.00	0.00060444	0.00001678	0.00001507	0.00000171	0.00071847	0.00001746	0.00001567	0.00000179
602870.00	2369440.00	0.00045746	0.00001587	0.00001429	0.00000158	0.00089411	0.00001843	0.00001674	0.00000169
603370.00	2369440.00	0.00042925	0.00001551	0.00001408	0.00000142	0.00088845	0.00001824	0.0000167	0.00000154
603870.00	2369440.00	0.00044758	0.00001542	0.00001413	0.00000128	0.0008896	0.00001795	0.00001657	0.00000138
604370.00	2369440.00	0.00045688	0.00001531	0.00001412	0.00000119	0.00088079	0.00001766	0.00001641	0.00000126
604870.00	2369440.00	0.0004119	0.00001493	0.00001378	0.00000115	0.00086764	0.00001754	0.00001634	0.00000119
605370.00	2369440.00	0.00044171	0.00001496	0.00001383	0.00000113	0.00086174	0.00001726	0.00001611	0.00000116
605870.00	2369440.00	0.00041987	0.00001468	0.00001356	0.00000112	0.00085528	0.00001711	0.00001596	0.00000115
606370.00	2369440.00	0.00041845	0.00001449	0.00001336	0.00000113	0.0008495	0.00001688	0.00001574	0.00000115
606870.00	2369440.00	0.00030809	0.00001359	0.00001244	0.00000115	0.00056582	0.00001555	0.00001438	0.00000117
607370.00	2369440.00	0.00042773	0.00001415	0.00001302	0.00000113	0.00081926	0.00001629	0.00001514	0.00000115
607870.00	2369440.00	0.00042694	0.00001396	0.00001283	0.00000113	0.00080792	0.00001603	0.00001488	0.00000115
608370.00	2369440.00	0.00036742	0.00001346	0.00001233	0.00000113	0.00080952	0.00001598	0.00001483	0.00000115
608870.00	2369440.00	0.00042135	0.00001361	0.00001249	0.00000112	0.00079677	0.00001563	0.0000145	0.00000114
609370.00	2369440.00	0.00053304	0.00001402	0.00001292	0.0000011	0.0006246	0.00001449	0.00001337	0.00000112
609870.00	2369440.00	0.00036782	0.00001304	0.00001195	0.00000109	0.00080429	0.0000155	0.00001438	0.00000112
610370.00	2369440.00	0.00051421	0.00001367	0.0000126	0.00000107	0.0006536	0.00001439	0.0000133	0.00000109
610870.00	2369440.00	0.0003576	0.00001277	0.0000117	0.00000106	0.00084293	0.00001553	0.00001444	0.00000109
611370.00	2369440.00	0.00027017	0.00001202	0.00001096	0.00000105	0.00048743	0.00001376	0.00001268	0.00000109
611870.00	2369440.00	0.0003328	0.00001236	0.00001134	0.00000102	0.00078369	0.00001504	0.00001398	0.00000105
612370.00	2369440.00	0.00059245	0.00001369	0.0000127	0.00000099	0.00078125	0.00001458	0.00001356	0.00000102
612870.00	2369440.00	0.00046799	0.00001291	0.00001194	0.00000097	0.00086804	0.00001499	0.00001399	0.000001
613370.00	2369440.00	0.0002717	0.00001154	0.00001058	0.00000096	0.00052802	0.00001345	0.00001245	0.000001
613870.00	2369440.00	0.00055438	0.00001308	0.00001217	0.00000091	0.00077909	0.00001419	0.00001324	0.00000095
614370.00	2369440.00	0.00065635	0.00001343	0.00001255	0.00000088	0.00067019	0.00001344	0.00001252	0.00000092
614870.00	2369440.00	0.00046538	0.0000123	0.00001144	0.00000086	0.00080748	0.00001408	0.00001319	0.00000089
615370.00	2369440.00	0.00069269	0.00001312	0.00001231	0.00000081	0.0004704	0.00001203	0.00001119	0.00000084
615870.00	2369440.00	0.00048933	0.00001176	0.00001099	0.00000077	0.00033942	0.00001112	0.00001032	0.0000008
616370.00	2369440.00	0.00045031	0.00001135	0.00001062	0.00000073	0.00032124	0.00001083	0.00001007	0.00000076
616870.00	2369440.00	0.00042798	0.00001104	0.00001034	0.0000007	0.00031029	0.00001058	0.00000986	0.00000072
617370.00	2369440.00	0.00041093	0.00001075	0.00001009	0.00000066	0.0003017	0.00001034	0.00000966	0.00000068
617870.00	2369440.00	0.00038094	0.00001037	0.00000974	0.00000063	0.00028327	0.00001004	0.00000939	0.00000065
618370.00	2369440.00	0.00022612	0.00000916	0.00000857	0.00000058	0.0002322	0.00000945	0.00000885	0.0000006
618870.00	2369440.00	0.00018948	0.00000873	0.00000818	0.00000055	0.00021608	0.0000091	0.00000855	0.00000056
619370.00	2369440.00	0.00018265	0.00000848	0.00000797	0.00000052	0.00020934	0.00000885	0.00000832	0.00000052
619870.00	2369440.00	0.00016938	0.00000815	0.00000767	0.00000048	0.00019456	0.00000848	0.000008	0.00000049
590370.00	2369940.00	0.00050511	0.00002179	0.00001929	0.0000025	0.00083623	0.00002577	0.00002333	0.00000244
590870.00	2369940.00	0.00050945	0.00002044	0.00001801	0.00000243	0.00105257	0.0000259	0.00002342	0.00000248
591370.00	2369940.00	0.00081895	0.00002146	0.00001921	0.00000225	0.00220799	0.00003022	0.00002784	0.00000238
591870.00	2369940.00	0.00210418	0.00002727	0.00002526	0.00000201	0.0014678	0.00002416	0.00002199	0.00000217
592370.00	2369940.00	0.00193043	0.00002433	0.00002255	0.00000177	0.00085831	0.00001935	0.00001743	0.00000192
592870.00	2369940.00	0.00073253	0.00001624	0.00001465	0.00000159	0.00047411	0.00001579	0.00001411	0.00000168

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2369940.00	0.00042522	0.00001396	0.00001246	0.00000149	0.00039765	0.00001444	0.00001291	0.00000152
593870.00	2369940.00	0.00025293	0.00001239	0.00001093	0.00000146	0.00029157	0.00001273	0.00001131	0.00000142
594370.00	2369940.00	0.00027906	0.00001358	0.00001206	0.00000152	0.00031594	0.00001346	0.00001199	0.00000147
594870.00	2369940.00	0.0004303	0.00001654	0.00001491	0.00000162	0.00040144	0.00001564	0.00001409	0.00000156
595370.00	2369940.00	0.00090383	0.00002119	0.00001946	0.00000173	0.00054572	0.00001842	0.00001675	0.00000167
595870.00	2369940.00	0.00159297	0.0000265	0.0000247	0.00000179	0.0008747	0.00002198	0.0000202	0.00000178
596370.00	2369940.00	0.00180668	0.00002867	0.00002689	0.00000178	0.00116576	0.00002469	0.00002286	0.00000183
596870.00	2369940.00	0.00166723	0.0000281	0.00002643	0.00000167	0.00135816	0.00002629	0.0000245	0.00000179
597370.00	2369940.00	0.00119725	0.00002504	0.00002351	0.00000152	0.0017041	0.0000281	0.00002642	0.00000168
597870.00	2369940.00	0.00114741	0.00002372	0.00002235	0.00000136	0.00150619	0.00002625	0.00002472	0.00000152
598370.00	2369940.00	0.00090162	0.00002133	0.00002009	0.00000124	0.00148514	0.00002522	0.00002384	0.00000137
598870.00	2369940.00	0.0006807	0.00001911	0.00001795	0.00000116	0.00142507	0.00002404	0.00002278	0.00000126
599370.00	2369940.00	0.00058947	0.00001778	0.00001664	0.00000114	0.00130952	0.00002254	0.00002135	0.00000119
599870.00	2369940.00	0.00050249	0.00001666	0.00001547	0.00000118	0.00118445	0.00002117	0.00001999	0.00000117
600370.00	2369940.00	0.00040603	0.0000156	0.0000143	0.0000013	0.00084856	0.00001883	0.00001759	0.00000124
600870.00	2369940.00	0.00034567	0.00001508	0.00001359	0.00000148	0.00055281	0.00001702	0.00001561	0.0000014
601370.00	2369940.00	0.00043672	0.00001551	0.00001391	0.0000016	0.00087464	0.00001822	0.0000167	0.00000152
601870.00	2369940.00	0.00045432	0.00001559	0.00001389	0.0000017	0.00088931	0.00001814	0.00001647	0.00000167
602370.00	2369940.00	0.00045088	0.00001551	0.0000138	0.00000171	0.00087085	0.00001795	0.00001621	0.00000174
602870.00	2369940.00	0.00042566	0.00001525	0.00001363	0.00000163	0.00086268	0.00001784	0.00001613	0.00000171
603370.00	2369940.00	0.0004398	0.00001516	0.00001367	0.00000149	0.00085833	0.00001759	0.00001599	0.0000016
603870.00	2369940.00	0.00035246	0.00001444	0.00001308	0.00000136	0.00069331	0.00001683	0.00001537	0.00000146
604370.00	2369940.00	0.00045623	0.00001487	0.00001366	0.00000122	0.00084253	0.00001701	0.00001571	0.0000013
604870.00	2369940.00	0.00040135	0.00001443	0.00001329	0.00000114	0.00084412	0.00001697	0.00001577	0.0000012
605370.00	2369940.00	0.00044606	0.00001455	0.00001345	0.0000011	0.00082789	0.0000166	0.00001547	0.00000113
605870.00	2369940.00	0.00045617	0.00001447	0.00001339	0.00000108	0.00079122	0.00001625	0.00001514	0.0000011
606370.00	2369940.00	0.00044966	0.00001429	0.00001321	0.00000108	0.00078722	0.00001609	0.00001499	0.0000011
606870.00	2369940.00	0.00040696	0.0000139	0.00001282	0.00000108	0.00081742	0.00001615	0.00001505	0.0000011
607370.00	2369940.00	0.00055764	0.00001445	0.00001337	0.00000108	0.00057825	0.00001457	0.00001348	0.0000011
607870.00	2369940.00	0.00040019	0.00001351	0.00001242	0.00000109	0.00079619	0.00001568	0.00001457	0.00000111
608370.00	2369940.00	0.000442	0.00001356	0.00001247	0.00000109	0.00074395	0.00001516	0.00001405	0.00000111
608870.00	2369940.00	0.00038538	0.0000131	0.00001202	0.00000109	0.00078442	0.00001529	0.00001418	0.00000111
609370.00	2369940.00	0.00026932	0.0000122	0.00001109	0.0000011	0.000431	0.00001362	0.00001248	0.00000113
609870.00	2369940.00	0.00051076	0.00001346	0.00001239	0.00000106	0.00061359	0.00001397	0.00001289	0.00000108
610370.00	2369940.00	0.00050782	0.00001332	0.00001227	0.00000105	0.0006161	0.00001386	0.00001279	0.00000107
610870.00	2369940.00	0.00052608	0.00001328	0.00001225	0.00000104	0.00058328	0.00001356	0.00001251	0.00000106
611370.00	2369940.00	0.00040222	0.00001257	0.00001154	0.00000102	0.00076109	0.00001449	0.00001344	0.00000105
611870.00	2369940.00	0.00031753	0.00001199	0.00001098	0.00000101	0.0007387	0.0000145	0.00001346	0.00000104
612370.00	2369940.00	0.00047839	0.00001282	0.00001183	0.00000099	0.00084325	0.00001466	0.00001365	0.00000101
612870.00	2369940.00	0.00043873	0.00001249	0.00001152	0.00000097	0.00085307	0.00001464	0.00001365	0.000001
613370.00	2369940.00	0.00038905	0.00001209	0.00001114	0.00000095	0.00084135	0.00001453	0.00001355	0.00000098
613870.00	2369940.00	0.00054213	0.00001265	0.00001173	0.00000092	0.00052653	0.0000126	0.00001165	0.00000094
614370.00	2369940.00	0.00049517	0.00001205	0.00001118	0.00000088	0.00034008	0.00001137	0.00001046	0.00000091
614870.00	2369940.00	0.00071549	0.00001325	0.00001239	0.00000086	0.00048334	0.00001207	0.00001118	0.00000089
615370.00	2369940.00	0.00049759	0.00001215	0.0000113	0.00000085	0.00076032	0.00001347	0.00001259	0.00000088
615870.00	2369940.00	0.00057169	0.00001237	0.00001156	0.00000081	0.00068295	0.00001288	0.00001204	0.00000085
616370.00	2369940.00	0.00062758	0.00001247	0.00001169	0.00000078	0.00061359	0.00001231	0.00001149	0.00000081
616870.00	2369940.00	0.00063169	0.00001216	0.00001142	0.00000074	0.00042585	0.00001116	0.00001039	0.00000077
617370.00	2369940.00	0.0005396	0.00001145	0.00001075	0.0000007	0.00036769	0.00001066	0.00000993	0.00000073
617870.00	2369940.00	0.00049441	0.00001103	0.00001036	0.00000067	0.00034097	0.00001033	0.00000964	0.0000007
618370.00	2369940.00	0.00023347	0.00000924	0.00000862	0.00000062	0.00023545	0.00000951	0.00000886	0.00000064
618870.00	2369940.00	0.00019531	0.00000878	0.00000819	0.00000059	0.00021808	0.00000914	0.00000854	0.0000006
619370.00	2369940.00	0.0001759	0.00000846	0.00000791	0.00000055	0.00020343	0.00000882	0.00000826	0.00000056
619870.00	2369940.00	0.00018691	0.00000837	0.00000785	0.00000053	0.00021044	0.00000872	0.00000818	0.00000054
590370.00	2370440.00	0.00048828	0.00002075	0.00001836	0.00000239	0.00083271	0.00002477	0.00002242	0.00000235
590870.00	2370440.00	0.00048523	0.00001947	0.00001715	0.00000232	0.00095974	0.00002439	0.00002202	0.00000238
591370.00	2370440.00	0.00066159	0.00001969	0.00001754	0.00000215	0.00195602	0.00002828	0.00002601	0.00000227
591870.00	2370440.00	0.00115369	0.00002171	0.00001978	0.00000193	0.00222188	0.00002781	0.00002573	0.00000208
592370.00	2370440.00	0.0021157	0.00002564	0.00002392	0.00000172	0.00137506	0.00002173	0.00001988	0.00000185
592870.00	2370440.00	0.00171413	0.00002176	0.00002021	0.00000155	0.00075151	0.00001714	0.0000155	0.00000164
593370.00	2370440.00	0.00081082	0.00001597	0.00001452	0.00000146	0.00046457	0.00001462	0.00001313	0.00000149
593870.00	2370440.00	0.00038233	0.00001338	0.00001195	0.00000143	0.00037003	0.00001354	0.00001213	0.00000141
594370.00	2370440.00	0.0002703	0.00001292	0.00001146	0.00000145	0.00030744	0.00001288	0.00001148	0.0000014
594870.00	2370440.00	0.00046009	0.00001596	0.00001441	0.00000154	0.00039904	0.00001496	0.00001347	0.00000149
595370.00	2370440.00	0.00081416	0.00001968	0.00001805	0.00000164	0.00050741	0.00001722	0.00001563	0.00000158
595870.00	2370440.00	0.00138484	0.00002424	0.00002253	0.00000171	0.00075224	0.00002021	0.00001853	0.00000168
596370.00	2370440.00	0.00171156	0.00002709	0.00002537	0.00000172	0.00101407	0.00002282	0.00002107	0.00000175
596870.00	2370440.00	0.00155209	0.00002691	0.00002526	0.00000164	0.00143783	0.00002583	0.00002409	0.00000174
597370.00	2370440.00	0.00148034	0.000026	0.00002449	0.00000151	0.00135364	0.00002543	0.00002378	0.00000165
597870.00	2370440.00	0.00122567	0.00002383	0.00002246	0.00000137	0.00142081	0.00002531	0.00002379	0.00000152

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2370440.00	0.00096196	0.00002146	0.00002022	0.00000124	0.00144772	0.00002469	0.00002331	0.00000138
598870.00	2370440.00	0.00075343	0.00001936	0.00001822	0.00000115	0.00140511	0.00002362	0.00002236	0.00000126
599370.00	2370440.00	0.00053334	0.00001724	0.00001613	0.0000011	0.00127004	0.00002224	0.00002107	0.00000117
599870.00	2370440.00	0.00048885	0.00001631	0.00001521	0.00000111	0.00116352	0.00002086	0.00001973	0.00000113
600370.00	2370440.00	0.00034993	0.00001493	0.00001373	0.0000012	0.00059377	0.00001736	0.00001618	0.00000118
600870.00	2370440.00	0.00041405	0.00001503	0.00001373	0.0000013	0.00085567	0.00001801	0.00001679	0.00000122
601370.00	2370440.00	0.00042683	0.00001496	0.00001351	0.00000145	0.00084783	0.00001761	0.00001625	0.00000136
601870.00	2370440.00	0.00040148	0.00001478	0.00001319	0.00000159	0.0008525	0.00001756	0.00001604	0.00000152
602370.00	2370440.00	0.00033582	0.00001433	0.00001266	0.00000167	0.00061241	0.00001646	0.0000148	0.00000165
602870.00	2370440.00	0.00041355	0.00001475	0.00001311	0.00000164	0.00083566	0.00001723	0.00001555	0.00000168
603370.00	2370440.00	0.00041967	0.00001463	0.00001309	0.00000154	0.00077769	0.00001675	0.00001512	0.00000163
603870.00	2370440.00	0.0004909	0.00001485	0.00001345	0.0000014	0.00076078	0.00001635	0.00001485	0.0000015
604370.00	2370440.00	0.00045791	0.0000145	0.00001323	0.00000126	0.00079674	0.00001637	0.00001501	0.00000136
604870.00	2370440.00	0.00041891	0.00001412	0.00001296	0.00000116	0.00081357	0.00001633	0.00001509	0.00000124
605370.00	2370440.00	0.00035087	0.0000136	0.0000125	0.0000011	0.00073218	0.00001596	0.0000148	0.00000116
605870.00	2370440.00	0.00041919	0.00001387	0.00001282	0.00000105	0.0008008	0.00001593	0.00001485	0.00000109
606370.00	2370440.00	0.00043752	0.00001385	0.00001282	0.00000104	0.00077609	0.00001564	0.00001457	0.00000106
606870.00	2370440.00	0.0003531	0.00001325	0.00001221	0.00000104	0.00076684	0.00001565	0.00001459	0.00000106
607370.00	2370440.00	0.00040658	0.00001341	0.00001237	0.00000104	0.00078216	0.00001542	0.00001437	0.00000106
607870.00	2370440.00	0.00029388	0.00001255	0.0000115	0.00000106	0.00056144	0.00001445	0.00001337	0.00000108
608370.00	2370440.00	0.00048347	0.00001346	0.00001242	0.00000104	0.00064616	0.0000143	0.00001324	0.00000106
608870.00	2370440.00	0.00052907	0.0000135	0.00001246	0.00000104	0.00053914	0.00001356	0.0000125	0.00000106
609370.00	2370440.00	0.00049618	0.00001322	0.00001217	0.00000104	0.0006018	0.00001375	0.00001269	0.00000106
609870.00	2370440.00	0.00054738	0.00001329	0.00001226	0.00000103	0.0004866	0.00001299	0.00001194	0.00000105
610370.00	2370440.00	0.00025862	0.00001161	0.00001055	0.00000106	0.00041227	0.00001296	0.00001187	0.00000109
610870.00	2370440.00	0.00025624	0.00001149	0.00001044	0.00000105	0.00041072	0.00001285	0.00001177	0.00000108
611370.00	2370440.00	0.00027479	0.00001153	0.00001052	0.00000102	0.00055725	0.00001346	0.00001242	0.00000104
611870.00	2370440.00	0.00052623	0.00001275	0.00001176	0.00000099	0.00051329	0.00001268	0.00001167	0.00000101
612370.00	2370440.00	0.00027897	0.00001136	0.00001038	0.00000099	0.00059356	0.00001342	0.00001241	0.00000101
612870.00	2370440.00	0.00035809	0.00001177	0.00001081	0.00000096	0.00080865	0.00001423	0.00001324	0.00000099
613370.00	2370440.00	0.00025009	0.00001093	0.00000997	0.00000096	0.00044232	0.00001248	0.00001148	0.000001
613870.00	2370440.00	0.00054164	0.00001239	0.00001147	0.00000092	0.00048401	0.00001212	0.00001117	0.00000094
614370.00	2370440.00	0.00041996	0.00001139	0.0000105	0.00000088	0.00030507	0.00001093	0.00001002	0.00000091
614870.00	2370440.00	0.00040801	0.0000112	0.00001034	0.00000086	0.00029553	0.00001077	0.00000988	0.00000089
615370.00	2370440.00	0.00069104	0.00001278	0.00001194	0.00000085	0.00046121	0.00001162	0.00001074	0.00000087
615870.00	2370440.00	0.00066426	0.00001249	0.00001167	0.00000082	0.00044192	0.00001139	0.00001054	0.00000085
616370.00	2370440.00	0.00058922	0.00001193	0.00001113	0.00000079	0.00039365	0.00001099	0.00001017	0.00000082
616870.00	2370440.00	0.0005798	0.00001174	0.00001098	0.00000076	0.0003895	0.00001083	0.00001003	0.00000079
617370.00	2370440.00	0.00034666	0.00001017	0.00000945	0.00000072	0.00026595	0.00000997	0.00000922	0.00000075
617870.00	2370440.00	0.00022987	0.00000926	0.00000858	0.00000069	0.00023376	0.00000953	0.00000882	0.00000071
618370.00	2370440.00	0.00018068	0.0000088	0.00000815	0.00000065	0.00020972	0.00000918	0.00000851	0.00000067
618870.00	2370440.00	0.00018242	0.00000867	0.00000805	0.00000062	0.00020991	0.00000904	0.0000084	0.00000064
619370.00	2370440.00	0.00019045	0.00000857	0.00000798	0.00000059	0.00021312	0.00000892	0.00000831	0.00000061
619870.00	2370440.00	0.00060952	0.00001102	0.00001042	0.0000006	0.00043349	0.00001013	0.00000951	0.00000062
590370.00	2370940.00	0.0004715	0.00001982	0.00001752	0.0000023	0.00079717	0.0000236	0.00002132	0.00000228
590870.00	2370940.00	0.00046715	0.00001862	0.0000164	0.00000222	0.00091075	0.00002324	0.00002095	0.00000229
591370.00	2370940.00	0.00048454	0.00001767	0.00001561	0.00000206	0.00121011	0.00002386	0.00002168	0.00000218
591870.00	2370940.00	0.00071436	0.00001839	0.00001654	0.00000186	0.00214224	0.00002721	0.00002521	0.000002
592370.00	2370940.00	0.00115658	0.00001863	0.00001701	0.00000162	0.00056597	0.00001642	0.00001467	0.00000175
592870.00	2370940.00	0.00100611	0.00001703	0.00001555	0.00000148	0.00051139	0.00001513	0.00001356	0.00000157
593370.00	2370940.00	0.00047646	0.00001348	0.0000121	0.00000139	0.00039497	0.0000136	0.00001218	0.00000142
593870.00	2370940.00	0.0003265	0.00001251	0.00001115	0.00000137	0.0003462	0.00001288	0.00001153	0.00000135
594370.00	2370940.00	0.00025962	0.00001228	0.00001089	0.00000139	0.00029664	0.00001232	0.00001097	0.00000134
594870.00	2370940.00	0.00043148	0.000015	0.00001354	0.00000147	0.00038089	0.00001416	0.00001274	0.00000142
595370.00	2370940.00	0.0008152	0.0000188	0.00001725	0.00000155	0.00049311	0.00001631	0.0000148	0.00000151
595870.00	2370940.00	0.00131138	0.0000229	0.00002127	0.00000163	0.00070625	0.00001901	0.0000174	0.0000016
596370.00	2370940.00	0.00165275	0.00002587	0.00002421	0.00000165	0.00095991	0.00002156	0.00001989	0.00000167
596870.00	2370940.00	0.00165755	0.00002637	0.00002476	0.00000161	0.00108017	0.00002295	0.00002127	0.00000168
597370.00	2370940.00	0.00154621	0.00002575	0.00002425	0.0000015	0.00121134	0.00002394	0.00002232	0.00000162
597870.00	2370940.00	0.00120292	0.00002343	0.00002206	0.00000137	0.00144744	0.000025	0.00002349	0.00000151
598370.00	2370940.00	0.00090367	0.00002093	0.00001969	0.00000124	0.0015065	0.00002474	0.00002335	0.00000138
598870.00	2370940.00	0.00079444	0.00001943	0.00001829	0.00000114	0.001391	0.00002328	0.00002202	0.00000126
599370.00	2370940.00	0.00063371	0.00001769	0.00001661	0.00000108	0.00131435	0.00002211	0.00002095	0.00000116
599870.00	2370940.00	0.0004119	0.00001559	0.00001453	0.00000107	0.00093537	0.00001965	0.00001854	0.00000111
600370.00	2370940.00	0.00035456	0.00001468	0.00001357	0.00000111	0.00066851	0.00001756	0.00001645	0.00000111
600870.00	2370940.00	0.00041183	0.00001466	0.00001349	0.00000117	0.00085159	0.00001768	0.00001655	0.00000113
601370.00	2370940.00	0.000438	0.00001461	0.00001331	0.0000013	0.00084435	0.00001717	0.00001595	0.00000122
601870.00	2370940.00	0.00038397	0.00001422	0.00001277	0.00000145	0.00082355	0.00001699	0.00001562	0.00000137
602370.00	2370940.00	0.00031551	0.00001375	0.00001217	0.00000158	0.0005	0.00001537	0.00001383	0.00000154
602870.00	2370940.00	0.00042857	0.00001439	0.00001279	0.0000016	0.00081225	0.00001657	0.00001497	0.0000016

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2370940.00	0.00041901	0.00001426	0.0000127	0.00000156	0.00080348	0.00001645	0.00001484	0.00000162
603870.00	2370940.00	0.00037649	0.00001389	0.00001242	0.00000147	0.00078282	0.00001633	0.00001477	0.00000155
604370.00	2370940.00	0.00044549	0.00001409	0.00001276	0.00000133	0.00077041	0.00001589	0.00001447	0.00000143
604870.00	2370940.00	0.00041989	0.00001378	0.00001257	0.0000012	0.00078227	0.0000158	0.0000145	0.00000129
605370.00	2370940.00	0.00044273	0.00001374	0.00001263	0.0000011	0.00075452	0.00001542	0.00001424	0.00000117
605870.00	2370940.00	0.00041046	0.00001345	0.00001241	0.00000104	0.0007829	0.00001546	0.00001437	0.0000011
606370.00	2370940.00	0.00042035	0.00001339	0.00001238	0.00000101	0.00077045	0.00001524	0.00001419	0.00000105
606870.00	2370940.00	0.00037578	0.00001305	0.00001205	0.000001	0.00077599	0.00001524	0.00001421	0.00000103
607370.00	2370940.00	0.00044656	0.00001329	0.00001229	0.00000099	0.00071161	0.00001464	0.00001363	0.00000101
607870.00	2370940.00	0.00043795	0.00001311	0.00001211	0.000001	0.00070659	0.00001449	0.00001347	0.00000102
608370.00	2370940.00	0.00051454	0.0000133	0.00001231	0.000001	0.00056257	0.00001354	0.00001252	0.00000102
608870.00	2370940.00	0.00031821	0.00001216	0.00001115	0.00000101	0.00069838	0.00001439	0.00001336	0.00000103
609370.00	2370940.00	0.0002612	0.0000116	0.00001057	0.00000103	0.00041643	0.00001293	0.00001187	0.00000106
609870.00	2370940.00	0.0002571	0.00001145	0.00001042	0.00000103	0.00040947	0.00001276	0.0000117	0.00000106
610370.00	2370940.00	0.00043588	0.00001239	0.00001139	0.000001	0.00064683	0.00001347	0.00001244	0.00000102
610870.00	2370940.00	0.00035912	0.00001189	0.00001089	0.000001	0.00072234	0.00001384	0.00001282	0.00000102
611370.00	2370940.00	0.00028661	0.00001136	0.00001036	0.000001	0.00062902	0.00001346	0.00001244	0.00000102
611870.00	2370940.00	0.00024931	0.00001103	0.00001001	0.00000102	0.00040026	0.00001237	0.00001131	0.00000105
612370.00	2370940.00	0.00052121	0.00001235	0.00001139	0.00000096	0.0004854	0.00001216	0.00001118	0.00000098
612870.00	2370940.00	0.00024319	0.00001074	0.00000977	0.00000097	0.0004053	0.00001211	0.0000111	0.000001
613370.00	2370940.00	0.0004943	0.00001205	0.00001111	0.00000093	0.00054401	0.00001228	0.00001133	0.00000095
613870.00	2370940.00	0.00024041	0.00001055	0.0000096	0.00000095	0.00039528	0.00001191	0.00001092	0.00000099
614370.00	2370940.00	0.00042946	0.00001123	0.00001035	0.00000088	0.0003054	0.00001071	0.0000098	0.00000091
614870.00	2370940.00	0.0003886	0.00001088	0.00001002	0.00000086	0.00028426	0.00001048	0.0000096	0.00000089
615370.00	2370940.00	0.00038022	0.00001073	0.00000989	0.00000084	0.00028023	0.00001036	0.00000949	0.00000087
615870.00	2370940.00	0.00045576	0.00001106	0.00001024	0.00000082	0.00031376	0.00001046	0.00000961	0.00000085
616370.00	2370940.00	0.00052278	0.00001138	0.00001057	0.0000008	0.00035014	0.00001056	0.00000973	0.00000083
616870.00	2370940.00	0.00028525	0.00000981	0.00000904	0.00000077	0.00024673	0.00000983	0.00000903	0.0000008
617370.00	2370940.00	0.00022846	0.00000933	0.00000859	0.00000074	0.00023101	0.00000958	0.00000882	0.00000077
617870.00	2370940.00	0.000179	0.00000884	0.00000814	0.00000071	0.00021038	0.00000923	0.0000085	0.00000073
618370.00	2370940.00	0.00046938	0.00001058	0.00000987	0.0000007	0.0003218	0.00000991	0.00000918	0.00000073
618870.00	2370940.00	0.0006217	0.00001134	0.00001066	0.00000068	0.00043009	0.00001038	0.00000967	0.00000071
619370.00	2370940.00	0.00043565	0.00001039	0.00000972	0.00000067	0.000653	0.00001147	0.00001078	0.0000007
619870.00	2370940.00	0.00040271	0.00001006	0.00000941	0.00000065	0.00065304	0.00001133	0.00001066	0.00000067
590370.00	2371440.00	0.00045641	0.00001898	0.00001676	0.00000221	0.00075958	0.00002248	0.00002026	0.00000221
590870.00	2371440.00	0.00044655	0.00001779	0.00001566	0.00000213	0.0008171	0.00002185	0.00001964	0.0000022
591370.00	2371440.00	0.00045196	0.00001682	0.00001485	0.00000197	0.00104121	0.00002219	0.0000201	0.00000209
591870.00	2371440.00	0.00093776	0.0000193	0.00001752	0.00000178	0.00213767	0.00002614	0.00002423	0.00000191
592370.00	2371440.00	0.00159628	0.00002083	0.00001925	0.00000157	0.00070932	0.00001674	0.00001505	0.00000169
592870.00	2371440.00	0.00026202	0.00001157	0.0000102	0.00000137	0.00031475	0.00001268	0.00001123	0.00000145
593370.00	2371440.00	0.00024277	0.00001106	0.00000976	0.0000013	0.00028959	0.00001186	0.00001054	0.00000132
593870.00	2371440.00	0.00022772	0.00001089	0.00000961	0.00000128	0.0002614	0.00001127	0.00001001	0.00000126
594370.00	2371440.00	0.00025725	0.0000118	0.00001047	0.00000133	0.00029355	0.0000119	0.0000106	0.00000129
594870.00	2371440.00	0.00042706	0.00001431	0.0000129	0.0000014	0.00037067	0.00001352	0.00001216	0.00000136
595370.00	2371440.00	0.00079896	0.0000179	0.00001642	0.00000148	0.0004836	0.00001549	0.00001405	0.00000144
595870.00	2371440.00	0.00125192	0.00002169	0.00002014	0.00000155	0.00066853	0.00001793	0.0000164	0.00000152
596370.00	2371440.00	0.00156672	0.00002449	0.0000229	0.00000159	0.00088238	0.00002023	0.00001863	0.0000016
596870.00	2371440.00	0.00161533	0.00002559	0.00002402	0.00000157	0.0011553	0.00002253	0.00002091	0.00000162
597370.00	2371440.00	0.00149391	0.00002501	0.00002352	0.00000148	0.00123415	0.00002337	0.00002178	0.00000159
597870.00	2371440.00	0.00135422	0.00002379	0.00002243	0.00000137	0.00124223	0.00002332	0.00002183	0.0000015
598370.00	2371440.00	0.001078	0.00002164	0.00002039	0.00000124	0.00135597	0.00002348	0.0000221	0.00000138
598870.00	2371440.00	0.00072309	0.00001885	0.00001771	0.00000114	0.0014384	0.00002337	0.00002211	0.00000126
599370.00	2371440.00	0.00055616	0.00001707	0.000016	0.00000107	0.00129416	0.00002195	0.00002079	0.00000116
599870.00	2371440.00	0.00059805	0.00001662	0.00001559	0.00000102	0.00121618	0.00002058	0.00001949	0.00000108
600370.00	2371440.00	0.00039811	0.00001478	0.00001375	0.00000103	0.00091339	0.00001859	0.00001754	0.00000106
600870.00	2371440.00	0.00041915	0.00001443	0.00001335	0.00000108	0.00085747	0.00001744	0.00001639	0.00000105
601370.00	2371440.00	0.00043192	0.00001422	0.00001305	0.00000117	0.00083576	0.00001682	0.0000157	0.00000111
601870.00	2371440.00	0.00041183	0.00001395	0.00001265	0.00000131	0.00080024	0.00001636	0.00001513	0.00000123
602370.00	2371440.00	0.0004015	0.00001385	0.00001241	0.00000144	0.00081804	0.00001631	0.00001495	0.00000137
602870.00	2371440.00	0.00041014	0.00001386	0.00001234	0.00000153	0.00079771	0.00001608	0.00001459	0.00000149
603370.00	2371440.00	0.0004553	0.00001405	0.00001251	0.00000155	0.00074733	0.00001565	0.00001409	0.00000156
603870.00	2371440.00	0.00039625	0.00001365	0.00001216	0.00000149	0.00077563	0.00001582	0.00001426	0.00000155
604370.00	2371440.00	0.00039088	0.00001348	0.00001209	0.00000139	0.00077117	0.00001566	0.00001418	0.00000148
604870.00	2371440.00	0.00037786	0.00001324	0.00001198	0.00000126	0.00076755	0.00001549	0.00001413	0.00000136
605370.00	2371440.00	0.00031331	0.00001269	0.00001152	0.00000117	0.00059267	0.00001465	0.0000134	0.00000125
605870.00	2371440.00	0.00041142	0.00001311	0.00001205	0.00000106	0.00075469	0.00001496	0.00001384	0.00000112
606370.00	2371440.00	0.00031967	0.00001248	0.00001146	0.00000102	0.00064995	0.00001456	0.00001349	0.00000107
606870.00	2371440.00	0.00034119	0.00001251	0.00001153	0.00000098	0.00072586	0.00001472	0.0000137	0.00000102
607370.00	2371440.00	0.00035339	0.00001248	0.00001151	0.00000097	0.00074214	0.00001463	0.00001364	0.00000099
607870.00	2371440.00	0.00035444	0.00001237	0.00001141	0.00000096	0.00073842	0.00001448	0.00001349	0.00000099

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2371440.00	0.00031543	0.00001202	0.00001105	0.00000097	0.00067927	0.00001415	0.00001316	0.00000099
608870.00	2371440.00	0.00047958	0.00001272	0.00001176	0.00000097	0.0005806	0.00001322	0.00001223	0.00000098
609370.00	2371440.00	0.00041676	0.00001229	0.00001132	0.00000097	0.00066508	0.00001357	0.00001258	0.00000099
609870.00	2371440.00	0.00046611	0.00001239	0.00001142	0.00000097	0.0005747	0.00001293	0.00001194	0.00000099
610370.00	2371440.00	0.00025126	0.00001105	0.00001006	0.00000099	0.00041288	0.00001238	0.00001136	0.00000102
610870.00	2371440.00	0.00050917	0.00001233	0.00001136	0.00000097	0.00047081	0.00001212	0.00001114	0.00000098
611370.00	2371440.00	0.00044004	0.00001193	0.00001096	0.00000097	0.00059572	0.0000127	0.00001171	0.00000098
611870.00	2371440.00	0.0004924	0.00001206	0.0000111	0.00000096	0.00049865	0.00001207	0.0000111	0.00000097
612370.00	2371440.00	0.00024068	0.00001059	0.00000962	0.00000097	0.00040105	0.00001191	0.00001091	0.000001
612870.00	2371440.00	0.00049829	0.00001189	0.00001096	0.00000093	0.00048611	0.00001181	0.00001086	0.00000095
613370.00	2371440.00	0.00048949	0.00001177	0.00001085	0.00000092	0.00051092	0.00001182	0.00001088	0.00000094
613870.00	2371440.00	0.00023714	0.00001034	0.00000939	0.00000095	0.00038639	0.00001166	0.00001067	0.00000099
614370.00	2371440.00	0.00049399	0.00001139	0.00001051	0.00000088	0.00032891	0.00001062	0.00000972	0.0000009
614870.00	2371440.00	0.0004781	0.00001121	0.00001035	0.00000087	0.0003221	0.00001049	0.00000961	0.00000089
615370.00	2371440.00	0.00030253	0.00001005	0.00000921	0.00000084	0.00024904	0.00000995	0.00000909	0.00000086
615870.00	2371440.00	0.00028014	0.00000982	0.000009	0.00000082	0.00024287	0.00000982	0.00000897	0.00000085
616370.00	2371440.00	0.00022036	0.0000093	0.0000085	0.0000008	0.00022389	0.00000954	0.00000872	0.00000082
616870.00	2371440.00	0.00021775	0.00000919	0.00000841	0.00000078	0.000223	0.00000944	0.00000864	0.0000008
617370.00	2371440.00	0.00018099	0.00000885	0.00000809	0.00000075	0.00020964	0.00000921	0.00000843	0.00000078
617870.00	2371440.00	0.00017966	0.00000874	0.00000801	0.00000073	0.00020862	0.0000091	0.00000834	0.00000075
618370.00	2371440.00	0.00063511	0.00001146	0.00001073	0.00000073	0.00043999	0.00001047	0.00000971	0.00000076
618870.00	2371440.00	0.00026011	0.00000947	0.00000873	0.00000073	0.00054062	0.0000112	0.00001044	0.00000076
619370.00	2371440.00	0.00022098	0.00000904	0.00000832	0.00000072	0.00037253	0.00001028	0.00000952	0.00000076
619870.00	2371440.00	0.00021902	0.0000089	0.0000082	0.0000007	0.00036651	0.0000101	0.00000937	0.00000073
590370.00	2371940.00	0.00044203	0.00001818	0.00001605	0.00000213	0.00074342	0.00002161	0.00001947	0.00000214
590870.00	2371940.00	0.00043345	0.0000171	0.00001505	0.00000204	0.00080477	0.00002106	0.00001894	0.00000212
591370.00	2371940.00	0.00046507	0.00001645	0.00001456	0.00000189	0.00119819	0.00002237	0.00002036	0.00000201
591870.00	2371940.00	0.001341	0.00002106	0.00001936	0.0000017	0.00180185	0.00002349	0.00002166	0.00000183
592370.00	2371940.00	0.00185734	0.00002214	0.00002062	0.00000152	0.00087662	0.00001731	0.00001567	0.00000164
592870.00	2371940.00	0.00032797	0.00001206	0.00001071	0.00000135	0.00035532	0.00001303	0.00001161	0.00000142
593370.00	2371940.00	0.00021288	0.00001015	0.00000894	0.00000122	0.00024825	0.00001081	0.00000957	0.00000124
593870.00	2371940.00	0.00023186	0.00001067	0.00000943	0.00000124	0.00027214	0.00001115	0.00000992	0.00000123
594370.00	2371940.00	0.00029268	0.00001186	0.00001057	0.00000129	0.00031833	0.00001197	0.00001071	0.00000125
594870.00	2371940.00	0.00049415	0.00001414	0.0000128	0.00000135	0.0003785	0.00001311	0.0000118	0.00000131
595370.00	2371940.00	0.00076138	0.00001693	0.00001552	0.00000141	0.00046133	0.00001467	0.0000133	0.00000137
595870.00	2371940.00	0.00133143	0.00002141	0.00001992	0.00000149	0.00070059	0.00001734	0.00001589	0.00000146
596370.00	2371940.00	0.00152037	0.00002344	0.00002191	0.00000153	0.00084654	0.0000192	0.00001768	0.00000153
596870.00	2371940.00	0.00157091	0.0000244	0.00002288	0.00000152	0.00095787	0.00002063	0.00001906	0.00000156
597370.00	2371940.00	0.0014863	0.00002438	0.00002291	0.00000146	0.00117823	0.00002235	0.0000208	0.00000155
597870.00	2371940.00	0.00137761	0.0000235	0.00002214	0.00000136	0.00118164	0.00002245	0.00002097	0.00000148
598370.00	2371940.00	0.00116377	0.00002181	0.00002056	0.00000125	0.00125735	0.00002252	0.00002115	0.00000137
598870.00	2371940.00	0.00079784	0.0000191	0.00001796	0.00000114	0.00140881	0.00002288	0.00002161	0.00000126
599370.00	2371940.00	0.00057359	0.00001703	0.00001597	0.00000106	0.00130963	0.00002182	0.00002065	0.00000117
599870.00	2371940.00	0.00062415	0.00001663	0.00001563	0.000001	0.00121266	0.00002037	0.00001929	0.00000108
600370.00	2371940.00	0.00040448	0.00001466	0.00001367	0.00000099	0.00093653	0.00001854	0.00001751	0.00000103
600870.00	2371940.00	0.00044808	0.00001438	0.00001337	0.000001	0.0008685	0.00001724	0.00001624	0.000001
601370.00	2371940.00	0.00040668	0.00001379	0.00001272	0.00000107	0.00082361	0.00001656	0.00001553	0.00000104
601870.00	2371940.00	0.00039637	0.00001352	0.00001233	0.00000118	0.00078721	0.000016	0.00001489	0.00000112
602370.00	2371940.00	0.00038688	0.00001337	0.00001206	0.00000131	0.00080109	0.00001588	0.00001464	0.00000124
602870.00	2371940.00	0.0003522	0.00001313	0.0000117	0.00000143	0.00074268	0.00001554	0.00001417	0.00000137
603370.00	2371940.00	0.0005532	0.00001409	0.0000126	0.00000149	0.00056808	0.00001416	0.0000127	0.00000146
603870.00	2371940.00	0.00039677	0.00001329	0.0000118	0.00000149	0.00075314	0.00001529	0.00001378	0.00000152
604370.00	2371940.00	0.00037663	0.00001309	0.00001166	0.00000143	0.00074787	0.00001521	0.00001372	0.00000149
604870.00	2371940.00	0.00039658	0.00001305	0.00001173	0.00000132	0.00074289	0.00001498	0.00001358	0.0000014
605370.00	2371940.00	0.00038538	0.00001283	0.00001163	0.0000012	0.00074471	0.00001484	0.00001355	0.00000129
605870.00	2371940.00	0.00031904	0.0000123	0.00001119	0.00000111	0.00064854	0.00001439	0.0000132	0.00000119
606370.00	2371940.00	0.00036605	0.00001244	0.00001142	0.00000102	0.00073901	0.00001451	0.00001343	0.00000108
606870.00	2371940.00	0.00046131	0.0000128	0.00001184	0.00000096	0.00064021	0.00001368	0.00001268	0.000001
607370.00	2371940.00	0.00033038	0.00001203	0.00001109	0.00000095	0.00069979	0.00001414	0.00001316	0.00000098
607870.00	2371940.00	0.00026917	0.00001151	0.00001054	0.00000096	0.00040548	0.00001268	0.00001168	0.000001
608370.00	2371940.00	0.00049637	0.00001264	0.00001172	0.00000092	0.00054071	0.00001283	0.00001189	0.00000094
608870.00	2371940.00	0.00029744	0.00001152	0.00001058	0.00000094	0.00062745	0.0000135	0.00001254	0.00000096
609370.00	2371940.00	0.00042456	0.00001208	0.00001114	0.00000093	0.00062911	0.0000131	0.00001215	0.00000095
609870.00	2371940.00	0.0004848	0.00001222	0.00001128	0.00000094	0.00051304	0.00001231	0.00001136	0.00000095
610370.00	2371940.00	0.00050222	0.00001215	0.00001121	0.00000094	0.00045547	0.00001191	0.00001096	0.00000095
610870.00	2371940.00	0.00050329	0.00001204	0.0000111	0.00000094	0.00043965	0.00001171	0.00001076	0.00000095
611370.00	2371940.00	0.0002894	0.0000109	0.00000995	0.00000095	0.00063308	0.00001289	0.00001192	0.00000097
611870.00	2371940.00	0.00024163	0.00001052	0.00000954	0.00000098	0.00038184	0.00001175	0.00001074	0.00000101
612370.00	2371940.00	0.0002377	0.00001038	0.00000942	0.00000097	0.00037702	0.00001161	0.00001061	0.000001
612870.00	2371940.00	0.00029547	0.00001066	0.00000973	0.00000093	0.00064932	0.00001265	0.00001171	0.00000095

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2371940.00	0.00023181	0.00001014	0.0000092	0.00000094	0.00037891	0.00001137	0.00001041	0.00000096
613870.00	2371940.00	0.0002661	0.00001031	0.0000094	0.00000091	0.0005778	0.00001221	0.00001128	0.00000093
614370.00	2371940.00	0.00041912	0.00001074	0.00000987	0.00000088	0.00029164	0.00001019	0.0000093	0.00000089
614870.00	2371940.00	0.00047242	0.00001097	0.00001011	0.00000086	0.00031544	0.00001024	0.00000937	0.00000088
615370.00	2371940.00	0.00043373	0.00001067	0.00000982	0.00000085	0.00029858	0.00001006	0.0000092	0.00000086
615870.00	2371940.00	0.00026527	0.00000955	0.00000872	0.00000082	0.00023498	0.00000957	0.00000873	0.00000084
616370.00	2371940.00	0.00020408	0.00000904	0.00000823	0.0000008	0.00021571	0.0000093	0.00000848	0.00000082
616870.00	2371940.00	0.00021405	0.00000901	0.00000822	0.00000079	0.00021785	0.00000924	0.00000843	0.00000081
617370.00	2371940.00	0.00051092	0.00001077	0.00000999	0.00000078	0.00033819	0.00000995	0.00000914	0.0000008
617870.00	2371940.00	0.0005848	0.0000113	0.00001053	0.00000077	0.00056179	0.00001105	0.00001026	0.0000008
618370.00	2371940.00	0.0004611	0.00001029	0.00000956	0.00000074	0.00031301	0.00000961	0.00000885	0.00000076
618870.00	2371940.00	0.00061066	0.00001118	0.00001045	0.00000073	0.00049488	0.00001053	0.00000977	0.00000075
619370.00	2371940.00	0.00026315	0.00000928	0.00000855	0.00000072	0.00055749	0.00001104	0.00001028	0.00000075
619870.00	2371940.00	0.00021473	0.0000088	0.00000807	0.00000073	0.00035093	0.00000997	0.0000092	0.00000077
590370.00	2372440.00	0.0004287	0.00001745	0.0000154	0.00000205	0.00072458	0.00002078	0.0000187	0.00000207
590870.00	2372440.00	0.00042203	0.00001646	0.0000145	0.00000196	0.00080249	0.0000204	0.00001836	0.00000204
591370.00	2372440.00	0.0004523	0.00001588	0.00001406	0.00000182	0.0011654	0.00002156	0.00001963	0.00000193
591870.00	2372440.00	0.00091682	0.0000182	0.00001656	0.00000164	0.0019905	0.00002417	0.0000224	0.00000177
592370.00	2372440.00	0.00159667	0.00002005	0.00001859	0.00000146	0.00071836	0.00001589	0.00001432	0.00000157
592870.00	2372440.00	0.00041619	0.00001235	0.00001104	0.00000131	0.00037196	0.00001286	0.00001147	0.00000138
593370.00	2372440.00	0.00024338	0.00001052	0.0000093	0.00000122	0.00028775	0.00001126	0.00001002	0.00000125
593870.00	2372440.00	0.00023646	0.00001045	0.00000924	0.00000121	0.00027677	0.00001093	0.00000973	0.00000119
594370.00	2372440.00	0.00029241	0.00001147	0.00001022	0.00000124	0.00031326	0.00001159	0.00001038	0.00000121
594870.00	2372440.00	0.00039101	0.00001292	0.00001162	0.00000129	0.00034512	0.00001234	0.00001109	0.00000125
595370.00	2372440.00	0.00066546	0.00001567	0.00001432	0.00000135	0.00042592	0.00001381	0.0000125	0.00000131
595870.00	2372440.00	0.0012873	0.00002042	0.00001899	0.00000142	0.00067097	0.00001646	0.00001507	0.00000139
596370.00	2372440.00	0.00149292	0.00002256	0.00002109	0.00000147	0.00082879	0.00001834	0.00001688	0.00000146
596870.00	2372440.00	0.00153447	0.00002351	0.00002203	0.00000148	0.00093299	0.0000197	0.00001819	0.0000015
597370.00	2372440.00	0.00148896	0.00002374	0.0000223	0.00000144	0.00109369	0.00002118	0.00001967	0.0000015
597870.00	2372440.00	0.00137857	0.00002307	0.00002172	0.00000135	0.00114209	0.00002166	0.00002021	0.00000145
598370.00	2372440.00	0.00123605	0.00002186	0.00002061	0.00000125	0.00115826	0.00002157	0.0000202	0.00000137
598870.00	2372440.00	0.00098385	0.00001991	0.00001876	0.00000114	0.00126021	0.00002168	0.00002042	0.00000126
599370.00	2372440.00	0.00086825	0.00001855	0.00001749	0.00000105	0.00119078	0.00002065	0.0000195	0.00000116
599870.00	2372440.00	0.00071819	0.00001702	0.00001604	0.00000099	0.00116613	0.00001986	0.00001879	0.00000107
600370.00	2372440.00	0.00043218	0.00001471	0.00001375	0.00000096	0.00101988	0.00001877	0.00001775	0.00000102
600870.00	2372440.00	0.00048798	0.00001442	0.00001347	0.00000095	0.00085673	0.00001695	0.00001598	0.00000097
601370.00	2372440.00	0.00040901	0.00001357	0.00001258	0.00000099	0.00081564	0.00001631	0.00001533	0.00000098
601870.00	2372440.00	0.00040264	0.00001326	0.00001219	0.00000107	0.00078928	0.00001574	0.00001471	0.00000103
602370.00	2372440.00	0.00040598	0.00001312	0.00001193	0.00000119	0.00075934	0.00001526	0.00001414	0.00000112
602870.00	2372440.00	0.00037202	0.00001287	0.00001156	0.00000131	0.00076688	0.00001521	0.00001397	0.00000124
603370.00	2372440.00	0.00031554	0.00001249	0.00001108	0.00000141	0.00063337	0.00001461	0.00001324	0.00000137
603870.00	2372440.00	0.00037349	0.00001281	0.00001136	0.00000145	0.00073685	0.00001487	0.00001343	0.00000145
604370.00	2372440.00	0.00036752	0.00001271	0.00001128	0.00000144	0.00072738	0.00001476	0.00001329	0.00000147
604870.00	2372440.00	0.00034882	0.0000125	0.00001114	0.00000136	0.00071269	0.00001463	0.0000132	0.00000143
605370.00	2372440.00	0.00033937	0.00001231	0.00001105	0.00000126	0.00070066	0.00001445	0.0000131	0.00000134
605870.00	2372440.00	0.00041442	0.00001255	0.00001141	0.00000114	0.00069078	0.00001403	0.00001281	0.00000122
606370.00	2372440.00	0.0003043	0.0000118	0.00001074	0.00000106	0.00060411	0.00001374	0.0000126	0.00000113
606870.00	2372440.00	0.00037898	0.0000121	0.00001113	0.00000098	0.00071294	0.00001388	0.00001285	0.00000103
607370.00	2372440.00	0.00047903	0.00001246	0.00001154	0.00000092	0.00056433	0.00001285	0.00001189	0.00000096
607870.00	2372440.00	0.00028713	0.00001138	0.00001046	0.00000092	0.00055498	0.00001312	0.00001216	0.00000095
608370.00	2372440.00	0.00028842	0.0000113	0.00001039	0.00000091	0.00057761	0.0000131	0.00001217	0.00000093
608870.00	2372440.00	0.0002598	0.00001099	0.00001007	0.00000092	0.00042305	0.00001227	0.00001133	0.00000094
609370.00	2372440.00	0.00050636	0.00001215	0.00001126	0.00000089	0.00044706	0.00001184	0.00001094	0.00000091
609870.00	2372440.00	0.00036509	0.00001142	0.00001051	0.00000091	0.00066968	0.000013	0.00001207	0.00000092
610370.00	2372440.00	0.00026988	0.00001076	0.00000985	0.00000092	0.00055075	0.00001253	0.00001159	0.00000094
610870.00	2372440.00	0.00023998	0.00001042	0.00000948	0.00000094	0.00037632	0.00001157	0.00001061	0.00000096
611370.00	2372440.00	0.00035709	0.00001104	0.00001013	0.00000092	0.00065022	0.00001256	0.00001163	0.00000093
611870.00	2372440.00	0.00045023	0.00001138	0.00001047	0.00000091	0.00051102	0.00001165	0.00001072	0.00000093
612370.00	2372440.00	0.00041971	0.00001115	0.00001025	0.00000091	0.00055486	0.00001181	0.00001088	0.00000092
612870.00	2372440.00	0.00038641	0.00001091	0.00001	0.0000009	0.00060138	0.00001199	0.00001106	0.00000092
613370.00	2372440.00	0.00022754	0.0000099	0.00000898	0.00000092	0.00036706	0.00001107	0.00001013	0.00000095
613870.00	2372440.00	0.00040766	0.00001085	0.00000996	0.00000089	0.00056747	0.00001163	0.00001073	0.0000009
614370.00	2372440.00	0.00034262	0.0000101	0.00000923	0.00000087	0.00025995	0.00000979	0.00000892	0.00000088
614870.00	2372440.00	0.00027497	0.0000096	0.00000875	0.00000085	0.00023471	0.00000955	0.00000868	0.00000087
615370.00	2372440.00	0.00026901	0.00000948	0.00000864	0.00000084	0.00023243	0.00000945	0.0000086	0.00000085
615870.00	2372440.00	0.00023146	0.00000916	0.00000834	0.00000082	0.00022175	0.00000929	0.00000845	0.00000084
616370.00	2372440.00	0.00019442	0.00000881	0.00000801	0.00000081	0.00020837	0.00000907	0.00000825	0.00000082
616870.00	2372440.00	0.00038598	0.00000996	0.00000916	0.00000079	0.00027603	0.00000949	0.00000868	0.00000081
617370.00	2372440.00	0.00031215	0.00000984	0.00000904	0.0000008	0.00068413	0.00001185	0.00001102	0.00000083
617870.00	2372440.00	0.00022396	0.00000919	0.00000839	0.0000008	0.0004076	0.00001055	0.00000972	0.00000083

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2372440.00	0.00022406	0.0000091	0.00000832	0.00000078	0.00041055	0.00001046	0.00000965	0.00000081
618870.00	2372440.00	0.00022506	0.00000901	0.00000825	0.00000076	0.00041688	0.00001039	0.0000096	0.00000079
619370.00	2372440.00	0.00021559	0.00000884	0.00000809	0.00000075	0.00037243	0.00001008	0.00000929	0.00000078
619870.00	2372440.00	0.00021196	0.00000871	0.00000796	0.00000075	0.00034769	0.00000987	0.00000908	0.00000079
590370.00	2372940.00	0.00041655	0.00001678	0.0000148	0.00000198	0.00071944	0.0000201	0.00001809	0.00000201
590870.00	2372940.00	0.0004165	0.00001593	0.00001404	0.00000189	0.00084525	0.00002005	0.00001808	0.00000197
591370.00	2372940.00	0.00048943	0.00001575	0.000014	0.00000175	0.0013966	0.00002208	0.00002023	0.00000186
591870.00	2372940.00	0.00118931	0.00001928	0.0000177	0.00000158	0.0017507	0.00002219	0.0000205	0.0000017
592370.00	2372940.00	0.00178645	0.00002102	0.00001959	0.00000142	0.00087759	0.00001644	0.00001492	0.00000152
592870.00	2372940.00	0.00085764	0.00001468	0.00001339	0.00000129	0.00045237	0.00001315	0.00001179	0.00000136
593370.00	2372940.00	0.00031611	0.00001105	0.00000985	0.0000012	0.00032851	0.00001164	0.00001041	0.00000123
593870.00	2372940.00	0.0002103	0.00000978	0.00000863	0.00000115	0.00024182	0.00001018	0.00000905	0.00000113
594370.00	2372940.00	0.0002322	0.00001038	0.0000092	0.00000119	0.00026729	0.0000106	0.00000944	0.00000115
594870.00	2372940.00	0.00031115	0.00001184	0.00001061	0.00000124	0.00031498	0.00001162	0.00001043	0.0000012
595370.00	2372940.00	0.0006869	0.00001519	0.0000139	0.0000013	0.00042277	0.00001326	0.000012	0.00000126
595870.00	2372940.00	0.00095853	0.00001778	0.00001642	0.00000136	0.00053149	0.00001494	0.00001361	0.00000133
596370.00	2372940.00	0.00130379	0.00002066	0.00001925	0.00000141	0.00070263	0.00001691	0.00001551	0.0000014
596870.00	2372940.00	0.00148955	0.00002256	0.00002113	0.00000143	0.00088424	0.00001874	0.00001729	0.00000145
597370.00	2372940.00	0.00145922	0.00002298	0.00002158	0.00000141	0.0010611	0.00002031	0.00001885	0.00000146
597870.00	2372940.00	0.00138643	0.00002262	0.00002128	0.00000134	0.00107943	0.00002074	0.00001931	0.00000143
598370.00	2372940.00	0.00120471	0.00002141	0.00002017	0.00000124	0.00119006	0.00002131	0.00001995	0.00000135
598870.00	2372940.00	0.00083483	0.00001891	0.00001776	0.00000115	0.00138996	0.00002215	0.00002089	0.00000126
599370.00	2372940.00	0.00092173	0.00001867	0.00001761	0.00000105	0.00115097	0.0000202	0.00001904	0.00000116
599870.00	2372940.00	0.0006143	0.00001616	0.00001517	0.00000098	0.0009362	0.00001848	0.00001741	0.00000107
600370.00	2372940.00	0.00041031	0.00001444	0.0000135	0.00000095	0.00094399	0.00001829	0.00001728	0.00000102
600870.00	2372940.00	0.00052332	0.00001447	0.00001355	0.00000091	0.00083166	0.00001663	0.00001568	0.00000095
601370.00	2372940.00	0.00042411	0.0000135	0.00001256	0.00000093	0.00086214	0.00001638	0.00001544	0.00000094
601870.00	2372940.00	0.00041233	0.00001308	0.00001209	0.00000099	0.00078425	0.00001548	0.00001452	0.00000096
602370.00	2372940.00	0.00039548	0.00001277	0.00001169	0.00000108	0.00075326	0.00001498	0.00001396	0.00000102
602870.00	2372940.00	0.00038887	0.00001263	0.00001144	0.00000119	0.00076406	0.00001483	0.0000137	0.00000112
603370.00	2372940.00	0.00046669	0.00001296	0.00001166	0.0000013	0.00067173	0.00001406	0.00001282	0.00000123
603870.00	2372940.00	0.00039124	0.00001255	0.00001117	0.00000138	0.00071892	0.00001436	0.00001301	0.00000135
604370.00	2372940.00	0.00041606	0.00001264	0.00001123	0.00000141	0.00068192	0.00001406	0.00001265	0.00000141
604870.00	2372940.00	0.00037556	0.00001236	0.00001098	0.00000138	0.00070049	0.00001415	0.00001273	0.00000142
605370.00	2372940.00	0.00030319	0.00001183	0.00001052	0.00000131	0.00060178	0.00001377	0.00001239	0.00000138
605870.00	2372940.00	0.00031128	0.00001175	0.00001054	0.0000012	0.00063505	0.00001375	0.00001247	0.00000129
606370.00	2372940.00	0.00034978	0.00001182	0.00001073	0.00000109	0.00069662	0.00001376	0.00001259	0.00000117
606870.00	2372940.00	0.00032527	0.00001155	0.00001055	0.00000101	0.00067487	0.00001356	0.00001249	0.00000108
607370.00	2372940.00	0.00041171	0.00001188	0.00001094	0.00000093	0.00064797	0.00001308	0.00001209	0.00000098
607870.00	2372940.00	0.00038773	0.00001166	0.00001077	0.0000009	0.00067101	0.00001311	0.00001217	0.00000093
608370.00	2372940.00	0.0004499	0.00001186	0.00001099	0.00000087	0.00057035	0.00001242	0.00001152	0.0000009
608870.00	2372940.00	0.00027158	0.00001084	0.00000996	0.00000088	0.00051297	0.00001242	0.00001151	0.00000091
609370.00	2372940.00	0.00026026	0.00001067	0.00000979	0.00000088	0.00046488	0.0000121	0.00001119	0.00000091
609870.00	2372940.00	0.00024797	0.00001047	0.00000956	0.00000091	0.00037541	0.00001157	0.00001062	0.00000095
610370.00	2372940.00	0.00042223	0.00001135	0.00001047	0.00000087	0.00056104	0.00001201	0.00001112	0.00000089
610870.00	2372940.00	0.00024049	0.00001023	0.00000933	0.0000009	0.00040001	0.00001146	0.00001054	0.00000092
611370.00	2372940.00	0.00023414	0.00001008	0.00000917	0.00000091	0.00036116	0.00001117	0.00001023	0.00000094
611870.00	2372940.00	0.00023081	0.00000997	0.00000906	0.00000091	0.00035945	0.00001107	0.00001013	0.00000094
612370.00	2372940.00	0.00023262	0.0000099	0.000009	0.0000009	0.00040065	0.00001117	0.00001024	0.00000092
612870.00	2372940.00	0.00044236	0.00001094	0.00001006	0.00000088	0.00048361	0.00001111	0.00001021	0.0000009
613370.00	2372940.00	0.00047384	0.00001097	0.0000101	0.00000088	0.00040722	0.00001062	0.00000973	0.00000089
613870.00	2372940.00	0.00046398	0.00001086	0.00000999	0.00000087	0.00043018	0.00001066	0.00000978	0.00000088
614370.00	2372940.00	0.00022526	0.00000919	0.00000834	0.00000085	0.00021844	0.00000933	0.00000846	0.00000087
614870.00	2372940.00	0.00022836	0.00000913	0.00000829	0.00000084	0.00021868	0.00000925	0.00000839	0.00000086
615370.00	2372940.00	0.00018911	0.00000877	0.00000794	0.00000083	0.00020361	0.00000902	0.00000818	0.00000084
615870.00	2372940.00	0.00018206	0.00000864	0.00000782	0.00000082	0.00020002	0.00000891	0.00000808	0.00000083
616370.00	2372940.00	0.0001705	0.00000849	0.00000768	0.0000008	0.0001936	0.00000877	0.00000795	0.00000082
616870.00	2372940.00	0.00028951	0.0000092	0.00000841	0.00000079	0.00023473	0.00000906	0.00000825	0.00000081
617370.00	2372940.00	0.00046867	0.0000105	0.00000971	0.00000079	0.00063622	0.00001125	0.00001044	0.00000081
617870.00	2372940.00	0.00025287	0.00000924	0.00000845	0.00000079	0.00054499	0.000011	0.00001018	0.00000081
618370.00	2372940.00	0.00021249	0.00000887	0.00000808	0.00000079	0.000362	0.00001008	0.00000926	0.00000082
618870.00	2372940.00	0.00021043	0.00000877	0.00000799	0.00000078	0.00034921	0.00000995	0.00000913	0.00000082
619370.00	2372940.00	0.00020952	0.00000868	0.00000791	0.00000077	0.00034655	0.00000985	0.00000904	0.00000081
619870.00	2372940.00	0.00021185	0.00000864	0.00000787	0.00000077	0.0003496	0.00000982	0.00000901	0.00000081
590370.00	2373440.00	0.0004052	0.00001616	0.00001425	0.00000191	0.00070907	0.00001942	0.00001747	0.00000195
590870.00	2373440.00	0.00040924	0.00001542	0.0000136	0.00000182	0.00085798	0.00001954	0.00001764	0.0000019
591370.00	2373440.00	0.0004815	0.00001527	0.00001359	0.00000168	0.00137836	0.00002142	0.00001963	0.00000179
591870.00	2373440.00	0.00141895	0.00002001	0.00001849	0.00000152	0.00148123	0.0000202	0.00001857	0.00000163
592370.00	2373440.00	0.00126616	0.00001731	0.00001594	0.00000136	0.00056607	0.00001423	0.00001277	0.00000146
592870.00	2373440.00	0.00039073	0.00001158	0.00001035	0.00000123	0.00035257	0.00001205	0.00001076	0.0000013

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2373440.00	0.00020978	0.00000955	0.00000843	0.00000112	0.0002451	0.00001019	0.00000904	0.00000114
593870.00	2373440.00	0.00021245	0.00000957	0.00000846	0.00000111	0.0002523	0.00001005	0.00000895	0.0000011
594370.00	2373440.00	0.00021657	0.00000985	0.00000872	0.00000113	0.00025537	0.00001011	0.00000901	0.0000011
594870.00	2373440.00	0.00026004	0.00001098	0.00000979	0.00000119	0.0002891	0.00001097	0.00000982	0.00000115
595370.00	2373440.00	0.00036523	0.0000126	0.00001136	0.00000124	0.00033296	0.00001202	0.00001081	0.0000012
595870.00	2373440.00	0.00089368	0.00001678	0.00001548	0.00000131	0.00050219	0.00001417	0.0000129	0.00000127
596370.00	2373440.00	0.00132643	0.00002013	0.00001877	0.00000136	0.00070799	0.00001629	0.00001495	0.00000134
596870.00	2373440.00	0.00145758	0.00002176	0.00002038	0.00000138	0.00088317	0.00001798	0.00001659	0.00000139
597370.00	2373440.00	0.00144168	0.00002223	0.00002086	0.00000137	0.00099139	0.00001924	0.00001782	0.00000142
597870.00	2373440.00	0.00133051	0.00002191	0.00002059	0.00000132	0.001111	0.00002033	0.00001893	0.0000014
598370.00	2373440.00	0.00114067	0.00002076	0.00001952	0.00000124	0.00123418	0.00002109	0.00001975	0.00000134
598870.00	2373440.00	0.00107534	0.00001992	0.00001877	0.00000115	0.00115731	0.00002044	0.00001918	0.00000126
599370.00	2373440.00	0.00096239	0.0000187	0.00001765	0.00000106	0.00110951	0.00001971	0.00001855	0.00000116
599870.00	2373440.00	0.00065278	0.00001623	0.00001525	0.00000098	0.00090691	0.00001812	0.00001705	0.00000107
600370.00	2373440.00	0.00046945	0.00001463	0.0000137	0.00000093	0.00093124	0.00001782	0.00001682	0.00000101
600870.00	2373440.00	0.00049422	0.0000142	0.00001331	0.00000089	0.0008489	0.00001665	0.00001571	0.00000094
601370.00	2373440.00	0.00042958	0.00001338	0.00001249	0.00000089	0.000862	0.00001623	0.00001532	0.00000091
601870.00	2373440.00	0.00040595	0.00001287	0.00001194	0.00000092	0.00081836	0.00001552	0.0000146	0.00000091
602370.00	2373440.00	0.00040081	0.00001257	0.00001158	0.00000099	0.00078404	0.00001493	0.00001398	0.00000095
602870.00	2373440.00	0.00038393	0.00001231	0.00001122	0.00000109	0.00075882	0.00001454	0.00001351	0.00000103
603370.00	2373440.00	0.00028831	0.00001165	0.00001044	0.00000121	0.00053787	0.0000135	0.00001235	0.00000115
603870.00	2373440.00	0.0003445	0.00001196	0.00001067	0.0000013	0.00070368	0.00001405	0.0000128	0.00000125
604370.00	2373440.00	0.00045777	0.00001251	0.00001115	0.00000135	0.00060745	0.00001326	0.00001193	0.00000133
604870.00	2373440.00	0.00035216	0.00001194	0.00001057	0.00000137	0.00068624	0.0000138	0.00001242	0.00000138
605370.00	2373440.00	0.00036179	0.00001191	0.00001059	0.00000132	0.00068116	0.00001367	0.0000123	0.00000137
605870.00	2373440.00	0.0003527	0.00001175	0.00001051	0.00000124	0.00067983	0.00001357	0.00001225	0.00000131
606370.00	2373440.00	0.00026367	0.00001106	0.00000988	0.00000118	0.00039985	0.00001228	0.00001102	0.00000126
606870.00	2373440.00	0.0002615	0.00001092	0.00000983	0.00000109	0.00039155	0.00001209	0.00001093	0.00000117
607370.00	2373440.00	0.00049268	0.00001195	0.000011	0.00000095	0.00046636	0.00001181	0.00001081	0.00000101
607870.00	2373440.00	0.00033773	0.00001115	0.00001025	0.00000091	0.00067272	0.00001296	0.000012	0.00000096
608370.00	2373440.00	0.0003005	0.00001086	0.00000998	0.00000088	0.00062526	0.00001272	0.0000118	0.00000091
608870.00	2373440.00	0.00036455	0.00001111	0.00001027	0.00000085	0.00065363	0.00001258	0.00001171	0.00000088
609370.00	2373440.00	0.00026748	0.00001049	0.00000964	0.00000085	0.00051496	0.00001206	0.00001118	0.00000088
609870.00	2373440.00	0.00029074	0.00001055	0.00000971	0.00000085	0.00061151	0.00001236	0.0000115	0.00000087
610370.00	2373440.00	0.00026795	0.00001032	0.00000947	0.00000085	0.00054426	0.000012	0.00001112	0.00000087
610870.00	2373440.00	0.00029368	0.00001038	0.00000953	0.00000085	0.00061928	0.00001218	0.00001131	0.00000087
611370.00	2373440.00	0.00033494	0.0000105	0.00000965	0.00000085	0.00062797	0.00001202	0.00001115	0.00000087
611870.00	2373440.00	0.0004569	0.00001096	0.00001011	0.00000085	0.00043738	0.00001082	0.00000996	0.00000087
612370.00	2373440.00	0.00030389	0.00001016	0.00000929	0.00000086	0.00061978	0.00001184	0.00001096	0.00000088
612870.00	2373440.00	0.00022329	0.00000957	0.00000868	0.00000089	0.00034767	0.00001064	0.00000972	0.00000092
613370.00	2373440.00	0.00039874	0.00001046	0.0000096	0.00000086	0.00052367	0.00001105	0.00001017	0.00000087
613870.00	2373440.00	0.00045568	0.00001061	0.00000976	0.00000085	0.00041221	0.00001037	0.0000095	0.00000087
614370.00	2373440.00	0.00038697	0.00000998	0.00000913	0.00000084	0.00027027	0.00000947	0.00000862	0.00000085
614870.00	2373440.00	0.00030811	0.00000945	0.00000862	0.00000083	0.00024179	0.00000922	0.00000838	0.00000084
615370.00	2373440.00	0.00022937	0.00000889	0.00000807	0.00000082	0.00021521	0.00000898	0.00000814	0.00000083
615870.00	2373440.00	0.00016829	0.0000084	0.00000758	0.00000082	0.00018995	0.00000866	0.00000784	0.00000083
616370.00	2373440.00	0.00016321	0.00000828	0.00000747	0.0000008	0.00018496	0.00000854	0.00000773	0.00000081
616870.00	2373440.00	0.00017599	0.0000083	0.00000751	0.00000079	0.00019426	0.00000856	0.00000776	0.0000008
617370.00	2373440.00	0.00042376	0.00000977	0.00000899	0.00000078	0.00028478	0.00000913	0.00000833	0.00000079
617870.00	2373440.00	0.0006135	0.00001086	0.00001008	0.00000077	0.00040832	0.00000976	0.00000897	0.00000079
618370.00	2373440.00	0.00025814	0.00000905	0.00000828	0.00000077	0.00056594	0.00001082	0.00001003	0.0000008
618870.00	2373440.00	0.00020699	0.00000862	0.00000784	0.00000078	0.00034256	0.00000977	0.00000895	0.00000082
619370.00	2373440.00	0.00020815	0.00000858	0.0000078	0.00000078	0.00034372	0.00000973	0.00000891	0.00000082
619870.00	2373440.00	0.00020969	0.00000854	0.00000776	0.00000078	0.00034772	0.00000971	0.00000889	0.00000082
590370.00	2373940.00	0.00039626	0.00001561	0.00001376	0.00000185	0.00071897	0.00001892	0.00001703	0.00000189
590870.00	2373940.00	0.00046418	0.00001549	0.00001374	0.00000175	0.00122497	0.00002085	0.00001902	0.00000183
591370.00	2373940.00	0.00050664	0.00001507	0.00001345	0.00000162	0.00148036	0.00002134	0.00001961	0.00000173
591870.00	2373940.00	0.00155827	0.00002021	0.00001874	0.00000147	0.00126181	0.00001854	0.00001696	0.00000158
592370.00	2373940.00	0.0007786	0.00001414	0.00001283	0.00000131	0.00043229	0.00001301	0.00001161	0.00000141
592870.00	2373940.00	0.00021477	0.00000966	0.00000851	0.00000115	0.00025616	0.0000105	0.00000928	0.00000122
593370.00	2373940.00	0.00021346	0.00000943	0.00000833	0.0000011	0.000254	0.0000101	0.00000898	0.00000112
593870.00	2373940.00	0.00025718	0.00000996	0.00000886	0.0000011	0.00028844	0.00001044	0.00000935	0.00000109
594370.00	2373940.00	0.00022973	0.00000974	0.00000863	0.00000111	0.00026327	0.00000998	0.0000089	0.00000108
594870.00	2373940.00	0.00022996	0.00001021	0.00000907	0.00000114	0.00027177	0.0000103	0.0000092	0.0000011
595370.00	2373940.00	0.00036661	0.00001213	0.00001093	0.0000012	0.00032694	0.00001156	0.0000104	0.00000116
595870.00	2373940.00	0.00075856	0.00001538	0.00001413	0.00000125	0.00044232	0.00001322	0.00001199	0.00000122
596370.00	2373940.00	0.00136215	0.00001983	0.00001852	0.00000131	0.00073625	0.00001585	0.00001456	0.00000129
596870.00	2373940.00	0.00141844	0.00002092	0.00001958	0.00000134	0.00085114	0.00001718	0.00001584	0.00000134
597370.00	2373940.00	0.00139726	0.00002146	0.00002013	0.00000134	0.0009941	0.00001866	0.00001729	0.00000137
597870.00	2373940.00	0.00135993	0.00002147	0.00002017	0.0000013	0.00099763	0.00001913	0.00001777	0.00000136

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2373940.00	0.00124761	0.00002088	0.00001965	0.00000123	0.00107017	0.00001972	0.0000184	0.00000132
598870.00	2373940.00	0.00114043	0.00001996	0.00001882	0.00000114	0.00106791	0.00001959	0.00001834	0.00000125
599370.00	2373940.00	0.00097212	0.00001858	0.00001752	0.00000106	0.00110467	0.00001943	0.00001827	0.00000116
599870.00	2373940.00	0.00069455	0.00001629	0.00001531	0.00000098	0.00086145	0.00001764	0.00001657	0.00000107
600370.00	2373940.00	0.00050281	0.00001471	0.00001378	0.00000093	0.0009192	0.00001755	0.00001655	0.000001
600870.00	2373940.00	0.00041527	0.00001366	0.00001278	0.00000089	0.00085878	0.00001676	0.00001582	0.00000095
601370.00	2373940.00	0.00039942	0.0000131	0.00001223	0.00000087	0.00085168	0.00001614	0.00001524	0.0000009
601870.00	2373940.00	0.00038788	0.00001261	0.00001174	0.00000088	0.00081248	0.0000154	0.00001452	0.00000088
602370.00	2373940.00	0.00039006	0.00001231	0.00001139	0.00000092	0.00077861	0.00001475	0.00001385	0.0000009
602870.00	2373940.00	0.00039239	0.00001209	0.00001109	0.00000099	0.00071356	0.00001404	0.0000131	0.00000095
603370.00	2373940.00	0.00035839	0.00001179	0.0000107	0.00000109	0.00072393	0.00001395	0.00001292	0.00000103
603870.00	2373940.00	0.00034424	0.00001165	0.00001045	0.0000012	0.00069836	0.0000137	0.00001257	0.00000114
604370.00	2373940.00	0.00036324	0.00001172	0.00001044	0.00000128	0.00068549	0.0000135	0.00001226	0.00000124
604870.00	2373940.00	0.00039456	0.00001185	0.00001053	0.00000133	0.00064875	0.00001319	0.00001188	0.00000131
605370.00	2373940.00	0.00039706	0.00001181	0.00001049	0.00000132	0.00063305	0.00001305	0.00001171	0.00000134
605870.00	2373940.00	0.00039203	0.0000117	0.00001044	0.00000127	0.00063086	0.00001296	0.00001164	0.00000132
606370.00	2373940.00	0.00026344	0.00001085	0.00000964	0.00000121	0.0004393	0.00001223	0.00001096	0.00000128
606870.00	2373940.00	0.00034025	0.00001119	0.0000101	0.00000109	0.0006592	0.00001295	0.00001178	0.00000117
607370.00	2373940.00	0.00032629	0.00001098	0.00000998	0.000001	0.00065448	0.0000128	0.00001173	0.00000107
607870.00	2373940.00	0.00025845	0.00001045	0.0000095	0.00000095	0.00043181	0.00001177	0.00001075	0.00000101
608370.00	2373940.00	0.00026491	0.0000104	0.00000951	0.00000089	0.00048372	0.00001187	0.00001094	0.00000094
608870.00	2373940.00	0.00042037	0.00001112	0.00001029	0.00000083	0.00055743	0.00001176	0.00001089	0.00000087
609370.00	2373940.00	0.00026214	0.00001022	0.00000939	0.00000084	0.00049405	0.00001171	0.00001085	0.00000087
609870.00	2373940.00	0.00028728	0.00001031	0.00000948	0.00000082	0.00059949	0.00001206	0.00001121	0.00000085
610370.00	2373940.00	0.00024799	0.00000997	0.00000915	0.00000083	0.00044529	0.00001131	0.00001046	0.00000085
610870.00	2373940.00	0.00046491	0.00001096	0.00001015	0.00000081	0.00041667	0.00001069	0.00000986	0.00000083
611370.00	2373940.00	0.00022928	0.00000965	0.0000088	0.00000085	0.00034798	0.00001067	0.00000978	0.00000088
611870.00	2373940.00	0.00043931	0.00001068	0.00000986	0.00000082	0.00044974	0.0000107	0.00000986	0.00000084
612370.00	2373940.00	0.00022385	0.00000946	0.0000086	0.00000086	0.00034364	0.0000105	0.0000096	0.00000089
612870.00	2373940.00	0.0002724	0.00000971	0.00000887	0.00000084	0.00057819	0.0000114	0.00001055	0.00000086
613370.00	2373940.00	0.00042171	0.00001035	0.00000952	0.00000083	0.00046063	0.0000105	0.00000965	0.00000085
613870.00	2373940.00	0.00041702	0.00001026	0.00000942	0.00000083	0.00046535	0.00001045	0.00000961	0.00000085
614370.00	2373940.00	0.00023653	0.00000891	0.00000809	0.00000082	0.00021572	0.00000895	0.00000812	0.00000083
614870.00	2373940.00	0.00020973	0.00000868	0.00000786	0.00000082	0.00020699	0.00000882	0.00000799	0.00000083
615370.00	2373940.00	0.00018176	0.00000841	0.00000759	0.00000081	0.00019548	0.00000863	0.00000781	0.00000082
615870.00	2373940.00	0.00016291	0.0000082	0.0000074	0.00000081	0.00018323	0.00000845	0.00000764	0.00000082
616370.00	2373940.00	0.00015598	0.00000805	0.00000725	0.0000008	0.00017603	0.0000083	0.00000749	0.00000081
616870.00	2373940.00	0.00022901	0.00000852	0.00000774	0.00000078	0.00021051	0.00000857	0.00000778	0.0000008
617370.00	2373940.00	0.00026961	0.0000091	0.00000831	0.00000079	0.00059629	0.00001089	0.00001009	0.00000081
617870.00	2373940.00	0.00021209	0.00000866	0.00000787	0.00000079	0.00038039	0.00000987	0.00000906	0.00000081
618370.00	2373940.00	0.00020495	0.00000854	0.00000775	0.00000078	0.00034532	0.00000966	0.00000885	0.00000081
618870.00	2373940.00	0.00020447	0.00000848	0.0000077	0.00000079	0.00033638	0.0000096	0.00000878	0.00000082
619370.00	2373940.00	0.00020695	0.00000847	0.00000768	0.00000079	0.00034282	0.00000962	0.00000879	0.00000083
619870.00	2373940.00	0.00020569	0.00000839	0.00000762	0.00000078	0.00034128	0.00000955	0.00000873	0.00000082
590370.00	2374440.00	0.00049379	0.00001602	0.00001423	0.00000178	0.00128295	0.00002121	0.00001938	0.00000183
590870.00	2374440.00	0.00152722	0.00002059	0.00001891	0.00000168	0.00081876	0.00001722	0.00001545	0.00000177
591370.00	2374440.00	0.00159695	0.00002042	0.00001886	0.00000155	0.00095247	0.00001719	0.00001554	0.00000166
591870.00	2374440.00	0.00164359	0.00002001	0.00001859	0.00000142	0.00097799	0.00001658	0.00001506	0.00000152
592370.00	2374440.00	0.0008024	0.00001398	0.0000127	0.00000127	0.00043465	0.00001269	0.00001132	0.00000136
592870.00	2374440.00	0.00020509	0.00000928	0.00000818	0.0000011	0.00024319	0.00001006	0.0000089	0.00000116
593370.00	2374440.00	0.00021477	0.00000925	0.00000817	0.00000107	0.00025483	0.00000989	0.0000088	0.0000011
593870.00	2374440.00	0.00027586	0.00000989	0.00000882	0.00000107	0.00029275	0.00001027	0.00000921	0.00000107
594370.00	2374440.00	0.00036594	0.00001065	0.00000956	0.00000109	0.00031513	0.00001046	0.00000939	0.00000107
594870.00	2374440.00	0.00049387	0.00001184	0.00001072	0.00000112	0.00034772	0.00001092	0.00000983	0.00000109
595370.00	2374440.00	0.00033816	0.00001149	0.00001033	0.00000115	0.00031203	0.00001104	0.00000992	0.00000112
595870.00	2374440.00	0.00075622	0.00001484	0.00001364	0.00000121	0.00043791	0.00001269	0.00001151	0.00000118
596370.00	2374440.00	0.00127131	0.00001868	0.00001742	0.00000126	0.00067113	0.00001492	0.00001368	0.00000124
596870.00	2374440.00	0.0013671	0.00002001	0.00001872	0.00000129	0.00078287	0.00001628	0.00001499	0.00000129
597370.00	2374440.00	0.00137864	0.00002067	0.00001937	0.0000013	0.00087115	0.00001739	0.00001606	0.00000133
597870.00	2374440.00	0.00134238	0.00002086	0.00001958	0.00000128	0.00095434	0.00001832	0.00001699	0.00000133
598370.00	2374440.00	0.00126009	0.00002052	0.0000193	0.00000122	0.00100907	0.0000189	0.0000176	0.0000013
598870.00	2374440.00	0.00117155	0.00001981	0.00001867	0.00000114	0.00101313	0.00001892	0.00001768	0.00000124
599370.00	2374440.00	0.00079066	0.00001717	0.00001611	0.00000106	0.00087662	0.00001793	0.00001677	0.00000116
599870.00	2374440.00	0.00063315	0.00001586	0.00001487	0.00000099	0.00093883	0.00001794	0.00001686	0.00000108
600370.00	2374440.00	0.0004714	0.00001444	0.00001351	0.00000093	0.00095095	0.00001765	0.00001664	0.00000101
600870.00	2374440.00	0.00053778	0.00001423	0.00001336	0.00000087	0.00082374	0.00001623	0.0000153	0.00000094
601370.00	2374440.00	0.00051694	0.00001362	0.00001278	0.00000084	0.00079436	0.0000155	0.00001462	0.00000088
601870.00	2374440.00	0.00039316	0.00001252	0.00001168	0.00000084	0.00081045	0.00001526	0.0000144	0.00000086
602370.00	2374440.00	0.00036544	0.00001201	0.00001114	0.00000087	0.00076694	0.00001461	0.00001375	0.00000086
602870.00	2374440.00	0.00037706	0.0000118	0.00001088	0.00000092	0.00071836	0.00001392	0.00001304	0.00000089

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2374440.00	0.00041282	0.00001182	0.00001082	0.000001	0.00068112	0.00001338	0.00001243	0.00000094
603870.00	2374440.00	0.00035466	0.00001143	0.00001033	0.0000011	0.00069701	0.00001339	0.00001236	0.00000104
604370.00	2374440.00	0.00025902	0.00001081	0.00000959	0.00000122	0.00041198	0.00001211	0.00001093	0.00000117
604870.00	2374440.00	0.00037052	0.00001144	0.00001017	0.00000126	0.00065356	0.00001295	0.00001172	0.00000123
605370.00	2374440.00	0.00038096	0.00001146	0.00001016	0.00000129	0.00063007	0.00001276	0.00001147	0.00000129
605870.00	2374440.00	0.00039776	0.00001148	0.0000102	0.00000128	0.0006004	0.00001252	0.00001122	0.00000131
606370.00	2374440.00	0.00039488	0.00001137	0.00001016	0.00000122	0.00059694	0.00001242	0.00001115	0.00000127
606870.00	2374440.00	0.0004054	0.0000113	0.00001017	0.00000113	0.00057781	0.00001219	0.00001099	0.0000012
607370.00	2374440.00	0.00032701	0.00001079	0.00000974	0.00000105	0.00064004	0.00001251	0.00001139	0.00000112
607870.00	2374440.00	0.00040915	0.00001106	0.0000101	0.00000095	0.00056401	0.00001183	0.00001081	0.00000102
608370.00	2374440.00	0.0004242	0.000011	0.00001012	0.00000088	0.00053259	0.00001152	0.00001058	0.00000094
608870.00	2374440.00	0.00046406	0.00001105	0.00001022	0.00000083	0.0004445	0.00001092	0.00001005	0.00000087
609370.00	2374440.00	0.00034427	0.00001045	0.00000964	0.00000081	0.00062545	0.00001188	0.00001104	0.00000085
609870.00	2374440.00	0.00025699	0.0000099	0.00000909	0.00000081	0.00048807	0.00001135	0.00001052	0.00000084
610370.00	2374440.00	0.00023575	0.00000967	0.00000885	0.00000081	0.00037401	0.00001074	0.0000099	0.00000084
610870.00	2374440.00	0.00035971	0.0000103	0.00000951	0.00000079	0.00058485	0.00001141	0.0000106	0.00000081
611370.00	2374440.00	0.00037387	0.00001029	0.00000949	0.00000079	0.00055457	0.00001116	0.00001035	0.00000081
611870.00	2374440.00	0.0002289	0.0000094	0.00000859	0.00000081	0.00038841	0.00001056	0.00000972	0.00000084
612370.00	2374440.00	0.0002662	0.00000957	0.00000876	0.00000081	0.0005594	0.00001121	0.00001039	0.00000083
612870.00	2374440.00	0.00039585	0.00001013	0.00000932	0.00000081	0.00048971	0.00001056	0.00000974	0.00000082
613370.00	2374440.00	0.00043836	0.00001021	0.0000094	0.00000081	0.00039277	0.00000995	0.00000913	0.00000082
613870.00	2374440.00	0.00030591	0.00000955	0.00000873	0.00000082	0.00058202	0.00001097	0.00001014	0.00000083
614370.00	2374440.00	0.00025353	0.00000885	0.00000805	0.0000008	0.00022004	0.0000088	0.00000799	0.00000081
614870.00	2374440.00	0.00016901	0.00000823	0.00000743	0.0000008	0.00018685	0.00000846	0.00000765	0.0000008
615370.00	2374440.00	0.00016175	0.00000811	0.00000731	0.0000008	0.00018086	0.00000834	0.00000754	0.0000008
615870.00	2374440.00	0.00019684	0.0000083	0.00000751	0.00000079	0.00019863	0.00000846	0.00000766	0.0000008
616370.00	2374440.00	0.00016971	0.00000804	0.00000725	0.00000079	0.00018645	0.00000827	0.00000748	0.00000079
616870.00	2374440.00	0.00034412	0.00000906	0.00000828	0.00000078	0.00024789	0.00000865	0.00000786	0.00000079
617370.00	2374440.00	0.00025035	0.00000882	0.00000804	0.00000078	0.00054335	0.00001048	0.00000968	0.0000008
617870.00	2374440.00	0.00020742	0.00000848	0.00000769	0.00000078	0.00036554	0.00000962	0.00000882	0.0000008
618370.00	2374440.00	0.00020059	0.00000836	0.00000758	0.00000078	0.000329	0.00000943	0.00000862	0.00000081
618870.00	2374440.00	0.00019975	0.0000083	0.00000752	0.00000077	0.00032889	0.00000937	0.00000857	0.0000008
619370.00	2374440.00	0.00020398	0.00000833	0.00000754	0.00000078	0.00033749	0.00000945	0.00000863	0.00000082
619870.00	2374440.00	0.00020286	0.00000826	0.00000748	0.00000077	0.00033701	0.00000938	0.00000857	0.00000081
590370.00	2374940.00	0.00068094	0.00001678	0.00001505	0.00000173	0.00149531	0.00002143	0.00001966	0.00000177
590870.00	2374940.00	0.00089719	0.00001627	0.00001465	0.00000163	0.00047149	0.00001475	0.00001303	0.00000171
591370.00	2374940.00	0.00126082	0.00001768	0.00001618	0.0000015	0.00058192	0.00001468	0.00001308	0.0000016
591870.00	2374940.00	0.00127176	0.00001706	0.00001569	0.00000136	0.00057601	0.00001392	0.00001246	0.00000146
592370.00	2374940.00	0.00022022	0.00000976	0.00000857	0.00000119	0.00026462	0.00001069	0.00000941	0.00000128
592870.00	2374940.00	0.0002136	0.00000927	0.00000818	0.00000109	0.00025369	0.00001004	0.00000889	0.00000115
593370.00	2374940.00	0.000223	0.00000911	0.00000806	0.00000105	0.00025815	0.00000973	0.00000865	0.00000107
593870.00	2374940.00	0.00047745	0.00001095	0.00000989	0.00000106	0.0003391	0.00001047	0.00000941	0.00000106
594370.00	2374940.00	0.00061556	0.00001189	0.00001082	0.00000106	0.00036529	0.00001062	0.00000957	0.00000105
594870.00	2374940.00	0.00079412	0.00001326	0.00001217	0.00000109	0.00042229	0.00001113	0.00001007	0.00000106
595370.00	2374940.00	0.00072446	0.00001344	0.00001232	0.00000112	0.00040792	0.00001145	0.00001036	0.00000109
595870.00	2374940.00	0.00060622	0.00001345	0.00001229	0.00000116	0.00038455	0.00001189	0.00001076	0.00000113
596370.00	2374940.00	0.00113452	0.00001732	0.00001611	0.00000121	0.00059419	0.00001396	0.00001277	0.00000119
596870.00	2374940.00	0.00131665	0.00001914	0.00001789	0.00000125	0.00073841	0.00001548	0.00001423	0.00000124
597370.00	2374940.00	0.00134606	0.00001995	0.00001868	0.00000127	0.00084532	0.00001668	0.0000154	0.00000128
597870.00	2374940.00	0.00132246	0.00002022	0.00001897	0.00000125	0.00090746	0.00001752	0.00001623	0.0000013
598370.00	2374940.00	0.0012716	0.00002011	0.0000189	0.0000012	0.00093879	0.00001803	0.00001675	0.00000128
598870.00	2374940.00	0.00087431	0.00001771	0.00001657	0.00000114	0.00084115	0.00001764	0.00001641	0.00000123
599370.00	2374940.00	0.00070377	0.00001658	0.00001551	0.00000106	0.00100212	0.00001842	0.00001726	0.00000116
599870.00	2374940.00	0.00064214	0.00001576	0.00001478	0.00000099	0.00095069	0.00001779	0.0000167	0.00000108
600370.00	2374940.00	0.00064176	0.00001519	0.00001427	0.00000092	0.00082563	0.00001655	0.00001554	0.000001
600870.00	2374940.00	0.00059468	0.00001441	0.00001355	0.00000086	0.00076937	0.00001575	0.00001482	0.00000093
601370.00	2374940.00	0.00039756	0.0000129	0.00001206	0.00000084	0.00084813	0.00001593	0.00001504	0.00000089
601870.00	2374940.00	0.00042876	0.00001261	0.0000118	0.00000081	0.00080752	0.00001507	0.00001422	0.00000085
602370.00	2374940.00	0.00036859	0.0000119	0.00001107	0.00000082	0.00076862	0.0000145	0.00001366	0.00000083
602870.00	2374940.00	0.00040366	0.00001178	0.00001093	0.00000085	0.00072862	0.00001378	0.00001294	0.00000084
603370.00	2374940.00	0.00035733	0.00001133	0.0000104	0.00000092	0.000709	0.00001345	0.00001257	0.00000088
603870.00	2374940.00	0.00032748	0.00001103	0.00001002	0.00000101	0.00067263	0.0000131	0.00001215	0.00000096
604370.00	2374940.00	0.00038373	0.00001125	0.00001015	0.0000011	0.00064836	0.0000127	0.00001166	0.00000104
604870.00	2374940.00	0.00025325	0.00001047	0.00000926	0.00000121	0.00041502	0.00001178	0.00001061	0.00000117
605370.00	2374940.00	0.00026957	0.00001057	0.00000931	0.00000125	0.00051486	0.00001219	0.00001096	0.00000123
605870.00	2374940.00	0.00024761	0.00001038	0.0000091	0.00000128	0.00037715	0.00001151	0.00001021	0.0000013
606370.00	2374940.00	0.00024725	0.00001031	0.00000906	0.00000125	0.00038445	0.00001148	0.00001019	0.00000129
606870.00	2374940.00	0.00024834	0.00001023	0.00000904	0.00000119	0.00039971	0.00001146	0.00001021	0.00000125
607370.00	2374940.00	0.00040103	0.00001096	0.00000987	0.00000108	0.000554	0.00001173	0.00001058	0.00000115
607870.00	2374940.00	0.00025447	0.00001006	0.00000904	0.00000102	0.00044916	0.00001143	0.00001035	0.00000109

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2374940.00	0.00024116	0.00000984	0.00000888	0.00000096	0.00036656	0.00001092	0.0000099	0.00000102
608870.00	2374940.00	0.00024033	0.00000973	0.00000884	0.00000089	0.00037432	0.00001083	0.00000988	0.00000095
609370.00	2374940.00	0.00044578	0.00001067	0.00000987	0.0000008	0.00044594	0.00001062	0.00000978	0.00000084
609870.00	2374940.00	0.00042908	0.00001054	0.00000975	0.00000078	0.00047783	0.00001072	0.00000991	0.00000081
610370.00	2374940.00	0.00024603	0.00000955	0.00000877	0.00000079	0.00044966	0.00001087	0.00001006	0.00000082
610870.00	2374940.00	0.00034959	0.00001004	0.00000928	0.00000077	0.00058085	0.00001118	0.00001039	0.00000079
611370.00	2374940.00	0.00034062	0.00000993	0.00000916	0.00000077	0.00058112	0.00001112	0.00001033	0.00000079
611870.00	2374940.00	0.00044061	0.00001027	0.00000951	0.00000077	0.00039923	0.00001003	0.00000925	0.00000078
612370.00	2374940.00	0.00039614	0.00001003	0.00000925	0.00000077	0.00048057	0.0000104	0.00000961	0.00000079
612870.00	2374940.00	0.00021529	0.00000897	0.00000817	0.0000008	0.00033641	0.00000995	0.00000912	0.00000083
613370.00	2374940.00	0.0002223	0.00000897	0.00000817	0.0000008	0.0003988	0.00001016	0.00000934	0.00000082
613870.00	2374940.00	0.00029967	0.00000934	0.00000855	0.00000079	0.00056991	0.00001073	0.00000992	0.00000081
614370.00	2374940.00	0.00018075	0.00000821	0.00000744	0.00000077	0.00019292	0.00000841	0.00000763	0.00000078
614870.00	2374940.00	0.00016703	0.00000805	0.00000728	0.00000078	0.00018423	0.00000827	0.00000749	0.00000078
615370.00	2374940.00	0.00034024	0.00000905	0.00000827	0.00000078	0.0002435	0.00000865	0.00000786	0.00000079
615870.00	2374940.00	0.00048018	0.00001004	0.00000925	0.00000079	0.00053245	0.00001016	0.00000936	0.0000008
616370.00	2374940.00	0.00057913	0.00001036	0.00000958	0.00000078	0.00037008	0.00000923	0.00000844	0.00000079
616870.00	2374940.00	0.00057806	0.0000103	0.00000953	0.00000077	0.00037311	0.0000092	0.00000841	0.00000078
617370.00	2374940.00	0.00042235	0.00000958	0.00000881	0.00000077	0.00058113	0.00001026	0.00000948	0.00000078
617870.00	2374940.00	0.00028144	0.00000879	0.00000802	0.00000077	0.00060312	0.00001047	0.00000969	0.00000078
618370.00	2374940.00	0.00019745	0.0000082	0.00000742	0.00000078	0.00032078	0.00000922	0.00000842	0.0000008
618870.00	2374940.00	0.00019746	0.00000816	0.00000738	0.00000077	0.00032151	0.00000919	0.00000839	0.0000008
619370.00	2374940.00	0.00019822	0.00000813	0.00000736	0.00000077	0.0003245	0.00000918	0.00000838	0.0000008
619870.00	2374940.00	0.0001991	0.0000081	0.00000733	0.00000077	0.00032864	0.00000919	0.00000839	0.00000081
590370.00	2375440.00	0.0013969	0.00001973	0.00001806	0.00000167	0.00077912	0.0000168	0.00001507	0.00000172
590870.00	2375440.00	0.00101377	0.00001657	0.000015	0.00000157	0.00049888	0.00001451	0.00001285	0.00000166
591370.00	2375440.00	0.00039872	0.00001227	0.00001083	0.00000144	0.00035919	0.00001287	0.00001132	0.00000155
591870.00	2375440.00	0.00032096	0.00001112	0.00000981	0.0000013	0.00033267	0.00001196	0.00001056	0.0000014
592370.00	2375440.00	0.00023688	0.00000982	0.00000865	0.00000117	0.00028242	0.00001074	0.00000949	0.00000125
592870.00	2375440.00	0.00022511	0.00000928	0.0000082	0.00000108	0.00026789	0.00000993	0.0000088	0.00000113
593370.00	2375440.00	0.00034079	0.00000997	0.00000893	0.00000104	0.00031025	0.00001023	0.00000916	0.00000107
593870.00	2375440.00	0.00063802	0.00001165	0.00001062	0.00000103	0.00036705	0.00001045	0.00000942	0.00000103
594370.00	2375440.00	0.0007936	0.00001267	0.00001164	0.00000104	0.00041218	0.00001071	0.00000969	0.00000102
594870.00	2375440.00	0.00089513	0.00001356	0.00001251	0.00000106	0.00044944	0.00001108	0.00001005	0.00000103
595370.00	2375440.00	0.00109084	0.00001524	0.00001415	0.00000109	0.00053338	0.00001194	0.00001088	0.00000106
595870.00	2375440.00	0.00117509	0.00001641	0.00001528	0.00000113	0.00059814	0.00001285	0.00001175	0.0000011
596370.00	2375440.00	0.00128085	0.00001779	0.00001662	0.00000117	0.00069246	0.00001405	0.0000129	0.00000115
596870.00	2375440.00	0.00130955	0.00001864	0.00001744	0.00000121	0.00077025	0.00001506	0.00001386	0.0000012
597370.00	2375440.00	0.00130026	0.0000191	0.00001787	0.00000123	0.00077885	0.00001573	0.00001449	0.00000124
597870.00	2375440.00	0.0012979	0.00001957	0.00001835	0.00000122	0.00085972	0.00001671	0.00001545	0.00000126
598370.00	2375440.00	0.00124927	0.00001958	0.0000184	0.00000119	0.00092165	0.00001746	0.00001621	0.00000125
598870.00	2375440.00	0.00076723	0.00001695	0.00001582	0.00000113	0.00100053	0.00001816	0.00001694	0.00000121
599370.00	2375440.00	0.00076385	0.00001662	0.00001556	0.00000106	0.00090602	0.00001753	0.00001638	0.00000115
599870.00	2375440.00	0.00075572	0.00001611	0.00001512	0.00000099	0.00079129	0.0000166	0.00001553	0.00000108
600370.00	2375440.00	0.00069324	0.00001531	0.00001439	0.00000092	0.00075812	0.00001601	0.00001501	0.000001
600870.00	2375440.00	0.00062795	0.00001448	0.00001361	0.00000086	0.00073538	0.00001542	0.00001449	0.00000093
601370.00	2375440.00	0.00041339	0.00001291	0.00001208	0.00000083	0.00086084	0.00001586	0.00001497	0.00000089
601870.00	2375440.00	0.00032805	0.00001194	0.00001113	0.00000081	0.00068455	0.00001463	0.00001377	0.00000085
602370.00	2375440.00	0.00039366	0.00001193	0.00001114	0.00000079	0.00077181	0.00001435	0.00001354	0.00000081
602870.00	2375440.00	0.00035637	0.00001139	0.00001058	0.00000081	0.00073445	0.0000138	0.00001299	0.00000081
603370.00	2375440.00	0.00039401	0.00001134	0.00001049	0.00000085	0.0006997	0.00001317	0.00001234	0.00000083
603870.00	2375440.00	0.00035338	0.00001096	0.00001003	0.00000093	0.00068513	0.0000129	0.00001202	0.00000088
604370.00	2375440.00	0.0003264	0.00001071	0.0000097	0.00000102	0.00065211	0.00001261	0.00001165	0.00000096
604870.00	2375440.00	0.00034224	0.00001075	0.00000964	0.0000011	0.00064586	0.00001242	0.00001137	0.00000105
605370.00	2375440.00	0.00037238	0.00001087	0.00000969	0.00000118	0.0006097	0.0000121	0.00001097	0.00000114
605870.00	2375440.00	0.00040646	0.000011	0.00000978	0.00000122	0.00054947	0.0000117	0.0000105	0.0000012
606370.00	2375440.00	0.00041848	0.00001101	0.00000979	0.00000122	0.00051237	0.00001146	0.00001022	0.00000124
606870.00	2375440.00	0.00025578	0.0000101	0.0000089	0.0000012	0.00046748	0.00001154	0.0000103	0.00000124
607370.00	2375440.00	0.00028476	0.00001019	0.00000906	0.00000113	0.00057578	0.00001189	0.0000107	0.00000119
607870.00	2375440.00	0.00030804	0.0000102	0.00000916	0.00000105	0.00060514	0.00001184	0.00001073	0.00000111
608370.00	2375440.00	0.00032719	0.00001018	0.00000922	0.00000096	0.00060511	0.00001165	0.00001063	0.00000102
608870.00	2375440.00	0.00026575	0.00000974	0.00000884	0.0000009	0.00052727	0.00001131	0.00001036	0.00000096
609370.00	2375440.00	0.00024504	0.00000951	0.00000866	0.00000085	0.00043409	0.00001079	0.00000989	0.0000009
609870.00	2375440.00	0.0002303	0.00000932	0.00000848	0.00000083	0.00034069	0.00001029	0.0000094	0.00000088
610370.00	2375440.00	0.00022768	0.00000922	0.00000842	0.0000008	0.00033893	0.00001017	0.00000933	0.00000084
610870.00	2375440.00	0.00023837	0.00000924	0.00000848	0.00000077	0.00042796	0.00001048	0.00000969	0.00000079
611370.00	2375440.00	0.00033052	0.00000968	0.00000893	0.00000075	0.00057625	0.0000109	0.00001013	0.00000077
611870.00	2375440.00	0.00022106	0.00000898	0.00000819	0.00000079	0.00033172	0.00000993	0.00000911	0.00000082
612370.00	2375440.00	0.00032727	0.00000953	0.00000878	0.00000075	0.00056222	0.00001069	0.00000992	0.00000077
612870.00	2375440.00	0.00038495	0.00000972	0.00000896	0.00000075	0.00047293	0.0000101	0.00000933	0.00000077

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2375440.00	0.00037696	0.00000961	0.00000885	0.00000076	0.00047528	0.00001005	0.00000928	0.00000077
613870.00	2375440.00	0.0002076	0.00000862	0.00000783	0.00000079	0.00031872	0.00000955	0.00000873	0.00000082
614370.00	2375440.00	0.00017361	0.00000799	0.00000725	0.00000075	0.00018753	0.00000819	0.00000744	0.00000075
614870.00	2375440.00	0.00015478	0.00000778	0.00000703	0.00000075	0.0001726	0.00000798	0.00000723	0.00000075
615370.00	2375440.00	0.00037129	0.00000906	0.0000083	0.00000076	0.00025124	0.00000853	0.00000776	0.00000077
615870.00	2375440.00	0.00045335	0.00000974	0.00000897	0.00000077	0.00053882	0.00001003	0.00000925	0.00000078
616370.00	2375440.00	0.00022944	0.00000849	0.00000772	0.00000078	0.00046901	0.0000099	0.00000911	0.00000079
616870.00	2375440.00	0.00020152	0.00000825	0.00000747	0.00000078	0.0003423	0.00000927	0.00000847	0.0000008
617370.00	2375440.00	0.00020582	0.00000823	0.00000746	0.00000077	0.00036879	0.00000934	0.00000855	0.00000079
617870.00	2375440.00	0.00021866	0.00000826	0.0000075	0.00000076	0.00043245	0.00000957	0.00000879	0.00000078
618370.00	2375440.00	0.00023118	0.00000829	0.00000754	0.00000075	0.00048463	0.00000975	0.00000898	0.00000077
618870.00	2375440.00	0.00021684	0.00000815	0.0000074	0.00000075	0.00042961	0.00000946	0.00000869	0.00000076
619370.00	2375440.00	0.0001925	0.00000792	0.00000717	0.00000075	0.00031585	0.00000891	0.00000814	0.00000077
619870.00	2375440.00	0.00019576	0.00000795	0.00000719	0.00000076	0.00032122	0.000009	0.0000082	0.0000008
590370.00	2375940.00	0.00023395	0.00001179	0.00001012	0.00000167	0.00027316	0.00001275	0.00001102	0.00000173
590870.00	2375940.00	0.00022034	0.00001098	0.00000944	0.00000154	0.00025746	0.00001195	0.0000103	0.00000164
591370.00	2375940.00	0.00021723	0.00001033	0.00000894	0.00000139	0.00025766	0.0000113	0.0000098	0.00000151
591870.00	2375940.00	0.00035078	0.00001105	0.00000978	0.00000127	0.0003349	0.00001169	0.00001033	0.00000136
592370.00	2375940.00	0.00045042	0.00001113	0.00000997	0.00000116	0.00034782	0.00001121	0.00000997	0.00000124
592870.00	2375940.00	0.0004801	0.00001089	0.00000981	0.00000108	0.00034424	0.00001068	0.00000955	0.00000113
593370.00	2375940.00	0.0005173	0.00001083	0.0000098	0.00000102	0.00034331	0.00001029	0.00000924	0.00000105
593870.00	2375940.00	0.00069076	0.00001172	0.00001072	0.00000101	0.00037548	0.00001028	0.00000928	0.00000101
594370.00	2375940.00	0.00102381	0.00001375	0.00001274	0.00000101	0.0004768	0.00001087	0.00000987	0.000001
594870.00	2375940.00	0.00105704	0.00001422	0.00001319	0.00000103	0.00050288	0.00001113	0.00001013	0.000001
595370.00	2375940.00	0.00111697	0.00001504	0.00001399	0.00000105	0.00054871	0.0000117	0.00001067	0.00000103
595870.00	2375940.00	0.001198	0.00001614	0.00001505	0.00000109	0.00060915	0.00001254	0.00001147	0.00000106
596370.00	2375940.00	0.00128295	0.0000174	0.00001627	0.00000113	0.00071823	0.00001375	0.00001264	0.00000111
596870.00	2375940.00	0.00127033	0.00001791	0.00001674	0.00000117	0.00072045	0.00001439	0.00001323	0.00000116
597370.00	2375940.00	0.00127743	0.00001852	0.00001733	0.00000119	0.00077571	0.00001527	0.00001407	0.0000012
597870.00	2375940.00	0.00126675	0.00001897	0.00001777	0.00000119	0.00085895	0.00001624	0.00001501	0.00000122
598370.00	2375940.00	0.00085797	0.00001699	0.00001581	0.00000117	0.00087016	0.0000167	0.00001548	0.00000122
598870.00	2375940.00	0.00086197	0.00001697	0.00001585	0.00000112	0.00079421	0.00001657	0.00001537	0.0000012
599370.00	2375940.00	0.00082088	0.00001659	0.00001553	0.00000106	0.00078847	0.00001654	0.0000154	0.00000114
599870.00	2375940.00	0.00076525	0.00001597	0.00001498	0.00000099	0.00077524	0.00001627	0.00001519	0.00000108
600370.00	2375940.00	0.00071271	0.00001526	0.00001434	0.00000092	0.00074038	0.00001572	0.00001472	0.000001
600870.00	2375940.00	0.00067061	0.00001455	0.00001369	0.00000086	0.0006764	0.00001494	0.000014	0.00000093
601370.00	2375940.00	0.00043912	0.00001297	0.00001215	0.00000082	0.00086696	0.00001573	0.00001484	0.00000089
601870.00	2375940.00	0.00033535	0.00001191	0.00001111	0.0000008	0.0007059	0.00001463	0.00001378	0.00000085
602370.00	2375940.00	0.0003917	0.00001183	0.00001106	0.00000077	0.00077083	0.00001427	0.00001347	0.0000008
602870.00	2375940.00	0.0004	0.00001151	0.00001074	0.00000077	0.00072785	0.00001356	0.00001278	0.00000078
603370.00	2375940.00	0.00034343	0.00001093	0.00001012	0.00000081	0.00070272	0.00001317	0.00001238	0.00000079
603870.00	2375940.00	0.00034306	0.00001072	0.00000986	0.00000086	0.00068061	0.00001274	0.00001192	0.00000083
604370.00	2375940.00	0.00033157	0.00001053	0.00000959	0.00000093	0.00065762	0.00001242	0.00001154	0.00000089
604870.00	2375940.00	0.00033272	0.00001046	0.00000944	0.00000102	0.00063897	0.00001217	0.00001121	0.00000096
605370.00	2375940.00	0.00032941	0.0000104	0.0000093	0.0000011	0.00062377	0.00001201	0.00001096	0.00000105
605870.00	2375940.00	0.00031438	0.0000103	0.00000913	0.00000117	0.00060907	0.00001191	0.00001078	0.00000114
606370.00	2375940.00	0.00025033	0.0000099	0.0000087	0.00000121	0.00045555	0.0000113	0.0000101	0.0000012
606870.00	2375940.00	0.00027651	0.00001003	0.00000883	0.00000119	0.00055599	0.00001167	0.00001045	0.00000121
607370.00	2375940.00	0.00040475	0.00001059	0.00000944	0.00000114	0.00049929	0.00001104	0.00000986	0.00000119
607870.00	2375940.00	0.00033771	0.00001018	0.0000091	0.00000108	0.00058196	0.00001146	0.00001032	0.00000114
608370.00	2375940.00	0.00023407	0.00000947	0.00000844	0.00000103	0.00036926	0.00001057	0.00000948	0.00000109
608870.00	2375940.00	0.00025719	0.00000952	0.00000859	0.00000093	0.00049998	0.00001102	0.00001003	0.000001
609370.00	2375940.00	0.00038798	0.00001006	0.00000922	0.00000085	0.00050966	0.00001064	0.00000974	0.0000009
609870.00	2375940.00	0.00025188	0.00000929	0.00000848	0.00000081	0.0004873	0.00001073	0.00000987	0.00000086
610370.00	2375940.00	0.00031928	0.00000957	0.0000088	0.00000077	0.00058178	0.0000109	0.0000101	0.0000008
610870.00	2375940.00	0.0004297	0.00000997	0.00000923	0.00000073	0.00040765	0.0000098	0.00000904	0.00000076
611370.00	2375940.00	0.00021988	0.00000886	0.0000081	0.00000076	0.00033424	0.00000979	0.000009	0.00000079
611870.00	2375940.00	0.00027536	0.00000915	0.00000842	0.00000073	0.00055991	0.00001066	0.00000991	0.00000075
612370.00	2375940.00	0.0004056	0.00000969	0.00000897	0.00000072	0.00043088	0.00000975	0.00000901	0.00000074
612870.00	2375940.00	0.00029811	0.00000914	0.00000841	0.00000073	0.0005595	0.00001046	0.00000971	0.00000075
613370.00	2375940.00	0.00038575	0.00000947	0.00000874	0.00000073	0.00044577	0.00000971	0.00000897	0.00000075
613870.00	2375940.00	0.0002156	0.00000854	0.00000779	0.00000075	0.00038297	0.00000965	0.00000888	0.00000077
614370.00	2375940.00	0.00018705	0.00000794	0.00000721	0.00000072	0.00019242	0.00000809	0.00000736	0.00000073
614870.00	2375940.00	0.00015157	0.00000758	0.00000686	0.00000072	0.00016881	0.00000777	0.00000705	0.00000072
615370.00	2375940.00	0.00017608	0.00000776	0.00000703	0.00000073	0.0001857	0.00000793	0.00000719	0.00000074
615870.00	2375940.00	0.00045608	0.00000933	0.00000859	0.00000074	0.00027469	0.00000845	0.0000077	0.00000075
616370.00	2375940.00	0.00055344	0.00000989	0.00000915	0.00000075	0.00034269	0.00000877	0.00000802	0.00000076
616870.00	2375940.00	0.00020605	0.00000814	0.00000738	0.00000076	0.0003722	0.00000923	0.00000845	0.00000078
617370.00	2375940.00	0.00019333	0.00000799	0.00000722	0.00000076	0.00031011	0.00000892	0.00000813	0.00000079
617870.00	2375940.00	0.00019249	0.00000794	0.00000717	0.00000077	0.00030599	0.00000888	0.00000809	0.00000079

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2375940.00	0.00019189	0.00000789	0.00000713	0.00000076	0.00030651	0.00000884	0.00000805	0.00000079
618870.00	2375940.00	0.00020834	0.00000796	0.00000722	0.00000074	0.00039738	0.00000915	0.00000839	0.00000075
619370.00	2375940.00	0.00019008	0.00000777	0.00000703	0.00000074	0.0003127	0.00000873	0.00000797	0.00000076
619870.00	2375940.00	0.00019158	0.00000778	0.00000703	0.00000075	0.00031148	0.00000876	0.00000799	0.00000078
590370.00	2376440.00	0.00023108	0.00001145	0.00000984	0.00000161	0.00027139	0.00001238	0.0000107	0.00000168
590870.00	2376440.00	0.00023142	0.00001091	0.00000942	0.00000149	0.00027513	0.00001187	0.00001028	0.00000158
591370.00	2376440.00	0.00026346	0.00001073	0.00000938	0.00000135	0.00030481	0.00001169	0.00001024	0.00000145
591870.00	2376440.00	0.00035254	0.0000108	0.00000957	0.00000123	0.00032923	0.00001137	0.00001005	0.00000132
592370.00	2376440.00	0.00064594	0.00001203	0.0000109	0.00000114	0.00038089	0.00001119	0.00000998	0.00000121
592870.00	2376440.00	0.00081391	0.00001262	0.00001156	0.00000106	0.00041849	0.00001096	0.00000985	0.00000111
593370.00	2376440.00	0.00087984	0.00001274	0.00001173	0.00000101	0.00043226	0.00001068	0.00000965	0.00000104
593870.00	2376440.00	0.00089143	0.00001269	0.00001171	0.00000098	0.00043396	0.00001047	0.00000948	0.00000099
594370.00	2376440.00	0.00114819	0.00001428	0.00001329	0.00000099	0.00054493	0.00001101	0.00001003	0.00000098
594870.00	2376440.00	0.00121604	0.00001494	0.00001394	0.000001	0.00059082	0.00001139	0.00001042	0.00000098
595370.00	2376440.00	0.00126489	0.00001571	0.00001468	0.00000103	0.00066026	0.00001205	0.00001105	0.000001
595870.00	2376440.00	0.00121879	0.00001592	0.00001487	0.00000106	0.00063433	0.00001233	0.00001129	0.00000103
596370.00	2376440.00	0.00124608	0.00001674	0.00001565	0.0000011	0.00068917	0.00001318	0.00001211	0.00000107
596870.00	2376440.00	0.00125579	0.00001755	0.00001641	0.00000113	0.00083605	0.00001456	0.00001344	0.00000112
597370.00	2376440.00	0.0012506	0.00001792	0.00001677	0.00000116	0.00076749	0.00001476	0.0000136	0.00000116
597870.00	2376440.00	0.00122592	0.00001834	0.00001717	0.00000117	0.00086937	0.00001582	0.00001463	0.00000119
598370.00	2376440.00	0.00087494	0.00001656	0.00001541	0.00000115	0.00075012	0.00001563	0.00001444	0.0000012
598870.00	2376440.00	0.00085719	0.00001658	0.00001547	0.00000111	0.0007573	0.00001595	0.00001478	0.00000118
599370.00	2376440.00	0.00082399	0.00001632	0.00001527	0.00000105	0.00076091	0.00001605	0.00001492	0.00000113
599870.00	2376440.00	0.00078458	0.00001583	0.00001484	0.00000099	0.00072836	0.00001574	0.00001467	0.00000107
600370.00	2376440.00	0.00072713	0.00001517	0.00001425	0.00000092	0.00071686	0.0000154	0.0000144	0.00000101
600870.00	2376440.00	0.00068259	0.00001449	0.00001363	0.00000086	0.0006627	0.00001471	0.00001378	0.00000094
601370.00	2376440.00	0.00042378	0.00001279	0.00001197	0.00000082	0.00085168	0.00001557	0.00001468	0.00000089
601870.00	2376440.00	0.00039215	0.00001218	0.0000114	0.00000078	0.00081192	0.00001492	0.00001408	0.00000084
602370.00	2376440.00	0.00039058	0.00001175	0.00001099	0.00000076	0.00076985	0.00001419	0.00001339	0.0000008
602870.00	2376440.00	0.00036486	0.00001124	0.00001049	0.00000075	0.00073238	0.00001358	0.00001281	0.00000077
603370.00	2376440.00	0.00026108	0.0000103	0.00000951	0.00000078	0.00046085	0.00001207	0.00001128	0.00000079
603870.00	2376440.00	0.00025605	0.00001005	0.00000922	0.00000082	0.000462	0.00001175	0.00001094	0.0000008
604370.00	2376440.00	0.00035181	0.00001045	0.00000959	0.00000086	0.00065332	0.00001219	0.00001137	0.00000082
604870.00	2376440.00	0.00030615	0.0000101	0.00000916	0.00000094	0.00062357	0.00001196	0.00001107	0.00000089
605370.00	2376440.00	0.00034609	0.00001025	0.00000923	0.00000102	0.00060643	0.00001165	0.00001068	0.00000097
605870.00	2376440.00	0.00040691	0.0000105	0.00000941	0.00000109	0.0005202	0.00001105	0.00001	0.00000105
606370.00	2376440.00	0.00035902	0.00001026	0.00000911	0.00000115	0.00056556	0.00001131	0.00001019	0.00000112
606870.00	2376440.00	0.00038425	0.00001035	0.00000918	0.00000117	0.00052101	0.00001101	0.00000984	0.00000117
607370.00	2376440.00	0.00038748	0.00001031	0.00000916	0.00000115	0.00050598	0.00001088	0.00000971	0.00000118
607870.00	2376440.00	0.00039561	0.00001027	0.00000916	0.0000011	0.00048664	0.0000107	0.00000956	0.00000115
608370.00	2376440.00	0.0004166	0.00001025	0.00000922	0.00000103	0.00044295	0.00001037	0.00000928	0.00000109
608870.00	2376440.00	0.00025924	0.00000939	0.00000842	0.00000097	0.00051384	0.00001091	0.00000988	0.00000103
609370.00	2376440.00	0.00035984	0.00000978	0.0000089	0.00000088	0.00053007	0.00001062	0.00000968	0.00000094
609870.00	2376440.00	0.00031823	0.00000948	0.00000865	0.00000082	0.00057069	0.00001078	0.0000099	0.00000087
610370.00	2376440.00	0.00040947	0.00000979	0.00000902	0.00000077	0.00043768	0.00000987	0.00000907	0.00000081
610870.00	2376440.00	0.00034968	0.00000946	0.00000872	0.00000074	0.00053049	0.00001032	0.00000955	0.00000077
611370.00	2376440.00	0.00021783	0.00000869	0.00000792	0.00000077	0.00032221	0.0000096	0.00000879	0.00000081
611870.00	2376440.00	0.00021908	0.00000864	0.00000791	0.00000073	0.00035829	0.00000963	0.00000887	0.00000076
612370.00	2376440.00	0.00022121	0.0000086	0.00000788	0.00000072	0.00038282	0.00000968	0.00000893	0.00000075
612870.00	2376440.00	0.00036779	0.00000929	0.00000858	0.00000071	0.00047073	0.00000974	0.00000902	0.00000072
613370.00	2376440.00	0.00029349	0.00000888	0.00000817	0.00000071	0.00054494	0.00001015	0.00000942	0.00000073
613870.00	2376440.00	0.00039514	0.00000927	0.00000856	0.00000071	0.00040051	0.00000924	0.00000852	0.00000073
614370.00	2376440.00	0.00015512	0.00000751	0.00000682	0.00000069	0.00017227	0.00000769	0.00000699	0.0000007
614870.00	2376440.00	0.00014828	0.00000738	0.00000669	0.00000069	0.0001656	0.00000756	0.00000686	0.0000007
615370.00	2376440.00	0.00034825	0.00000863	0.00000791	0.00000072	0.00023928	0.00000815	0.00000742	0.00000073
615870.00	2376440.00	0.00029942	0.00000864	0.00000791	0.00000073	0.00059229	0.0000101	0.00000935	0.00000075
616370.00	2376440.00	0.00022973	0.0000082	0.00000746	0.00000074	0.00047392	0.00000958	0.00000882	0.00000076
616870.00	2376440.00	0.00021181	0.00000803	0.00000729	0.00000074	0.00040475	0.00000922	0.00000846	0.00000076
617370.00	2376440.00	0.0001911	0.00000784	0.00000709	0.00000075	0.00030687	0.00000873	0.00000796	0.00000077
617870.00	2376440.00	0.00019007	0.00000779	0.00000704	0.00000076	0.00029978	0.0000087	0.00000792	0.00000078
618370.00	2376440.00	0.00018908	0.00000774	0.00000699	0.00000075	0.00029985	0.00000865	0.00000788	0.00000078
618870.00	2376440.00	0.00019233	0.00000777	0.00000701	0.00000076	0.00030908	0.00000873	0.00000794	0.00000079
619370.00	2376440.00	0.00019143	0.00000772	0.00000697	0.00000075	0.00031018	0.0000087	0.00000791	0.00000079
619870.00	2376440.00	0.00019042	0.00000767	0.00000692	0.00000075	0.00030987	0.00000865	0.00000787	0.00000078
590370.00	2376940.00	0.00021501	0.00001095	0.00000938	0.00000157	0.00024853	0.00001181	0.00001017	0.00000164
590870.00	2376940.00	0.00023686	0.0000107	0.00000926	0.00000144	0.00028167	0.00001163	0.0000101	0.00000153
591370.00	2376940.00	0.00032357	0.00001091	0.0000096	0.00000131	0.00032304	0.00001164	0.00001023	0.00000141
591870.00	2376940.00	0.00041653	0.00001095	0.00000975	0.0000012	0.00033843	0.00001118	0.0000099	0.00000129
592370.00	2376940.00	0.00058106	0.0000114	0.00001029	0.0000011	0.00036035	0.00001081	0.00000964	0.00000117
592870.00	2376940.00	0.00077226	0.00001217	0.00001114	0.00000103	0.00040158	0.0000106	0.00000952	0.00000108

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2376940.00	0.00086439	0.00001245	0.00001146	0.00000098	0.00042478	0.00001042	0.00000941	0.00000101
593870.00	2376940.00	0.00099318	0.00001306	0.0000121	0.00000096	0.00045841	0.0000104	0.00000943	0.00000097
594370.00	2376940.00	0.00106692	0.00001355	0.00001259	0.00000096	0.00050087	0.00001056	0.00000961	0.00000095
594870.00	2376940.00	0.00109369	0.00001391	0.00001294	0.00000097	0.00052801	0.00001075	0.0000098	0.00000095
595370.00	2376940.00	0.00115893	0.00001468	0.00001369	0.00000099	0.00057309	0.00001126	0.00001029	0.00000097
595870.00	2376940.00	0.00119572	0.00001543	0.00001441	0.00000102	0.00062332	0.00001193	0.00001093	0.000001
596370.00	2376940.00	0.00118956	0.00001596	0.0000149	0.00000106	0.00063644	0.00001251	0.00001147	0.00000104
596870.00	2376940.00	0.00121147	0.00001669	0.0000156	0.0000011	0.00068405	0.00001333	0.00001225	0.00000108
597370.00	2376940.00	0.00121676	0.00001726	0.00001614	0.00000112	0.00073076	0.00001411	0.00001299	0.00000112
597870.00	2376940.00	0.00086267	0.00001573	0.00001459	0.00000114	0.00069073	0.00001442	0.00001327	0.00000115
598370.00	2376940.00	0.00086214	0.00001606	0.00001493	0.00000113	0.00071543	0.00001498	0.00001382	0.00000117
598870.00	2376940.00	0.00084881	0.00001612	0.00001503	0.0000011	0.00069195	0.00001518	0.00001402	0.00000116
599370.00	2376940.00	0.0008253	0.00001599	0.00001494	0.00000105	0.00070274	0.00001536	0.00001423	0.00000112
599870.00	2376940.00	0.0007887	0.00001561	0.00001462	0.00000099	0.00069127	0.00001524	0.00001418	0.00000107
600370.00	2376940.00	0.00074057	0.00001505	0.00001413	0.00000092	0.00068451	0.00001501	0.00001401	0.00000101
600870.00	2376940.00	0.00069233	0.0000144	0.00001354	0.00000086	0.0006492	0.00001448	0.00001354	0.00000094
601370.00	2376940.00	0.00045284	0.00001289	0.00001207	0.00000082	0.00092	0.00001577	0.00001488	0.00000089
601870.00	2376940.00	0.00034199	0.00001182	0.00001103	0.00000079	0.00073874	0.00001462	0.00001378	0.00000085
602370.00	2376940.00	0.00035584	0.00001149	0.00001074	0.00000075	0.00075257	0.00001412	0.00001332	0.0000008
602870.00	2376940.00	0.00046732	0.00001167	0.00001095	0.00000073	0.00065692	0.00001293	0.00001218	0.00000075
603370.00	2376940.00	0.00042793	0.00001114	0.00001041	0.00000073	0.00065448	0.00001256	0.00001183	0.00000074
603870.00	2376940.00	0.00038333	0.00001065	0.0000099	0.00000075	0.0006596	0.00001231	0.00001156	0.00000074
604370.00	2376940.00	0.00024484	0.00000966	0.00000884	0.00000082	0.00042577	0.00001119	0.00001039	0.0000008
604870.00	2376940.00	0.00031814	0.00000998	0.00000911	0.00000087	0.00062958	0.00001178	0.00001096	0.00000083
605370.00	2376940.00	0.00025966	0.00000957	0.00000862	0.00000095	0.00051675	0.00001123	0.00001033	0.00000091
605870.00	2376940.00	0.0003113	0.00000982	0.0000088	0.00000102	0.00059703	0.00001138	0.00001041	0.00000098
606370.00	2376940.00	0.00036014	0.00001004	0.00000895	0.00000109	0.00055359	0.00001101	0.00000996	0.00000105
606870.00	2376940.00	0.00040699	0.00001022	0.00000909	0.00000113	0.00047142	0.0000105	0.00000939	0.00000111
607370.00	2376940.00	0.00022745	0.00000925	0.0000081	0.00000116	0.0003657	0.00001034	0.00000917	0.00000117
607870.00	2376940.00	0.0002679	0.00000946	0.00000834	0.00000112	0.00053602	0.000011	0.00000985	0.00000115
608370.00	2376940.00	0.00026919	0.00000939	0.00000832	0.00000107	0.00053899	0.00001093	0.00000982	0.00000112
608870.00	2376940.00	0.00038278	0.00000984	0.00000885	0.00000099	0.00047695	0.0000103	0.00000925	0.00000105
609370.00	2376940.00	0.00022526	0.00000892	0.00000797	0.00000095	0.00036588	0.00000999	0.00000899	0.00000101
609870.00	2376940.00	0.00041814	0.00000975	0.00000891	0.00000084	0.00039694	0.00000962	0.00000873	0.0000009
610370.00	2376940.00	0.00040767	0.00000961	0.00000883	0.00000079	0.00041853	0.00000963	0.0000088	0.00000083
610870.00	2376940.00	0.00034065	0.00000925	0.0000085	0.00000075	0.00052488	0.00001014	0.00000936	0.00000079
611370.00	2376940.00	0.00023877	0.00000867	0.00000793	0.00000073	0.00046025	0.00000999	0.00000922	0.00000077
611870.00	2376940.00	0.00022603	0.00000853	0.00000781	0.00000072	0.00040578	0.00000967	0.00000892	0.00000075
612370.00	2376940.00	0.00029362	0.00000883	0.00000814	0.00000069	0.00054722	0.00001011	0.00000939	0.00000072
612870.00	2376940.00	0.0002586	0.0000086	0.00000791	0.0000007	0.00052513	0.00001002	0.0000093	0.00000072
613370.00	2376940.00	0.0004096	0.0000092	0.00000852	0.00000068	0.00035359	0.00000888	0.00000818	0.0000007
613870.00	2376940.00	0.00036778	0.000009	0.00000831	0.00000069	0.00043785	0.00000929	0.00000858	0.00000071
614370.00	2376940.00	0.00015488	0.00000735	0.00000669	0.00000067	0.00017216	0.00000753	0.00000686	0.00000068
614870.00	2376940.00	0.00015151	0.00000729	0.00000662	0.00000067	0.00016841	0.00000747	0.00000679	0.00000068
615370.00	2376940.00	0.00028457	0.00000812	0.00000743	0.00000069	0.00021878	0.00000788	0.00000718	0.0000007
615870.00	2376940.00	0.00051147	0.00000952	0.00000881	0.00000071	0.00041535	0.0000089	0.00000818	0.00000072
616370.00	2376940.00	0.00021176	0.00000795	0.00000722	0.00000072	0.00040376	0.00000911	0.00000837	0.00000074
616870.00	2376940.00	0.000194	0.00000778	0.00000705	0.00000073	0.00032464	0.0000087	0.00000795	0.00000075
617370.00	2376940.00	0.00018955	0.00000769	0.00000696	0.00000073	0.0003066	0.00000857	0.00000782	0.00000075
617870.00	2376940.00	0.00018667	0.00000763	0.00000689	0.00000074	0.00029459	0.00000849	0.00000773	0.00000076
618370.00	2376940.00	0.00018727	0.00000761	0.00000686	0.00000074	0.00029502	0.00000849	0.00000772	0.00000077
618870.00	2376940.00	0.00018931	0.00000762	0.00000687	0.00000075	0.00030273	0.00000856	0.00000777	0.00000078
619370.00	2376940.00	0.00018794	0.00000756	0.00000682	0.00000074	0.00030132	0.0000085	0.00000772	0.00000078
619870.00	2376940.00	0.00018707	0.00000751	0.00000678	0.00000074	0.00030138	0.00000846	0.00000769	0.00000077
590370.00	2377440.00	0.00021628	0.00001071	0.00000919	0.00000152	0.00025272	0.00001155	0.00000996	0.00000159
590870.00	2377440.00	0.00022493	0.00001032	0.00000892	0.0000014	0.00026853	0.00001121	0.00000972	0.00000149
591370.00	2377440.00	0.00030079	0.0000105	0.00000923	0.00000128	0.00031248	0.00001127	0.00000991	0.00000137
591870.00	2377440.00	0.00044145	0.00001086	0.00000969	0.00000117	0.00033708	0.00001092	0.00000967	0.00000125
592370.00	2377440.00	0.00068257	0.00001179	0.00001071	0.00000108	0.0003782	0.00001069	0.00000954	0.00000115
592870.00	2377440.00	0.00073297	0.00001173	0.00001072	0.00000101	0.00038566	0.0000103	0.00000925	0.00000105
593370.00	2377440.00	0.00098192	0.00001291	0.00001195	0.00000096	0.00045228	0.00001039	0.0000094	0.00000099
593870.00	2377440.00	0.00099516	0.00001288	0.00001194	0.00000094	0.00046481	0.00001022	0.00000927	0.00000094
594370.00	2377440.00	0.00103164	0.00001313	0.0000122	0.00000093	0.00048528	0.00001024	0.00000931	0.00000092
594870.00	2377440.00	0.00109077	0.00001365	0.00001271	0.00000094	0.00052533	0.00001053	0.00000961	0.00000092
595370.00	2377440.00	0.00112053	0.00001416	0.00001319	0.00000096	0.00055095	0.00001087	0.00000993	0.00000094
595870.00	2377440.00	0.00115133	0.00001482	0.00001383	0.00000099	0.00059174	0.00001144	0.00001048	0.00000097
596370.00	2377440.00	0.00115663	0.00001539	0.00001436	0.00000103	0.00061428	0.00001203	0.00001103	0.000001
596870.00	2377440.00	0.00117609	0.00001607	0.00001501	0.00000106	0.00065472	0.00001278	0.00001173	0.00000104
597370.00	2377440.00	0.0011861	0.00001666	0.00001557	0.00000109	0.00070535	0.00001356	0.00001248	0.00000109
597870.00	2377440.00	0.00084204	0.0000152	0.00001409	0.00000111	0.00066507	0.00001388	0.00001276	0.00000112

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2377440.00	0.00084111	0.00001552	0.00001442	0.00000111	0.00067061	0.00001433	0.00001319	0.00000114
598870.00	2377440.00	0.00083381	0.0000157	0.00001462	0.00000108	0.00068679	0.00001473	0.0000136	0.00000113
599370.00	2377440.00	0.00081468	0.00001565	0.00001462	0.00000104	0.00070235	0.00001503	0.00001392	0.00000111
599870.00	2377440.00	0.00078323	0.00001537	0.00001438	0.00000098	0.00069613	0.00001501	0.00001395	0.00000106
600370.00	2377440.00	0.00074222	0.00001489	0.00001396	0.00000092	0.0006758	0.00001475	0.00001374	0.000001
600870.00	2377440.00	0.00069659	0.0000143	0.00001343	0.00000086	0.00064563	0.0000143	0.00001336	0.00000094
601370.00	2377440.00	0.00046479	0.00001287	0.00001205	0.00000082	0.00093027	0.00001568	0.00001478	0.00000089
601870.00	2377440.00	0.00041084	0.00001216	0.00001138	0.00000078	0.00086621	0.00001499	0.00001415	0.00000084
602370.00	2377440.00	0.00030045	0.00001107	0.00001032	0.00000075	0.00058567	0.00001336	0.00001255	0.00000081
602870.00	2377440.00	0.0003793	0.00001117	0.00001045	0.00000072	0.0007296	0.00001339	0.00001264	0.00000076
603370.00	2377440.00	0.00035182	0.00001068	0.00000997	0.00000071	0.00069655	0.00001285	0.00001212	0.00000073
603870.00	2377440.00	0.00038803	0.00001057	0.00000985	0.00000072	0.00064988	0.00001216	0.00001144	0.00000072
604370.00	2377440.00	0.00020072	0.00000851	0.00000768	0.00000083	0.00030866	0.00000964	0.00000879	0.00000085
604870.00	2377440.00	0.00042183	0.00001032	0.00000953	0.0000008	0.00054819	0.00001103	0.00001027	0.00000076
605370.00	2377440.00	0.00033478	0.0000098	0.00000893	0.00000087	0.00060619	0.0000113	0.00001047	0.00000083
605870.00	2377440.00	0.00018903	0.00000818	0.00000716	0.00000102	0.00028565	0.0000091	0.00000809	0.000001
606370.00	2377440.00	0.00022576	0.00000908	0.00000804	0.00000104	0.00036771	0.00001021	0.0000092	0.000001
606870.00	2377440.00	0.00027251	0.00000936	0.00000828	0.00000108	0.00054698	0.00001091	0.00000986	0.00000105
607370.00	2377440.00	0.00018398	0.00000808	0.00000693	0.00000116	0.00027355	0.00000892	0.00000775	0.00000117
607870.00	2377440.00	0.00041128	0.00000995	0.00000884	0.00000111	0.00041636	0.00000993	0.00000881	0.00000112
608370.00	2377440.00	0.00027844	0.00000928	0.0000082	0.00000108	0.00054593	0.00001075	0.00000963	0.00000112
608870.00	2377440.00	0.00018132	0.00000791	0.00000683	0.00000108	0.00026666	0.00000875	0.0000076	0.00000115
609370.00	2377440.00	0.00027877	0.0000091	0.00000814	0.00000096	0.000546	0.00001056	0.00000954	0.00000102
609870.00	2377440.00	0.00039487	0.00000952	0.00000864	0.00000088	0.00042317	0.00000964	0.00000871	0.00000094
610370.00	2377440.00	0.00017809	0.00000763	0.00000673	0.0000009	0.0002607	0.00000845	0.00000748	0.00000097
610870.00	2377440.00	0.00039937	0.00000933	0.00000857	0.00000076	0.0004031	0.00000932	0.00000851	0.0000008
611370.00	2377440.00	0.0002461	0.00000856	0.00000782	0.00000074	0.0004914	0.00000995	0.00000917	0.00000078
611870.00	2377440.00	0.00017452	0.00000741	0.00000664	0.00000077	0.00025557	0.00000819	0.00000736	0.00000082
612370.00	2377440.00	0.00038559	0.00000907	0.00000839	0.00000068	0.00041697	0.00000916	0.00000846	0.0000007
612870.00	2377440.00	0.00023597	0.00000832	0.00000764	0.00000068	0.00046798	0.00000963	0.00000892	0.00000071
613370.00	2377440.00	0.00016879	0.0000072	0.00000648	0.00000073	0.00024914	0.00000794	0.00000718	0.00000077
613870.00	2377440.00	0.00021897	0.00000812	0.00000743	0.00000068	0.00041061	0.00000927	0.00000857	0.0000007
614370.00	2377440.00	0.00014738	0.00000709	0.00000644	0.00000064	0.00016433	0.00000725	0.0000066	0.00000065
614870.00	2377440.00	0.00015572	0.00000719	0.00000653	0.00000065	0.00017213	0.00000737	0.0000067	0.00000066
615370.00	2377440.00	0.00048169	0.0000091	0.00000843	0.00000068	0.00028297	0.00000811	0.00000743	0.00000069
615870.00	2377440.00	0.00046738	0.00000918	0.00000849	0.00000069	0.00046144	0.00000901	0.00000831	0.0000007
616370.00	2377440.00	0.00050289	0.00000927	0.00000858	0.00000069	0.00040309	0.00000864	0.00000794	0.0000007
616870.00	2377440.00	0.00019934	0.00000768	0.00000698	0.00000071	0.0003553	0.00000869	0.00000796	0.00000073
617370.00	2377440.00	0.00018599	0.00000754	0.00000682	0.00000072	0.00029289	0.00000837	0.00000763	0.00000074
617870.00	2377440.00	0.00018433	0.00000748	0.00000676	0.00000072	0.00028868	0.00000831	0.00000757	0.00000074
618370.00	2377440.00	0.00018638	0.00000749	0.00000676	0.00000073	0.00029267	0.00000836	0.0000076	0.00000076
618870.00	2377440.00	0.00018676	0.00000747	0.00000674	0.00000073	0.00029668	0.00000838	0.00000761	0.00000077
619370.00	2377440.00	0.00018537	0.00000742	0.00000669	0.00000073	0.00029528	0.00000832	0.00000756	0.00000076
619870.00	2377440.00	0.00018446	0.00000737	0.00000665	0.00000073	0.00029526	0.00000828	0.00000752	0.00000076
590370.00	2377940.00	0.00022436	0.00001059	0.00000913	0.00000147	0.0002656	0.00001144	0.0000099	0.00000154
590870.00	2377940.00	0.0002537	0.00001044	0.00000909	0.00000136	0.00029141	0.0000113	0.00000986	0.00000144
591370.00	2377940.00	0.00034047	0.00001053	0.00000929	0.00000124	0.00031725	0.00001105	0.00000972	0.00000133
591870.00	2377940.00	0.00052965	0.00001115	0.00001001	0.00000114	0.00035018	0.00001076	0.00000954	0.00000122
592370.00	2377940.00	0.00066974	0.00001151	0.00001046	0.00000105	0.00037121	0.00001042	0.00000931	0.00000112
592870.00	2377940.00	0.00088559	0.00001239	0.0000114	0.00000099	0.0004258	0.00001036	0.00000933	0.00000103
593370.00	2377940.00	0.00095902	0.00001259	0.00001165	0.00000094	0.00044329	0.00001014	0.00000917	0.00000097
593870.00	2377940.00	0.00102952	0.00001291	0.00001199	0.00000092	0.00047725	0.00001011	0.00000919	0.00000092
594370.00	2377940.00	0.0010588	0.00001309	0.00001218	0.00000091	0.00049857	0.00001014	0.00000923	0.0000009
594870.00	2377940.00	0.00107658	0.00001334	0.00001243	0.00000092	0.00051902	0.00001028	0.00000938	0.0000009
595370.00	2377940.00	0.0011334	0.000014	0.00001306	0.00000094	0.00056583	0.00001072	0.0000098	0.00000091
595870.00	2377940.00	0.00112446	0.00001435	0.00001339	0.00000096	0.00057627	0.00001107	0.00001013	0.00000094
596370.00	2377940.00	0.00114994	0.00001503	0.00001404	0.000001	0.0006213	0.00001174	0.00001077	0.00000097
596870.00	2377940.00	0.00116079	0.00001564	0.00001461	0.00000103	0.00067396	0.0000125	0.00001149	0.00000101
597370.00	2377940.00	0.00116675	0.00001621	0.00001515	0.00000106	0.00071906	0.00001325	0.0000122	0.00000105
597870.00	2377940.00	0.00116123	0.00001662	0.00001554	0.00000108	0.00074943	0.00001386	0.00001278	0.00000109
598370.00	2377940.00	0.00082395	0.00001506	0.00001398	0.00000108	0.00067333	0.00001393	0.00001282	0.00000111
598870.00	2377940.00	0.00082386	0.00001528	0.00001422	0.00000107	0.00065924	0.0000142	0.00001309	0.00000111
599370.00	2377940.00	0.00081079	0.0000153	0.00001427	0.00000103	0.00065548	0.00001441	0.00001332	0.00000109
599870.00	2377940.00	0.00078556	0.00001512	0.00001414	0.00000098	0.00065802	0.00001451	0.00001345	0.00000105
600370.00	2377940.00	0.00074717	0.00001469	0.00001376	0.00000092	0.00062949	0.00001426	0.00001325	0.000001
600870.00	2377940.00	0.00070305	0.00001412	0.00001326	0.00000086	0.00057849	0.00001375	0.0000128	0.00000094
601370.00	2377940.00	0.00046447	0.00001278	0.00001196	0.00000082	0.00095365	0.00001567	0.00001478	0.0000009
601870.00	2377940.00	0.00042116	0.00001214	0.00001136	0.00000078	0.00087788	0.00001493	0.00001409	0.00000084
602370.00	2377940.00	0.00038323	0.00001151	0.00001076	0.00000074	0.00075137	0.00001387	0.00001308	0.00000079
602870.00	2377940.00	0.00035935	0.00001101	0.00001029	0.00000071	0.00072946	0.00001337	0.00001262	0.00000075

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
603370.00	2377940.00	0.00029405	0.00001028	0.00000958	0.0000007	0.00061007	0.00001252	0.00001178	0.00000073
603870.00	2377940.00	0.00035325	0.00001031	0.00000962	0.0000007	0.00066904	0.00001225	0.00001155	0.00000071
604370.00	2377940.00	0.00023814	0.0000094	0.00000865	0.00000075	0.00037773	0.00001077	0.00001002	0.00000075
604870.00	2377940.00	0.00033573	0.00000977	0.00000902	0.00000075	0.00062323	0.00001145	0.00001072	0.00000073
605370.00	2377940.00	0.00031716	0.00000954	0.00000873	0.00000081	0.00060562	0.00001119	0.00001041	0.00000077
605870.00	2377940.00	0.00028663	0.0000093	0.00000842	0.00000088	0.00057776	0.00001097	0.00001013	0.00000084
606370.00	2377940.00	0.00033734	0.00000951	0.00000856	0.00000095	0.00055928	0.00001066	0.00000976	0.0000009
606870.00	2377940.00	0.00022957	0.0000089	0.00000787	0.00000103	0.00041187	0.00001015	0.00000916	0.000001
607370.00	2377940.00	0.00026369	0.00000909	0.00000802	0.00000107	0.00052748	0.00001058	0.00000953	0.00000105
607870.00	2377940.00	0.00021631	0.00000877	0.00000766	0.00000111	0.00033365	0.00000974	0.00000863	0.00000111
608370.00	2377940.00	0.00022455	0.0000088	0.00000771	0.00000109	0.0003863	0.00000993	0.00000881	0.00000111
608870.00	2377940.00	0.00024921	0.0000089	0.00000785	0.00000105	0.00049964	0.00001038	0.00000929	0.00000109
609370.00	2377940.00	0.00045557	0.0000099	0.00000891	0.00000099	0.00053595	0.00001019	0.00000916	0.00000104
609870.00	2377940.00	0.00021947	0.00000853	0.00000759	0.00000094	0.00036485	0.00000959	0.00000859	0.000001
610370.00	2377940.00	0.00023566	0.00000855	0.00000768	0.00000087	0.0004494	0.00000986	0.00000894	0.00000092
610870.00	2377940.00	0.00025024	0.00000854	0.00000774	0.00000081	0.00051311	0.00001004	0.00000918	0.00000086
611370.00	2377940.00	0.00039995	0.00000924	0.0000085	0.00000074	0.00058608	0.00001006	0.00000928	0.00000078
611870.00	2377940.00	0.00029167	0.00000861	0.0000079	0.00000071	0.00060296	0.00001019	0.00000944	0.00000075
612370.00	2377940.00	0.00023589	0.00000824	0.00000754	0.00000069	0.0004669	0.00000956	0.00000883	0.00000073
612870.00	2377940.00	0.00020539	0.00000798	0.00000729	0.00000069	0.00032288	0.00000885	0.00000813	0.00000072
613370.00	2377940.00	0.0002566	0.00000825	0.00000758	0.00000067	0.0005403	0.00000974	0.00000905	0.00000069
613870.00	2377940.00	0.00013111	0.00000552	0.00000481	0.00000071	0.00020697	0.00000619	0.00000544	0.00000075
614370.00	2377940.00	0.00032633	0.0000082	0.00000755	0.00000064	0.00024144	0.00000784	0.00000719	0.00000066
614870.00	2377940.00	0.00026039	0.00000776	0.00000712	0.00000064	0.00021997	0.00000766	0.000007	0.00000066
615370.00	2377940.00	0.00036302	0.00000834	0.00000768	0.00000065	0.00025608	0.00000784	0.00000718	0.00000067
615870.00	2377940.00	0.00030881	0.00000821	0.00000754	0.00000067	0.00046761	0.00000896	0.00000828	0.00000068
616370.00	2377940.00	0.00025304	0.00000789	0.00000722	0.00000068	0.00049213	0.00000912	0.00000843	0.00000069
616870.00	2377940.00	0.00021181	0.00000763	0.00000694	0.00000069	0.0004183	0.00000881	0.00000811	0.0000007
617370.00	2377940.00	0.00019913	0.00000751	0.00000682	0.00000069	0.00036999	0.00000856	0.00000785	0.00000071
617870.00	2377940.00	0.00018352	0.00000736	0.00000665	0.00000071	0.0002839	0.00000818	0.00000744	0.00000074
618370.00	2377940.00	0.00018315	0.00000731	0.00000661	0.0000007	0.00029914	0.00000816	0.00000744	0.00000072
618870.00	2377940.00	0.00019548	0.00000735	0.00000666	0.00000069	0.00036587	0.0000084	0.00000769	0.00000071
619370.00	2377940.00	0.00018266	0.00000723	0.00000653	0.0000007	0.00030407	0.00000809	0.00000738	0.00000071
619870.00	2377940.00	0.0001809	0.00000718	0.00000648	0.00000069	0.00029917	0.00000803	0.00000732	0.00000071
590370.00	2378440.00	0.00022046	0.0000103	0.00000888	0.00000143	0.00026143	0.00001112	0.00000962	0.00000149
590870.00	2378440.00	0.00032708	0.00001073	0.00000941	0.00000132	0.0003138	0.00001129	0.0000099	0.0000014
591370.00	2378440.00	0.0004818	0.00001113	0.00000992	0.00000121	0.00033954	0.00001097	0.00000968	0.00000129
591870.00	2378440.00	0.00064457	0.00001159	0.00001048	0.00000111	0.00036572	0.00001064	0.00000946	0.00000119
592370.00	2378440.00	0.0009466	0.00001291	0.00001188	0.00000103	0.0004452	0.00001066	0.00000956	0.00000109
592870.00	2378440.00	0.00101146	0.00001297	0.000012	0.00000097	0.00046744	0.0000104	0.00000939	0.00000101
593370.00	2378440.00	0.00103753	0.0000129	0.00001198	0.00000092	0.00048335	0.00001015	0.00000921	0.00000095
593870.00	2378440.00	0.00101237	0.00001263	0.00001174	0.00000089	0.000474	0.00000989	0.00000898	0.0000009
594370.00	2378440.00	0.00111498	0.00001325	0.00001236	0.00000089	0.00052993	0.00001013	0.00000925	0.00000088
594870.00	2378440.00	0.00108708	0.0000132	0.00001231	0.00000089	0.00052314	0.0000101	0.00000923	0.00000088
595370.00	2378440.00	0.00112256	0.0000137	0.00001279	0.00000091	0.00056469	0.00001048	0.00000959	0.00000089
595870.00	2378440.00	0.00115742	0.00001435	0.00001341	0.00000094	0.00064916	0.00001114	0.00001023	0.00000091
596370.00	2378440.00	0.00113439	0.00001464	0.00001367	0.00000097	0.00062026	0.00001144	0.00001049	0.00000094
596870.00	2378440.00	0.00113548	0.00001514	0.00001414	0.000001	0.00065874	0.00001208	0.0000111	0.00000098
597370.00	2378440.00	0.00111115	0.00001568	0.00001465	0.00000103	0.00082184	0.00001341	0.00001239	0.00000102
597870.00	2378440.00	0.00113543	0.00001607	0.00001502	0.00000105	0.00070603	0.00001327	0.00001222	0.00000105
598370.00	2378440.00	0.00080426	0.00001456	0.00001351	0.00000106	0.00064595	0.00001337	0.00001229	0.00000108
598870.00	2378440.00	0.00079603	0.00001473	0.00001368	0.00000105	0.00061289	0.00001355	0.00001246	0.00000109
599370.00	2378440.00	0.00077784	0.00001475	0.00001373	0.00000102	0.00059207	0.00001371	0.00001264	0.00000108
599870.00	2378440.00	0.00076583	0.0000147	0.00001372	0.00000098	0.000601	0.00001389	0.00001285	0.00000104
600370.00	2378440.00	0.00074225	0.00001444	0.00001352	0.00000092	0.00059856	0.00001385	0.00001285	0.000001
600870.00	2378440.00	0.00068699	0.00001385	0.00001298	0.00000087	0.00054764	0.00001338	0.00001243	0.00000094
601370.00	2378440.00	0.00047357	0.00001273	0.0000119	0.00000082	0.00096275	0.00001556	0.00001467	0.0000009
601870.00	2378440.00	0.00038452	0.00001186	0.00001108	0.00000078	0.00086709	0.00001487	0.00001402	0.00000085
602370.00	2378440.00	0.0003961	0.00001152	0.00001078	0.00000074	0.00077864	0.00001391	0.00001312	0.0000008
602870.00	2378440.00	0.00035451	0.00001092	0.00001021	0.00000071	0.00072797	0.00001331	0.00001256	0.00000076
603370.00	2378440.00	0.00036041	0.0000106	0.00000992	0.00000069	0.00069865	0.00001272	0.000012	0.00000072
603870.00	2378440.00	0.00027124	0.00000978	0.00000909	0.00000069	0.00054266	0.00001178	0.00001107	0.00000071
604370.00	2378440.00	0.00035158	0.00000996	0.00000927	0.00000069	0.00063898	0.00001169	0.000011	0.00000069
604870.00	2378440.00	0.00030789	0.00000952	0.0000088	0.00000071	0.00061765	0.00001138	0.00001068	0.0000007
605370.00	2378440.00	0.00037296	0.00000968	0.00000893	0.00000075	0.00056809	0.00001076	0.00001004	0.00000072
605870.00	2378440.00	0.00034996	0.00000945	0.00000864	0.00000081	0.00056506	0.00001061	0.00000984	0.00000077
606370.00	2378440.00	0.0004214	0.00000969	0.00000882	0.00000087	0.0004402	0.00000975	0.00000893	0.00000083
606870.00	2378440.00	0.00038822	0.00000951	0.00000857	0.00000095	0.00047098	0.00000989	0.00000899	0.0000009
607370.00	2378440.00	0.00021592	0.00000864	0.00000759	0.00000105	0.00032672	0.00000961	0.00000858	0.00000103
607870.00	2378440.00	0.000226	0.00000867	0.0000076	0.00000106	0.0004066	0.00000986	0.00000881	0.00000105

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
608370.00	2378440.00	0.00040186	0.00000962	0.00000855	0.00000107	0.0005781	0.0000104	0.00000933	0.00000107
608870.00	2378440.00	0.00021144	0.00000849	0.00000742	0.00000107	0.00032853	0.00000944	0.00000834	0.0000011
609370.00	2378440.00	0.00034034	0.00000919	0.00000818	0.00000101	0.00060752	0.0000105	0.00000945	0.00000105
609870.00	2378440.00	0.00021026	0.00000834	0.00000737	0.00000098	0.00032663	0.00000928	0.00000825	0.00000103
610370.00	2378440.00	0.00020791	0.00000824	0.00000732	0.00000092	0.00031387	0.00000914	0.00000816	0.00000098
610870.00	2378440.00	0.00020747	0.00000816	0.00000729	0.00000088	0.00030559	0.00000906	0.00000812	0.00000094
611370.00	2378440.00	0.00029105	0.00000856	0.00000779	0.00000077	0.00059611	0.00001012	0.0000093	0.00000082
611870.00	2378440.00	0.00033224	0.00000869	0.00000797	0.00000072	0.00060718	0.00001001	0.00000925	0.00000076
612370.00	2378440.00	0.00020211	0.00000788	0.00000715	0.00000073	0.00029853	0.00000871	0.00000794	0.00000077
612870.00	2378440.00	0.00020039	0.0000078	0.00000711	0.0000007	0.00030029	0.00000862	0.00000789	0.00000073
613370.00	2378440.00	0.00022282	0.00000791	0.00000724	0.00000066	0.00042437	0.00000909	0.0000084	0.00000069
613870.00	2378440.00	0.00013948	0.00000591	0.00000521	0.0000007	0.0002142	0.00000659	0.00000584	0.00000074
614370.00	2378440.00	0.00016712	0.000007	0.0000063	0.00000069	0.00024508	0.0000077	0.00000697	0.00000073
614870.00	2378440.00	0.00020636	0.00000766	0.00000701	0.00000065	0.00037261	0.00000868	0.00000801	0.00000067
615370.00	2378440.00	0.00029406	0.00000806	0.00000741	0.00000065	0.00048144	0.00000896	0.0000083	0.00000066
615870.00	2378440.00	0.00020002	0.00000753	0.00000687	0.00000066	0.00035745	0.00000851	0.00000783	0.00000068
616370.00	2378440.00	0.00028862	0.00000793	0.00000728	0.00000065	0.00047105	0.00000881	0.00000814	0.00000067
616870.00	2378440.00	0.00020968	0.00000749	0.00000682	0.00000067	0.00041119	0.00000864	0.00000796	0.00000068
617370.00	2378440.00	0.00018525	0.00000731	0.00000661	0.0000007	0.00028486	0.00000812	0.00000739	0.00000073
617870.00	2378440.00	0.00025627	0.00000763	0.00000697	0.00000067	0.00047716	0.00000874	0.00000806	0.00000068
618370.00	2378440.00	0.00022969	0.00000746	0.00000679	0.00000067	0.0004624	0.00000868	0.000008	0.00000069
618870.00	2378440.00	0.00025404	0.00000752	0.00000685	0.00000067	0.00043537	0.00000844	0.00000776	0.00000068
619370.00	2378440.00	0.00025904	0.00000751	0.00000684	0.00000067	0.00043255	0.00000838	0.0000077	0.00000068
619870.00	2378440.00	0.0002586	0.00000747	0.0000068	0.00000067	0.00043158	0.00000834	0.00000765	0.00000068
590370.00	2378940.00	0.00024057	0.00001034	0.00000896	0.00000138	0.0002791	0.00001114	0.00000969	0.00000145
590870.00	2378940.00	0.00026673	0.0000101	0.00000882	0.00000128	0.00029317	0.00001086	0.0000095	0.00000136
591370.00	2378940.00	0.0002897	0.00000976	0.00000858	0.00000118	0.00029559	0.00001039	0.00000913	0.00000126
591870.00	2378940.00	0.00044232	0.00001022	0.00000914	0.00000108	0.00032286	0.00001013	0.00000897	0.00000115
592370.00	2378940.00	0.00048156	0.00001005	0.00000905	0.000001	0.00032573	0.0000097	0.00000864	0.00000106
592870.00	2378940.00	0.00072179	0.00001112	0.00001018	0.00000094	0.00037684	0.00000967	0.00000869	0.00000098
593370.00	2378940.00	0.00100124	0.00001251	0.00001161	0.0000009	0.00046356	0.00000988	0.00000896	0.00000092
593870.00	2378940.00	0.00103194	0.00001258	0.0000117	0.00000087	0.0004831	0.00000978	0.0000089	0.00000088
594370.00	2378940.00	0.0010569	0.00001272	0.00001185	0.00000087	0.00050324	0.00000979	0.00000893	0.00000086
594870.00	2378940.00	0.00111361	0.00001319	0.00001232	0.00000087	0.00054727	0.00001005	0.00000919	0.00000086
595370.00	2378940.00	0.00116898	0.00001389	0.000013	0.00000089	0.00067846	0.00001089	0.00001002	0.00000087
595870.00	2378940.00	0.0011421	0.00001417	0.00001326	0.00000091	0.00075692	0.00001156	0.00001067	0.00000089
596370.00	2378940.00	0.00102439	0.00001411	0.00001317	0.00000094	0.00093698	0.00001287	0.00001195	0.00000092
596870.00	2378940.00	0.00101148	0.00001447	0.00001349	0.00000097	0.00093174	0.00001325	0.00001229	0.00000096
597370.00	2378940.00	0.00110966	0.00001512	0.00001412	0.000001	0.00065876	0.00001221	0.00001123	0.00000099
597870.00	2378940.00	0.00109608	0.00001541	0.00001439	0.00000102	0.00064311	0.00001253	0.0000115	0.00000102
598370.00	2378940.00	0.00078035	0.00001402	0.00001299	0.00000103	0.00059128	0.00001273	0.00001168	0.00000105
598870.00	2378940.00	0.00076736	0.0000142	0.00001317	0.00000103	0.00056546	0.00001295	0.00001189	0.00000106
599370.00	2378940.00	0.00075032	0.00001426	0.00001325	0.00000101	0.00055781	0.00001318	0.00001212	0.00000106
599870.00	2378940.00	0.00073291	0.00001421	0.00001324	0.00000097	0.00055493	0.00001333	0.00001229	0.00000103
600370.00	2378940.00	0.00070889	0.00001399	0.00001307	0.00000092	0.00054749	0.00001331	0.00001231	0.00000099
600870.00	2378940.00	0.00069916	0.00001377	0.0000129	0.00000087	0.00055183	0.00001321	0.00001227	0.00000094
601370.00	2378940.00	0.00032569	0.0000116	0.00001076	0.00000084	0.00055239	0.00001359	0.00001266	0.00000092
601870.00	2378940.00	0.00058778	0.00001274	0.00001196	0.00000077	0.000654	0.00001329	0.00001246	0.00000084
602370.00	2378940.00	0.00041575	0.00001155	0.00001082	0.00000074	0.00077848	0.00001378	0.00001299	0.0000008
602870.00	2378940.00	0.00036733	0.00001094	0.00001023	0.00000071	0.00073549	0.00001325	0.0000125	0.00000075
603370.00	2378940.00	0.00037371	0.00001062	0.00000994	0.00000068	0.00069697	0.00001263	0.00001191	0.00000072
603870.00	2378940.00	0.00035587	0.0000102	0.00000953	0.00000066	0.00066611	0.00001211	0.00001142	0.00000069
604370.00	2378940.00	0.00044677	0.00001033	0.00000967	0.00000066	0.0005325	0.00001093	0.00001026	0.00000067
604870.00	2378940.00	0.00029728	0.00000936	0.00000868	0.00000068	0.00060829	0.00001128	0.0000106	0.00000068
605370.00	2378940.00	0.0004087	0.00000972	0.00000901	0.0000007	0.00051855	0.00001035	0.00000967	0.00000068
605870.00	2378940.00	0.00033128	0.00000922	0.00000846	0.00000076	0.00057425	0.00001057	0.00000984	0.00000072
606370.00	2378940.00	0.00030786	0.00000901	0.00000819	0.00000082	0.00056506	0.00001042	0.00000964	0.00000078
606870.00	2378940.00	0.00026579	0.00000875	0.00000786	0.00000089	0.00053438	0.00001027	0.00000942	0.00000085
607370.00	2378940.00	0.00024907	0.00000863	0.00000767	0.00000096	0.00049865	0.00001008	0.00000916	0.00000092
607870.00	2378940.00	0.00022346	0.00000847	0.00000746	0.00000102	0.00040622	0.00000967	0.00000868	0.00000099
608370.00	2378940.00	0.00020918	0.00000835	0.0000073	0.00000105	0.0003314	0.00000931	0.00000826	0.00000105
608870.00	2378940.00	0.00024811	0.00000859	0.00000754	0.00000105	0.00050543	0.00001004	0.00000899	0.00000106
609370.00	2378940.00	0.00024866	0.00000854	0.00000752	0.00000103	0.00050775	0.00001001	0.00000895	0.00000105
609870.00	2378940.00	0.00020868	0.00000821	0.00000722	0.000001	0.00033414	0.00000917	0.00000813	0.00000104
610370.00	2378940.00	0.00020654	0.00000812	0.00000718	0.00000094	0.00032365	0.00000904	0.00000805	0.00000099
610870.00	2378940.00	0.00020353	0.00000801	0.00000712	0.00000089	0.00030699	0.00000888	0.00000794	0.00000094
611370.00	2378940.00	0.00020224	0.00000792	0.00000708	0.00000084	0.0002984	0.00000877	0.00000788	0.0000009
611870.00	2378940.00	0.00023957	0.00000807	0.00000732	0.00000075	0.0004869	0.00000947	0.00000867	0.0000008
612370.00	2378940.00	0.00021464	0.00000785	0.00000713	0.00000072	0.00038126	0.0000089	0.00000815	0.00000076
612870.00	2378940.00	0.0003871	0.00000869	0.00000802	0.00000067	0.00055388	0.0000094	0.0000087	0.0000007

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
613370.00	2378940.00	0.00019679	0.0000076	0.00000692	0.00000068	0.00029863	0.0000084	0.00000769	0.00000071
613870.00	2378940.00	0.00012857	0.00000533	0.00000464	0.00000069	0.00020142	0.00000598	0.00000524	0.00000074
614370.00	2378940.00	0.0002616	0.00000786	0.00000723	0.00000063	0.00049792	0.00000905	0.0000084	0.00000065
614870.00	2378940.00	0.00019119	0.00000742	0.00000676	0.00000066	0.00028456	0.0000082	0.0000075	0.00000069
615370.00	2378940.00	0.00026979	0.00000781	0.00000718	0.00000063	0.00048828	0.00000889	0.00000824	0.00000065
615870.00	2378940.00	0.00023063	0.00000757	0.00000693	0.00000064	0.00046285	0.0000088	0.00000815	0.00000065
616370.00	2378940.00	0.00027807	0.00000775	0.00000712	0.00000064	0.00046761	0.00000867	0.00000802	0.00000065
616870.00	2378940.00	0.00018417	0.00000721	0.00000655	0.00000066	0.00029415	0.00000801	0.00000733	0.00000068
617370.00	2378940.00	0.00032577	0.00000788	0.00000723	0.00000064	0.00040191	0.0000082	0.00000754	0.00000065
617870.00	2378940.00	0.00023873	0.00000743	0.00000677	0.00000065	0.00046614	0.00000859	0.00000793	0.00000066
618370.00	2378940.00	0.00024605	0.00000742	0.00000676	0.00000065	0.00046647	0.00000853	0.00000787	0.00000067
618870.00	2378940.00	0.00024551	0.00000736	0.00000671	0.00000066	0.00043156	0.00000831	0.00000764	0.00000067
619370.00	2378940.00	0.00025516	0.00000737	0.00000671	0.00000066	0.00042466	0.00000822	0.00000755	0.00000067
619870.00	2378940.00	0.00025454	0.00000733	0.00000667	0.00000066	0.00042326	0.00000817	0.0000075	0.00000067
590370.00	2379440.00	0.00020022	0.00000958	0.00000822	0.00000136	0.00023595	0.00001031	0.00000889	0.00000143
590870.00	2379440.00	0.00020376	0.00000921	0.00000795	0.00000125	0.00024338	0.00000997	0.00000864	0.00000133
591370.00	2379440.00	0.00021622	0.00000895	0.00000781	0.00000114	0.00025716	0.00000973	0.00000851	0.00000122
591870.00	2379440.00	0.00019783	0.00000828	0.00000725	0.00000104	0.00023728	0.00000899	0.00000788	0.00000111
592370.00	2379440.00	0.00034271	0.00000906	0.00000809	0.00000097	0.00029266	0.00000926	0.00000824	0.00000103
592870.00	2379440.00	0.00067237	0.00001066	0.00000974	0.00000092	0.00035941	0.00000936	0.00000841	0.00000096
593370.00	2379440.00	0.0009464	0.00001202	0.00001114	0.00000088	0.00044171	0.00000958	0.00000868	0.0000009
593870.00	2379440.00	0.00121056	0.00001359	0.00001273	0.00000086	0.00061407	0.00001037	0.0000095	0.00000087
594370.00	2379440.00	0.00109107	0.00001277	0.00001192	0.00000085	0.00052302	0.00000974	0.00000889	0.00000084
594870.00	2379440.00	0.0011156	0.00001304	0.00001219	0.00000085	0.00055828	0.00000993	0.00000909	0.00000084
595370.00	2379440.00	0.00113458	0.00001362	0.00001275	0.00000087	0.00076435	0.00001115	0.0000103	0.00000085
595870.00	2379440.00	0.00107608	0.00001329	0.00001241	0.00000089	0.00055842	0.00001023	0.00000937	0.00000086
596370.00	2379440.00	0.00106482	0.00001361	0.0000127	0.00000091	0.00056359	0.00001057	0.00000969	0.00000089
596870.00	2379440.00	0.00104406	0.00001389	0.00001295	0.00000094	0.00055604	0.00001092	0.00001	0.00000092
597370.00	2379440.00	0.00108025	0.0000146	0.00001363	0.00000097	0.0006306	0.00001174	0.00001078	0.00000096
597870.00	2379440.00	0.00105727	0.00001482	0.00001383	0.00000099	0.00059269	0.00001197	0.00001098	0.00000099
598370.00	2379440.00	0.00073488	0.00001336	0.00001236	0.00000101	0.00052214	0.00001201	0.00001099	0.00000102
598870.00	2379440.00	0.00071809	0.00001353	0.00001252	0.00000101	0.00051295	0.0000123	0.00001126	0.00000104
599370.00	2379440.00	0.00071513	0.00001372	0.00001273	0.00000099	0.00052119	0.00001264	0.0000116	0.00000104
599870.00	2379440.00	0.00071027	0.0000138	0.00001284	0.00000096	0.00053009	0.00001288	0.00001186	0.00000102
600370.00	2379440.00	0.0006989	0.00001371	0.0000128	0.00000092	0.00053414	0.00001298	0.00001199	0.00000099
600870.00	2379440.00	0.00065921	0.00001333	0.00001246	0.00000087	0.00050916	0.00001277	0.00001183	0.00000094
601370.00	2379440.00	0.00048288	0.00001255	0.00001172	0.00000083	0.00098193	0.00001534	0.00001444	0.0000009
601870.00	2379440.00	0.0004601	0.0000121	0.00001132	0.00000078	0.00090519	0.00001465	0.00001381	0.00000085
602370.00	2379440.00	0.00029546	0.00001072	0.00000997	0.00000075	0.00051474	0.00001263	0.00001181	0.00000082
602870.00	2379440.00	0.00032152	0.00001061	0.0000099	0.00000071	0.00066436	0.00001294	0.00001218	0.00000076
603370.00	2379440.00	0.00028335	0.00001005	0.00000936	0.00000068	0.0005545	0.00001208	0.00001135	0.00000073
603870.00	2379440.00	0.00031358	0.00000992	0.00000926	0.00000066	0.00064968	0.00001208	0.00001139	0.00000069
604370.00	2379440.00	0.00027825	0.00000943	0.00000878	0.00000065	0.00057679	0.00001144	0.00001077	0.00000067
604870.00	2379440.00	0.00027656	0.00000917	0.00000851	0.00000066	0.00057564	0.00001111	0.00001044	0.00000066
605370.00	2379440.00	0.00024306	0.00000877	0.00000809	0.00000069	0.00047704	0.00001043	0.00000975	0.00000068
605870.00	2379440.00	0.00028239	0.00000885	0.00000813	0.00000071	0.0005698	0.00001054	0.00000985	0.00000069
606370.00	2379440.00	0.00037282	0.00000918	0.00000842	0.00000076	0.00050676	0.00000988	0.00000916	0.00000072
606870.00	2379440.00	0.00023544	0.00000841	0.00000758	0.00000084	0.00046251	0.00000984	0.00000905	0.00000079
607370.00	2379440.00	0.00022164	0.0000083	0.00000739	0.0000009	0.00040875	0.00000954	0.00000867	0.00000086
607870.00	2379440.00	0.00029691	0.00000869	0.00000773	0.00000095	0.00052106	0.00000984	0.00000892	0.00000092
608370.00	2379440.00	0.00039644	0.00000923	0.00000823	0.00000099	0.00055794	0.00000993	0.00000896	0.00000097
608870.00	2379440.00	0.00022398	0.00000828	0.00000725	0.00000103	0.00041955	0.00000949	0.00000846	0.00000102
609370.00	2379440.00	0.0004221	0.00000929	0.00000828	0.00000102	0.00051729	0.00000965	0.00000862	0.00000103
609870.00	2379440.00	0.00027477	0.00000849	0.0000075	0.00000099	0.00056086	0.00000999	0.00000897	0.00000102
610370.00	2379440.00	0.0003094	0.00000861	0.00000766	0.00000095	0.0005823	0.00000997	0.00000898	0.00000099
610870.00	2379440.00	0.00037405	0.00000885	0.00000796	0.00000089	0.00055608	0.00000968	0.00000874	0.00000094
611370.00	2379440.00	0.00025937	0.00000817	0.00000733	0.00000084	0.00053978	0.00000967	0.00000878	0.00000089
611870.00	2379440.00	0.0002406	0.00000797	0.00000719	0.00000078	0.00049308	0.00000938	0.00000855	0.00000083
612370.00	2379440.00	0.00019705	0.00000762	0.00000686	0.00000075	0.00029651	0.00000844	0.00000764	0.0000008
612870.00	2379440.00	0.00025282	0.00000788	0.00000719	0.00000069	0.00052847	0.00000934	0.00000861	0.00000073
613370.00	2379440.00	0.00019686	0.00000749	0.00000681	0.00000068	0.00030953	0.00000831	0.0000076	0.00000071
613870.00	2379440.00	0.00012697	0.00000524	0.00000454	0.00000069	0.00019857	0.00000588	0.00000513	0.00000074
614370.00	2379440.00	0.00015392	0.00000643	0.00000575	0.00000068	0.00022736	0.0000071	0.00000638	0.00000072
614870.00	2379440.00	0.00020882	0.00000741	0.00000679	0.00000062	0.00039068	0.00000848	0.00000783	0.00000065
615370.00	2379440.00	0.00019241	0.00000727	0.00000664	0.00000063	0.00031831	0.00000812	0.00000747	0.00000065
615870.00	2379440.00	0.0003689	0.00000804	0.00000743	0.00000061	0.00032141	0.00000776	0.00000713	0.00000062
616370.00	2379440.00	0.00018276	0.00000711	0.00000647	0.00000065	0.00027435	0.00000785	0.00000718	0.00000067
616870.00	2379440.00	0.00021205	0.00000726	0.00000663	0.00000063	0.00041935	0.0000084	0.00000776	0.00000064
617370.00	2379440.00	0.00020097	0.00000716	0.00000652	0.00000063	0.00038411	0.00000821	0.00000756	0.00000065
617870.00	2379440.00	0.00022774	0.00000725	0.00000662	0.00000063	0.00045197	0.00000842	0.00000777	0.00000065

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
618370.00	2379440.00	0.00017545	0.00000691	0.00000626	0.00000065	0.00027113	0.00000765	0.00000698	0.00000068
618870.00	2379440.00	0.00022548	0.00000715	0.00000651	0.00000064	0.00043044	0.00000822	0.00000757	0.00000065
619370.00	2379440.00	0.00025165	0.00000723	0.00000659	0.00000064	0.00041764	0.00000806	0.00000741	0.00000065
619870.00	2379440.00	0.00025084	0.00000719	0.00000655	0.00000064	0.00041581	0.00000802	0.00000736	0.00000065
590370.00	2379940.00	0.00020528	0.00000946	0.00000815	0.00000132	0.00024379	0.00001019	0.00000881	0.00000138
590870.00	2379940.00	0.00020253	0.000009	0.00000778	0.00000122	0.00024248	0.00000974	0.00000845	0.0000013
591370.00	2379940.00	0.00019615	0.0000085	0.00000739	0.00000111	0.00023562	0.00000923	0.00000804	0.00000119
591870.00	2379940.00	0.00018893	0.00000803	0.00000702	0.00000101	0.00022697	0.00000871	0.00000763	0.00000108
592370.00	2379940.00	0.00037209	0.00000907	0.00000812	0.00000095	0.00029533	0.00000911	0.0000081	0.000001
592870.00	2379940.00	0.00075344	0.00001096	0.00001006	0.0000009	0.00037893	0.00000933	0.00000839	0.00000094
593370.00	2379940.00	0.00094487	0.00001186	0.000011	0.00000086	0.00044027	0.00000941	0.00000852	0.00000088
593870.00	2379940.00	0.00111937	0.00001281	0.00001197	0.00000084	0.00053825	0.00000978	0.00000893	0.00000085
594370.00	2379940.00	0.00109148	0.00001262	0.00001179	0.00000083	0.00052911	0.00000961	0.00000878	0.00000082
594870.00	2379940.00	0.00057155	0.00001059	0.00000974	0.00000085	0.00126929	0.00001383	0.00001299	0.00000084
595370.00	2379940.00	0.0010673	0.00001274	0.00001189	0.00000084	0.00054097	0.00000973	0.00000891	0.00000082
595870.00	2379940.00	0.00104849	0.00001289	0.00001203	0.00000086	0.00054041	0.00000992	0.00000908	0.00000084
596370.00	2379940.00	0.00101729	0.00001304	0.00001215	0.00000089	0.00052635	0.00001012	0.00000926	0.00000086
596870.00	2379940.00	0.00099538	0.00001329	0.00001238	0.00000091	0.00051982	0.00001044	0.00000955	0.00000089
597370.00	2379940.00	0.00103274	0.00001397	0.00001302	0.00000094	0.00056549	0.0000111	0.00001017	0.00000093
597870.00	2379940.00	0.00103269	0.00001436	0.00001339	0.00000097	0.00057561	0.00001155	0.00001059	0.00000096
598370.00	2379940.00	0.00072477	0.00001299	0.00001201	0.00000098	0.0005157	0.00001164	0.00001065	0.00000099
598870.00	2379940.00	0.00073066	0.00001333	0.00001234	0.00000099	0.00052895	0.00001206	0.00001105	0.00000101
599370.00	2379940.00	0.000754	0.00001373	0.00001275	0.00000098	0.0005627	0.00001255	0.00001153	0.00000102
599870.00	2379940.00	0.00070047	0.00001348	0.00001253	0.00000095	0.00051857	0.00001252	0.00001151	0.00000101
600370.00	2379940.00	0.000691	0.00001345	0.00001253	0.00000091	0.00052176	0.00001265	0.00001167	0.00000098
600870.00	2379940.00	0.00065458	0.00001313	0.00001226	0.00000087	0.00050273	0.00001252	0.00001158	0.00000094
601370.00	2379940.00	0.00048952	0.00001245	0.00001162	0.00000083	0.00097664	0.00001512	0.00001422	0.0000009
601870.00	2379940.00	0.00046586	0.00001204	0.00001125	0.00000078	0.00092396	0.00001462	0.00001377	0.00000085
602370.00	2379940.00	0.00041074	0.00001137	0.00001063	0.00000074	0.00078059	0.00001361	0.00001281	0.0000008
602870.00	2379940.00	0.0003968	0.00001097	0.00001027	0.0000007	0.00073873	0.00001305	0.0000123	0.00000076
603370.00	2379940.00	0.00035652	0.00001043	0.00000975	0.00000067	0.00070165	0.00001257	0.00001185	0.00000072
603870.00	2379940.00	0.00045817	0.00001058	0.00000994	0.00000064	0.00056422	0.00001133	0.00001065	0.00000068
604370.00	2379940.00	0.00036103	0.00000982	0.00000918	0.00000063	0.0006296	0.00001145	0.0000108	0.00000066
604870.00	2379940.00	0.00024755	0.00000893	0.00000829	0.00000064	0.00048081	0.00001066	0.00001	0.00000066
605370.00	2379940.00	0.00023807	0.00000866	0.000008	0.00000066	0.00045777	0.00001027	0.00000961	0.00000066
605870.00	2379940.00	0.00027139	0.00000868	0.00000801	0.00000068	0.00055639	0.00001041	0.00000975	0.00000066
606370.00	2379940.00	0.00021571	0.00000822	0.00000749	0.00000073	0.00037698	0.00000948	0.00000877	0.00000071
606870.00	2379940.00	0.00020856	0.00000809	0.0000073	0.00000079	0.00034234	0.00000919	0.00000843	0.00000076
607370.00	2379940.00	0.00024715	0.00000829	0.00000745	0.00000084	0.00049772	0.00000974	0.00000894	0.0000008
607870.00	2379940.00	0.00031844	0.00000862	0.00000773	0.00000089	0.00050017	0.00000953	0.00000867	0.00000085
608370.00	2379940.00	0.00038183	0.00000886	0.00000792	0.00000094	0.00039265	0.00000885	0.00000795	0.00000091
608870.00	2379940.00	0.00026111	0.00000834	0.00000735	0.00000099	0.00053771	0.00000981	0.00000884	0.00000097
609370.00	2379940.00	0.00031503	0.00000861	0.00000761	0.000001	0.00057251	0.00000987	0.00000887	0.000001
609870.00	2379940.00	0.00022692	0.00000808	0.00000708	0.000001	0.00044042	0.00000934	0.00000832	0.00000102
610370.00	2379940.00	0.00019827	0.00000784	0.00000685	0.00000099	0.00029469	0.00000869	0.00000766	0.00000103
610870.00	2379940.00	0.00019694	0.00000776	0.00000681	0.00000094	0.00029375	0.0000086	0.00000761	0.00000099
611370.00	2379940.00	0.00047779	0.00000912	0.00000827	0.00000085	0.00041701	0.0000087	0.0000078	0.0000009
611870.00	2379940.00	0.00021107	0.0000077	0.00000688	0.00000082	0.0003768	0.00000876	0.00000789	0.00000086
612370.00	2379940.00	0.00024773	0.00000783	0.00000707	0.00000075	0.00051446	0.00000926	0.00000846	0.0000008
612870.00	2379940.00	0.00029403	0.00000799	0.00000729	0.0000007	0.00056839	0.00000934	0.0000086	0.00000074
613370.00	2379940.00	0.00035055	0.0000082	0.00000754	0.00000066	0.00055169	0.00000911	0.00000841	0.0000007
613870.00	2379940.00	0.00013475	0.00000561	0.00000491	0.0000007	0.00020564	0.00000626	0.00000551	0.00000075
614370.00	2379940.00	0.00015461	0.0000064	0.00000572	0.00000068	0.00022709	0.00000707	0.00000634	0.00000072
614870.00	2379940.00	0.0001963	0.00000722	0.0000066	0.00000062	0.0003357	0.00000811	0.00000746	0.00000065
615370.00	2379940.00	0.00031387	0.00000775	0.00000715	0.0000006	0.00042688	0.00000824	0.00000763	0.00000062
615870.00	2379940.00	0.00019652	0.00000714	0.00000653	0.00000061	0.00034956	0.00000807	0.00000744	0.00000063
616370.00	2379940.00	0.00030594	0.00000763	0.00000703	0.0000006	0.00042436	0.00000816	0.00000754	0.00000061
616870.00	2379940.00	0.00018874	0.00000701	0.0000064	0.00000062	0.00032553	0.00000788	0.00000724	0.00000063
617370.00	2379940.00	0.0002233	0.00000716	0.00000654	0.00000061	0.00044381	0.00000831	0.00000769	0.00000063
617870.00	2379940.00	0.00017722	0.00000686	0.00000623	0.00000063	0.00028036	0.0000076	0.00000696	0.00000065
618370.00	2379940.00	0.00017691	0.00000682	0.00000619	0.00000063	0.00028648	0.00000758	0.00000694	0.00000065
618870.00	2379940.00	0.00019434	0.00000688	0.00000626	0.00000063	0.00037135	0.0000079	0.00000726	0.00000064
619370.00	2379940.00	0.0001781	0.00000675	0.00000612	0.00000063	0.00030407	0.00000757	0.00000692	0.00000065
619870.00	2379940.00	0.00024297	0.00000704	0.00000641	0.00000063	0.0004103	0.00000788	0.00000724	0.00000064
590370.00	2380440.00	0.00025271	0.00000979	0.00000851	0.00000127	0.00027929	0.00001048	0.00000914	0.00000134
590870.00	2380440.00	0.00028463	0.00000953	0.00000835	0.00000118	0.00028498	0.0000101	0.00000884	0.00000126
591370.00	2380440.00	0.00050199	0.0000104	0.00000931	0.0000011	0.0003263	0.00000997	0.0000088	0.00000117
591870.00	2380440.00	0.0002362	0.00000842	0.00000742	0.000001	0.00026301	0.00000905	0.00000799	0.00000106
592370.00	2380440.00	0.00022907	0.00000802	0.0000071	0.00000092	0.00025479	0.0000086	0.00000763	0.00000097
592870.00	2380440.00	0.00027182	0.00000801	0.00000715	0.00000086	0.00026188	0.00000833	0.00000743	0.0000009

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
593370.00	2380440.00	0.0003162	0.00000807	0.00000725	0.00000082	0.00026796	0.00000812	0.00000727	0.00000084
593870.00	2380440.00	0.00049038	0.00000895	0.00000814	0.00000081	0.00030199	0.00000818	0.00000737	0.00000081
594370.00	2380440.00	0.00112266	0.0000127	0.00001189	0.00000081	0.00056971	0.00000968	0.00000887	0.00000081
594870.00	2380440.00	0.00112868	0.00001295	0.00001214	0.00000082	0.00069298	0.00001033	0.00000952	0.0000008
595370.00	2380440.00	0.00104278	0.0000124	0.00001157	0.00000082	0.00052661	0.00000947	0.00000867	0.0000008
595870.00	2380440.00	0.00104192	0.00001265	0.00001181	0.00000084	0.00054475	0.00000974	0.00000892	0.00000082
596370.00	2380440.00	0.00099684	0.00001267	0.00001181	0.00000086	0.0005149	0.00000983	0.00000899	0.00000084
596870.00	2380440.00	0.00101418	0.00001318	0.00001229	0.00000089	0.00054465	0.00001032	0.00000945	0.00000087
597370.00	2380440.00	0.00102722	0.00001367	0.00001275	0.00000092	0.00057447	0.00001086	0.00000996	0.0000009
597870.00	2380440.00	0.00104103	0.0000142	0.00001326	0.00000094	0.00064877	0.00001161	0.00001067	0.00000094
598370.00	2380440.00	0.00074015	0.00001283	0.00001187	0.00000096	0.00055708	0.00001155	0.00001058	0.00000096
598870.00	2380440.00	0.00074804	0.00001319	0.00001223	0.00000097	0.00057476	0.00001199	0.00001101	0.00000099
599370.00	2380440.00	0.0007167	0.00001318	0.00001222	0.00000096	0.00052116	0.000012	0.00001101	0.000001
599870.00	2380440.00	0.00068962	0.00001316	0.00001222	0.00000094	0.00050666	0.00001216	0.00001117	0.00000099
600370.00	2380440.00	0.00072362	0.00001345	0.00001255	0.00000091	0.00054488	0.00001252	0.00001155	0.00000097
600870.00	2380440.00	0.00072383	0.00001343	0.00001256	0.00000087	0.00056705	0.00001264	0.00001171	0.00000093
601370.00	2380440.00	0.0004432	0.00001206	0.00001123	0.00000083	0.00097219	0.00001501	0.00001411	0.0000009
601870.00	2380440.00	0.00047372	0.00001197	0.00001119	0.00000078	0.00092024	0.00001444	0.00001359	0.00000085
602370.00	2380440.00	0.00043191	0.0000114	0.00001066	0.00000074	0.00078178	0.00001347	0.00001267	0.0000008
602870.00	2380440.00	0.00037809	0.00001081	0.0000101	0.0000007	0.00074384	0.00001304	0.00001228	0.00000076
603370.00	2380440.00	0.00037418	0.00001046	0.00000979	0.00000067	0.0007034	0.00001247	0.00001176	0.00000072
603870.00	2380440.00	0.00034985	0.00001002	0.00000938	0.00000065	0.00066914	0.00001198	0.0000113	0.00000068
604370.00	2380440.00	0.00026507	0.00000925	0.00000861	0.00000063	0.00052634	0.00001113	0.00001046	0.00000067
604870.00	2380440.00	0.00027821	0.00000906	0.00000844	0.00000062	0.00057631	0.000011	0.00001035	0.00000064
605370.00	2380440.00	0.00029128	0.0000089	0.00000827	0.00000063	0.00058613	0.0000107	0.00001007	0.00000063
605870.00	2380440.00	0.00040777	0.00000924	0.00000861	0.00000063	0.00047387	0.00000966	0.00000904	0.00000062
606370.00	2380440.00	0.00030946	0.00000864	0.00000797	0.00000067	0.00055495	0.00001002	0.00000937	0.00000065
606870.00	2380440.00	0.00026157	0.00000829	0.00000757	0.00000072	0.00052737	0.00000983	0.00000914	0.00000069
607370.00	2380440.00	0.0002273	0.00000803	0.00000725	0.00000078	0.00044438	0.00000939	0.00000865	0.00000075
607870.00	2380440.00	0.00020117	0.00000782	0.00000697	0.00000086	0.00032386	0.0000088	0.00000798	0.00000082
608370.00	2380440.00	0.0001987	0.00000779	0.00000688	0.00000092	0.00031103	0.00000871	0.00000782	0.00000089
608870.00	2380440.00	0.00026187	0.00000818	0.00000723	0.00000094	0.00053706	0.00000963	0.00000871	0.00000092
609370.00	2380440.00	0.00019733	0.00000778	0.00000678	0.000001	0.00029712	0.00000864	0.00000764	0.000001
609870.00	2380440.00	0.0004361	0.00000901	0.00000803	0.00000098	0.00046737	0.00000904	0.00000806	0.00000098
610370.00	2380440.00	0.00026089	0.0000081	0.00000713	0.00000097	0.00053149	0.00000952	0.00000853	0.00000099
610870.00	2380440.00	0.00023982	0.00000792	0.00000698	0.00000094	0.00048922	0.0000093	0.00000832	0.00000097
611370.00	2380440.00	0.00019312	0.00000756	0.00000664	0.00000091	0.00028902	0.00000838	0.00000742	0.00000096
611870.00	2380440.00	0.00019255	0.00000748	0.00000662	0.00000086	0.00029044	0.00000829	0.00000738	0.00000091
612370.00	2380440.00	0.00019408	0.00000741	0.00000661	0.0000008	0.00030453	0.00000825	0.0000074	0.00000085
612870.00	2380440.00	0.0002468	0.00000764	0.00000691	0.00000073	0.0005116	0.00000905	0.00000827	0.00000077
613370.00	2380440.00	0.00031086	0.0000079	0.00000722	0.00000068	0.00055763	0.00000908	0.00000836	0.00000072
613870.00	2380440.00	0.00012418	0.00000509	0.00000438	0.00000071	0.00019364	0.00000571	0.00000495	0.00000076
614370.00	2380440.00	0.00018791	0.00000712	0.00000645	0.00000067	0.00027728	0.00000788	0.00000717	0.00000071
614870.00	2380440.00	0.0001884	0.0000071	0.00000644	0.00000066	0.00028096	0.00000788	0.00000718	0.00000071
615370.00	2380440.00	0.00031998	0.00000765	0.00000706	0.00000059	0.00040574	0.00000801	0.0000074	0.00000061
615870.00	2380440.00	0.00030533	0.00000754	0.00000696	0.00000059	0.00042238	0.00000806	0.00000746	0.0000006
616370.00	2380440.00	0.00030402	0.0000075	0.00000691	0.00000058	0.00041777	0.000008	0.0000074	0.0000006
616870.00	2380440.00	0.00017808	0.00000682	0.00000621	0.00000061	0.00027147	0.00000754	0.0000069	0.00000063
617370.00	2380440.00	0.00022712	0.00000706	0.00000647	0.00000059	0.00044572	0.00000819	0.00000758	0.00000061
617870.00	2380440.00	0.0003053	0.00000738	0.00000679	0.00000059	0.00039595	0.00000777	0.00000717	0.00000061
618370.00	2380440.00	0.00033243	0.00000745	0.00000686	0.00000059	0.00034519	0.00000746	0.00000685	0.00000061
618870.00	2380440.00	0.000172	0.00000665	0.00000602	0.00000063	0.00026134	0.00000735	0.00000669	0.00000066
619370.00	2380440.00	0.00017327	0.00000662	0.000006	0.00000062	0.00028394	0.00000738	0.00000674	0.00000064
619870.00	2380440.00	0.00022413	0.00000685	0.00000624	0.00000061	0.00043405	0.00000793	0.0000073	0.00000063
590370.00	2380940.00	0.00032378	0.00001	0.00000876	0.00000124	0.00029273	0.00001036	0.00000906	0.0000013
590870.00	2380940.00	0.00034773	0.00000974	0.00000858	0.00000116	0.00029617	0.00000997	0.00000875	0.00000122
591370.00	2380940.00	0.0009062	0.00001252	0.00001145	0.00000107	0.00042799	0.00001039	0.00000924	0.00000114
591870.00	2380940.00	0.0005037	0.00000984	0.00000885	0.00000099	0.00031856	0.00000931	0.00000826	0.00000105
592370.00	2380940.00	0.00072503	0.00001073	0.00000981	0.00000092	0.00036752	0.00000925	0.00000828	0.00000097
592870.00	2380940.00	0.00064515	0.00001002	0.00000916	0.00000086	0.00034381	0.00000877	0.00000787	0.0000009
593370.00	2380940.00	0.00071194	0.00001021	0.00000939	0.00000082	0.00036129	0.00000863	0.00000778	0.00000084
593870.00	2380940.00	0.00092361	0.00001133	0.00001052	0.0000008	0.00043662	0.00000887	0.00000807	0.00000081
594370.00	2380940.00	0.00033555	0.00000881	0.00000799	0.00000082	0.00102088	0.00001265	0.00001182	0.00000083
594870.00	2380940.00	0.00107754	0.00001234	0.00001154	0.00000079	0.00055705	0.00000942	0.00000864	0.00000078
595370.00	2380940.00	0.00104815	0.00001228	0.00001148	0.0000008	0.00054471	0.00000941	0.00000862	0.00000079
595870.00	2380940.00	0.00102989	0.00001239	0.00001157	0.00000082	0.00054418	0.00000955	0.00000875	0.0000008
596370.00	2380940.00	0.00104244	0.00001284	0.000012	0.00000084	0.00062039	0.00001019	0.00000937	0.00000082
596870.00	2380940.00	0.00099661	0.00001311	0.00001224	0.00000087	0.00076008	0.00001124	0.00001039	0.00000085
597370.00	2380940.00	0.0010082	0.00001329	0.0000124	0.00000089	0.00057836	0.00001055	0.00000967	0.00000088
597870.00	2380940.00	0.00070163	0.00001194	0.00001103	0.00000092	0.00050022	0.0000106	0.00000969	0.00000091

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
598370.00	2380940.00	0.00069475	0.00001222	0.00001128	0.00000094	0.00049183	0.00001091	0.00000997	0.00000094
598870.00	2380940.00	0.00069072	0.00001248	0.00001154	0.00000095	0.00048994	0.00001123	0.00001027	0.00000096
599370.00	2380940.00	0.00067019	0.00001259	0.00001164	0.00000095	0.00047831	0.00001146	0.00001048	0.00000097
599870.00	2380940.00	0.00065107	0.00001265	0.00001172	0.00000093	0.00047363	0.00001168	0.0000107	0.00000097
600370.00	2380940.00	0.00066412	0.00001283	0.00001192	0.0000009	0.00049164	0.00001195	0.00001099	0.00000096
600870.00	2380940.00	0.00060796	0.00001246	0.0000116	0.00000086	0.00046377	0.00001185	0.00001093	0.00000093
601370.00	2380940.00	0.00032197	0.00001103	0.00001019	0.00000084	0.00054317	0.00001281	0.0000119	0.00000091
601870.00	2380940.00	0.00040061	0.00001145	0.00001066	0.00000079	0.00088976	0.00001428	0.00001343	0.00000085
602370.00	2380940.00	0.00041897	0.00001129	0.00001055	0.00000074	0.00088147	0.00001392	0.00001312	0.00000081
602870.00	2380940.00	0.00034387	0.00001055	0.00000984	0.00000071	0.00070794	0.00001285	0.00001209	0.00000077
603370.00	2380940.00	0.00051803	0.00001106	0.0000104	0.00000066	0.00053686	0.00001135	0.00001064	0.00000071
603870.00	2380940.00	0.00041565	0.0000103	0.00000966	0.00000064	0.00062827	0.00001161	0.00001093	0.00000068
604370.00	2380940.00	0.0002632	0.00000919	0.00000856	0.00000063	0.00051449	0.00001102	0.00001036	0.00000066
604870.00	2380940.00	0.00024155	0.00000879	0.00000817	0.00000062	0.00044955	0.00001042	0.00000977	0.00000064
605370.00	2380940.00	0.00031443	0.00000896	0.00000835	0.00000061	0.00059103	0.00001062	0.00001	0.00000062
605870.00	2380940.00	0.0003351	0.00000885	0.00000823	0.00000061	0.00055856	0.00001014	0.00000953	0.00000061
606370.00	2380940.00	0.00035994	0.00000879	0.00000815	0.00000063	0.00051029	0.00000963	0.00000901	0.00000062
606870.00	2380940.00	0.00036059	0.00000866	0.00000799	0.00000067	0.00048512	0.00000932	0.00000868	0.00000064
607370.00	2380940.00	0.00020218	0.00000774	0.00000699	0.00000075	0.00033608	0.00000881	0.0000081	0.00000072
607870.00	2380940.00	0.00031386	0.00000829	0.00000751	0.00000078	0.00049501	0.00000921	0.00000848	0.00000074
608370.00	2380940.00	0.00026478	0.00000802	0.00000718	0.00000084	0.00050085	0.00000928	0.00000847	0.0000008
608870.00	2380940.00	0.00027167	0.00000808	0.00000718	0.00000089	0.00054665	0.0000095	0.00000864	0.00000086
609370.00	2380940.00	0.00022846	0.00000782	0.00000688	0.00000094	0.00045627	0.00000911	0.00000819	0.00000092
609870.00	2380940.00	0.00022281	0.00000777	0.00000681	0.00000096	0.00043619	0.000009	0.00000805	0.00000096
610370.00	2380940.00	0.0001961	0.00000758	0.0000066	0.00000097	0.00032054	0.00000847	0.00000749	0.00000098
610870.00	2380940.00	0.00027666	0.00000801	0.00000706	0.00000094	0.00054031	0.00000934	0.00000837	0.00000097
611370.00	2380940.00	0.00045164	0.00000879	0.00000789	0.0000009	0.00041776	0.00000851	0.00000757	0.00000094
611870.00	2380940.00	0.00024035	0.00000768	0.00000682	0.00000086	0.00049253	0.00000904	0.00000814	0.00000091
612370.00	2380940.00	0.00018901	0.00000729	0.00000646	0.00000083	0.00028561	0.00000808	0.0000072	0.00000088
612870.00	2380940.00	0.00018771	0.0000072	0.00000642	0.00000078	0.00027993	0.00000798	0.00000715	0.00000083
613370.00	2380940.00	0.00031017	0.0000078	0.0000071	0.0000007	0.00054671	0.00000893	0.00000819	0.00000074
613870.00	2380940.00	0.00012246	0.00000501	0.00000428	0.00000073	0.00019104	0.00000563	0.00000485	0.00000078
614370.00	2380940.00	0.00014782	0.00000609	0.0000054	0.00000069	0.00021786	0.00000674	0.000006	0.00000074
614870.00	2380940.00	0.0002516	0.00000727	0.00000666	0.00000061	0.00046749	0.00000836	0.00000772	0.00000063
615370.00	2380940.00	0.00018642	0.00000689	0.00000628	0.00000061	0.00030347	0.00000769	0.00000705	0.00000063
615870.00	2380940.00	0.00028165	0.00000732	0.00000674	0.00000058	0.000439	0.00000805	0.00000745	0.0000006
616370.00	2380940.00	0.00024048	0.00000709	0.00000651	0.00000058	0.00045629	0.00000817	0.00000757	0.0000006
616870.00	2380940.00	0.0003464	0.0000075	0.00000693	0.00000057	0.0003219	0.00000732	0.00000673	0.00000058
617370.00	2380940.00	0.00022361	0.00000693	0.00000635	0.00000058	0.00043875	0.00000804	0.00000744	0.0000006
617870.00	2380940.00	0.00020173	0.00000678	0.0000062	0.00000059	0.00039233	0.00000783	0.00000723	0.0000006
618370.00	2380940.00	0.00030312	0.00000722	0.00000664	0.00000058	0.00038397	0.00000756	0.00000697	0.00000059
618870.00	2380940.00	0.00032267	0.00000726	0.00000668	0.00000058	0.00034615	0.00000732	0.00000673	0.00000059
619370.00	2380940.00	0.0001708	0.00000652	0.0000059	0.00000062	0.00026037	0.00000722	0.00000657	0.00000065
619870.00	2380940.00	0.00017898	0.00000651	0.00000591	0.0000006	0.00031838	0.00000737	0.00000675	0.00000062
588472.38	2364388.75	0.00082335	0.00004483	0.00004209	0.00000274	0.00120245	0.00004531	0.00004254	0.00000278
588972.38	2364388.75	0.00088392	0.00004885	0.00004585	0.000003	0.0012578	0.00004961	0.00004671	0.0000029
589472.38	2364388.75	0.00092716	0.00005127	0.00004788	0.0000034	0.00130624	0.00005336	0.0000502	0.00000317
589972.38	2364388.75	0.00193859	0.00005619	0.00005264	0.00000355	0.0022472	0.00005977	0.00005668	0.00000309
590472.38	2364388.75	0.002684	0.00005655	0.00005216	0.00000439	0.00165106	0.00005463	0.00005103	0.0000036
590972.38	2364388.75	0.00277176	0.00005232	0.00004721	0.00000511	0.0014954	0.00004957	0.0000451	0.00000447
588472.38	2364888.75	0.0007995	0.00004332	0.00004073	0.00000259	0.00115693	0.00004397	0.0000414	0.00000257
588972.38	2364888.75	0.00084829	0.00004641	0.00004356	0.00000285	0.00120548	0.00004764	0.0000449	0.00000274
589472.38	2364888.75	0.00087506	0.00004764	0.0000444	0.00000324	0.00123805	0.00005032	0.00004731	0.00000301
589972.38	2364888.75	0.00085583	0.00004584	0.00004223	0.00000362	0.00124018	0.00005089	0.00004773	0.00000316
590472.38	2364888.75	0.00248459	0.0000513	0.00004714	0.00000415	0.00144605	0.00004907	0.00004563	0.00000344
590972.38	2364888.75	0.00157522	0.0000413	0.0000366	0.0000047	0.0009263	0.00004165	0.00003745	0.0000042
588472.38	2365388.75	0.00077518	0.00004176	0.00003929	0.00000247	0.00111585	0.00004267	0.00004025	0.00000242
588972.38	2365388.75	0.00080729	0.00004383	0.00004113	0.0000027	0.00113978	0.00004542	0.00004286	0.00000256
589472.38	2365388.75	0.00082036	0.0000441	0.00004105	0.00000305	0.00115808	0.00004718	0.00004438	0.0000028
589972.38	2365388.75	0.00081782	0.00004242	0.00003881	0.00000361	0.00119328	0.00004715	0.00004392	0.00000323
590472.38	2365388.75	0.00079724	0.0000386	0.0000346	0.00000399	0.0015196	0.00004731	0.00004385	0.00000346
590972.38	2365388.75	0.00274012	0.00004629	0.000042	0.00000429	0.00157313	0.00004283	0.00003887	0.00000396
588472.38	2365888.75	0.00074856	0.00004008	0.00003772	0.00000236	0.00107066	0.00004121	0.00003893	0.00000229
588972.38	2365888.75	0.00076155	0.00004128	0.00003875	0.00000253	0.00107046	0.00004327	0.0000409	0.00000237
589472.38	2365888.75	0.0007727	0.00004094	0.00003803	0.00000291	0.00109425	0.00004434	0.00004169	0.00000265
589972.38	2365888.75	0.00075328	0.00003871	0.00003538	0.00000333	0.00111142	0.00004366	0.00004073	0.00000293
590472.38	2365888.75	0.00072953	0.00003573	0.00003191	0.00000381	0.00113132	0.00004145	0.00003802	0.00000343
590972.38	2365888.75	0.00072429	0.00003227	0.00002831	0.00000396	0.00149253	0.00004117	0.0000374	0.00000377
588472.38	2366388.75	0.00072154	0.0000384	0.00003612	0.00000227	0.00102783	0.0000398	0.00003761	0.00000219
588972.38	2366388.75	0.00073385	0.00003902	0.00003654	0.00000249	0.00103414	0.00004134	0.000039	0.00000234

Particle Bound		Units 1 & 2 combined				Unit 3			
X (m)	Y (m)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)	Air Conc/unit emission (ug-s/m^3-g)	Total dep rate/unit emission (g-s/m^2-yr-g)	Dry dep rate/unit emission (g-s/m^2-yr-g)	Wet dep rate/unit emission (g-s/m2-yr-g)
589472.38	2366388.75	0.00077096	0.00003814	0.00003549	0.00000265	0.00153963	0.00004498	0.0000426	0.00000238
589972.38	2366388.75	0.00071087	0.00003565	0.00003249	0.00000316	0.00114123	0.00004133	0.00003856	0.00000277
590472.38	2366388.75	0.0006847	0.00003289	0.00002931	0.00000358	0.00109717	0.00003865	0.00003542	0.00000324
590972.38	2366388.75	0.00068124	0.00002998	0.00002631	0.00000367	0.00137402	0.00003802	0.00003447	0.00000355
588472.38	2366888.75	0.0006913	0.00003664	0.00003446	0.00000218	0.00097967	0.00003828	0.00003619	0.0000021
588972.38	2366888.75	0.00069893	0.00003676	0.00003436	0.0000024	0.00098708	0.00003935	0.0000371	0.00000225
589472.38	2366888.75	0.00081599	0.0000362	0.00003363	0.00000256	0.00182351	0.00004412	0.00004183	0.00000229
589972.38	2366888.75	0.00189862	0.00003976	0.00003681	0.00000295	0.00109113	0.00003747	0.00003494	0.00000253
590472.38	2366888.75	0.00071222	0.00003096	0.0000276	0.00000336	0.00159234	0.00003945	0.00003639	0.00000306
590972.38	2366888.75	0.00070297	0.00002846	0.00002504	0.00000342	0.00172144	0.00003789	0.00003455	0.00000334
591758.19	2356560.25	0.01124202	0.00222099	0.0007114	0.0015096	0.0290152	0.00222977	0.00141763	0.00081215
592258.19	2356560.25	0.00249515	0.00334071	0.00018336	0.00315737	0.02860629	0.00445302	0.00163439	0.00281863
592758.19	2356560.25	0.01310035	0.00164789	0.00100379	0.0006441	0.01315615	0.00600622	0.00100537	0.0050009
593258.19	2356560.25	0.01041413	0.00097346	0.00080597	0.00016748	0.03212862	0.00290107	0.0024708	0.00043027
593758.19	2356560.25	0.00770234	0.00068826	0.00061327	0.00007499	0.02067517	0.00169118	0.00155024	0.00014095
594258.19	2356560.25	0.00594719	0.00050678	0.00046343	0.00004335	0.01371655	0.00102364	0.00095313	0.00007051
591758.19	2357060.25	0.01488165	0.00163376	0.00129831	0.00033545	0.02424704	0.00207989	0.00168215	0.00039774
592258.19	2357060.25	0.00981837	0.0011986	0.00071469	0.00048392	0.03404003	0.0032334	0.00280464	0.00042876
592758.19	2357060.25	0.01022062	0.00107468	0.00072806	0.00034662	0.02500756	0.00222924	0.00169026	0.00053897
593258.19	2357060.25	0.0082681	0.00082059	0.00062709	0.0001935	0.02080071	0.00178683	0.00142726	0.00035957
593758.19	2357060.25	0.00625851	0.00056209	0.0004805	0.00008159	0.01415943	0.00117785	0.00101558	0.00016227
594258.19	2357060.25	0.0044567	0.00036117	0.00032066	0.00004051	0.00938821	0.00066739	0.00060217	0.00006522
591758.19	2357560.25	0.01067759	0.00100345	0.00086152	0.00014193	0.01391078	0.0011833	0.00103247	0.00015083
592258.19	2357560.25	0.00661967	0.00062795	0.00044748	0.00018047	0.01929718	0.00160791	0.00140349	0.00020441
592758.19	2357560.25	0.00726906	0.00059586	0.0004797	0.00011616	0.01280088	0.0009618	0.00077413	0.00018767
593258.19	2357560.25	0.0055522	0.00048686	0.00037142	0.00011544	0.01214279	0.00084652	0.00071661	0.0001299
593758.19	2357560.25	0.00480234	0.00041592	0.00033877	0.00007715	0.00983467	0.00070005	0.00059216	0.00010789
594258.19	2357560.25	0.0039317	0.00033574	0.00028663	0.00004911	0.00733535	0.00052873	0.00045747	0.00007126
591758.19	2358060.25	0.00685712	0.00060735	0.00051277	0.00009459	0.00966026	0.00069821	0.00062983	0.00006837
592258.19	2358060.25	0.00438643	0.00036774	0.00027795	0.00008979	0.01097441	0.00080151	0.00068613	0.00011538
592758.19	2358060.25	0.0051142	0.00039813	0.00032173	0.00007641	0.00775398	0.00050653	0.00041607	0.00009046
593258.19	2358060.25	0.00405325	0.00030214	0.00025014	0.000052	0.00929538	0.00055119	0.00048035	0.00007084
593758.19	2358060.25	0.00359599	0.00027727	0.00022437	0.00005289	0.0065944	0.00040646	0.00034218	0.00006428
594258.19	2358060.25	0.00315386	0.00024637	0.00020703	0.00003934	0.00576043	0.00035671	0.00030807	0.00004864
591758.19	2358560.25	0.00457366	0.00037585	0.00031272	0.00006312	0.00739741	0.00048795	0.00044278	0.00004518
592258.19	2358560.25	0.0031568	0.00023928	0.00018699	0.00005229	0.00719155	0.00045287	0.00038415	0.00006873
592758.19	2358560.25	0.0036197	0.00025895	0.00021362	0.00004534	0.00538956	0.00030295	0.00025244	0.0000505
593258.19	2358560.25	0.00327899	0.00022022	0.00019	0.00003022	0.0070396	0.00037464	0.00032795	0.00004669
593758.19	2358560.25	0.00271408	0.00018982	0.00015606	0.00003376	0.00510263	0.00027049	0.00023848	0.00003201
594258.19	2358560.25	0.00257264	0.00018073	0.00015131	0.00002942	0.00438888	0.00024183	0.00020591	0.00003591
591758.19	2359060.25	0.00327081	0.00024875	0.00020553	0.00004322	0.0056476	0.0003447	0.00031091	0.00003379
592258.19	2359060.25	0.00241916	0.00016816	0.00013424	0.00003392	0.00523047	0.00028738	0.00024338	0.000044
592758.19	2359060.25	0.00262589	0.00017455	0.00014642	0.00002813	0.00413729	0.00020286	0.00017112	0.00003174
593258.19	2359060.25	0.00284811	0.00018115	0.00015616	0.00002499	0.00518758	0.0002512	0.00022073	0.00003047
593758.19	2359060.25	0.00218648	0.00013802	0.0001202	0.00001781	0.0046032	0.00021175	0.00018967	0.00002208
594258.19	2359060.25	0.00204088	0.00013303	0.0001107	0.00002233	0.00343182	0.00016949	0.00014822	0.00002127

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HUMAN HEALTH RISK ASSESSMENT REPORT
H-POWER EXPANSION PROJECT

Appendix B
Exposure and Risk Calculations

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Units 1 & 2 Calculations
Pearl Harbor Fisher

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Residential Area	5
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	Pearl Harbor Watershed Impervious	12
Select the location for the pervious area of the watershed	Pearl Harbor Watershed Pervious	13
Select the location for the drinking water and fish exposure water body	Pearl Harbor	10

Unitized Air Modeling Results	Symbol	Units Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.46455E-06	4.37944E-06	0.000186393	0.000033865	1.93621E-06	1.37464E-06	1.61613E-06	1.46149E-06	1.1317E-06	1.40998E-06	9.83333E-07	8.84131E-07	8.59213E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	3.38523E-05	3.68356E-05	0.00075806	0.00023434	1.71645E-05	9.76055E-06	1.19425E-05	1.16923E-05	7.17437E-06	9.74894E-06	5.46667E-06	3.36044E-06	3.76898E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	0.000034625	3.70156E-05	0.000643109	0.000181585	2.26614E-05	1.47727E-05	1.84775E-05	1.91377E-05	1.34115E-05	1.6423E-05	1.44033E-05	8.52861E-06	1.03516E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000335306	0.000391544	0.006901513	0.002012835	0.000216809	0.00013562	0.000166552	0.0001782	0.00011969	0.000146841	0.00011235	7.13193E-05	8.42169E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.000879218	0.000800461	0.008591956	0.002852313	0.000510271	0.000446853	0.000701292	0.000475492	0.000425908	0.000607652	0.00078381	0.000317958	0.00045034
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.000860414	0.000780127	0.008545623	0.002814235	0.000495852	0.000441446	0.00068391	0.000468449	0.000421462	0.000594625	0.000749947	0.000319121	0.000443985
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.68845E-05	7.04722E-06	0.000311157	2.20675E-05	7.0269E-06	4.12962E-06	3.85475E-06	6.59223E-06	3.58509E-06	3.55522E-06	1.87667E-06	1.62769E-06	1.70537E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000150544	7.44283E-05	0.002883657	0.00022228	1.95931E-05	3.6231E-05	4.94079E-05	1.57333E-05	2.30601E-05	3.82578E-05	0.00005449	3.12193E-05	3.92822E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.000870941	0.000799849	0.008582527	0.002856068	0.000510282	0.000444023	0.000698883	0.0004744	0.000423892	0.000605529	0.000779117	0.00031358	0.000445597
Unitized air concentration - HgII			0.000836867	0.000780368	0.008522327	0.00282602	0.000495858	0.000425242	0.000670983	0.000460566	0.000405519	0.000580343	0.00073797	0.000293634	0.000419545
Unitized Dry deposition - HgII			0.000513978	0.000397487	0.009259773	0.001450035	0.000171102	0.000173203	0.000226938	0.000139525	0.000131513	0.000187547	0.00021364	0.000128137	0.000156247
Unitized Wet deposition - HgII			6.82945E-05	4.61633E-05	0.001260296	0.00017232	3.04645E-05	1.7167E-05	1.95452E-05	2.12377E-05	1.49035E-05	1.76076E-05	1.08633E-05	7.64211E-06	8.33146E-06
Unitized air concentration - Hg0			0.000858408	0.000793558	0.008547674	0.002847923	0.00050834	0.000438557	0.000692329	0.000473055	0.000420543	0.000600363	0.00076766	0.00030652	0.000437305
Unitized Dry deposition - Hg0			0.000392447	0.000191023	0.007891281	0.000573655	4.67207E-05	9.01547E-05	0.00012272	3.66957E-05	5.57671E-05	9.41557E-05	0.00013191	7.59329E-05	9.58428E-05
Unitized Wet deposition - Hg0			1.46364E-07	0.00000003	8.52857E-07	8.75E-08	1.72069E-07	8.30802E-08	4.94966E-08	2.4883E-07	9.72936E-08	5.7478E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	3.80891E-05	4.13933E-05	0.000829501	0.000215453	2.45983E-05	1.61476E-05	2.00938E-05	2.05989E-05	1.45434E-05	1.7833E-05	1.53867E-05	9.41323E-06	1.12102E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000369159	0.000428381	0.007659573	0.002247173	0.000233974	0.000145381	0.000178495	0.000189893	0.000126864	0.000156591	0.000117813	7.46801E-05	8.7986E-05

Emission Rates

Units 1 & 2

Compound	PM10 g/s	TSP g/s
Mercury, elemental	2.46E-03	2.46E-03
Mercury, methyl	2.46E-03	2.46E-03
Mercury, divalent	2.46E-03	2.46E-03
1,2,3,4,6,7,8,9-OCDD	4.00E-08	4.00E-08
1,2,3,4,6,7,8,9-OCDF	1.14E-08	1.14E-08
1,2,3,4,6,7,8-HpCDD	4.84E-08	4.84E-08
1,2,3,4,6,7,8-HpCDF	1.01E-07	1.01E-07
1,2,3,4,7,8,9-HpCDF	7.74E-09	7.74E-09
1,2,3,4,7,8-HxCDD	9.59E-09	9.59E-09
1,2,3,4,7,8-HxCDF	5.71E-08	5.71E-08
1,2,3,6,7,8-HxCDD	1.30E-08	1.30E-08
1,2,3,6,7,8-HxCDF	6.01E-08	6.01E-08
1,2,3,7,8,9-HxCDD	1.04E-08	1.04E-08
1,2,3,7,8,9-HxCDF	8.56E-09	8.56E-09
1,2,3,7,8-PeCDD	1.83E-08	1.83E-08
1,2,3,7,8-PeCDF	6.24E-08	6.24E-08
2,3,4,6,7,8-HxCDF	4.18E-08	4.18E-08
2,3,4,7,8-PeCDF	6.88E-08	6.88E-08
2,3,7,8-TCDD	7.79E-09	7.79E-09
2,3,7,8-TCDF	3.39E-08	3.39E-08
Arsenic	8.63E-05	8.63E-05
Beryllium	8.57E-06	8.57E-06
Cadmium	4.09E-04	4.09E-04
Chromium	4.41E-04	4.41E-04
Lead	1.61E-02	1.61E-02
Nickel	3.89E-04	3.89E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Residential Area	Pearl Harbor	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Pearl Harbor
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	2.53E-05	9.84E-11	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	6.69E-04
Mercury, divalent	1.28E-03	1.23E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	1.23E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	5.39E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	7.90E-14
1,2,3,4,6,7,8,9-OCDF	9.26E-10	2.42E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	6.68E-14
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.03E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	2.85E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	8.54E-16	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	1.56E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	6.81E-17	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	1.25E-12
1,2,3,4,7,8-HxCDD	7.83E-10	3.30E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	1.71E-13
1,2,3,4,7,8-HxCDF	4.66E-09	1.22E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	5.97E-11
1,2,3,6,7,8-HxCDD	1.06E-09	1.40E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	3.51E-12
1,2,3,6,7,8-HxCDF	4.91E-09	1.29E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	6.31E-11
1,2,3,7,8,9-HxCDD	8.47E-10	1.11E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	2.78E-12
1,2,3,7,8,9-HxCDF	7.03E-10	1.90E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	9.29E-12
1,2,3,7,8-PeCDD	1.50E-09	9.06E-16	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	2.34E-11
1,2,3,7,8-PeCDF	5.23E-09	2.52E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	8.50E-11
2,3,4,6,7,8-HxCDF	3.41E-09	8.98E-16	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	4.40E-11
2,3,4,7,8-PeCDF	5.69E-09	4.92E-15	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	9.92E-11
2,3,7,8-TCDD	6.62E-10	3.91E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	1.35E-11
2,3,7,8-TCDF	2.91E-09	7.19E-15	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	7.14E-11
Arsenic	5.97E-11	1.30E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.48E-08
Beryllium	8.26E-09	1.29E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	7.98E-10
Cadmium	1.81E-08	6.18E-10	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	5.61E-07
Chromium	2.38E-05	2.63E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	5.00E-08
Lead	1.06E-05	2.41E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	2.17E-09
Nickel	1.85E-08	5.89E-10	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	4.60E-08

Summary of EPCs (Non Cancer)	Residential Area	Pearl Harbor	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Pearl Harbor
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	4.96E-05	9.84E-11	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	6.69E-04
Mercury, divalent	2.56E-03	1.23E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	1.23E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	5.39E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	7.90E-14
1,2,3,4,6,7,8,9-OCDF	1.61E-09	2.42E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	6.68E-14
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.03E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	2.85E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	8.54E-16	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	1.56E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	6.81E-17	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	1.25E-12
1,2,3,4,7,8-HxCDD	1.36E-09	3.30E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	1.71E-13
1,2,3,4,7,8-HxCDF	8.09E-09	1.22E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	5.97E-11
1,2,3,6,7,8-HxCDD	1.84E-09	1.40E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	3.51E-12
1,2,3,6,7,8-HxCDF	8.53E-09	1.29E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	6.31E-11
1,2,3,7,8,9-HxCDD	1.47E-09	1.11E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	2.78E-12
1,2,3,7,8,9-HxCDF	1.22E-09	1.90E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	9.29E-12
1,2,3,7,8-PeCDD	2.60E-09	9.06E-16	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	2.34E-11
1,2,3,7,8-PeCDF	9.08E-09	2.52E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	8.50E-11
2,3,4,6,7,8-HxCDF	5.93E-09	8.98E-16	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	4.40E-11
2,3,4,7,8-PeCDF	9.85E-09	4.92E-15	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	9.92E-11
2,3,7,8-TCDD	1.13E-09	3.91E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	1.35E-11
2,3,7,8-TCDF	4.95E-09	7.19E-15	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	7.14E-11
Arsenic	5.97E-11	1.30E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.48E-08
Beryllium	8.26E-09	1.29E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	7.98E-10
Cadmium	1.81E-08	6.18E-10	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	5.61E-07
Chromium	2.44E-05	2.63E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	5.00E-08
Lead	1.06E-05	2.41E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	2.17E-09
Nickel	1.85E-08	5.89E-10	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	4.60E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Adult 5

H-POWER Expansion **Fisher Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	5.36E-10	2.68E-05	Residential Area
Water	NC	NC	Pearl Harbor
Air	3.97E-09	4.00E-05	Residential Area
Produce	6.50E-09	4.68E-04	Residential Area
Fish	1.86E-09	2.03E-03	Pearl Harbor
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**1.29E-08**	**2.57E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Adult**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	1.29E-08		2.57E-03	
Mercury, Elemental	NC		5.25E-09	0.0002%
Mercury, Methyl	NC		2.01E-03	78.1222%
Mercury, Divalent	NC		3.05E-05	1.1874%
1,2,3,4,6,7,8,9-OCDD	1.29E-12	0.0100%	1.40E-08	0.0005%
1,2,3,4,6,7,8,9-OCDF	3.67E-13	0.0029%	3.98E-09	0.0002%
1,2,3,4,6,7,8-HpCDD	5.15E-11	0.3999%	5.55E-07	0.0216%
1,2,3,4,6,7,8-HpCDF	1.15E-10	0.8903%	1.27E-06	0.0495%
1,2,3,4,7,8,9-HpCDF	1.09E-11	0.0843%	1.30E-07	0.0051%
1,2,3,4,7,8-HxCDD	1.08E-10	0.8400%	1.20E-06	0.0466%
1,2,3,4,7,8-HxCDF	7.32E-10	5.6895%	8.54E-06	0.3325%
1,2,3,6,7,8-HxCDD	1.55E-10	1.2077%	1.76E-06	0.0687%
1,2,3,6,7,8-HxCDF	7.72E-10	6.0020%	9.02E-06	0.3511%
1,2,3,7,8,9-HxCDD	1.20E-10	0.9327%	1.34E-06	0.0523%
1,2,3,7,8,9-HxCDF	1.13E-10	0.8763%	1.33E-06	0.0517%
1,2,3,7,8-PeCDD	2.65E-09	20.5916%	3.22E-05	1.2531%
1,2,3,7,8-PeCDF	2.54E-10	1.9757%	3.03E-06	0.1180%
2,3,4,6,7,8-HxCDF	5.38E-10	4.1799%	6.28E-06	0.2446%
2,3,4,7,8-PeCDF	2.83E-09	21.9924%	3.40E-05	1.3221%
2,3,7,8-TCDD	1.04E-09	8.0522%	1.23E-05	0.4773%
2,3,7,8-TCDF	4.40E-10	3.4229%	5.25E-06	0.2046%
Arsenic	8.65E-10	6.7193%	8.69E-06	0.3384%
Beryllium	1.81E-11	0.1404%	9.20E-07	0.0358%
Cadmium	1.32E-09	10.2415%	1.24E-05	0.4842%
Chromium	NC		3.08E-09	0.0001%
Lead	7.40E-10	5.7483%	3.87E-04	15.0697%
Nickel	NC		4.18E-06	0.1627%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	Pearl Harbor Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Pearl Harbor Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.53E-05	9.84E-11	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	6.69E-04
Mercury, Divalent	1.28E-03	1.23E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	1.23E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	5.39E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	7.90E-14
1,2,3,4,6,7,8,9-OCDF	9.26E-10	2.42E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	6.68E-14
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.03E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	2.85E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	8.54E-16	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	1.56E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	6.81E-17	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	1.25E-12
1,2,3,4,7,8-HxCDD	7.83E-10	3.30E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	1.71E-13
1,2,3,4,7,8-HxCDF	4.66E-09	1.22E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	5.97E-11
1,2,3,6,7,8-HxCDD	1.06E-09	1.40E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	3.51E-12
1,2,3,6,7,8-HxCDF	4.91E-09	1.29E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	6.31E-11
1,2,3,7,8,9-HxCDD	8.47E-10	1.11E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	2.78E-12
1,2,3,7,8,9-HxCDF	7.03E-10	1.90E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	9.29E-12
1,2,3,7,8-PeCDD	1.50E-09	9.06E-16	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	2.34E-11
1,2,3,7,8-PeCDF	5.23E-09	2.52E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	8.50E-11
2,3,4,6,7,8-HxCDF	3.41E-09	8.98E-16	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	4.40E-11
2,3,4,7,8-PeCDF	5.69E-09	4.92E-15	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	9.92E-11
2,3,7,8-TCDD	6.62E-10	3.91E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	1.35E-11
2,3,7,8-TCDF	2.91E-09	7.19E-15	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	7.14E-11
Arsenic	5.97E-11	1.30E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.48E-08
Beryllium	8.26E-09	1.29E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	7.98E-10
Cadmium	1.81E-08	6.18E-10	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	5.61E-07
Chromium	2.38E-05	2.63E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	5.00E-08
Lead	1.06E-05	2.41E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	2.17E-09
Nickel	1.85E-08	5.89E-10	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	4.60E-08

Noncancer concentrations H-POWER Expansion	Residential Area Soil	Pearl Harbor Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Pearl Harbor Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.96E-05	9.84E-11	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	6.69E-04
Mercury, Divalent	2.56E-03	1.23E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	1.23E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	5.39E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	7.90E-14
1,2,3,4,6,7,8,9-OCDF	1.61E-09	2.42E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	6.68E-14
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.03E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	2.85E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	8.54E-16	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	1.56E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	6.81E-17	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	1.25E-12
1,2,3,4,7,8-HxCDD	1.36E-09	3.30E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	1.71E-13
1,2,3,4,7,8-HxCDF	8.09E-09	1.22E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	5.97E-11
1,2,3,6,7,8-HxCDD	1.84E-09	1.40E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	3.51E-12
1,2,3,6,7,8-HxCDF	8.53E-09	1.29E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	6.31E-11
1,2,3,7,8,9-HxCDD	1.47E-09	1.11E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	2.78E-12
1,2,3,7,8,9-HxCDF	1.22E-09	1.90E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	9.29E-12
1,2,3,7,8-PeCDD	2.60E-09	9.06E-16	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	2.34E-11
1,2,3,7,8-PeCDF	9.08E-09	2.52E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	8.50E-11
2,3,4,6,7,8-HxCDF	5.93E-09	8.98E-16	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	4.40E-11
2,3,4,7,8-PeCDF	9.85E-09	4.92E-15	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	9.92E-11
2,3,7,8-TCDD	1.13E-09	3.91E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	1.35E-11
2,3,7,8-TCDF	4.95E-09	7.19E-15	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	7.14E-11
Arsenic	5.97E-11	1.30E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.48E-08
Beryllium	8.26E-09	1.29E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	7.98E-10
Cadmium	1.81E-08	6.18E-10	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	5.61E-07
Chromium	2.44E-05	2.63E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	5.00E-08
Lead	1.06E-05	2.41E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	2.17E-09
Nickel	1.85E-08	5.89E-10	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	4.60E-08

H-POWER Expansion **Fisher Adult**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	8.61E-14	0.00E+00	4.58E-13	7.48E-13	4.57E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.45E-14	0.00E+00	1.30E-13	2.12E-13	3.86E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	3.47E-12	0.00E+00	1.85E-11	2.94E-11	5.49E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	7.26E-12	0.00E+00	3.86E-11	6.57E-11	3.01E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.59E-13	0.00E+00	2.96E-12	7.10E-12	2.40E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	6.90E-12	0.00E+00	3.66E-11	6.43E-11	3.29E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	4.10E-11	0.00E+00	2.18E-10	3.58E-10	1.15E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	9.32E-12	0.00E+00	4.96E-11	8.97E-11	6.76E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	4.32E-11	0.00E+00	2.29E-10	3.78E-10	1.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	7.46E-12	0.00E+00	3.98E-11	6.74E-11	5.36E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	6.19E-12	0.00E+00	3.27E-11	5.60E-11	1.79E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	1.32E-10	0.00E+00	7.00E-10	1.37E-09	4.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.38E-11	0.00E+00	7.15E-11	1.20E-10	4.91E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	3.00E-11	0.00E+00	1.59E-10	2.64E-10	8.47E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	1.50E-10	0.00E+00	7.88E-10	1.32E-09	5.73E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	5.83E-11	0.00E+00	2.98E-10	4.21E-10	2.59E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	2.56E-11	0.00E+00	1.30E-10	1.48E-10	1.38E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	5.25E-17	0.00E+00	3.26E-10	5.36E-10	2.86E-12	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	1.81E-11	ND	ND	ND	ND	ND	ND	ND
Cadmium	4.04E-15	0.00E+00	6.47E-10	6.44E-10	2.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	5.31E-14	0.00E+00	1.70E-10	5.70E-10	2.37E-15	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Adult**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.3E-09	NC	No uptake factor	NC	NC	NC	NC	NC
Mercury, Methyl	6.8E-07	0.0E+00	NC	9.0E-07	2.0E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.2E-05	0.0E+00	3.0E-06	1.6E-05	1.2E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	2.3E-09	0.0E+00	ND	1.2E-08	7.1E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.6E-10	0.0E+00	ND	3.3E-09	6.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	9.4E-08	0.0E+00	ND	4.6E-07	8.5E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	2.0E-07	0.0E+00	ND	1.0E-06	4.7E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.5E-08	0.0E+00	ND	1.1E-07	3.7E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	1.9E-07	0.0E+00	ND	1.0E-06	5.1E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.1E-06	0.0E+00	ND	5.6E-06	1.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.5E-07	0.0E+00	ND	1.4E-06	1.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.2E-06	0.0E+00	ND	6.0E-06	1.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	2.0E-07	0.0E+00	ND	1.1E-06	8.3E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.7E-07	0.0E+00	ND	8.8E-07	2.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.6E-06	0.0E+00	ND	2.2E-05	7.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.7E-07	0.0E+00	ND	1.9E-06	7.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	8.1E-07	0.0E+00	ND	4.2E-06	1.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	4.0E-06	0.0E+00	ND	2.1E-05	8.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.5E-06	0.0E+00	ND	6.7E-06	4.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	6.8E-07	0.0E+00	ND	2.4E-06	2.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	2.7E-13	0.0E+00	5.9E-06	2.8E-06	1.5E-08	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	5.7E-12	0.0E+00	8.8E-07	4.1E-08	1.2E-10	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	5.0E-11	0.0E+00	4.2E-06	7.9E-06	3.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.2E-11	0.0E+00	1.7E-10	2.9E-09	1.0E-11	0.0E+00	0.0E+00	NC	NC	NC
Lead	3.4E-08	0.0E+00	2.2E-05	3.6E-04	1.5E-09	0.0E+00	0.0E+00	NC	NC	NC
Nickel	1.3E-12	0.0E+00	4.0E-06	1.9E-07	6.9E-10	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Child 6

H-POWER Expansion **Fisher Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.00E-09	2.50E-04	Residential Area
Water	NC	NC	Pearl Harbor
Air	1.98E-09	9.96E-05	Residential Area
Produce	4.87E-09	1.76E-03	Residential Area
Fish	2.61E-10	1.43E-03	Pearl Harbor
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**8.11E-09**	**3.54E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Child**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	8.11E-09		3.54E-03	
Mercury, Elemental	NC		1.31E-08	0.0004%
Mercury, Methyl	NC		1.42E-03	40.2008%
Mercury, Divalent	NC		1.80E-04	5.0974%
1,2,3,4,6,7,8,9-OCDD	9.48E-13	0.0117%	6.55E-08	0.0019%
1,2,3,4,6,7,8,9-OCDF	2.69E-13	0.0033%	1.86E-08	0.0005%
1,2,3,4,6,7,8-HpCDD	3.77E-11	0.4652%	2.60E-06	0.0736%
1,2,3,4,6,7,8-HpCDF	8.24E-11	1.0157%	5.73E-06	0.1620%
1,2,3,4,7,8,9-HpCDF	7.86E-12	0.0969%	5.60E-07	0.0158%
1,2,3,4,7,8-HxCDD	7.92E-11	0.9770%	5.51E-06	0.1558%
1,2,3,4,7,8-HxCDF	4.70E-10	5.7906%	3.28E-05	0.9273%
1,2,3,6,7,8-HxCDD	1.10E-10	1.3591%	7.70E-06	0.2178%
1,2,3,6,7,8-HxCDF	4.95E-10	6.1078%	3.46E-05	0.9787%
1,2,3,7,8,9-HxCDD	8.50E-11	1.0477%	5.91E-06	0.1671%
1,2,3,7,8,9-HxCDF	7.23E-11	0.8914%	5.07E-06	0.1433%
1,2,3,7,8-PeCDD	1.68E-09	20.7463%	1.19E-04	3.3735%
1,2,3,7,8-PeCDF	1.58E-10	1.9496%	1.11E-05	0.3150%
2,3,4,6,7,8-HxCDF	3.45E-10	4.2537%	2.41E-05	0.6816%
2,3,4,7,8-PeCDF	1.74E-09	21.4876%	1.23E-04	3.4787%
2,3,7,8-TCDD	6.09E-10	7.5121%	4.24E-05	1.1988%
2,3,7,8-TCDF	2.43E-10	2.9955%	1.71E-05	0.4824%
Arsenic	5.63E-10	6.9404%	2.51E-05	0.7084%
Beryllium	8.99E-12	0.1108%	2.34E-06	0.0661%
Cadmium	8.07E-10	9.9446%	4.02E-05	1.1365%
Chromium	NC		1.14E-08	0.0003%
Lead	5.10E-10	6.2929%	1.42E-03	40.1159%
Nickel	NC		1.06E-05	0.3003%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	Pearl Harbor Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Pearl Harbor Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.53E-05	9.84E-11	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	6.69E-04
Mercury, Divalent	1.28E-03	1.23E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	1.23E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	5.39E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	7.90E-14
1,2,3,4,6,7,8,9-OCDF	9.26E-10	2.42E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	6.68E-14
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.03E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	2.85E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	8.54E-16	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	1.56E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	6.81E-17	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	1.25E-12
1,2,3,4,7,8-HxCDD	7.83E-10	3.30E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	1.71E-13
1,2,3,4,7,8-HxCDF	4.66E-09	1.22E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	5.97E-11
1,2,3,6,7,8-HxCDD	1.06E-09	1.40E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	3.51E-12
1,2,3,6,7,8-HxCDF	4.91E-09	1.29E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	6.31E-11
1,2,3,7,8,9-HxCDD	8.47E-10	1.11E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	2.78E-12
1,2,3,7,8,9-HxCDF	7.03E-10	1.90E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	9.29E-12
1,2,3,7,8-PeCDD	1.50E-09	9.06E-16	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	2.34E-11
1,2,3,7,8-PeCDF	5.23E-09	2.52E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	8.50E-11
2,3,4,6,7,8-HxCDF	3.41E-09	8.98E-16	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	4.40E-11
2,3,4,7,8-PeCDF	5.69E-09	4.92E-15	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	9.92E-11
2,3,7,8-TCDD	6.62E-10	3.91E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	1.35E-11
2,3,7,8-TCDF	2.91E-09	7.19E-15	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	7.14E-11
Arsenic	5.97E-11	1.30E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.48E-08
Beryllium	8.26E-09	1.29E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	7.98E-10
Cadmium	1.81E-08	6.18E-10	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	5.61E-07
Chromium	2.38E-05	2.63E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	5.00E-08
Lead	1.06E-05	2.41E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	2.17E-09
Nickel	1.85E-08	5.89E-10	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	4.60E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	Pearl Harbor Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Pearl Harbor Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.96E-05	9.84E-11	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	6.69E-04
Mercury, Divalent	2.56E-03	1.23E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	1.23E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	5.39E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	7.90E-14
1,2,3,4,6,7,8,9-OCDF	1.61E-09	2.42E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	6.68E-14
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.03E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	2.85E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	8.54E-16	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	1.56E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	6.81E-17	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	1.25E-12
1,2,3,4,7,8-HxCDD	1.36E-09	3.30E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	1.71E-13
1,2,3,4,7,8-HxCDF	8.09E-09	1.22E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	5.97E-11
1,2,3,6,7,8-HxCDD	1.84E-09	1.40E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	3.51E-12
1,2,3,6,7,8-HxCDF	8.53E-09	1.29E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	6.31E-11
1,2,3,7,8,9-HxCDD	1.47E-09	1.11E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	2.78E-12
1,2,3,7,8,9-HxCDF	1.22E-09	1.90E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	9.29E-12
1,2,3,7,8-PeCDD	2.60E-09	9.06E-16	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	2.34E-11
1,2,3,7,8-PeCDF	9.08E-09	2.52E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	8.50E-11
2,3,4,6,7,8-HxCDF	5.93E-09	8.98E-16	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	4.40E-11
2,3,4,7,8-PeCDF	9.85E-09	4.92E-15	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	9.92E-11
2,3,7,8-TCDD	1.13E-09	3.91E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	1.35E-11
2,3,7,8-TCDF	4.95E-09	7.19E-15	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	7.14E-11
Arsenic	5.97E-11	1.30E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.48E-08
Beryllium	8.26E-09	1.29E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	7.98E-10
Cadmium	1.81E-08	6.18E-10	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	5.61E-07
Chromium	2.44E-05	2.63E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	5.00E-08
Lead	1.06E-05	2.41E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	2.17E-09
Nickel	1.85E-08	5.89E-10	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	4.60E-08

H-POWER Expansion **Fisher Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	1.61E-13	0.00E+00	2.28E-13	5.60E-13	6.43E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	4.57E-14	0.00E+00	6.47E-14	1.59E-13	5.43E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	6.49E-12	0.00E+00	9.20E-12	2.20E-11	7.73E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.35E-11	0.00E+00	1.92E-11	4.92E-11	4.23E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	1.04E-12	0.00E+00	1.47E-12	5.31E-12	3.38E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	1.29E-11	0.00E+00	1.82E-11	4.81E-11	4.63E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	7.66E-11	0.00E+00	1.08E-10	2.69E-10	1.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	1.74E-11	0.00E+00	2.47E-11	6.72E-11	9.52E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	8.07E-11	0.00E+00	1.14E-10	2.83E-10	1.71E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	1.39E-11	0.00E+00	1.98E-11	5.05E-11	7.55E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	1.16E-11	0.00E+00	1.63E-11	4.20E-11	2.52E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.47E-10	0.00E+00	3.48E-10	1.02E-09	6.35E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	2.58E-11	0.00E+00	3.55E-11	8.99E-11	6.92E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.61E-11	0.00E+00	7.93E-11	1.98E-10	1.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.81E-10	0.00E+00	3.92E-10	9.90E-10	8.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.09E-10	0.00E+00	1.48E-10	3.16E-10	3.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	4.78E-11	0.00E+00	6.44E-11	1.11E-10	1.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	9.81E-17	0.00E+00	1.62E-10	4.00E-10	4.03E-13	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.99E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	7.55E-15	0.00E+00	3.22E-10	4.81E-10	3.85E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	9.92E-14	0.00E+00	8.46E-11	4.26E-10	3.33E-16	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.3E-08	NC	lo uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.3E-06	0.0E+00	NC	4.2E-06	1.4E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-04	0.0E+00	7.6E-06	6.4E-05	8.6E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	2.2E-08	0.0E+00	ND	4.4E-08	5.0E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.2E-09	0.0E+00	ND	1.2E-08	4.2E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	8.8E-07	0.0E+00	ND	1.7E-06	6.0E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	1.8E-06	0.0E+00	ND	3.9E-06	3.3E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.4E-07	0.0E+00	ND	4.2E-07	2.6E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	1.7E-06	0.0E+00	ND	3.8E-06	3.6E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.0E-05	0.0E+00	ND	2.1E-05	1.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.4E-06	0.0E+00	ND	5.3E-06	7.4E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.1E-05	0.0E+00	ND	2.2E-05	1.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.9E-06	0.0E+00	ND	4.0E-06	5.9E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.6E-06	0.0E+00	ND	3.3E-06	2.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.3E-05	0.0E+00	ND	8.1E-05	4.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.5E-06	0.0E+00	ND	7.1E-06	5.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	7.6E-06	0.0E+00	ND	1.6E-05	9.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	3.8E-05	0.0E+00	ND	7.9E-05	6.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.4E-05	0.0E+00	ND	2.5E-05	2.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	6.3E-06	0.0E+00	ND	9.2E-06	1.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	2.5E-12	0.0E+00	1.5E-05	1.0E-05	1.0E-08	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	5.3E-11	0.0E+00	2.2E-06	1.5E-07	8.4E-11	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	4.6E-10	0.0E+00	1.0E-05	3.0E-05	2.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.1E-10	0.0E+00	4.2E-10	1.1E-08	7.0E-12	0.0E+00	0.0E+00	NC	NC	NC
Lead	3.2E-07	0.0E+00	5.5E-05	1.4E-03	1.1E-09	0.0E+00	0.0E+00	NC	NC	NC
Nickel	1.2E-11	0.0E+00	9.9E-06	7.0E-07	4.8E-10	0.0E+00	0.0E+00	NC	NC	NC

Unit 3 Calculations
Pearl Harbor Fisher

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Residential Area	5
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	Pearl Harbor Watershed Impervious	12
Select the location for the pervious area of the watershed	Pearl Harbor Watershed Pervious	13
Select the location for the drinking water and fish exposure water body	Pearl Harbor	10

Unitized Air Modeling Results	Symbol	Units	Location: Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.12364E-06	4.68833E-06	0.000169337	4.16325E-05	2.06069E-06	1.40845E-06	1.67361E-06	1.55181E-06	1.16504E-06	1.46067E-06	0.00000106	8.98971E-07	8.87714E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	2.69505E-05	3.55728E-05	0.000716117	0.000247493	1.70817E-05	9.49959E-06	1.17642E-05	1.16793E-05	6.97918E-06	9.58306E-06	0.00000572	3.24743E-06	3.72772E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	4.01355E-05	4.15061E-05	0.001246786	0.000260698	2.59769E-05	1.64887E-05	1.99835E-05	2.20146E-05	1.49788E-05	1.7859E-05	1.38967E-05	9.66918E-06	1.13007E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000374533	0.000416787	0.013351707	0.002869695	0.000235428	0.000141544	0.000172559	0.000192109	0.000124746	0.000151948	0.000110333	7.397E-05	8.61672E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.001269324	0.001223517	0.016980554	0.005055578	0.000866141	0.000683538	0.000882264	0.000824851	0.000652322	0.000795879	0.000681757	0.000502784	0.000599816
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.001264637	0.001202342	0.016809874	0.004971138	0.000856098	0.000660874	0.000849106	0.000808552	0.000627353	0.000763562	0.000641317	0.000485795	0.000569734
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.96332E-05	0.00000737	0.000334916	0.000024585	7.71414E-06	4.28608E-06	3.96244E-06	6.90681E-06	3.65888E-06	3.64028E-06	0.00000178	1.65668E-06	1.69834E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000185641	0.000101949	0.006451413	0.000447955	2.51769E-05	4.15559E-05	5.65554E-05	1.96172E-05	2.66416E-05	4.39255E-05	5.80167E-05	3.51009E-05	4.3353E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.001254956	0.001220427	0.01692135	0.005057125	0.000864098	0.000680432	0.000879414	0.000823217	0.000651256	0.000794129	0.000675737	0.000497788	0.000595199
Unitized air concentration - HgII			0.001206627	0.00118563	0.016733094	0.004981375	0.000831724	0.000638154	0.000834961	0.000780166	0.000601808	0.000746729	0.000630557	0.00045772	0.000551989
Unitized Dry deposition - HgII			0.000598224	0.000521713	0.018005304	0.002485268	0.000212502	0.000198084	0.000258185	0.000170194	0.000150836	0.00021375	0.000224297	0.000142514	0.000171397
Unitized Wet deposition - HgII			7.23873E-05	4.65256E-05	0.001319981	0.000183213	3.20955E-05	1.74755E-05	2.00334E-05	2.23946E-05	1.51276E-05	1.79687E-05	1.14833E-05	7.71625E-06	8.54413E-06
Unitized air concentration - Hg0			0.001235513	0.001209388	0.016765936	0.00503163	0.000861846	0.000674206	0.000870888	0.000822416	0.000647763	0.00078768	0.00066027	0.000489659	0.000585415
Unitized Dry deposition - Hg0			0.00047757	0.000258017	0.01749374	0.001151858	5.74728E-05	0.000100927	0.000138614	4.32802E-05	6.24654E-05	0.000106344	0.000140533	8.29958E-05	0.000103717
Unitized Wet deposition - Hg0			1.45455E-07	3.22222E-08	8.97143E-07	0.000000095	1.37241E-07	6.43285E-08	4.0757E-08	1.81489E-07	7.03214E-08	4.4703E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	4.32577E-05	4.61939E-05	0.001416126	0.00030233	2.80372E-05	1.7897E-05	2.16572E-05	2.35669E-05	1.61437E-05	1.93197E-05	0.00001496	1.05679E-05	1.2188E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000401483	0.000452359	0.014067826	0.003117188	0.00025251	0.000151043	0.000184323	0.000203789	0.000131725	0.000161531	0.000116053	7.72175E-05	8.98954E-05

Emission Rates

Unit 3

Compound	PM10 g/s	TSP g/s
Mercury, elemental	1.47E-03	1.47E-03
Mercury, methyl	1.47E-03	1.47E-03
Mercury, divalent	1.47E-03	1.47E-03
1,2,3,4,6,7,8,9-OCDD	8.42E-08	8.42E-08
1,2,3,4,6,7,8,9-OCDF	9.02E-09	9.02E-09
1,2,3,4,6,7,8-HpCDD	4.77E-08	4.77E-08
1,2,3,4,6,7,8-HpCDF	1.77E-08	1.77E-08
1,2,3,4,7,8,9-HpCDF	2.87E-09	2.87E-09
1,2,3,4,7,8-HxCDD	2.09E-09	2.09E-09
1,2,3,4,7,8-HxCDF	6.69E-09	6.69E-09
1,2,3,6,7,8-HxCDD	6.73E-09	6.73E-09
1,2,3,6,7,8-HxCDF	6.60E-09	6.60E-09
1,2,3,7,8,9-HxCDD	3.93E-09	3.93E-09
1,2,3,7,8,9-HxCDF	3.39E-09	3.39E-09
1,2,3,7,8-PeCDD	2.01E-09	2.01E-09
1,2,3,7,8-PeCDF	5.23E-09	5.23E-09
2,3,4,6,7,8-HxCDF	4.95E-09	4.95E-09
2,3,4,7,8-PeCDF	6.12E-09	6.12E-09
2,3,7,8-TCDD	9.90E-10	9.90E-10
2,3,7,8-TCDF	3.06E-09	3.06E-09
Arsenic	7.57E-06	7.57E-06
Beryllium	2.20E-06	2.20E-06
Cadmium	5.25E-04	5.25E-04
Chromium	8.80E-05	8.80E-05
Lead	7.36E-03	7.36E-03
Nickel	1.70E-04	1.70E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Residential Area	Pearl Harbor	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Pearl Harbor
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	2.48E-05	6.74E-11	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	4.59E-04
Mercury, divalent	1.26E-03	8.42E-10	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	8.42E-10
1,2,3,4,6,7,8,9-OCDD	9.65E-09	1.26E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	1.85E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	2.14E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	5.90E-14
1,2,3,4,6,7,8-HpCDD	5.46E-09	1.13E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	3.12E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	1.66E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	3.04E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	2.83E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	5.17E-13
1,2,3,4,7,8-HxCDD	2.42E-10	8.03E-18	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	4.15E-14
1,2,3,4,7,8-HxCDF	7.82E-10	1.60E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	7.83E-12
1,2,3,6,7,8-HxCDD	7.78E-10	8.08E-17	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	2.03E-12
1,2,3,6,7,8-HxCDF	7.73E-10	1.58E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	7.76E-12
1,2,3,7,8,9-HxCDD	4.52E-10	4.66E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	1.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	8.43E-17	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	4.13E-12
1,2,3,7,8-PeCDD	2.42E-10	1.12E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	2.89E-12
1,2,3,7,8-PeCDF	6.83E-10	2.41E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	8.13E-12
2,3,4,6,7,8-HxCDF	5.81E-10	1.19E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	5.83E-12
2,3,4,7,8-PeCDF	7.77E-10	4.98E-16	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	1.00E-11
2,3,7,8-TCDD	1.49E-10	5.80E-17	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	1.99E-12
2,3,7,8-TCDF	4.79E-10	7.62E-16	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	7.57E-12
Arsenic	7.27E-12	1.19E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.36E-09
Beryllium	2.94E-09	3.45E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	2.14E-10
Cadmium	3.23E-08	8.29E-10	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	7.52E-07
Chromium	6.58E-06	5.46E-10	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	1.04E-08
Lead	6.74E-06	1.15E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.03E-09
Nickel	1.12E-08	2.68E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	2.09E-08

Summary of EPCs (Non Cancer)	Residential Area	Pearl Harbor	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Pearl Harbor
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	4.86E-05	6.74E-11	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	4.59E-04
Mercury, divalent	2.51E-03	8.42E-10	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	8.42E-10
1,2,3,4,6,7,8,9-OCDD	1.68E-08	1.26E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	1.85E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	2.14E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	5.90E-14
1,2,3,4,6,7,8-HpCDD	9.50E-09	1.13E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	3.12E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	1.66E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	3.04E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	2.83E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	5.17E-13
1,2,3,4,7,8-HxCDD	4.21E-10	8.03E-18	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	4.15E-14
1,2,3,4,7,8-HxCDF	1.36E-09	1.60E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	7.83E-12
1,2,3,6,7,8-HxCDD	1.35E-09	8.08E-17	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	2.03E-12
1,2,3,6,7,8-HxCDF	1.34E-09	1.58E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	7.76E-12
1,2,3,7,8,9-HxCDD	7.85E-10	4.66E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	1.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	8.43E-17	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	4.13E-12
1,2,3,7,8-PeCDD	4.19E-10	1.12E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	2.89E-12
1,2,3,7,8-PeCDF	1.19E-09	2.41E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	8.13E-12
2,3,4,6,7,8-HxCDF	1.01E-09	1.19E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	5.83E-12
2,3,4,7,8-PeCDF	1.34E-09	4.98E-16	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	1.00E-11
2,3,7,8-TCDD	2.54E-10	5.80E-17	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	1.99E-12
2,3,7,8-TCDF	8.16E-10	7.62E-16	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	7.57E-12
Arsenic	7.27E-12	1.19E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.36E-09
Beryllium	2.94E-09	3.45E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	2.14E-10
Cadmium	3.23E-08	8.29E-10	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	7.52E-07
Chromium	6.75E-06	5.46E-10	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	1.04E-08
Lead	6.74E-06	1.15E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.03E-09
Nickel	1.12E-08	2.68E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	2.09E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Adult **5**

H-POWER Expansion **Fisher Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.04E-10	1.49E-05	Residential Area
Water	NC	NC	Pearl Harbor
Air	2.30E-09	3.49E-05	Residential Area
Produce	2.51E-09	2.80E-04	Residential Area
Fish	2.65E-10	1.38E-03	Pearl Harbor
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**5.18E-09**	**1.71E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Adult**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	5.18E-09		1.71E-03	
Mercury, Elemental	NC		5.53E-09	0.0003%
Mercury, Methyl	NC		1.38E-03	80.5632%
Mercury, Divalent	NC		3.07E-05	1.8004%
1,2,3,4,6,7,8,9-OCDD	4.23E-12	0.0816%	4.22E-08	0.0025%
1,2,3,4,6,7,8,9-OCDF	4.52E-13	0.0087%	4.52E-09	0.0003%
1,2,3,4,6,7,8-HpCDD	7.85E-11	1.5153%	7.77E-07	0.0455%
1,2,3,4,6,7,8-HpCDF	3.10E-11	0.5986%	3.18E-07	0.0186%
1,2,3,4,7,8,9-HpCDF	6.43E-12	0.1242%	7.36E-08	0.0043%
1,2,3,4,7,8-HxCDD	3.69E-11	0.7127%	3.80E-07	0.0222%
1,2,3,4,7,8-HxCDF	1.28E-10	2.4729%	1.38E-06	0.0807%
1,2,3,6,7,8-HxCDD	1.25E-10	2.4096%	1.32E-06	0.0772%
1,2,3,6,7,8-HxCDF	1.27E-10	2.4465%	1.37E-06	0.0800%
1,2,3,7,8,9-HxCDD	6.97E-11	1.3468%	7.21E-07	0.0422%
1,2,3,7,8,9-HxCDF	6.71E-11	1.2966%	7.35E-07	0.0430%
1,2,3,7,8-PeCDD	4.40E-10	8.4993%	5.03E-06	0.2946%
1,2,3,7,8-PeCDF	3.25E-11	0.6267%	3.64E-07	0.0213%
2,3,4,6,7,8-HxCDF	9.53E-11	1.8400%	1.03E-06	0.0602%
2,3,4,7,8-PeCDF	3.80E-10	7.3373%	4.28E-06	0.2503%
2,3,7,8-TCDD	2.06E-10	3.9842%	2.34E-06	0.1370%
2,3,7,8-TCDF	6.18E-11	1.1929%	7.07E-07	0.0414%
Arsenic	1.17E-10	2.2540%	1.26E-06	0.0736%
Beryllium	8.18E-12	0.1581%	4.13E-07	0.0242%
Cadmium	2.66E-09	51.4072%	2.42E-05	1.4161%
Chromium	NC		8.72E-10	0.0001%
Lead	5.02E-10	9.6868%	2.51E-04	14.7140%
Nickel	NC		3.19E-06	0.1867%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	Pearl Harbor Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Pearl Harbor Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.48E-05	6.74E-11	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	4.59E-04
Mercury, Divalent	1.26E-03	8.42E-10	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	8.42E-10
1,2,3,4,6,7,8,9-OCDD	9.65E-09	1.26E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	1.85E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	2.14E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	5.90E-14
1,2,3,4,6,7,8-HpCDD	5.46E-09	1.13E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	3.12E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	1.66E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	3.04E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	2.83E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	5.17E-13
1,2,3,4,7,8-HxCDD	2.42E-10	8.03E-18	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	4.15E-14
1,2,3,4,7,8-HxCDF	7.82E-10	1.60E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	7.83E-12
1,2,3,6,7,8-HxCDD	7.78E-10	8.08E-17	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	2.03E-12
1,2,3,6,7,8-HxCDF	7.73E-10	1.58E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	7.76E-12
1,2,3,7,8,9-HxCDD	4.52E-10	4.66E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	1.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	8.43E-17	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	4.13E-12
1,2,3,7,8-PeCDD	2.42E-10	1.12E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	2.89E-12
1,2,3,7,8-PeCDF	6.83E-10	2.41E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	8.13E-12
2,3,4,6,7,8-HxCDF	5.81E-10	1.19E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	5.83E-12
2,3,4,7,8-PeCDF	7.77E-10	4.98E-16	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	1.00E-11
2,3,7,8-TCDD	1.49E-10	5.80E-17	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	1.99E-12
2,3,7,8-TCDF	4.79E-10	7.62E-16	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	7.57E-12
Arsenic	7.27E-12	1.19E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.36E-09
Beryllium	2.94E-09	3.45E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	2.14E-10
Cadmium	3.23E-08	8.29E-10	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	7.52E-07
Chromium	6.58E-06	5.46E-10	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	1.04E-08
Lead	6.74E-06	1.15E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.03E-09
Nickel	1.12E-08	2.68E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	2.09E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	Pearl Harbor Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Pearl Harbor Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.86E-05	6.74E-11	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	4.59E-04
Mercury, Divalent	2.51E-03	8.42E-10	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	8.42E-10
1,2,3,4,6,7,8,9-OCDD	1.68E-08	1.26E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	1.85E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	2.14E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	5.90E-14
1,2,3,4,6,7,8-HpCDD	9.50E-09	1.13E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	3.12E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	1.66E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	3.04E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	2.83E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	5.17E-13
1,2,3,4,7,8-HxCDD	4.21E-10	8.03E-18	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	4.15E-14
1,2,3,4,7,8-HxCDF	1.36E-09	1.60E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	7.83E-12
1,2,3,6,7,8-HxCDD	1.35E-09	8.08E-17	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	2.03E-12
1,2,3,6,7,8-HxCDF	1.34E-09	1.58E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	7.76E-12
1,2,3,7,8,9-HxCDD	7.85E-10	4.66E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	1.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	8.43E-17	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	4.13E-12
1,2,3,7,8-PeCDD	4.19E-10	1.12E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	2.89E-12
1,2,3,7,8-PeCDF	1.19E-09	2.41E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	8.13E-12
2,3,4,6,7,8-HxCDF	1.01E-09	1.19E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	5.83E-12
2,3,4,7,8-PeCDF	1.34E-09	4.98E-16	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	1.00E-11
2,3,7,8-TCDD	2.54E-10	5.80E-17	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	1.99E-12
2,3,7,8-TCDF	8.16E-10	7.62E-16	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	7.57E-12
Arsenic	7.27E-12	1.19E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.36E-09
Beryllium	2.94E-09	3.45E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	2.14E-10
Cadmium	3.23E-08	8.29E-10	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	7.52E-07
Chromium	6.75E-06	5.46E-10	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	1.04E-08
Lead	6.74E-06	1.15E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.03E-09
Nickel	1.12E-08	2.68E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	2.09E-08

H-POWER Expansion **Fisher Adult**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	2.55E-13	0.00E+00	1.71E-12	2.26E-12	1.07E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.73E-14	0.00E+00	1.83E-13	2.42E-13	3.41E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	4.81E-12	0.00E+00	3.23E-11	4.14E-11	6.01E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.79E-12	0.00E+00	1.20E-11	1.66E-11	5.86E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	2.98E-13	0.00E+00	1.94E-12	4.09E-12	9.96E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	2.13E-12	0.00E+00	1.42E-11	2.05E-11	8.00E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	6.88E-12	0.00E+00	4.53E-11	6.08E-11	1.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	6.85E-12	0.00E+00	4.55E-11	6.85E-11	3.91E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	6.81E-12	0.00E+00	4.46E-11	6.03E-11	1.49E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	3.98E-12	0.00E+00	2.66E-11	3.69E-11	2.25E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	3.57E-12	0.00E+00	2.29E-11	3.27E-11	7.96E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.13E-11	0.00E+00	1.36E-10	2.27E-10	5.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.80E-12	0.00E+00	1.06E-11	1.53E-11	4.70E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.12E-12	0.00E+00	3.35E-11	4.54E-11	1.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.05E-11	0.00E+00	1.24E-10	1.77E-10	5.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.31E-11	0.00E+00	6.70E-11	8.78E-11	3.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	4.22E-12	0.00E+00	2.07E-11	2.22E-11	1.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	6.40E-18	0.00E+00	5.05E-11	6.59E-11	2.62E-13	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.18E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	7.20E-15	0.00E+00	1.47E-09	1.16E-09	3.67E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	3.36E-14	0.00E+00	1.37E-10	3.64E-10	1.13E-15	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Adult**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.5E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.7E-07	0.0E+00	NC	8.9E-07	1.4E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-05	0.0E+00	3.2E-06	1.6E-05	8.4E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	6.9E-09	0.0E+00	ND	3.5E-08	1.7E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	7.4E-10	0.0E+00	ND	3.8E-09	5.3E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.3E-07	0.0E+00	ND	6.5E-07	9.3E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	4.8E-08	0.0E+00	ND	2.6E-07	9.1E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	8.1E-09	0.0E+00	ND	6.4E-08	1.5E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	5.8E-08	0.0E+00	ND	3.2E-07	1.2E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.9E-07	0.0E+00	ND	9.6E-07	2.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.9E-07	0.0E+00	ND	1.1E-06	6.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.8E-07	0.0E+00	ND	9.5E-07	2.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.1E-07	0.0E+00	ND	5.8E-07	3.5E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	9.6E-08	0.0E+00	ND	5.1E-07	1.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	5.7E-07	0.0E+00	ND	3.6E-06	8.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.9E-08	0.0E+00	ND	2.4E-07	7.3E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	1.4E-07	0.0E+00	ND	7.2E-07	1.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	5.5E-07	0.0E+00	ND	2.8E-06	9.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.5E-07	0.0E+00	ND	1.4E-06	6.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.1E-07	0.0E+00	ND	3.7E-07	2.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	3.3E-14	0.0E+00	9.1E-07	3.4E-07	1.4E-09	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	2.0E-12	0.0E+00	4.0E-07	1.5E-08	3.2E-11	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.8E-11	0.0E+00	9.5E-06	1.4E-05	4.5E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	6.2E-12	0.0E+00	6.0E-11	8.0E-10	2.1E-12	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.2E-08	0.0E+00	1.8E-05	2.3E-04	7.2E-10	0.0E+00	0.0E+00	NC	NC	NC
Nickel	7.7E-13	0.0E+00	3.1E-06	1.1E-07	3.1E-10	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Child 6

H-POWER Expansion **Fisher Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.93E-10	1.39E-04	Residential Area
Water	NC	NC	Pearl Harbor
Air	1.15E-09	8.67E-05	Residential Area
Produce	1.88E-09	1.05E-03	Residential Area
Fish	3.73E-11	9.70E-04	Pearl Harbor
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**3.25E-09**	**2.25E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Child**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	3.25E-09		2.25E-03	
Mercury, Elemental	NC		1.38E-08	0.0006%
Mercury, Methyl	NC		9.78E-04	43.5104%
Mercury, Divalent	NC		1.80E-04	7.9965%
1,2,3,4,6,7,8,9-OCDD	3.02E-12	0.0928%	1.97E-07	0.0087%
1,2,3,4,6,7,8,9-OCDF	3.23E-13	0.0099%	2.11E-08	0.0009%
1,2,3,4,6,7,8-HpCDD	5.60E-11	1.7213%	3.64E-06	0.1618%
1,2,3,4,6,7,8-HpCDF	2.18E-11	0.6718%	1.44E-06	0.0639%
1,2,3,4,7,8,9-HpCDF	4.60E-12	0.1414%	3.16E-07	0.0141%
1,2,3,4,7,8-HxCDD	2.64E-11	0.8120%	1.74E-06	0.0775%
1,2,3,4,7,8-HxCDF	8.31E-11	2.5550%	5.50E-06	0.2447%
1,2,3,6,7,8-HxCDD	8.73E-11	2.6839%	5.80E-06	0.2580%
1,2,3,6,7,8-HxCDF	8.22E-11	2.5281%	5.45E-06	0.2424%
1,2,3,7,8,9-HxCDD	4.86E-11	1.4950%	3.20E-06	0.1423%
1,2,3,7,8,9-HxCDF	4.37E-11	1.3434%	2.92E-06	0.1299%
1,2,3,7,8-PeCDD	2.86E-10	8.7796%	1.95E-05	0.8656%
1,2,3,7,8-PeCDF	2.08E-11	0.6400%	1.42E-06	0.0631%
2,3,4,6,7,8-HxCDF	6.18E-11	1.9018%	4.10E-06	0.1825%
2,3,4,7,8-PeCDF	2.41E-10	7.4168%	1.64E-05	0.7299%
2,3,7,8-TCDD	1.29E-10	3.9704%	8.92E-06	0.3969%
2,3,7,8-TCDF	3.70E-11	1.1380%	2.60E-06	0.1157%
Arsenic	7.44E-11	2.2886%	3.55E-06	0.1580%
Beryllium	4.07E-12	0.1252%	1.04E-06	0.0465%
Cadmium	1.60E-09	49.2101%	7.71E-05	3.4310%
Chromium	NC		3.21E-09	0.0001%
Lead	3.41E-10	10.4750%	9.17E-04	40.7996%
Nickel	NC		8.07E-06	0.3592%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	Pearl Harbor Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Pearl Harbor Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.48E-05	6.74E-11	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	4.59E-04
Mercury, Divalent	1.26E-03	8.42E-10	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	8.42E-10
1,2,3,4,6,7,8,9-OCDD	9.65E-09	1.26E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	1.85E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	2.14E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	5.90E-14
1,2,3,4,6,7,8-HpCDD	5.46E-09	1.13E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	3.12E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	1.66E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	3.04E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	2.83E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	5.17E-13
1,2,3,4,7,8-HxCDD	2.42E-10	8.03E-18	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	4.15E-14
1,2,3,4,7,8-HxCDF	7.82E-10	1.60E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	7.83E-12
1,2,3,6,7,8-HxCDD	7.78E-10	8.08E-17	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	2.03E-12
1,2,3,6,7,8-HxCDF	7.73E-10	1.58E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	7.76E-12
1,2,3,7,8,9-HxCDD	4.52E-10	4.66E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	1.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	8.43E-17	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	4.13E-12
1,2,3,7,8-PeCDD	2.42E-10	1.12E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	2.89E-12
1,2,3,7,8-PeCDF	6.83E-10	2.41E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	8.13E-12
2,3,4,6,7,8-HxCDF	5.81E-10	1.19E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	5.83E-12
2,3,4,7,8-PeCDF	7.77E-10	4.98E-16	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	1.00E-11
2,3,7,8-TCDD	1.49E-10	5.80E-17	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	1.99E-12
2,3,7,8-TCDF	4.79E-10	7.62E-16	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	7.57E-12
Arsenic	7.27E-12	1.19E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.36E-09
Beryllium	2.94E-09	3.45E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	2.14E-10
Cadmium	3.23E-08	8.29E-10	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	7.52E-07
Chromium	6.58E-06	5.46E-10	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	1.04E-08
Lead	6.74E-06	1.15E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.03E-09
Nickel	1.12E-08	2.68E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	2.09E-08

Noncancer concentrations H-POWER Expansion	Residential Area Soil	Pearl Harbor Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Pearl Harbor Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.86E-05	6.74E-11	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	4.59E-04
Mercury, Divalent	2.51E-03	8.42E-10	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	8.42E-10
1,2,3,4,6,7,8,9-OCDD	1.68E-08	1.26E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	1.85E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	2.14E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	5.90E-14
1,2,3,4,6,7,8-HpCDD	9.50E-09	1.13E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	3.12E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	1.66E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	3.04E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	2.83E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	5.17E-13
1,2,3,4,7,8-HxCDD	4.21E-10	8.03E-18	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	4.15E-14
1,2,3,4,7,8-HxCDF	1.36E-09	1.60E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	7.83E-12
1,2,3,6,7,8-HxCDD	1.35E-09	8.08E-17	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	2.03E-12
1,2,3,6,7,8-HxCDF	1.34E-09	1.58E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	7.76E-12
1,2,3,7,8,9-HxCDD	7.85E-10	4.66E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	1.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	8.43E-17	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	4.13E-12
1,2,3,7,8-PeCDD	4.19E-10	1.12E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	2.89E-12
1,2,3,7,8-PeCDF	1.19E-09	2.41E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	8.13E-12
2,3,4,6,7,8-HxCDF	1.01E-09	1.19E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	5.83E-12
2,3,4,7,8-PeCDF	1.34E-09	4.98E-16	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	1.00E-11
2,3,7,8-TCDD	2.54E-10	5.80E-17	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	1.99E-12
2,3,7,8-TCDF	8.16E-10	7.62E-16	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	7.57E-12
Arsenic	7.27E-12	1.19E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.36E-09
Beryllium	2.94E-09	3.45E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	2.14E-10
Cadmium	3.23E-08	8.29E-10	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	7.52E-07
Chromium	6.75E-06	5.46E-10	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	1.04E-08
Lead	6.74E-06	1.15E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.03E-09
Nickel	1.12E-08	2.68E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	2.09E-08

H-POWER Expansion **Fisher Child**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)

LADI = Lifetime average daily intake (mg/kg-day)

CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	4.76E-13	0.00E+00	8.51E-13	1.69E-12	1.51E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	5.09E-14	0.00E+00	9.11E-14	1.81E-13	4.80E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	8.97E-12	0.00E+00	1.60E-11	3.10E-11	8.46E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	3.34E-12	0.00E+00	5.96E-12	1.25E-11	8.24E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.56E-13	0.00E+00	9.67E-13	3.06E-12	1.40E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	3.98E-12	0.00E+00	7.04E-12	1.54E-11	1.13E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	1.29E-11	0.00E+00	2.25E-11	4.56E-11	2.12E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	1.28E-11	0.00E+00	2.27E-11	5.13E-11	5.50E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	1.27E-11	0.00E+00	2.22E-11	4.52E-11	2.10E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	7.43E-12	0.00E+00	1.32E-11	2.76E-11	3.18E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	6.66E-12	0.00E+00	1.14E-11	2.45E-11	1.12E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	3.98E-11	0.00E+00	6.76E-11	1.70E-10	7.85E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	3.37E-12	0.00E+00	5.28E-12	1.15E-11	6.62E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	9.55E-12	0.00E+00	1.67E-11	3.41E-11	1.58E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	3.83E-11	0.00E+00	6.18E-11	1.33E-10	8.17E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	2.45E-11	0.00E+00	3.33E-11	6.59E-11	5.41E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	7.88E-12	0.00E+00	1.03E-11	1.68E-11	2.05E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	1.19E-17	0.00E+00	2.51E-11	4.92E-11	3.69E-14	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	4.07E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.34E-14	0.00E+00	7.30E-10	8.65E-10	5.17E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	6.28E-14	0.00E+00	6.82E-11	2.72E-10	1.59E-16	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.4E-08	NC	Io uptake factc	NC	NC	NC	NC	NC
Mercury, Methyl	6.2E-06	0.0E+00	NC	4.1E-06	9.7E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-04	0.0E+00	7.9E-06	6.5E-05	5.9E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	6.4E-08	0.0E+00	ND	1.3E-07	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.9E-09	0.0E+00	ND	1.4E-08	3.7E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.2E-06	0.0E+00	ND	2.4E-06	6.6E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	4.5E-07	0.0E+00	ND	9.8E-07	6.4E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	7.5E-08	0.0E+00	ND	2.4E-07	1.1E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	5.4E-07	0.0E+00	ND	1.2E-06	8.8E-10	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.7E-06	0.0E+00	ND	3.6E-06	1.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.7E-06	0.0E+00	ND	4.0E-06	4.3E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.7E-06	0.0E+00	ND	3.6E-06	1.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.0E-06	0.0E+00	ND	2.2E-06	2.5E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	9.0E-07	0.0E+00	ND	1.9E-06	8.7E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	5.4E-06	0.0E+00	ND	1.3E-05	6.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.5E-07	0.0E+00	ND	9.1E-07	5.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	1.3E-06	0.0E+00	ND	2.7E-06	1.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	5.2E-06	0.0E+00	ND	1.1E-05	6.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.2E-06	0.0E+00	ND	5.3E-06	4.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.0E-06	0.0E+00	ND	1.4E-06	1.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	3.1E-13	0.0E+00	2.3E-06	1.3E-06	9.6E-10	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	1.9E-11	0.0E+00	9.9E-07	5.5E-08	2.3E-11	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.3E-10	0.0E+00	2.4E-05	5.3E-05	3.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	5.8E-11	0.0E+00	1.5E-10	3.0E-09	1.5E-12	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.0E-07	0.0E+00	4.4E-05	8.7E-04	5.1E-10	0.0E+00	0.0E+00	NC	NC	NC
Nickel	7.2E-12	0.0E+00	7.6E-06	4.3E-07	2.2E-10	0.0E+00	0.0E+00	NC	NC	NC

Units 1 & 2 Calculations
West Loch Fisher

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Residential Area	5
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

Unitized Air Modeling Results	Symbol	Units Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.46455E-06	4.37944E-06	0.000186393	0.000033865	1.93621E-06	1.37464E-06	1.61613E-06	1.46149E-06	1.1317E-06	1.40998E-06	9.83333E-07	8.84131E-07	8.59213E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	3.38523E-05	3.68356E-05	0.00075806	0.00023434	1.71645E-05	9.76055E-06	1.19425E-05	1.16923E-05	7.17437E-06	9.74894E-06	5.46667E-06	3.36044E-06	3.76898E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	0.000034625	3.70156E-05	0.000643109	0.000181585	2.26614E-05	1.47727E-05	1.84775E-05	1.91377E-05	1.34115E-05	1.6423E-05	1.44033E-05	8.52861E-06	1.03516E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000335306	0.000391544	0.006901513	0.002012835	0.000216809	0.00013562	0.000166552	0.0001782	0.00011969	0.000146841	0.00011235	7.13193E-05	8.42169E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.000879218	0.000800461	0.008591956	0.002852313	0.000510271	0.000446853	0.000701292	0.000475492	0.000425908	0.000607652	0.00078381	0.000317958	0.00045034
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.000860414	0.000780127	0.008545623	0.002814235	0.000495852	0.000441446	0.00068391	0.000468449	0.000421462	0.000594625	0.000749947	0.000319121	0.000443985
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.68845E-05	7.04722E-06	0.000311157	2.20675E-05	7.0269E-06	4.12962E-06	3.85475E-06	6.59223E-06	3.58509E-06	3.55522E-06	1.87667E-06	1.62769E-06	1.70537E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000150544	7.44283E-05	0.002883657	0.00022228	1.95931E-05	3.6231E-05	4.94079E-05	1.57333E-05	2.30601E-05	3.82578E-05	0.00005449	3.12193E-05	3.92822E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.000870941	0.000799849	0.008582527	0.002856068	0.000510282	0.000444023	0.000698883	0.0004744	0.000423892	0.000605529	0.000779117	0.00031358	0.000445597
Unitized air concentration - HgII			0.000836867	0.000780368	0.008522327	0.00282602	0.000495858	0.000425242	0.000670983	0.000460566	0.000405519	0.000580343	0.00073797	0.000293634	0.000419545
Unitized Dry deposition - HgII			0.000513978	0.000397487	0.009259773	0.001450035	0.000171102	0.000173203	0.000226938	0.000139525	0.000131513	0.000187547	0.00021364	0.000128137	0.000156247
Unitized Wet deposition - HgII			6.82945E-05	4.61633E-05	0.001260296	0.00017232	3.04645E-05	1.7167E-05	1.95452E-05	2.12377E-05	1.49035E-05	1.76076E-05	1.08633E-05	7.64211E-06	8.33146E-06
Unitized air concentration - Hg0			0.000858408	0.000793558	0.008547674	0.002847923	0.00050834	0.000438557	0.000692329	0.000473055	0.000420543	0.000600363	0.00076766	0.00030652	0.000437305
Unitized Dry deposition - Hg0			0.000392447	0.000191023	0.007891281	0.000573655	4.67207E-05	9.01547E-05	0.00012272	3.66957E-05	5.57671E-05	9.41557E-05	0.00013191	7.59329E-05	9.58428E-05
Unitized Wet deposition - Hg0			1.46364E-07	0.00000003	8.52857E-07	8.75E-08	1.72069E-07	8.30802E-08	4.94966E-08	2.4883E-07	9.72936E-08	5.7478E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	3.80891E-05	4.13933E-05	0.000829501	0.000215453	2.45983E-05	1.61476E-05	2.00938E-05	2.05989E-05	1.45434E-05	1.7833E-05	1.53867E-05	9.41323E-06	1.12102E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000369159	0.000428381	0.007659573	0.002247173	0.000233974	0.000145381	0.000178495	0.000189893	0.000126864	0.000156591	0.000117813	7.46801E-05	8.7986E-05

Emission Rates

Units 1 & 2

Compound	PM10 g/s	TSP g/s
Mercury, elemental	2.46E-03	2.46E-03
Mercury, methyl	2.46E-03	2.46E-03
Mercury, divalent	2.46E-03	2.46E-03
1,2,3,4,6,7,8,9-OCDD	4.00E-08	4.00E-08
1,2,3,4,6,7,8,9-OCDF	1.14E-08	1.14E-08
1,2,3,4,6,7,8-HpCDD	4.84E-08	4.84E-08
1,2,3,4,6,7,8-HpCDF	1.01E-07	1.01E-07
1,2,3,4,7,8,9-HpCDF	7.74E-09	7.74E-09
1,2,3,4,7,8-HxCDD	9.59E-09	9.59E-09
1,2,3,4,7,8-HxCDF	5.71E-08	5.71E-08
1,2,3,6,7,8-HxCDD	1.30E-08	1.30E-08
1,2,3,6,7,8-HxCDF	6.01E-08	6.01E-08
1,2,3,7,8,9-HxCDD	1.04E-08	1.04E-08
1,2,3,7,8,9-HxCDF	8.56E-09	8.56E-09
1,2,3,7,8-PeCDD	1.83E-08	1.83E-08
1,2,3,7,8-PeCDF	6.24E-08	6.24E-08
2,3,4,6,7,8-HxCDF	4.18E-08	4.18E-08
2,3,4,7,8-PeCDF	6.88E-08	6.88E-08
2,3,7,8-TCDD	7.79E-09	7.79E-09
2,3,7,8-TCDF	3.39E-08	3.39E-08
Arsenic	8.63E-05	8.63E-05
Beryllium	8.57E-06	8.57E-06
Cadmium	4.09E-04	4.09E-04
Chromium	4.41E-04	4.41E-04
Lead	1.61E-02	1.61E-02
Nickel	3.89E-04	3.89E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Residential Area	West Loch	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	2.53E-05	2.09E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, divalent	1.28E-03	2.60E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	9.95E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	4.47E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.91E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	1.58E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.29E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	7.83E-10	6.16E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	4.66E-09	2.31E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.06E-09	2.62E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	4.91E-09	2.45E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.06E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	7.03E-10	3.66E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	1.50E-09	1.77E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	5.23E-09	5.21E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	3.41E-09	1.71E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	5.69E-09	1.00E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	6.62E-10	8.92E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	2.91E-09	1.68E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	2.38E-05	6.09E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Summary of EPCs (Non Cancer)	Residential Area	West Loch	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	4.96E-05	2.09E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, divalent	2.56E-03	2.60E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	9.95E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	4.47E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.91E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	1.58E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.29E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.36E-09	6.16E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	8.09E-09	2.31E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.84E-09	2.62E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	8.53E-09	2.45E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.06E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.22E-09	3.66E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	2.60E-09	1.77E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	9.08E-09	5.21E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	5.93E-09	1.71E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	9.85E-09	1.00E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	1.13E-09	8.92E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	4.95E-09	1.68E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	2.44E-05	6.09E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Adult 5

H-POWER Expansion **Fisher Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	5.36E-10	2.68E-05	Residential Area
Water	NC	NC	West Loch
Air	3.97E-09	4.00E-05	Residential Area
Produce	6.50E-09	4.68E-04	Residential Area
Fish	3.79E-09	4.33E-03	West Loch
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**1.48E-08**	**4.86E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Adult**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	1.48E-08		4.86E-03	
Mercury, Elemental	NC		5.25E-09	0.0001%
Mercury, Methyl	NC		4.27E-03	87.8237%
Mercury, Divalent	NC		3.05E-05	0.6273%
1,2,3,4,6,7,8,9-OCDD	1.29E-12	0.0087%	1.40E-08	0.0003%
1,2,3,4,6,7,8,9-OCDF	3.67E-13	0.0025%	3.99E-09	0.0001%
1,2,3,4,6,7,8-HpCDD	5.15E-11	0.3479%	5.55E-07	0.0114%
1,2,3,4,6,7,8-HpCDF	1.17E-10	0.7912%	1.31E-06	0.0270%
1,2,3,4,7,8,9-HpCDF	1.11E-11	0.0748%	1.33E-07	0.0027%
1,2,3,4,7,8-HxCDD	1.08E-10	0.7321%	1.20E-06	0.0247%
1,2,3,4,7,8-HxCDF	8.35E-10	5.6406%	1.01E-05	0.2086%
1,2,3,6,7,8-HxCDD	1.61E-10	1.0897%	1.86E-06	0.0382%
1,2,3,6,7,8-HxCDF	8.82E-10	5.9540%	1.07E-05	0.2204%
1,2,3,7,8,9-HxCDD	1.25E-10	0.8419%	1.41E-06	0.0291%
1,2,3,7,8,9-HxCDF	1.29E-10	0.8743%	1.59E-06	0.0326%
1,2,3,7,8-PeCDD	3.08E-09	20.8200%	3.89E-05	0.8005%
1,2,3,7,8-PeCDF	3.07E-10	2.0714%	3.85E-06	0.0791%
2,3,4,6,7,8-HxCDF	6.14E-10	4.1481%	7.47E-06	0.1536%
2,3,4,7,8-PeCDF	3.43E-09	23.1480%	4.32E-05	0.8895%
2,3,7,8-TCDD	1.37E-09	9.2382%	1.74E-05	0.3582%
2,3,7,8-TCDF	6.24E-10	4.2142%	8.11E-06	0.1668%
Arsenic	8.67E-10	5.8537%	8.70E-06	0.1790%
Beryllium	1.81E-11	0.1221%	9.20E-07	0.0189%
Cadmium	1.34E-09	9.0305%	1.27E-05	0.2606%
Chromium	NC		3.09E-09	0.0001%
Lead	7.40E-10	4.9963%	3.87E-04	7.9614%
Nickel	NC		4.18E-06	0.0860%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.53E-05	2.09E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, Divalent	1.28E-03	2.60E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	9.95E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	4.47E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.91E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	1.58E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.29E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	7.83E-10	6.16E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	4.66E-09	2.31E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.06E-09	2.62E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	4.91E-09	2.45E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.06E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	7.03E-10	3.66E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	1.50E-09	1.77E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	5.23E-09	5.21E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	3.41E-09	1.71E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	5.69E-09	1.00E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	6.62E-10	8.92E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	2.91E-09	1.68E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	2.38E-05	6.09E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.96E-05	2.09E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, Divalent	2.56E-03	2.60E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	9.95E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	4.47E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.91E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	1.58E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.29E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.36E-09	6.16E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	8.09E-09	2.31E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.84E-09	2.62E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	8.53E-09	2.45E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.06E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.22E-09	3.66E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	2.60E-09	1.77E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	9.08E-09	5.21E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	5.93E-09	1.71E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	9.85E-09	1.00E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	1.13E-09	8.92E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	4.95E-09	1.68E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	2.44E-05	6.09E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

H-POWER Expansion **Fisher Adult**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	8.61E-14	0.00E+00	4.58E-13	7.48E-13	8.43E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.45E-14	0.00E+00	1.30E-13	2.12E-13	7.12E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	3.47E-12	0.00E+00	1.85E-11	2.94E-11	1.01E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	7.26E-12	0.00E+00	3.86E-11	6.57E-11	5.58E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.59E-13	0.00E+00	2.96E-12	7.10E-12	4.56E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	6.90E-12	0.00E+00	3.66E-11	6.43E-11	6.14E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	4.10E-11	0.00E+00	2.18E-10	3.58E-10	2.18E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	9.32E-12	0.00E+00	4.96E-11	8.97E-11	1.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	4.32E-11	0.00E+00	2.29E-10	3.78E-10	2.31E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	7.46E-12	0.00E+00	3.98E-11	6.74E-11	9.98E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	6.19E-12	0.00E+00	3.27E-11	5.60E-11	3.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	1.32E-10	0.00E+00	7.00E-10	1.37E-09	8.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.38E-11	0.00E+00	7.15E-11	1.20E-10	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	3.00E-11	0.00E+00	1.59E-10	2.64E-10	1.61E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	1.50E-10	0.00E+00	7.88E-10	1.32E-09	1.17E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	5.83E-11	0.00E+00	2.98E-10	4.21E-10	5.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	2.56E-11	0.00E+00	1.30E-10	1.48E-10	3.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	5.25E-17	0.00E+00	3.26E-10	5.36E-10	4.84E-12	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	1.81E-11	ND	ND	ND	ND	ND	ND	ND
Cadmium	4.04E-15	0.00E+00	6.47E-10	6.44E-10	4.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	5.31E-14	0.00E+00	1.70E-10	5.70E-10	4.03E-15	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Adult**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.3E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.8E-07	0.0E+00	NC	9.0E-07	4.3E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.2E-05	0.0E+00	3.0E-06	1.6E-05	2.6E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	2.3E-09	0.0E+00	ND	1.2E-08	1.3E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.6E-10	0.0E+00	ND	3.3E-09	1.1E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	9.4E-08	0.0E+00	ND	4.6E-07	1.6E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	2.0E-07	0.0E+00	ND	1.0E-06	8.7E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.5E-08	0.0E+00	ND	1.1E-07	7.1E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	1.9E-07	0.0E+00	ND	1.0E-06	9.6E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.1E-06	0.0E+00	ND	5.6E-06	3.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.5E-07	0.0E+00	ND	1.4E-06	2.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.2E-06	0.0E+00	ND	6.0E-06	3.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	2.0E-07	0.0E+00	ND	1.1E-06	1.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.7E-07	0.0E+00	ND	8.8E-07	5.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.6E-06	0.0E+00	ND	2.2E-05	1.4E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.7E-07	0.0E+00	ND	1.9E-06	1.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	8.1E-07	0.0E+00	ND	4.2E-06	2.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	4.0E-06	0.0E+00	ND	2.1E-05	1.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.5E-06	0.0E+00	ND	6.7E-06	9.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	6.8E-07	0.0E+00	ND	2.4E-06	5.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	2.7E-13	0.0E+00	5.9E-06	2.8E-06	2.5E-08	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	5.7E-12	0.0E+00	8.8E-07	4.1E-08	2.0E-10	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	5.0E-11	0.0E+00	4.2E-06	7.9E-06	5.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.2E-11	0.0E+00	1.7E-10	2.9E-09	2.3E-11	0.0E+00	0.0E+00	NC	NC	NC
Lead	3.4E-08	0.0E+00	2.2E-05	3.6E-04	2.6E-09	0.0E+00	0.0E+00	NC	NC	NC
Nickel	1.3E-12	0.0E+00	4.0E-06	1.9E-07	1.2E-09	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Child 6

H-POWER Expansion **Fisher Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.00E-09	2.50E-04	Residential Area
Water	NC	NC	West Loch
Air	1.98E-09	9.96E-05	Residential Area
Produce	4.87E-09	1.76E-03	Residential Area
Fish	5.34E-10	3.05E-03	West Loch
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**8.38E-09**	**5.15E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Child**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	8.38E-09		5.15E-03	
Mercury, Elemental	NC		1.31E-08	0.0003%
Mercury, Methyl	NC		3.01E-03	58.5299%
Mercury, Divalent	NC		1.80E-04	3.5000%
1,2,3,4,6,7,8,9-OCDD	9.48E-13	0.0113%	6.55E-08	0.0013%
1,2,3,4,6,7,8,9-OCDF	2.69E-13	0.0032%	1.86E-08	0.0004%
1,2,3,4,6,7,8-HpCDD	3.77E-11	0.4502%	2.60E-06	0.0505%
1,2,3,4,6,7,8-HpCDF	8.27E-11	0.9870%	5.76E-06	0.1118%
1,2,3,4,7,8,9-HpCDF	7.89E-12	0.0941%	5.62E-07	0.0109%
1,2,3,4,7,8-HxCDD	7.93E-11	0.9457%	5.51E-06	0.1070%
1,2,3,4,7,8-HxCDF	4.84E-10	5.7751%	3.39E-05	0.6586%
1,2,3,6,7,8-HxCDD	1.11E-10	1.3248%	7.77E-06	0.1508%
1,2,3,6,7,8-HxCDF	5.11E-10	6.0924%	3.58E-05	0.6952%
1,2,3,7,8,9-HxCDD	8.56E-11	1.0214%	5.96E-06	0.1157%
1,2,3,7,8,9-HxCDF	7.46E-11	0.8904%	5.25E-06	0.1019%
1,2,3,7,8-PeCDD	1.74E-09	20.7981%	1.24E-04	2.4083%
1,2,3,7,8-PeCDF	1.66E-10	1.9743%	1.17E-05	0.2275%
2,3,4,6,7,8-HxCDF	3.56E-10	4.2434%	2.49E-05	0.4842%
2,3,4,7,8-PeCDF	1.83E-09	21.7914%	1.30E-04	2.5155%
2,3,7,8-TCDD	6.56E-10	7.8246%	4.60E-05	0.8936%
2,3,7,8-TCDF	2.69E-10	3.2062%	1.91E-05	0.3702%
Arsenic	5.63E-10	6.7179%	2.51E-05	0.4866%
Beryllium	8.99E-12	0.1072%	2.34E-06	0.0454%
Cadmium	8.09E-10	9.6531%	4.04E-05	0.7836%
Chromium	NC		1.14E-08	0.0002%
Lead	5.10E-10	6.0882%	1.42E-03	27.5444%
Nickel	NC		1.06E-05	0.2062%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.53E-05	2.09E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, Divalent	1.28E-03	2.60E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	9.95E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	4.47E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.91E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	1.58E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.29E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	7.83E-10	6.16E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	4.66E-09	2.31E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.06E-09	2.62E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	4.91E-09	2.45E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.06E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	7.03E-10	3.66E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	1.50E-09	1.77E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	5.23E-09	5.21E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	3.41E-09	1.71E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	5.69E-09	1.00E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	6.62E-10	8.92E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	2.91E-09	1.68E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	2.38E-05	6.09E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.96E-05	2.09E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, Divalent	2.56E-03	2.60E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	9.95E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	4.47E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.91E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	1.58E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.29E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.36E-09	6.16E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	8.09E-09	2.31E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.84E-09	2.62E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	8.53E-09	2.45E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.06E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.22E-09	3.66E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	2.60E-09	1.77E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	9.08E-09	5.21E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	5.93E-09	1.71E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	9.85E-09	1.00E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	1.13E-09	8.92E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	4.95E-09	1.68E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	2.44E-05	6.09E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

H-POWER Expansion **Fisher Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	1.61E-13	0.00E+00	2.28E-13	5.60E-13	1.19E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	4.57E-14	0.00E+00	6.47E-14	1.59E-13	1.00E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	6.49E-12	0.00E+00	9.20E-12	2.20E-11	1.43E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.35E-11	0.00E+00	1.92E-11	4.92E-11	7.85E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	1.04E-12	0.00E+00	1.47E-12	5.31E-12	6.42E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	1.29E-11	0.00E+00	1.82E-11	4.81E-11	8.65E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	7.66E-11	0.00E+00	1.08E-10	2.69E-10	3.07E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	1.74E-11	0.00E+00	2.47E-11	6.72E-11	1.78E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	8.07E-11	0.00E+00	1.14E-10	2.83E-10	3.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	1.39E-11	0.00E+00	1.98E-11	5.05E-11	1.40E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	1.16E-11	0.00E+00	1.63E-11	4.20E-11	4.87E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.47E-10	0.00E+00	3.48E-10	1.02E-09	1.24E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	2.58E-11	0.00E+00	3.55E-11	8.99E-11	1.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.61E-11	0.00E+00	7.93E-11	1.98E-10	2.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.81E-10	0.00E+00	3.92E-10	9.90E-10	1.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.09E-10	0.00E+00	1.48E-10	3.16E-10	8.32E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	4.78E-11	0.00E+00	6.44E-11	1.11E-10	4.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	9.81E-17	0.00E+00	1.62E-10	4.00E-10	6.81E-13	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.99E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	7.55E-15	0.00E+00	3.22E-10	4.81E-10	6.54E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	9.92E-14	0.00E+00	8.46E-11	4.26E-10	5.67E-16	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.3E-08	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.3E-06	0.0E+00	NC	4.2E-06	3.0E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-04	0.0E+00	7.6E-06	6.4E-05	1.8E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	2.2E-08	0.0E+00	ND	4.4E-08	9.2E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.2E-09	0.0E+00	ND	1.2E-08	7.8E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	8.8E-07	0.0E+00	ND	1.7E-06	1.1E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	1.8E-06	0.0E+00	ND	3.9E-06	6.1E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.4E-07	0.0E+00	ND	4.2E-07	5.0E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	1.7E-06	0.0E+00	ND	3.8E-06	6.7E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.0E-05	0.0E+00	ND	2.1E-05	2.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.4E-06	0.0E+00	ND	5.3E-06	1.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.1E-05	0.0E+00	ND	2.2E-05	2.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.9E-06	0.0E+00	ND	4.0E-06	1.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.6E-06	0.0E+00	ND	3.3E-06	3.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.3E-05	0.0E+00	ND	8.1E-05	9.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.5E-06	0.0E+00	ND	7.1E-06	1.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	7.6E-06	0.0E+00	ND	1.6E-05	1.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	3.8E-05	0.0E+00	ND	7.9E-05	1.3E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.4E-05	0.0E+00	ND	2.5E-05	6.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	6.3E-06	0.0E+00	ND	9.2E-06	3.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	2.5E-12	0.0E+00	1.5E-05	1.0E-05	1.8E-08	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	5.3E-11	0.0E+00	2.2E-06	1.5E-07	1.4E-10	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	4.6E-10	0.0E+00	1.0E-05	3.0E-05	4.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.1E-10	0.0E+00	4.2E-10	1.1E-08	1.6E-11	0.0E+00	0.0E+00	NC	NC	NC
Lead	3.2E-07	0.0E+00	5.5E-05	1.4E-03	1.8E-09	0.0E+00	0.0E+00	NC	NC	NC
Nickel	1.2E-11	0.0E+00	9.9E-06	7.0E-07	8.2E-10	0.0E+00	0.0E+00	NC	NC	NC

Unit 3 Calculations
West Loch Fisher

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Residential Area	5
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

		Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Air Modeling Results	**Symbol**	**Units**													
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.12364E-06	4.68833E-06	0.000169337	4.16325E-05	2.06069E-06	1.40845E-06	1.67361E-06	1.55181E-06	1.16504E-06	1.46067E-06	0.00000106	8.98971E-07	8.87714E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	2.69505E-05	3.55728E-05	0.000716117	0.000247493	1.70817E-05	9.49959E-06	1.17642E-05	1.16793E-05	6.97918E-06	9.58306E-06	0.00000572	3.24743E-06	3.72772E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	4.01355E-05	4.15061E-05	0.001246786	0.000260698	2.59769E-05	1.64887E-05	1.99835E-05	2.20146E-05	1.49788E-05	1.7859E-05	1.38967E-05	9.66918E-06	1.13007E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000374533	0.000416787	0.013351707	0.002869695	0.000235428	0.000141544	0.000172559	0.000192109	0.000124746	0.000151948	0.000110333	7.397E-05	8.61672E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.001269324	0.001223517	0.016980554	0.005055578	0.000866141	0.000683538	0.000882264	0.000824851	0.000652322	0.000795879	0.000681757	0.000502784	0.000599816
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.001264637	0.001202342	0.016809874	0.004971138	0.000856098	0.000660874	0.000849106	0.000808552	0.000627353	0.000763562	0.000641317	0.000485795	0.000569734
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.96332E-05	0.00000737	0.000334916	0.000024585	7.71414E-06	4.28608E-06	3.96244E-06	6.90681E-06	3.65888E-06	3.64028E-06	0.00000178	1.65668E-06	1.69834E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000185641	0.000101949	0.006451413	0.000447955	2.51769E-05	4.15559E-05	5.65554E-05	1.96172E-05	2.66416E-05	4.39255E-05	5.80167E-05	3.51009E-05	4.3353E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.001254956	0.001220427	0.01692135	0.005057125	0.000864098	0.000680432	0.000879414	0.000823217	0.000651256	0.000794129	0.000675737	0.000497788	0.000595199
Unitized air concentration - HgII			0.001206627	0.00118563	0.016733094	0.004981375	0.000831724	0.000638154	0.000834961	0.000780166	0.000601808	0.000746729	0.000630557	0.00045772	0.000551989
Unitized Dry deposition - HgII			0.000598224	0.000521713	0.018005304	0.002485268	0.000212502	0.000198084	0.000258185	0.000170194	0.000150836	0.00021375	0.000224297	0.000142514	0.000171397
Unitized Wet deposition - HgII			7.23873E-05	4.65256E-05	0.001319981	0.000183213	3.20955E-05	1.74755E-05	2.00334E-05	2.23946E-05	1.51276E-05	1.79687E-05	1.14833E-05	7.71625E-06	8.54413E-06
Unitized air concentration - Hg0			0.001235513	0.001209388	0.016765936	0.00503163	0.000861846	0.000674206	0.000870888	0.000822416	0.000647763	0.00078768	0.00066027	0.000489659	0.000585415
Unitized Dry deposition - Hg0			0.00047757	0.000258017	0.01749374	0.001151858	5.74728E-05	0.000100927	0.000138614	4.32802E-05	6.24654E-05	0.000106344	0.000140533	8.29958E-05	0.000103717
Unitized Wet deposition - Hg0			1.45455E-07	3.22222E-08	8.97143E-07	0.000000095	1.37241E-07	6.43285E-08	4.0757E-08	1.81489E-07	7.03214E-08	4.4703E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	4.32577E-05	4.61939E-05	0.001416126	0.00030233	2.80372E-05	1.7897E-05	2.16572E-05	2.35669E-05	1.61437E-05	1.93197E-05	0.00001496	1.05679E-05	1.2188E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000401483	0.000452359	0.014067826	0.003117188	0.00025251	0.000151043	0.000184323	0.000203789	0.000131725	0.000161531	0.000116053	7.72175E-05	8.98954E-05

Emission Rates

Unit 3

Compound	PM10 g/s	TSP g/s
Mercury, elemental	1.47E-03	1.47E-03
Mercury, methyl	1.47E-03	1.47E-03
Mercury, divalent	1.47E-03	1.47E-03
1,2,3,4,6,7,8,9-OCDD	8.42E-08	8.42E-08
1,2,3,4,6,7,8,9-OCDF	9.02E-09	9.02E-09
1,2,3,4,6,7,8-HpCDD	4.77E-08	4.77E-08
1,2,3,4,6,7,8-HpCDF	1.77E-08	1.77E-08
1,2,3,4,7,8,9-HpCDF	2.87E-09	2.87E-09
1,2,3,4,7,8-HxCDD	2.09E-09	2.09E-09
1,2,3,4,7,8-HxCDF	6.69E-09	6.69E-09
1,2,3,6,7,8-HxCDD	6.73E-09	6.73E-09
1,2,3,6,7,8-HxCDF	6.60E-09	6.60E-09
1,2,3,7,8,9-HxCDD	3.93E-09	3.93E-09
1,2,3,7,8,9-HxCDF	3.39E-09	3.39E-09
1,2,3,7,8-PeCDD	2.01E-09	2.01E-09
1,2,3,7,8-PeCDF	5.23E-09	5.23E-09
2,3,4,6,7,8-HxCDF	4.95E-09	4.95E-09
2,3,4,7,8-PeCDF	6.12E-09	6.12E-09
2,3,7,8-TCDD	9.90E-10	9.90E-10
2,3,7,8-TCDF	3.06E-09	3.06E-09
Arsenic	7.57E-06	7.57E-06
Beryllium	2.20E-06	2.20E-06
Cadmium	5.25E-04	5.25E-04
Chromium	8.80E-05	8.80E-05
Lead	7.36E-03	7.36E-03
Nickel	1.70E-04	1.70E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Residential Area	West Loch	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	2.48E-05	1.43E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, divalent	1.26E-03	1.77E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.32E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	3.93E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.08E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.07E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	5.34E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	2.42E-10	1.49E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	7.82E-10	3.01E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.51E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	7.73E-10	2.99E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	4.52E-10	8.64E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	1.62E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	2.42E-10	2.18E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	6.83E-10	4.93E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	5.81E-10	2.25E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	7.77E-10	1.01E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	1.49E-10	1.30E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	4.79E-10	1.75E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	6.58E-06	1.26E-09	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Summary of EPCs (Non Cancer)	Residential Area	West Loch	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	4.86E-05	1.43E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, divalent	2.51E-03	1.77E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.32E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	3.93E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.08E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.07E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	5.34E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	4.21E-10	1.49E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.36E-09	3.01E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.51E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.34E-09	2.99E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	7.85E-10	8.64E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	1.62E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	4.19E-10	2.18E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	1.19E-09	4.93E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.01E-09	2.25E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	1.34E-09	1.01E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	2.54E-10	1.30E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	8.16E-10	1.75E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	6.75E-06	1.26E-09	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Adult 5

H-POWER Expansion **Fisher Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.04E-10	1.49E-05	Residential Area
Water	NC	NC	West Loch
Air	2.30E-09	3.49E-05	Residential Area
Produce	2.51E-09	2.80E-04	Residential Area
Fish	5.24E-10	2.91E-03	West Loch
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**5.44E-09**	**3.24E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Adult**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	5.44E-09		3.24E-03	
Mercury, Elemental	NC		5.53E-09	0.0002%
Mercury, Methyl	NC		2.91E-03	89.6434%
Mercury, Divalent	NC		3.07E-05	0.9481%
1,2,3,4,6,7,8,9-OCDD	4.23E-12	0.0777%	4.22E-08	0.0013%
1,2,3,4,6,7,8,9-OCDF	4.53E-13	0.0083%	4.52E-09	0.0001%
1,2,3,4,6,7,8-HpCDD	7.85E-11	1.4440%	7.78E-07	0.0240%
1,2,3,4,6,7,8-HpCDF	3.15E-11	0.5792%	3.26E-07	0.0101%
1,2,3,4,7,8,9-HpCDF	6.52E-12	0.1199%	7.49E-08	0.0023%
1,2,3,4,7,8-HxCDD	3.70E-11	0.6800%	3.81E-07	0.0117%
1,2,3,4,7,8-HxCDF	1.41E-10	2.6003%	1.59E-06	0.0489%
1,2,3,6,7,8-HxCDD	1.28E-10	2.3568%	1.37E-06	0.0423%
1,2,3,6,7,8-HxCDF	1.40E-10	2.5737%	1.57E-06	0.0485%
1,2,3,7,8,9-HxCDD	7.17E-11	1.3179%	7.51E-07	0.0232%
1,2,3,7,8,9-HxCDF	7.45E-11	1.3694%	8.49E-07	0.0262%
1,2,3,7,8-PeCDD	4.93E-10	9.0629%	5.85E-06	0.1804%
1,2,3,7,8-PeCDF	3.74E-11	0.6873%	4.41E-07	0.0136%
2,3,4,6,7,8-HxCDF	1.05E-10	1.9362%	1.18E-06	0.0365%
2,3,4,7,8-PeCDF	4.39E-10	8.0800%	5.20E-06	0.1603%
2,3,7,8-TCDD	2.54E-10	4.6723%	3.08E-06	0.0950%
2,3,7,8-TCDF	8.06E-11	1.4820%	1.00E-06	0.0308%
Arsenic	1.17E-10	2.1499%	1.26E-06	0.0388%
Beryllium	8.18E-12	0.1505%	4.13E-07	0.0127%
Cadmium	2.69E-09	49.4265%	2.45E-05	0.7553%
Chromium	NC		8.75E-10	0.0000%
Lead	5.02E-10	9.2251%	2.51E-04	7.7479%
Nickel	NC		3.19E-06	0.0983%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.48E-05	1.43E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, Divalent	1.26E-03	1.77E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.32E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	3.93E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.08E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.07E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	5.34E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	2.42E-10	1.49E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	7.82E-10	3.01E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.51E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	7.73E-10	2.99E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	4.52E-10	8.64E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	1.62E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	2.42E-10	2.18E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	6.83E-10	4.93E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	5.81E-10	2.25E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	7.77E-10	1.01E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	1.49E-10	1.30E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	4.79E-10	1.75E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	6.58E-06	1.26E-09	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.86E-05	1.43E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, Divalent	2.51E-03	1.77E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.32E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	3.93E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.08E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.07E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	5.34E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	4.21E-10	1.49E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.36E-09	3.01E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.51E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.34E-09	2.99E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	7.85E-10	8.64E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	1.62E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	4.19E-10	2.18E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	1.19E-09	4.93E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.01E-09	2.25E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	1.34E-09	1.01E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	2.54E-10	1.30E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	8.16E-10	1.75E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	6.75E-06	1.26E-09	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

H-POWER Expansion **Fisher Adult**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	2.55E-13	0.00E+00	1.71E-12	2.26E-12	1.96E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.73E-14	0.00E+00	1.83E-13	2.42E-13	6.26E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	4.81E-12	0.00E+00	3.23E-11	4.14E-11	1.10E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.79E-12	0.00E+00	1.20E-11	1.66E-11	1.08E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	2.98E-13	0.00E+00	1.94E-12	4.09E-12	1.88E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	2.13E-12	0.00E+00	1.42E-11	2.05E-11	1.49E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	6.88E-12	0.00E+00	4.53E-11	6.08E-11	2.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	6.85E-12	0.00E+00	4.55E-11	6.85E-11	7.29E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	6.81E-12	0.00E+00	4.46E-11	6.03E-11	2.82E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	3.98E-12	0.00E+00	2.66E-11	3.69E-11	4.18E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	3.57E-12	0.00E+00	2.29E-11	3.27E-11	1.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.13E-11	0.00E+00	1.36E-10	2.27E-10	1.08E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.80E-12	0.00E+00	1.06E-11	1.53E-11	9.62E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.12E-12	0.00E+00	3.35E-11	4.54E-11	2.12E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.05E-11	0.00E+00	1.24E-10	1.77E-10	1.17E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.31E-11	0.00E+00	6.70E-11	8.78E-11	8.62E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	4.22E-12	0.00E+00	2.07E-11	2.22E-11	3.34E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	6.40E-18	0.00E+00	5.05E-11	6.59E-11	4.43E-13	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.18E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	7.20E-15	0.00E+00	1.47E-09	1.16E-09	6.23E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	3.36E-14	0.00E+00	1.37E-10	3.64E-10	1.92E-15	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Adult**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.5E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.7E-07	0.0E+00	NC	8.9E-07	2.9E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-05	0.0E+00	3.2E-06	1.6E-05	1.8E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	6.9E-09	0.0E+00	ND	3.5E-08	3.1E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	7.4E-10	0.0E+00	ND	3.8E-09	9.7E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.3E-07	0.0E+00	ND	6.5E-07	1.7E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	4.8E-08	0.0E+00	ND	2.6E-07	1.7E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	8.1E-09	0.0E+00	ND	6.4E-08	2.9E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	5.8E-08	0.0E+00	ND	3.2E-07	2.3E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.9E-07	0.0E+00	ND	9.6E-07	4.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.9E-07	0.0E+00	ND	1.1E-06	1.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.8E-07	0.0E+00	ND	9.5E-07	4.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.1E-07	0.0E+00	ND	5.8E-07	6.5E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	9.6E-08	0.0E+00	ND	5.1E-07	2.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	5.7E-07	0.0E+00	ND	3.6E-06	1.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.9E-08	0.0E+00	ND	2.4E-07	1.5E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	1.4E-07	0.0E+00	ND	7.2E-07	3.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	5.5E-07	0.0E+00	ND	2.8E-06	1.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.5E-07	0.0E+00	ND	1.4E-06	1.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.1E-07	0.0E+00	ND	3.7E-07	5.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	3.3E-14	0.0E+00	9.1E-07	3.4E-07	2.3E-09	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	2.0E-12	0.0E+00	4.0E-07	1.5E-08	5.5E-11	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.8E-11	0.0E+00	9.5E-06	1.4E-05	7.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	6.2E-12	0.0E+00	6.0E-11	8.0E-10	4.8E-12	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.2E-08	0.0E+00	1.8E-05	2.3E-04	1.2E-09	0.0E+00	0.0E+00	NC	NC	NC
Nickel	7.7E-13	0.0E+00	3.1E-06	1.1E-07	5.3E-10	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Child **6**

H-POWER Expansion **Fisher Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.93E-10	1.39E-04	Residential Area
Water	NC	NC	West Loch
Air	1.15E-09	8.67E-05	Residential Area
Produce	1.88E-09	1.05E-03	Residential Area
Fish	7.38E-11	2.05E-03	West Loch
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**3.29E-09**	**3.33E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Child**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	3.29E-09		3.33E-03	
Mercury, Elemental	NC		1.38E-08	0.0004%
Mercury, Methyl	NC		2.06E-03	61.7734%
Mercury, Divalent	NC		1.80E-04	5.3994%
1,2,3,4,6,7,8,9-OCDD	3.02E-12	0.0918%	1.97E-07	0.0059%
1,2,3,4,6,7,8,9-OCDF	3.23E-13	0.0098%	2.11E-08	0.0006%
1,2,3,4,6,7,8-HpCDD	5.60E-11	1.7024%	3.64E-06	0.1093%
1,2,3,4,6,7,8-HpCDF	2.19E-11	0.6665%	1.44E-06	0.0433%
1,2,3,4,7,8,9-HpCDF	4.61E-12	0.1402%	3.17E-07	0.0095%
1,2,3,4,7,8-HxCDD	2.64E-11	0.8033%	1.74E-06	0.0524%
1,2,3,4,7,8-HxCDF	8.50E-11	2.5837%	5.65E-06	0.1696%
1,2,3,6,7,8-HxCDD	8.78E-11	2.6686%	5.83E-06	0.1753%
1,2,3,6,7,8-HxCDF	8.41E-11	2.5568%	5.59E-06	0.1680%
1,2,3,7,8,9-HxCDD	4.89E-11	1.4866%	3.22E-06	0.0967%
1,2,3,7,8,9-HxCDF	4.47E-11	1.3598%	3.00E-06	0.0901%
1,2,3,7,8-PeCDD	2.93E-10	8.9077%	2.00E-05	0.6018%
1,2,3,7,8-PeCDF	2.15E-11	0.6539%	1.47E-06	0.0442%
2,3,4,6,7,8-HxCDF	6.33E-11	1.9235%	4.21E-06	0.1265%
2,3,4,7,8-PeCDF	2.50E-10	7.5888%	1.71E-05	0.5124%
2,3,7,8-TCDD	1.36E-10	4.1308%	9.44E-06	0.2837%
2,3,7,8-TCDF	3.97E-11	1.2059%	2.81E-06	0.0843%
Arsenic	7.45E-11	2.2640%	3.55E-06	0.1067%
Beryllium	4.07E-12	0.1238%	1.04E-06	0.0314%
Cadmium	1.60E-09	48.7734%	7.73E-05	2.3234%
Chromium	NC		3.22E-09	0.0001%
Lead	3.41E-10	10.3587%	9.17E-04	27.5488%
Nickel	NC		8.07E-06	0.2425%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.48E-05	1.43E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, Divalent	1.26E-03	1.77E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.32E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	3.93E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.08E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.07E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	5.34E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	2.42E-10	1.49E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	7.82E-10	3.01E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.51E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	7.73E-10	2.99E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	4.52E-10	8.64E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	1.62E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	2.42E-10	2.18E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	6.83E-10	4.93E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	5.81E-10	2.25E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	7.77E-10	1.01E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	1.49E-10	1.30E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	4.79E-10	1.75E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	6.58E-06	1.26E-09	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.86E-05	1.43E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, Divalent	2.51E-03	1.77E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.32E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	3.93E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.08E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.07E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	5.34E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	4.21E-10	1.49E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.36E-09	3.01E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.51E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.34E-09	2.99E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	7.85E-10	8.64E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	1.62E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	4.19E-10	2.18E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	1.19E-09	4.93E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.01E-09	2.25E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	1.34E-09	1.01E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	2.54E-10	1.30E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	8.16E-10	1.75E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	6.75E-06	1.26E-09	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

H-POWER Expansion **Fisher Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	4.76E-13	0.00E+00	8.51E-13	1.69E-12	2.77E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	5.09E-14	0.00E+00	9.11E-14	1.81E-13	8.81E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	8.97E-12	0.00E+00	1.60E-11	3.10E-11	1.55E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	3.34E-12	0.00E+00	5.96E-12	1.25E-11	1.52E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.56E-13	0.00E+00	9.67E-13	3.06E-12	2.65E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	3.98E-12	0.00E+00	7.04E-12	1.54E-11	2.09E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	1.29E-11	0.00E+00	2.25E-11	4.56E-11	4.00E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	1.28E-11	0.00E+00	2.27E-11	5.13E-11	1.03E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	1.27E-11	0.00E+00	2.22E-11	4.52E-11	3.97E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	7.43E-12	0.00E+00	1.32E-11	2.76E-11	5.88E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	6.66E-12	0.00E+00	1.14E-11	2.45E-11	2.15E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	3.98E-11	0.00E+00	6.76E-11	1.70E-10	1.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	3.37E-12	0.00E+00	5.28E-12	1.15E-11	1.35E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	9.55E-12	0.00E+00	1.67E-11	3.41E-11	2.99E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	3.83E-11	0.00E+00	6.18E-11	1.33E-10	1.65E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	2.45E-11	0.00E+00	3.33E-11	6.59E-11	1.21E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	7.88E-12	0.00E+00	1.03E-11	1.68E-11	4.70E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	1.19E-17	0.00E+00	2.51E-11	4.92E-11	6.24E-14	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	4.07E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.34E-14	0.00E+00	7.30E-10	8.65E-10	8.76E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	6.28E-14	0.00E+00	6.82E-11	2.72E-10	2.70E-16	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.4E-08	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.2E-06	0.0E+00	NC	4.1E-06	2.0E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-04	0.0E+00	7.9E-06	6.5E-05	1.2E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	6.4E-08	0.0E+00	ND	1.3E-07	2.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.9E-09	0.0E+00	ND	1.4E-08	6.9E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.2E-06	0.0E+00	ND	2.4E-06	1.2E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	4.5E-07	0.0E+00	ND	9.8E-07	1.2E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	7.5E-08	0.0E+00	ND	2.4E-07	2.1E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	5.4E-07	0.0E+00	ND	1.2E-06	1.6E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.7E-06	0.0E+00	ND	3.6E-06	3.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.7E-06	0.0E+00	ND	4.0E-06	8.0E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.7E-06	0.0E+00	ND	3.6E-06	3.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.0E-06	0.0E+00	ND	2.2E-06	4.6E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	9.0E-07	0.0E+00	ND	1.9E-06	1.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	5.4E-06	0.0E+00	ND	1.3E-05	1.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.5E-07	0.0E+00	ND	9.1E-07	1.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	1.3E-06	0.0E+00	ND	2.7E-06	2.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	5.2E-06	0.0E+00	ND	1.1E-05	1.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.2E-06	0.0E+00	ND	5.3E-06	9.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.0E-06	0.0E+00	ND	1.4E-06	3.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	3.1E-13	0.0E+00	2.3E-06	1.3E-06	1.6E-09	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	1.9E-11	0.0E+00	9.9E-07	5.5E-08	3.8E-11	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.3E-10	0.0E+00	2.4E-05	5.3E-05	5.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	5.8E-11	0.0E+00	1.5E-10	3.0E-09	3.4E-12	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.0E-07	0.0E+00	4.4E-05	8.7E-04	8.7E-10	0.0E+00	0.0E+00	NC	NC	NC
Nickel	7.2E-12	0.0E+00	7.6E-06	4.3E-07	3.7E-10	0.0E+00	0.0E+00	NC	NC	NC

Units 1 & 2 Calculations
Wahiawa Reservoir Fisher

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project: H-POWER Expansion

Locations:
All Max
Poultry Area
Agriculture Area
Compost Area
Residential Area
West Loch
West Loch Watershed
West Loch Watershed Impervious
West Loch Watershed Pervious
Pearl Harbor
Pearl Harbor Watershed
Pearl Harbor Watershed Impervious
Pearl Harbor Watershed Pervious
Waikele Stream
Waikele Stream Watershed
Wahiawa
Wahiawa Watershed
Wahiawa Watershed Impervious
Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Residential Area	5
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	Wahiawa Watershed Impervious	18
Select the location for the pervious area of the watershed	Wahiawa Watershed Pervious	19
Select the location for the drinking water and fish exposure water body	Wahiawa	16

Unitized Air Modeling Results	Symbol	Units	Location: Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.46455E-06	4.37944E-06	0.000186393	0.000033865	1.93621E-06	1.37464E-06	1.61613E-06	1.46149E-06	1.1317E-06	1.40998E-06	9.83333E-07	8.84131E-07	8.59213E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	3.38523E-05	3.68356E-05	0.00075806	0.00023434	1.71645E-05	9.76055E-06	1.19425E-05	1.16923E-05	7.17437E-06	9.74894E-06	5.46667E-06	3.36044E-06	3.76898E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	0.000034625	3.70156E-05	0.000643109	0.000181585	2.26614E-05	1.47727E-05	1.84775E-05	1.91377E-05	1.34115E-05	1.6423E-05	1.44033E-05	8.52861E-06	1.03516E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000335306	0.000391544	0.006901513	0.002012835	0.000216809	0.00013562	0.000166552	0.0001782	0.00011969	0.000146841	0.00011235	7.13193E-05	8.42169E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.000879218	0.000800461	0.008591956	0.002852313	0.000510271	0.000446853	0.000701292	0.000475492	0.000425908	0.000607652	0.00078381	0.000317958	0.00045034
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.000860414	0.000780127	0.008545623	0.002814235	0.000495852	0.000441446	0.00068391	0.000468449	0.000421462	0.000594625	0.000749947	0.000319121	0.000443985
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.68845E-05	7.04722E-06	0.000311157	2.20675E-05	7.0269E-06	4.12962E-06	3.85475E-06	6.59223E-06	3.58509E-06	3.55522E-06	1.87667E-06	1.62769E-06	1.70537E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000150544	7.44283E-05	0.002883657	0.00022228	1.95931E-05	3.6231E-05	4.94079E-05	1.57333E-05	2.30601E-05	3.82578E-05	0.00005449	3.12193E-05	3.92822E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.000870941	0.000799849	0.008582527	0.002856068	0.000510282	0.000444023	0.000698883	0.0004744	0.000423892	0.000605529	0.000779117	0.00031358	0.000445597
Unitized air concentration - HgII			0.000836867	0.000780368	0.008522327	0.00282602	0.000495858	0.000425242	0.000670983	0.000460566	0.000405519	0.000580343	0.00073797	0.000293634	0.000419545
Unitized Dry deposition - HgII			0.000513978	0.000397487	0.009259773	0.001450035	0.000171102	0.000173203	0.000226938	0.000139525	0.000131513	0.000187547	0.00021364	0.000128137	0.000156247
Unitized Wet deposition - HgII			6.82945E-05	4.61633E-05	0.001260296	0.00017232	3.04645E-05	1.7167E-05	1.95452E-05	2.12377E-05	1.49035E-05	1.76076E-05	1.08633E-05	7.64211E-06	8.33146E-06
Unitized air concentration - Hg0			0.000858408	0.000793558	0.008547674	0.002847923	0.00050834	0.000438557	0.000692329	0.000473055	0.000420543	0.000600363	0.00076766	0.00030652	0.000437305
Unitized Dry deposition - Hg0			0.000392447	0.000191023	0.007891281	0.000573655	4.67207E-05	9.01547E-05	0.00012272	3.66957E-05	5.57671E-05	9.41557E-05	0.00013191	7.59329E-05	9.58428E-05
Unitized Wet deposition - Hg0			1.46364E-07	0.00000003	8.52857E-07	8.75E-08	1.72069E-07	8.30802E-08	4.94966E-08	2.4883E-07	9.72936E-08	5.7478E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	3.80891E-05	4.13933E-05	0.000829501	0.000215453	2.45983E-05	1.61476E-05	2.00938E-05	2.05989E-05	1.45434E-05	1.7833E-05	1.53867E-05	9.41323E-06	1.12102E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000369159	0.000428381	0.007659573	0.002247173	0.000233974	0.000145381	0.000178495	0.000189893	0.000126864	0.000156591	0.000117813	7.46801E-05	8.7986E-05

Emission Rates

Units 1 & 2

Compound	PM10 g/s	TSP g/s
Mercury, elemental	2.46E-03	2.46E-03
Mercury, methyl	2.46E-03	2.46E-03
Mercury, divalent	2.46E-03	2.46E-03
1,2,3,4,6,7,8,9-OCDD	4.00E-08	4.00E-08
1,2,3,4,6,7,8,9-OCDF	1.14E-08	1.14E-08
1,2,3,4,6,7,8-HpCDD	4.84E-08	4.84E-08
1,2,3,4,6,7,8-HpCDF	1.01E-07	1.01E-07
1,2,3,4,7,8,9-HpCDF	7.74E-09	7.74E-09
1,2,3,4,7,8-HxCDD	9.59E-09	9.59E-09
1,2,3,4,7,8-HxCDF	5.71E-08	5.71E-08
1,2,3,6,7,8-HxCDD	1.30E-08	1.30E-08
1,2,3,6,7,8-HxCDF	6.01E-08	6.01E-08
1,2,3,7,8,9-HxCDD	1.04E-08	1.04E-08
1,2,3,7,8,9-HxCDF	8.56E-09	8.56E-09
1,2,3,7,8-PeCDD	1.83E-08	1.83E-08
1,2,3,7,8-PeCDF	6.24E-08	6.24E-08
2,3,4,6,7,8-HxCDF	4.18E-08	4.18E-08
2,3,4,7,8-PeCDF	6.88E-08	6.88E-08
2,3,7,8-TCDD	7.79E-09	7.79E-09
2,3,7,8-TCDF	3.39E-08	3.39E-08
Arsenic	8.63E-05	8.63E-05
Beryllium	8.57E-06	8.57E-06
Cadmium	4.09E-04	4.09E-04
Chromium	4.41E-04	4.41E-04
Lead	1.61E-02	1.61E-02
Nickel	3.89E-04	3.89E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer) Compound	Residential Area Soil C_s (mg/kg)	Wahiawa Water C_{dw} (mg/L)	Residential Area Air C_a (ug/m3)	Residential Area Produce - above P_{ag} (mg/kg DW)	Residential Area Produce - root P_{bg} (mg/kg DW)	Poultry Area Beef A_{beef} (mg/kg FW)	Poultry Area Milk A_{milk} (mg/kg FW)	Poultry Area Chicken $A_{chicken}$ (mg/kg FW)	Poultry Area Eggs A_{egg} (mg/kg FW)	Poultry Area Pork A_{pork} (mg/kg FW)	Wahiawa Fish C_{fish} (mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	2.53E-05	4.54E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	3.09E-03
Mercury, divalent	1.28E-03	4.99E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	4.99E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	1.24E-16	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.82E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	5.60E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.54E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	2.39E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	6.59E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	2.02E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	3.70E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.73E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	3.16E-12
1,2,3,4,7,8-HxCDD	7.83E-10	7.91E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	4.09E-13
1,2,3,4,7,8-HxCDF	4.66E-09	3.14E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.54E-10
1,2,3,6,7,8-HxCDD	1.06E-09	3.43E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	8.60E-12
1,2,3,6,7,8-HxCDF	4.91E-09	3.33E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.63E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.66E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	6.68E-12
1,2,3,7,8,9-HxCDF	7.03E-10	5.15E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	2.52E-11
1,2,3,7,8-PeCDD	1.50E-09	2.66E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	6.89E-11
1,2,3,7,8-PeCDF	5.23E-09	8.34E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	2.82E-10
2,3,4,6,7,8-HxCDF	3.41E-09	2.33E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	1.14E-10
2,3,4,7,8-PeCDF	5.69E-09	1.66E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	3.34E-10
2,3,7,8-TCDD	6.62E-10	1.62E-15	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	5.57E-11
2,3,7,8-TCDF	2.91E-09	3.79E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	3.77E-10
Arsenic	5.97E-11	1.03E-09	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.17E-07
Beryllium	8.26E-09	9.25E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	5.74E-09
Cadmium	1.81E-08	4.84E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	4.39E-06
Chromium	2.38E-05	6.15E-08	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.17E-06
Lead	1.06E-05	1.71E-07	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	1.54E-08
Nickel	1.85E-08	4.62E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	3.60E-07

Summary of EPCs (Non Cancer)	Residential Area	Wahiawa	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Wahiawa
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	4.96E-05	4.54E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	3.09E-03
Mercury, divalent	2.56E-03	4.99E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	4.99E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	1.24E-16	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.82E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	5.60E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.54E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	2.39E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	6.59E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	2.02E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	3.70E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.73E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	3.16E-12
1,2,3,4,7,8-HxCDD	1.36E-09	7.91E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	4.09E-13
1,2,3,4,7,8-HxCDF	8.09E-09	3.14E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.54E-10
1,2,3,6,7,8-HxCDD	1.84E-09	3.43E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	8.60E-12
1,2,3,6,7,8-HxCDF	8.53E-09	3.33E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.63E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.66E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	6.68E-12
1,2,3,7,8,9-HxCDF	1.22E-09	5.15E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	2.52E-11
1,2,3,7,8-PeCDD	2.60E-09	2.66E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	6.89E-11
1,2,3,7,8-PeCDF	9.08E-09	8.34E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	2.82E-10
2,3,4,6,7,8-HxCDF	5.93E-09	2.33E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	1.14E-10
2,3,4,7,8-PeCDF	9.85E-09	1.66E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	3.34E-10
2,3,7,8-TCDD	1.13E-09	1.62E-15	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	5.57E-11
2,3,7,8-TCDF	4.95E-09	3.79E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	3.77E-10
Arsenic	5.97E-11	1.03E-09	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.17E-07
Beryllium	8.26E-09	9.25E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	5.74E-09
Cadmium	1.81E-08	4.84E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	4.39E-06
Chromium	2.44E-05	6.15E-08	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.17E-06
Lead	1.06E-05	1.71E-07	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	1.54E-08
Nickel	1.85E-08	4.62E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	3.60E-07

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Adult 5

H-POWER Expansion **Fisher Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	5.36E-10	2.68E-05	Residential Area
Water	NC	NC	Wahiawa
Air	3.97E-09	4.00E-05	Residential Area
Produce	6.50E-09	4.68E-04	Residential Area
Fish	6.37E-09	9.35E-03	Wahiawa
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**1.74E-08**	**9.89E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Adult**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	1.74E-08		9.89E-03	
Mercury, Elemental	NC		5.25E-09	0.0001%
Mercury, Methyl	NC		9.26E-03	93.6164%
Mercury, Divalent	NC		3.05E-05	0.3084%
1,2,3,4,6,7,8,9-OCDD	1.29E-12	0.0074%	1.40E-08	0.0001%
1,2,3,4,6,7,8,9-OCDF	3.68E-13	0.0021%	3.99E-09	0.0000%
1,2,3,4,6,7,8-HpCDD	5.15E-11	0.2964%	5.56E-07	0.0056%
1,2,3,4,6,7,8-HpCDF	1.19E-10	0.6826%	1.34E-06	0.0135%
1,2,3,4,7,8,9-HpCDF	1.12E-11	0.0645%	1.36E-07	0.0014%
1,2,3,4,7,8-HxCDD	1.09E-10	0.6244%	1.20E-06	0.0122%
1,2,3,4,7,8-HxCDF	9.13E-10	5.2517%	1.14E-05	0.1148%
1,2,3,6,7,8-HxCDD	1.65E-10	0.9503%	1.92E-06	0.0194%
1,2,3,6,7,8-HxCDF	9.65E-10	5.5489%	1.20E-05	0.1214%
1,2,3,7,8,9-HxCDD	1.28E-10	0.7335%	1.46E-06	0.0148%
1,2,3,7,8,9-HxCDF	1.43E-10	0.8252%	1.80E-06	0.0182%
1,2,3,7,8-PeCDD	3.53E-09	20.2764%	4.58E-05	0.4631%
1,2,3,7,8-PeCDF	3.68E-10	2.1159%	4.80E-06	0.0485%
2,3,4,6,7,8-HxCDF	6.73E-10	3.8700%	8.38E-06	0.0848%
2,3,4,7,8-PeCDF	4.19E-09	24.0894%	5.51E-05	0.5569%
2,3,7,8-TCDD	1.85E-09	10.6420%	2.49E-05	0.2520%
2,3,7,8-TCDF	1.03E-09	5.9179%	1.44E-05	0.1457%
Arsenic	8.84E-10	5.0865%	8.79E-06	0.0889%
Beryllium	1.81E-11	0.1039%	9.21E-07	0.0093%
Cadmium	1.51E-09	8.6561%	1.47E-05	0.1489%
Chromium	NC		3.30E-09	0.0000%
Lead	7.40E-10	4.2547%	3.87E-04	3.9132%
Nickel	NC		4.18E-06	0.0423%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	Wahiawa Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Wahiawa Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.53E-05	4.54E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	3.09E-03
Mercury, Divalent	1.28E-03	4.99E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	4.99E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	1.24E-16	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.82E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	5.60E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.54E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	2.39E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	6.59E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	2.02E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	3.70E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.73E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	3.16E-12
1,2,3,4,7,8-HxCDD	7.83E-10	7.91E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	4.09E-13
1,2,3,4,7,8-HxCDF	4.66E-09	3.14E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.54E-10
1,2,3,6,7,8-HxCDD	1.06E-09	3.43E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	8.60E-12
1,2,3,6,7,8-HxCDF	4.91E-09	3.33E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.63E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.66E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	6.68E-12
1,2,3,7,8,9-HxCDF	7.03E-10	5.15E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	2.52E-11
1,2,3,7,8-PeCDD	1.50E-09	2.66E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	6.89E-11
1,2,3,7,8-PeCDF	5.23E-09	8.34E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	2.82E-10
2,3,4,6,7,8-HxCDF	3.41E-09	2.33E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	1.14E-10
2,3,4,7,8-PeCDF	5.69E-09	1.66E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	3.34E-10
2,3,7,8-TCDD	6.62E-10	1.62E-15	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	5.57E-11
2,3,7,8-TCDF	2.91E-09	3.79E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	3.77E-10
Arsenic	5.97E-11	1.03E-09	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.17E-07
Beryllium	8.26E-09	9.25E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	5.74E-09
Cadmium	1.81E-08	4.84E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	4.39E-06
Chromium	2.38E-05	6.15E-08	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.17E-06
Lead	1.06E-05	1.71E-07	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	1.54E-08
Nickel	1.85E-08	4.62E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	3.60E-07

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	Wahiawa Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Wahiawa Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.96E-05	4.54E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	3.09E-03
Mercury, Divalent	2.56E-03	4.99E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	4.99E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	1.24E-16	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.82E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	5.60E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.54E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	2.39E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	6.59E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	2.02E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	3.70E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.73E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	3.16E-12
1,2,3,4,7,8-HxCDD	1.36E-09	7.91E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	4.09E-13
1,2,3,4,7,8-HxCDF	8.09E-09	3.14E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.54E-10
1,2,3,6,7,8-HxCDD	1.84E-09	3.43E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	8.60E-12
1,2,3,6,7,8-HxCDF	8.53E-09	3.33E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.63E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.66E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	6.68E-12
1,2,3,7,8,9-HxCDF	1.22E-09	5.15E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	2.52E-11
1,2,3,7,8-PeCDD	2.60E-09	2.66E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	6.89E-11
1,2,3,7,8-PeCDF	9.08E-09	8.34E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	2.82E-10
2,3,4,6,7,8-HxCDF	5.93E-09	2.33E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	1.14E-10
2,3,4,7,8-PeCDF	9.85E-09	1.66E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	3.34E-10
2,3,7,8-TCDD	1.13E-09	1.62E-15	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	5.57E-11
2,3,7,8-TCDF	4.95E-09	3.79E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	3.77E-10
Arsenic	5.97E-11	1.03E-09	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.17E-07
Beryllium	8.26E-09	9.25E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	5.74E-09
Cadmium	1.81E-08	4.84E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	4.39E-06
Chromium	2.44E-05	6.15E-08	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.17E-06
Lead	1.06E-05	1.71E-07	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	1.54E-08
Nickel	1.85E-08	4.62E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	3.60E-07

H-POWER Expansion **Fisher Adult**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	8.61E-14	0.00E+00	4.58E-13	7.48E-13	1.05E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.45E-14	0.00E+00	1.30E-13	2.12E-13	8.91E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	3.47E-12	0.00E+00	1.85E-11	2.94E-11	1.27E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	7.26E-12	0.00E+00	3.86E-11	6.57E-11	7.12E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.59E-13	0.00E+00	2.96E-12	7.10E-12	6.09E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	6.90E-12	0.00E+00	3.66E-11	6.43E-11	7.89E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	4.10E-11	0.00E+00	2.18E-10	3.58E-10	2.96E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	9.32E-12	0.00E+00	4.96E-11	8.97E-11	1.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	4.32E-11	0.00E+00	2.29E-10	3.78E-10	3.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	7.46E-12	0.00E+00	3.98E-11	6.74E-11	1.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	6.19E-12	0.00E+00	3.27E-11	5.60E-11	4.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	1.32E-10	0.00E+00	7.00E-10	1.37E-09	1.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.38E-11	0.00E+00	7.15E-11	1.20E-10	1.63E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	3.00E-11	0.00E+00	1.59E-10	2.64E-10	2.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	1.50E-10	0.00E+00	7.88E-10	1.32E-09	1.93E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	5.83E-11	0.00E+00	2.98E-10	4.21E-10	1.07E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	2.56E-11	0.00E+00	1.30E-10	1.48E-10	7.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	5.25E-17	0.00E+00	3.26E-10	5.36E-10	2.25E-11	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	1.81E-11	ND	ND	ND	ND	ND	ND	ND
Cadmium	4.04E-15	0.00E+00	6.47E-10	6.44E-10	2.14E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	5.31E-14	0.00E+00	1.70E-10	5.70E-10	1.68E-14	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Adult**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.3E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.8E-07	0.0E+00	NC	9.0E-07	9.3E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.2E-05	0.0E+00	3.0E-06	1.6E-05	5.0E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	2.3E-09	0.0E+00	ND	1.2E-08	1.6E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.6E-10	0.0E+00	ND	3.3E-09	1.4E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	9.4E-08	0.0E+00	ND	4.6E-07	2.0E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	2.0E-07	0.0E+00	ND	1.0E-06	1.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.5E-08	0.0E+00	ND	1.1E-07	9.5E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	1.9E-07	0.0E+00	ND	1.0E-06	1.2E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.1E-06	0.0E+00	ND	5.6E-06	4.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.5E-07	0.0E+00	ND	1.4E-06	2.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.2E-06	0.0E+00	ND	6.0E-06	4.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	2.0E-07	0.0E+00	ND	1.1E-06	2.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.7E-07	0.0E+00	ND	8.8E-07	7.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.6E-06	0.0E+00	ND	2.2E-05	2.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.7E-07	0.0E+00	ND	1.9E-06	2.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	8.1E-07	0.0E+00	ND	4.2E-06	3.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	4.0E-06	0.0E+00	ND	2.1E-05	3.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.5E-06	0.0E+00	ND	6.7E-06	1.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	6.8E-07	0.0E+00	ND	2.4E-06	1.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	2.7E-13	0.0E+00	5.9E-06	2.8E-06	1.2E-07	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	5.7E-12	0.0E+00	8.8E-07	4.1E-08	8.6E-10	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	5.0E-11	0.0E+00	4.2E-06	7.9E-06	2.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.2E-11	0.0E+00	1.7E-10	2.9E-09	2.3E-10	0.0E+00	0.0E+00	NC	NC	NC
Lead	3.4E-08	0.0E+00	2.2E-05	3.6E-04	1.1E-08	0.0E+00	0.0E+00	NC	NC	NC
Nickel	1.3E-12	0.0E+00	4.0E-06	1.9E-07	5.4E-09	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult Resident Child Farmer Adult Farmer Child Fisher Adult Fisher Child

Select a receptor: Fisher Child **6**

H-POWER Expansion **Fisher Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.00E-09	2.50E-04	Residential Area
Water	NC	NC	Wahiawa
Air	1.98E-09	9.96E-05	Residential Area
Produce	4.87E-09	1.76E-03	Residential Area
Fish	8.97E-10	6.59E-03	Wahiawa
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**8.75E-09**	**8.69E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Child**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	8.75E-09		8.69E-03	
Mercury, Elemental	NC		1.31E-08	0.0002%
Mercury, Methyl	NC		6.53E-03	75.1029%
Mercury, Divalent	NC		1.80E-04	2.0743%
1,2,3,4,6,7,8,9-OCDD	9.48E-13	0.0108%	6.55E-08	0.0008%
1,2,3,4,6,7,8,9-OCDF	2.69E-13	0.0031%	1.86E-08	0.0002%
1,2,3,4,6,7,8-HpCDD	3.77E-11	0.4315%	2.60E-06	0.0300%
1,2,3,4,6,7,8-HpCDF	8.30E-11	0.9485%	5.77E-06	0.0664%
1,2,3,4,7,8,9-HpCDF	7.91E-12	0.0905%	5.64E-07	0.0065%
1,2,3,4,7,8-HxCDD	7.93E-11	0.9067%	5.52E-06	0.0635%
1,2,3,4,7,8-HxCDF	4.95E-10	5.6607%	3.48E-05	0.4001%
1,2,3,6,7,8-HxCDD	1.12E-10	1.2760%	7.81E-06	0.0898%
1,2,3,6,7,8-HxCDF	5.22E-10	5.9732%	3.67E-05	0.4225%
1,2,3,7,8,9-HxCDD	8.60E-11	0.9836%	5.99E-06	0.0689%
1,2,3,7,8,9-HxCDF	7.66E-11	0.8760%	5.40E-06	0.0622%
1,2,3,7,8-PeCDD	1.81E-09	20.6469%	1.29E-04	1.4831%
1,2,3,7,8-PeCDF	1.74E-10	1.9907%	1.24E-05	0.1425%
2,3,4,6,7,8-HxCDF	3.64E-10	4.1616%	2.56E-05	0.2944%
2,3,4,7,8-PeCDF	1.93E-09	22.1112%	1.38E-04	1.5868%
2,3,7,8-TCDD	7.24E-10	8.2762%	5.13E-05	0.5904%
2,3,7,8-TCDF	3.26E-10	3.7249%	2.35E-05	0.2704%
Arsenic	5.66E-10	6.4673%	2.51E-05	0.2891%
Beryllium	8.99E-12	0.1028%	2.34E-06	0.0269%
Cadmium	8.33E-10	9.5224%	4.18E-05	0.4811%
Chromium	NC		1.15E-08	0.0001%
Lead	5.10E-10	5.8353%	1.42E-03	16.3246%
Nickel	NC		1.06E-05	0.1223%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	Wahiawa Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Wahiawa Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.53E-05	4.54E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	3.09E-03
Mercury, Divalent	1.28E-03	4.99E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	4.99E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	1.24E-16	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.82E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	5.60E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.54E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	2.39E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	6.59E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	2.02E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	3.70E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.73E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	3.16E-12
1,2,3,4,7,8-HxCDD	7.83E-10	7.91E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	4.09E-13
1,2,3,4,7,8-HxCDF	4.66E-09	3.14E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.54E-10
1,2,3,6,7,8-HxCDD	1.06E-09	3.43E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	8.60E-12
1,2,3,6,7,8-HxCDF	4.91E-09	3.33E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.63E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.66E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	6.68E-12
1,2,3,7,8,9-HxCDF	7.03E-10	5.15E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	2.52E-11
1,2,3,7,8-PeCDD	1.50E-09	2.66E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	6.89E-11
1,2,3,7,8-PeCDF	5.23E-09	8.34E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	2.82E-10
2,3,4,6,7,8-HxCDF	3.41E-09	2.33E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	1.14E-10
2,3,4,7,8-PeCDF	5.69E-09	1.66E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	3.34E-10
2,3,7,8-TCDD	6.62E-10	1.62E-15	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	5.57E-11
2,3,7,8-TCDF	2.91E-09	3.79E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	3.77E-10
Arsenic	5.97E-11	1.03E-09	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.17E-07
Beryllium	8.26E-09	9.25E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	5.74E-09
Cadmium	1.81E-08	4.84E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	4.39E-06
Chromium	2.38E-05	6.15E-08	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.17E-06
Lead	1.06E-05	1.71E-07	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	1.54E-08
Nickel	1.85E-08	4.62E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	3.60E-07

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	Wahiawa Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Wahiawa Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.96E-05	4.54E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	3.09E-03
Mercury, Divalent	2.56E-03	4.99E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	4.99E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	1.24E-16	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.82E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	5.60E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.54E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	2.39E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	6.59E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	2.02E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	3.70E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.73E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	3.16E-12
1,2,3,4,7,8-HxCDD	1.36E-09	7.91E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	4.09E-13
1,2,3,4,7,8-HxCDF	8.09E-09	3.14E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.54E-10
1,2,3,6,7,8-HxCDD	1.84E-09	3.43E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	8.60E-12
1,2,3,6,7,8-HxCDF	8.53E-09	3.33E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.63E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.66E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	6.68E-12
1,2,3,7,8,9-HxCDF	1.22E-09	5.15E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	2.52E-11
1,2,3,7,8-PeCDD	2.60E-09	2.66E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	6.89E-11
1,2,3,7,8-PeCDF	9.08E-09	8.34E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	2.82E-10
2,3,4,6,7,8-HxCDF	5.93E-09	2.33E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	1.14E-10
2,3,4,7,8-PeCDF	9.85E-09	1.66E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	3.34E-10
2,3,7,8-TCDD	1.13E-09	1.62E-15	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	5.57E-11
2,3,7,8-TCDF	4.95E-09	3.79E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	3.77E-10
Arsenic	5.97E-11	1.03E-09	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	1.17E-07
Beryllium	8.26E-09	9.25E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	5.74E-09
Cadmium	1.81E-08	4.84E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	4.39E-06
Chromium	2.44E-05	6.15E-08	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.17E-06
Lead	1.06E-05	1.71E-07	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	1.54E-08
Nickel	1.85E-08	4.62E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	3.60E-07

H-POWER Expansion **Fisher Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	1.61E-13	0.00E+00	2.28E-13	5.60E-13	1.48E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	4.57E-14	0.00E+00	6.47E-14	1.59E-13	1.25E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	6.49E-12	0.00E+00	9.20E-12	2.20E-11	1.79E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.35E-11	0.00E+00	1.92E-11	4.92E-11	1.00E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	1.04E-12	0.00E+00	1.47E-12	5.31E-12	8.58E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	1.29E-11	0.00E+00	1.82E-11	4.81E-11	1.11E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	7.66E-11	0.00E+00	1.08E-10	2.69E-10	4.17E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	1.74E-11	0.00E+00	2.47E-11	6.72E-11	2.33E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	8.07E-11	0.00E+00	1.14E-10	2.83E-10	4.42E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	1.39E-11	0.00E+00	1.98E-11	5.05E-11	1.81E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	1.16E-11	0.00E+00	1.63E-11	4.20E-11	6.84E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.47E-10	0.00E+00	3.48E-10	1.02E-09	1.87E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	2.58E-11	0.00E+00	3.55E-11	8.99E-11	2.29E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.61E-11	0.00E+00	7.93E-11	1.98E-10	3.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.81E-10	0.00E+00	3.92E-10	9.90E-10	2.72E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.09E-10	0.00E+00	1.48E-10	3.16E-10	1.51E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	4.78E-11	0.00E+00	6.44E-11	1.11E-10	1.02E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	9.81E-17	0.00E+00	1.62E-10	4.00E-10	3.17E-12	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.99E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	7.55E-15	0.00E+00	3.22E-10	4.81E-10	3.02E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	9.92E-14	0.00E+00	8.46E-11	4.26E-10	2.37E-15	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Child**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.3E-08	NC	Jo uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.3E-06	0.0E+00	NC	4.2E-06	6.5E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-04	0.0E+00	7.6E-06	6.4E-05	3.5E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	2.2E-08	0.0E+00	ND	4.4E-08	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.2E-09	0.0E+00	ND	1.2E-08	9.8E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	8.8E-07	0.0E+00	ND	1.7E-06	1.4E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	1.8E-06	0.0E+00	ND	3.9E-06	7.8E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.4E-07	0.0E+00	ND	4.2E-07	6.7E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	1.7E-06	0.0E+00	ND	3.8E-06	8.6E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.0E-05	0.0E+00	ND	2.1E-05	3.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.4E-06	0.0E+00	ND	5.3E-06	1.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.1E-05	0.0E+00	ND	2.2E-05	3.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.9E-06	0.0E+00	ND	4.0E-06	1.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.6E-06	0.0E+00	ND	3.3E-06	5.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.3E-05	0.0E+00	ND	8.1E-05	1.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.5E-06	0.0E+00	ND	7.1E-06	1.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	7.6E-06	0.0E+00	ND	1.6E-05	2.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	3.8E-05	0.0E+00	ND	7.9E-05	2.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.4E-05	0.0E+00	ND	2.5E-05	1.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	6.3E-06	0.0E+00	ND	9.2E-06	7.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	2.5E-12	0.0E+00	1.5E-05	1.0E-05	8.2E-08	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	5.3E-11	0.0E+00	2.2E-06	1.5E-07	6.1E-10	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	4.6E-10	0.0E+00	1.0E-05	3.0E-05	1.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.1E-10	0.0E+00	4.2E-10	1.1E-08	1.6E-10	0.0E+00	0.0E+00	NC	NC	NC
Lead	3.2E-07	0.0E+00	5.5E-05	1.4E-03	7.6E-09	0.0E+00	0.0E+00	NC	NC	NC
Nickel	1.2E-11	0.0E+00	9.9E-06	7.0E-07	3.8E-09	0.0E+00	0.0E+00	NC	NC	NC

Unit 3 Calculations
Wahiawa Reservoir Fisher

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Residential Area	**5**
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	**2**
Select the location for the impervious area of the watershed	Wahiawa Watershed Impervious	**18**
Select the location for the pervious area of the watershed	Wahiawa Watershed Pervious	**19**
Select the location for the drinking water and fish exposure water body	Wahiawa	**16**

Unitized Air Modeling Results	Symbol	Units	Location: Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.12364E-06	4.68833E-06	0.000169337	4.16325E-05	2.06069E-06	1.40845E-06	1.67361E-06	1.55181E-06	1.16504E-06	1.46067E-06	0.00000106	8.98971E-07	8.87714E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	2.69505E-05	3.55728E-05	0.000716117	0.000247493	1.70817E-05	9.49959E-06	1.17642E-05	1.16793E-05	6.97918E-06	9.58306E-06	0.00000572	3.24743E-06	3.72772E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	4.01355E-05	4.15061E-05	0.001246786	0.000260698	2.59769E-05	1.64887E-05	1.99835E-05	2.20146E-05	1.49788E-05	1.7859E-05	1.38967E-05	9.66918E-06	1.13007E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000374533	0.000416787	0.013351707	0.002869695	0.000235428	0.000141544	0.000172559	0.000192109	0.000124746	0.000151948	0.000110333	7.397E-05	8.61672E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.001269324	0.001223517	0.016980554	0.005055578	0.000866141	0.000683538	0.000882264	0.000824851	0.000652322	0.000795879	0.000681757	0.000502784	0.000599816
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.001264637	0.001202342	0.016809874	0.004971138	0.000856098	0.000660874	0.000849106	0.000808552	0.000627353	0.000763562	0.000641317	0.000485795	0.000569734
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.96332E-05	0.00000737	0.000334916	0.000024585	7.71414E-06	4.28608E-06	3.96244E-06	6.90681E-06	3.65888E-06	3.64028E-06	0.00000178	1.65668E-06	1.69834E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000185641	0.000101949	0.006451413	0.000447955	2.51769E-05	4.15559E-05	5.65554E-05	1.96172E-05	2.66416E-05	4.39255E-05	5.80167E-05	3.51009E-05	4.3353E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.001254956	0.001220427	0.01692135	0.005057125	0.000864098	0.000680432	0.000879414	0.000823217	0.000651256	0.000794129	0.000675737	0.000497788	0.000595199
Unitized air concentration - HgII			0.001206627	0.00118563	0.016733094	0.004981375	0.000831724	0.000638154	0.000834961	0.000780166	0.000601808	0.000746729	0.000630557	0.00045772	0.000551989
Unitized Dry deposition - HgII			0.000598224	0.000521713	0.018005304	0.002485268	0.000212502	0.000198084	0.000258185	0.000170194	0.000150836	0.00021375	0.000224297	0.000142514	0.000171397
Unitized Wet deposition - HgII			7.23873E-05	4.65256E-05	0.001319981	0.000183213	3.20955E-05	1.74755E-05	2.00334E-05	2.23946E-05	1.51276E-05	1.79687E-05	1.14833E-05	7.71625E-06	8.54413E-06
Unitized air concentration - Hg0			0.001235513	0.001209388	0.016765936	0.00503163	0.000861846	0.000674206	0.000870888	0.000822416	0.000647763	0.00078768	0.00066027	0.000489659	0.000585415
Unitized Dry deposition - Hg0			0.00047757	0.000258017	0.01749374	0.001151858	5.74728E-05	0.000100927	0.000138614	4.32802E-05	6.24654E-05	0.000106344	0.000140533	8.29958E-05	0.000103717
Unitized Wet deposition - Hg0			1.45455E-07	3.22222E-08	8.97143E-07	0.000000095	1.37241E-07	6.43285E-08	4.0757E-08	1.81489E-07	7.03214E-08	4.4703E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	4.32577E-05	4.61939E-05	0.001416126	0.00030233	2.80372E-05	1.7897E-05	2.16572E-05	2.35669E-05	1.61437E-05	1.93197E-05	0.00001496	1.05679E-05	1.2188E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000401483	0.000452359	0.014067826	0.003117188	0.00025251	0.000151043	0.000184323	0.000203789	0.000131725	0.000161531	0.000116053	7.72175E-05	8.98954E-05

Emission Rates

Unit 3

Compound	PM10 g/s	TSP g/s
Mercury, elemental	1.47E-03	1.47E-03
Mercury, methyl	1.47E-03	1.47E-03
Mercury, divalent	1.47E-03	1.47E-03
1,2,3,4,6,7,8,9-OCDD	8.42E-08	8.42E-08
1,2,3,4,6,7,8,9-OCDF	9.02E-09	9.02E-09
1,2,3,4,6,7,8-HpCDD	4.77E-08	4.77E-08
1,2,3,4,6,7,8-HpCDF	1.77E-08	1.77E-08
1,2,3,4,7,8,9-HpCDF	2.87E-09	2.87E-09
1,2,3,4,7,8-HxCDD	2.09E-09	2.09E-09
1,2,3,4,7,8-HxCDF	6.69E-09	6.69E-09
1,2,3,6,7,8-HxCDD	6.73E-09	6.73E-09
1,2,3,6,7,8-HxCDF	6.60E-09	6.60E-09
1,2,3,7,8,9-HxCDD	3.93E-09	3.93E-09
1,2,3,7,8,9-HxCDF	3.39E-09	3.39E-09
1,2,3,7,8-PeCDD	2.01E-09	2.01E-09
1,2,3,7,8-PeCDF	5.23E-09	5.23E-09
2,3,4,6,7,8-HxCDF	4.95E-09	4.95E-09
2,3,4,7,8-PeCDF	6.12E-09	6.12E-09
2,3,7,8-TCDD	9.90E-10	9.90E-10
2,3,7,8-TCDF	3.06E-09	3.06E-09
Arsenic	7.57E-06	7.57E-06
Beryllium	2.20E-06	2.20E-06
Cadmium	5.25E-04	5.25E-04
Chromium	8.80E-05	8.80E-05
Lead	7.36E-03	7.36E-03
Nickel	1.70E-04	1.70E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Residential Area	Wahiawa	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Wahiawa
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	2.48E-05	2.98E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	2.03E-03
Mercury, divalent	1.26E-03	3.28E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	3.28E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.91E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	4.27E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	4.94E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.36E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.62E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	7.21E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.93E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	7.19E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	7.14E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	1.30E-12
1,2,3,4,7,8-HxCDD	2.42E-10	1.92E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	9.93E-14
1,2,3,4,7,8-HxCDF	7.82E-10	4.09E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	2.00E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.97E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	4.95E-12
1,2,3,6,7,8-HxCDF	7.73E-10	4.06E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.99E-11
1,2,3,7,8,9-HxCDD	4.52E-10	1.12E-16	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.80E-12
1,2,3,7,8,9-HxCDF	4.05E-10	2.27E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	1.11E-11
1,2,3,7,8-PeCDD	2.42E-10	3.24E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	8.39E-12
1,2,3,7,8-PeCDF	6.83E-10	7.77E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	2.62E-11
2,3,4,6,7,8-HxCDF	5.81E-10	3.07E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.50E-11
2,3,4,7,8-PeCDF	7.77E-10	1.64E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	3.30E-11
2,3,7,8-TCDD	1.49E-10	2.29E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	7.87E-12
2,3,7,8-TCDF	4.79E-10	3.81E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	3.78E-11
Arsenic	7.27E-12	9.30E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.06E-08
Beryllium	2.94E-09	2.45E-11	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	1.52E-09
Cadmium	3.23E-08	6.42E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	5.83E-06
Chromium	6.58E-06	1.26E-08	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-07
Lead	6.74E-06	8.07E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	7.26E-09
Nickel	1.12E-08	2.08E-09	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	1.62E-07

Summary of EPCs (Non Cancer)	Residential Area	Wahiawa	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Wahiawa
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_{a}	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	4.86E-05	2.98E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	2.03E-03
Mercury, divalent	2.51E-03	3.28E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	3.28E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.91E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	4.27E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	4.94E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.36E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.62E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	7.21E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.93E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	7.19E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	7.14E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	1.30E-12
1,2,3,4,7,8-HxCDD	4.21E-10	1.92E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	9.93E-14
1,2,3,4,7,8-HxCDF	1.36E-09	4.09E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	2.00E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.97E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	4.95E-12
1,2,3,6,7,8-HxCDF	1.34E-09	4.06E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.99E-11
1,2,3,7,8,9-HxCDD	7.85E-10	1.12E-16	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.80E-12
1,2,3,7,8,9-HxCDF	7.04E-10	2.27E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	1.11E-11
1,2,3,7,8-PeCDD	4.19E-10	3.24E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	8.39E-12
1,2,3,7,8-PeCDF	1.19E-09	7.77E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	2.62E-11
2,3,4,6,7,8-HxCDF	1.01E-09	3.07E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.50E-11
2,3,4,7,8-PeCDF	1.34E-09	1.64E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	3.30E-11
2,3,7,8-TCDD	2.54E-10	2.29E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	7.87E-12
2,3,7,8-TCDF	8.16E-10	3.81E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	3.78E-11
Arsenic	7.27E-12	9.30E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.06E-08
Beryllium	2.94E-09	2.45E-11	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	1.52E-09
Cadmium	3.23E-08	6.42E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	5.83E-06
Chromium	6.75E-06	1.26E-08	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-07
Lead	6.74E-06	8.07E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	7.26E-09
Nickel	1.12E-08	2.08E-09	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	1.62E-07

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Adult 5

H-POWER Expansion **Fisher Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.04E-10	1.49E-05	Residential Area
Water	NC	NC	Wahiawa
Air	2.30E-09	3.49E-05	Residential Area
Produce	2.51E-09	2.80E-04	Residential Area
Fish	1.02E-09	6.09E-03	Wahiawa
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**5.94E-09**	**6.42E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Adult**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	5.94E-09		6.42E-03	
Mercury, Elemental	NC		5.53E-09	0.0001%
Mercury, Methyl	NC		6.08E-03	94.6628%
Mercury, Divalent	NC		3.07E-05	0.4786%
1,2,3,4,6,7,8,9-OCDD	4.23E-12	0.0712%	4.22E-08	0.0007%
1,2,3,4,6,7,8,9-OCDF	4.53E-13	0.0076%	4.53E-09	0.0001%
1,2,3,4,6,7,8-HpCDD	7.85E-11	1.3232%	7.78E-07	0.0121%
1,2,3,4,6,7,8-HpCDF	3.18E-11	0.5356%	3.31E-07	0.0051%
1,2,3,4,7,8,9-HpCDF	6.58E-12	0.1109%	7.59E-08	0.0012%
1,2,3,4,7,8-HxCDD	3.70E-11	0.6236%	3.82E-07	0.0059%
1,2,3,4,7,8-HxCDF	1.52E-10	2.5529%	1.74E-06	0.0271%
1,2,3,6,7,8-HxCDD	1.30E-10	2.1968%	1.41E-06	0.0219%
1,2,3,6,7,8-HxCDF	1.50E-10	2.5284%	1.73E-06	0.0269%
1,2,3,7,8,9-HxCDD	7.29E-11	1.2279%	7.70E-07	0.0120%
1,2,3,7,8,9-HxCDF	8.06E-11	1.3572%	9.43E-07	0.0147%
1,2,3,7,8-PeCDD	5.46E-10	9.1973%	6.68E-06	0.1039%
1,2,3,7,8-PeCDF	4.29E-11	0.7227%	5.27E-07	0.0082%
2,3,4,6,7,8-HxCDF	1.13E-10	1.9035%	1.30E-06	0.0203%
2,3,4,7,8-PeCDF	5.13E-10	8.6400%	6.34E-06	0.0987%
2,3,7,8-TCDD	3.19E-10	5.3809%	4.10E-06	0.0638%
2,3,7,8-TCDF	1.20E-10	2.0218%	1.61E-06	0.0251%
Arsenic	1.18E-10	1.9962%	1.27E-06	0.0197%
Beryllium	8.18E-12	0.1379%	4.13E-07	0.0064%
Cadmium	2.91E-09	49.0143%	2.72E-05	0.4237%
Chromium	NC		9.18E-10	0.0000%
Lead	5.02E-10	8.4502%	2.51E-04	3.9112%
Nickel	NC		3.19E-06	0.0497%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	Wahiawa Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Wahiawa Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.48E-05	2.98E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	2.03E-03
Mercury, Divalent	1.26E-03	3.28E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	3.28E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.91E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	4.27E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	4.94E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.36E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.62E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	7.21E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.93E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	7.19E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	7.14E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	1.30E-12
1,2,3,4,7,8-HxCDD	2.42E-10	1.92E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	9.93E-14
1,2,3,4,7,8-HxCDF	7.82E-10	4.09E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	2.00E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.97E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	4.95E-12
1,2,3,6,7,8-HxCDF	7.73E-10	4.06E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.99E-11
1,2,3,7,8,9-HxCDD	4.52E-10	1.12E-16	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.80E-12
1,2,3,7,8,9-HxCDF	4.05E-10	2.27E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	1.11E-11
1,2,3,7,8-PeCDD	2.42E-10	3.24E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	8.39E-12
1,2,3,7,8-PeCDF	6.83E-10	7.77E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	2.62E-11
2,3,4,6,7,8-HxCDF	5.81E-10	3.07E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.50E-11
2,3,4,7,8-PeCDF	7.77E-10	1.64E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	3.30E-11
2,3,7,8-TCDD	1.49E-10	2.29E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	7.87E-12
2,3,7,8-TCDF	4.79E-10	3.81E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	3.78E-11
Arsenic	7.27E-12	9.30E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.06E-08
Beryllium	2.94E-09	2.45E-11	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	1.52E-09
Cadmium	3.23E-08	6.42E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	5.83E-06
Chromium	6.58E-06	1.26E-08	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-07
Lead	6.74E-06	8.07E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	7.26E-09
Nickel	1.12E-08	2.08E-09	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	1.62E-07

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	Wahiawa Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Wahiawa Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.86E-05	2.98E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	2.03E-03
Mercury, Divalent	2.51E-03	3.28E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	3.28E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.91E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	4.27E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	4.94E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.36E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.62E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	7.21E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.93E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	7.19E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	7.14E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	1.30E-12
1,2,3,4,7,8-HxCDD	4.21E-10	1.92E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	9.93E-14
1,2,3,4,7,8-HxCDF	1.36E-09	4.09E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	2.00E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.97E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	4.95E-12
1,2,3,6,7,8-HxCDF	1.34E-09	4.06E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.99E-11
1,2,3,7,8,9-HxCDD	7.85E-10	1.12E-16	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.80E-12
1,2,3,7,8,9-HxCDF	7.04E-10	2.27E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	1.11E-11
1,2,3,7,8-PeCDD	4.19E-10	3.24E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	8.39E-12
1,2,3,7,8-PeCDF	1.19E-09	7.77E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	2.62E-11
2,3,4,6,7,8-HxCDF	1.01E-09	3.07E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.50E-11
2,3,4,7,8-PeCDF	1.34E-09	1.64E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	3.30E-11
2,3,7,8-TCDD	2.54E-10	2.29E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	7.87E-12
2,3,7,8-TCDF	8.16E-10	3.81E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	3.78E-11
Arsenic	7.27E-12	9.30E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.06E-08
Beryllium	2.94E-09	2.45E-11	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	1.52E-09
Cadmium	3.23E-08	6.42E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	5.83E-06
Chromium	6.75E-06	1.26E-08	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-07
Lead	6.74E-06	8.07E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	7.26E-09
Nickel	1.12E-08	2.08E-09	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	1.62E-07

H-POWER Expansion **Fisher Adult**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	2.55E-13	0.00E+00	1.71E-12	2.26E-12	2.47E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.73E-14	0.00E+00	1.83E-13	2.42E-13	7.87E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	4.81E-12	0.00E+00	3.23E-11	4.14E-11	1.39E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.79E-12	0.00E+00	1.20E-11	1.66E-11	1.39E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	2.98E-13	0.00E+00	1.94E-12	4.09E-12	2.51E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	2.13E-12	0.00E+00	1.42E-11	2.05E-11	1.91E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	6.88E-12	0.00E+00	4.53E-11	6.08E-11	3.86E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	6.85E-12	0.00E+00	4.55E-11	6.85E-11	9.54E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	6.81E-12	0.00E+00	4.46E-11	6.03E-11	3.83E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	3.98E-12	0.00E+00	2.66E-11	3.69E-11	5.40E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	3.57E-12	0.00E+00	2.29E-11	3.27E-11	2.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.13E-11	0.00E+00	1.36E-10	2.27E-10	1.62E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.80E-12	0.00E+00	1.06E-11	1.53E-11	1.51E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.12E-12	0.00E+00	3.35E-11	4.54E-11	2.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.05E-11	0.00E+00	1.24E-10	1.77E-10	1.91E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.31E-11	0.00E+00	6.70E-11	8.78E-11	1.52E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	4.22E-12	0.00E+00	2.07E-11	2.22E-11	7.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	6.40E-18	0.00E+00	5.05E-11	6.59E-11	2.04E-12	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.18E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	7.20E-15	0.00E+00	1.47E-09	1.16E-09	2.84E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	3.36E-14	0.00E+00	1.37E-10	3.64E-10	7.93E-15	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Adult**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.5E-09	NC	lo uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.7E-07	0.0E+00	NC	8.9E-07	6.1E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-05	0.0E+00	3.2E-06	1.6E-05	3.3E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	6.9E-09	0.0E+00	ND	3.5E-08	3.8E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	7.4E-10	0.0E+00	ND	3.8E-09	1.2E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.3E-07	0.0E+00	ND	6.5E-07	2.2E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	4.8E-08	0.0E+00	ND	2.6E-07	2.2E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	8.1E-09	0.0E+00	ND	6.4E-08	3.9E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	5.8E-08	0.0E+00	ND	3.2E-07	3.0E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.9E-07	0.0E+00	ND	9.6E-07	6.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.9E-07	0.0E+00	ND	1.1E-06	1.5E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.8E-07	0.0E+00	ND	9.5E-07	6.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.1E-07	0.0E+00	ND	5.8E-07	8.4E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	9.6E-08	0.0E+00	ND	5.1E-07	3.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	5.7E-07	0.0E+00	ND	3.6E-06	2.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.9E-08	0.0E+00	ND	2.4E-07	2.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	1.4E-07	0.0E+00	ND	7.2E-07	4.5E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	5.5E-07	0.0E+00	ND	2.8E-06	3.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.5E-07	0.0E+00	ND	1.4E-06	2.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.1E-07	0.0E+00	ND	3.7E-07	1.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	3.3E-14	0.0E+00	9.1E-07	3.4E-07	1.1E-08	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	2.0E-12	0.0E+00	4.0E-07	1.5E-08	2.3E-10	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.8E-11	0.0E+00	9.5E-06	1.4E-05	3.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	6.2E-12	0.0E+00	6.0E-11	8.0E-10	4.8E-11	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.2E-08	0.0E+00	1.8E-05	2.3E-04	5.1E-09	0.0E+00	0.0E+00	NC	NC	NC
Nickel	7.7E-13	0.0E+00	3.1E-06	1.1E-07	2.4E-09	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Fisher Child **6**

H-POWER Expansion **Fisher Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.93E-10	1.39E-04	Residential Area
Water	NC	NC	Wahiawa
Air	1.15E-09	8.67E-05	Residential Area
Produce	1.88E-09	1.05E-03	Residential Area
Fish	1.44E-10	4.29E-03	Wahiawa
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**3.36E-09**	**5.57E-03**	

NC - Not Calculated

H-POWER Expansion **Fisher Child**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	3.36E-09		5.57E-03	
Mercury, Elemental	NC		1.38E-08	0.0002%
Mercury, Methyl	NC		4.29E-03	77.0617%
Mercury, Divalent	NC		1.80E-04	3.2275%
1,2,3,4,6,7,8,9-OCDD	3.02E-12	0.0899%	1.97E-07	0.0035%
1,2,3,4,6,7,8,9-OCDF	3.23E-13	0.0096%	2.11E-08	0.0004%
1,2,3,4,6,7,8-HpCDD	5.60E-11	1.6670%	3.64E-06	0.0653%
1,2,3,4,6,7,8-HpCDF	2.20E-11	0.6538%	1.45E-06	0.0260%
1,2,3,4,7,8,9-HpCDF	4.62E-12	0.1376%	3.18E-07	0.0057%
1,2,3,4,7,8-HxCDD	2.64E-11	0.7867%	1.74E-06	0.0313%
1,2,3,4,7,8-HxCDF	8.64E-11	2.5723%	5.76E-06	0.1034%
1,2,3,6,7,8-HxCDD	8.81E-11	2.6222%	5.86E-06	0.1052%
1,2,3,6,7,8-HxCDF	8.55E-11	2.5458%	5.70E-06	0.1024%
1,2,3,7,8,9-HxCDD	4.91E-11	1.4607%	3.23E-06	0.0581%
1,2,3,7,8,9-HxCDF	4.56E-11	1.3570%	3.07E-06	0.0551%
1,2,3,7,8-PeCDD	3.00E-10	8.9444%	2.06E-05	0.3702%
1,2,3,7,8-PeCDF	2.23E-11	0.6634%	1.53E-06	0.0275%
2,3,4,6,7,8-HxCDF	6.43E-11	1.9157%	4.29E-06	0.0771%
2,3,4,7,8-PeCDF	2.60E-10	7.7384%	1.79E-05	0.3207%
2,3,7,8-TCDD	1.45E-10	4.3184%	1.02E-05	0.1824%
2,3,7,8-TCDF	4.52E-11	1.3460%	3.24E-06	0.0581%
Arsenic	7.47E-11	2.2233%	3.56E-06	0.0639%
Beryllium	4.07E-12	0.1212%	1.05E-06	0.0188%
Cadmium	1.64E-09	48.6845%	7.92E-05	1.4232%
Chromium	NC		3.25E-09	0.0001%
Lead	3.41E-10	10.1422%	9.17E-04	16.4671%
Nickel	NC		8.07E-06	0.1450%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	Wahiawa Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Wahiawa Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.48E-05	2.98E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	2.03E-03
Mercury, Divalent	1.26E-03	3.28E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	3.28E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.91E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	4.27E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	4.94E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.36E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.62E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	7.21E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.93E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	7.19E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	7.14E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	1.30E-12
1,2,3,4,7,8-HxCDD	2.42E-10	1.92E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	9.93E-14
1,2,3,4,7,8-HxCDF	7.82E-10	4.09E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	2.00E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.97E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	4.95E-12
1,2,3,6,7,8-HxCDF	7.73E-10	4.06E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.99E-11
1,2,3,7,8,9-HxCDD	4.52E-10	1.12E-16	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.80E-12
1,2,3,7,8,9-HxCDF	4.05E-10	2.27E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	1.11E-11
1,2,3,7,8-PeCDD	2.42E-10	3.24E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	8.39E-12
1,2,3,7,8-PeCDF	6.83E-10	7.77E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	2.62E-11
2,3,4,6,7,8-HxCDF	5.81E-10	3.07E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.50E-11
2,3,4,7,8-PeCDF	7.77E-10	1.64E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	3.30E-11
2,3,7,8-TCDD	1.49E-10	2.29E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	7.87E-12
2,3,7,8-TCDF	4.79E-10	3.81E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	3.78E-11
Arsenic	7.27E-12	9.30E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.06E-08
Beryllium	2.94E-09	2.45E-11	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	1.52E-09
Cadmium	3.23E-08	6.42E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	5.83E-06
Chromium	6.58E-06	1.26E-08	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-07
Lead	6.74E-06	8.07E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	7.26E-09
Nickel	1.12E-08	2.08E-09	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	1.62E-07

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	Wahiawa Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	Wahiawa Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.86E-05	2.98E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	2.03E-03
Mercury, Divalent	2.51E-03	3.28E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	3.28E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.91E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	4.27E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	4.94E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.36E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.62E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	7.21E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.93E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	7.19E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	7.14E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	1.30E-12
1,2,3,4,7,8-HxCDD	4.21E-10	1.92E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	9.93E-14
1,2,3,4,7,8-HxCDF	1.36E-09	4.09E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	2.00E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.97E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	4.95E-12
1,2,3,6,7,8-HxCDF	1.34E-09	4.06E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.99E-11
1,2,3,7,8,9-HxCDD	7.85E-10	1.12E-16	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.80E-12
1,2,3,7,8,9-HxCDF	7.04E-10	2.27E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	1.11E-11
1,2,3,7,8-PeCDD	4.19E-10	3.24E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	8.39E-12
1,2,3,7,8-PeCDF	1.19E-09	7.77E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	2.62E-11
2,3,4,6,7,8-HxCDF	1.01E-09	3.07E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.50E-11
2,3,4,7,8-PeCDF	1.34E-09	1.64E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	3.30E-11
2,3,7,8-TCDD	2.54E-10	2.29E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	7.87E-12
2,3,7,8-TCDF	8.16E-10	3.81E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	3.78E-11
Arsenic	7.27E-12	9.30E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	1.06E-08
Beryllium	2.94E-09	2.45E-11	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	1.52E-09
Cadmium	3.23E-08	6.42E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	5.83E-06
Chromium	6.75E-06	1.26E-08	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-07
Lead	6.74E-06	8.07E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	7.26E-09
Nickel	1.12E-08	2.08E-09	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	1.62E-07

H-POWER Expansion **Fisher Child**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	4.76E-13	0.00E+00	8.51E-13	1.69E-12	3.47E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	5.09E-14	0.00E+00	9.11E-14	1.81E-13	1.11E-16	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	8.97E-12	0.00E+00	1.60E-11	3.10E-11	1.96E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	3.34E-12	0.00E+00	5.96E-12	1.25E-11	1.95E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.56E-13	0.00E+00	9.67E-13	3.06E-12	3.54E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	3.98E-12	0.00E+00	7.04E-12	1.54E-11	2.69E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	1.29E-11	0.00E+00	2.25E-11	4.56E-11	5.43E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	1.28E-11	0.00E+00	2.27E-11	5.13E-11	1.34E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	1.27E-11	0.00E+00	2.22E-11	4.52E-11	5.40E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	7.43E-12	0.00E+00	1.32E-11	2.76E-11	7.61E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	6.66E-12	0.00E+00	1.14E-11	2.45E-11	3.01E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	3.98E-11	0.00E+00	6.76E-11	1.70E-10	2.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	3.37E-12	0.00E+00	5.28E-12	1.15E-11	2.13E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	9.55E-12	0.00E+00	1.67E-11	3.41E-11	4.08E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	3.83E-11	0.00E+00	6.18E-11	1.33E-10	2.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	2.45E-11	0.00E+00	3.33E-11	6.59E-11	2.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	7.88E-12	0.00E+00	1.03E-11	1.68E-11	1.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	1.19E-17	0.00E+00	2.51E-11	4.92E-11	2.87E-13	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	4.07E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.34E-14	0.00E+00	7.30E-10	8.65E-10	4.00E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	6.28E-14	0.00E+00	6.82E-11	2.72E-10	1.12E-15	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Fisher Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.4E-08	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.2E-06	0.0E+00	NC	4.1E-06	4.3E-03	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-04	0.0E+00	7.9E-06	6.5E-05	2.3E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	6.4E-08	0.0E+00	ND	1.3E-07	2.7E-11	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.9E-09	0.0E+00	ND	1.4E-08	8.6E-12	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.2E-06	0.0E+00	ND	2.4E-06	1.5E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	4.5E-07	0.0E+00	ND	9.8E-07	1.5E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	7.5E-08	0.0E+00	ND	2.4E-07	2.8E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	5.4E-07	0.0E+00	ND	1.2E-06	2.1E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.7E-06	0.0E+00	ND	3.6E-06	4.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.7E-06	0.0E+00	ND	4.0E-06	1.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.7E-06	0.0E+00	ND	3.6E-06	4.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.0E-06	0.0E+00	ND	2.2E-06	5.9E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	9.0E-07	0.0E+00	ND	1.9E-06	2.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	5.4E-06	0.0E+00	ND	1.3E-05	1.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.5E-07	0.0E+00	ND	9.1E-07	1.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	1.3E-06	0.0E+00	ND	2.7E-06	3.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	5.2E-06	0.0E+00	ND	1.1E-05	2.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.2E-06	0.0E+00	ND	5.3E-06	1.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.0E-06	0.0E+00	ND	1.4E-06	8.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	3.1E-13	0.0E+00	2.3E-06	1.3E-06	7.5E-09	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	1.9E-11	0.0E+00	9.9E-07	5.5E-08	1.6E-10	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.3E-10	0.0E+00	2.4E-05	5.3E-05	2.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	5.8E-11	0.0E+00	1.5E-10	3.0E-09	3.4E-11	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.0E-07	0.0E+00	4.4E-05	8.7E-04	3.6E-09	0.0E+00	0.0E+00	NC	NC	NC
Nickel	7.2E-12	0.0E+00	7.6E-06	4.3E-07	1.7E-09	0.0E+00	0.0E+00	NC	NC	NC

Units 1 & 2 Calculations
Resident in Poultry Area

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Poultry Area	2
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

		Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Air Modeling Results	**Symbol**	**Units**													
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.46455E-06	4.37944E-06	0.000186393	0.000033865	1.93621E-06	1.37464E-06	1.61613E-06	1.46149E-06	1.1317E-06	1.40998E-06	9.83333E-07	8.84131E-07	8.59213E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	3.38523E-05	3.68356E-05	0.00075806	0.00023434	1.71645E-05	9.76055E-06	1.19425E-05	1.16923E-05	7.17437E-06	9.74894E-06	5.46667E-06	3.36044E-06	3.76898E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	0.000034625	3.70156E-05	0.000643109	0.000181585	2.26614E-05	1.47727E-05	1.84775E-05	1.91377E-05	1.34115E-05	1.6423E-05	1.44033E-05	8.52861E-06	1.03516E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000335306	0.000391544	0.006901513	0.002012835	0.000216809	0.00013562	0.000166552	0.0001782	0.00011969	0.000146841	0.00011235	7.13193E-05	8.42169E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.000879218	0.000800461	0.008591956	0.002852313	0.000510271	0.000446853	0.000701292	0.000475492	0.000425908	0.000607652	0.00078381	0.000317958	0.00045034
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.000860414	0.000780127	0.008545623	0.002814235	0.000495852	0.000441446	0.00068391	0.000468449	0.000421462	0.000594625	0.000749947	0.000319121	0.000443985
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.68845E-05	7.04722E-06	0.000311157	2.20675E-05	7.0269E-06	4.12962E-06	3.85475E-06	6.59223E-06	3.58509E-06	3.55522E-06	1.87667E-06	1.62769E-06	1.70537E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000150544	7.44283E-05	0.002883657	0.00022228	1.95931E-05	3.6231E-05	4.94079E-05	1.57333E-05	2.30601E-05	3.82578E-05	0.00005449	3.12193E-05	3.92822E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.000870941	0.000799849	0.008582527	0.002856068	0.000510282	0.000444023	0.000698883	0.0004744	0.000423892	0.000605529	0.000779117	0.00031358	0.000445597
Unitized air concentration - HgII			0.000836867	0.000780368	0.008522327	0.00282602	0.000495858	0.000425242	0.000670983	0.000460566	0.000405519	0.000580343	0.00073797	0.000293634	0.000419545
Unitized Dry deposition - HgII			0.000513978	0.000397487	0.009259773	0.001450035	0.000171102	0.000173203	0.000226938	0.000139525	0.000131513	0.000187547	0.00021364	0.000128137	0.000156247
Unitized Wet deposition - HgII			6.82945E-05	4.61633E-05	0.001260296	0.00017232	3.04645E-05	1.7167E-05	1.95452E-05	2.12377E-05	1.49035E-05	1.76076E-05	1.08633E-05	7.64211E-06	8.33146E-06
Unitized air concentration - Hg0			0.000858408	0.000793558	0.008547674	0.002847923	0.00050834	0.000438557	0.000692329	0.000473055	0.000420543	0.000600363	0.00076766	0.00030652	0.000437305
Unitized Dry deposition - Hg0			0.000392447	0.000191023	0.007891281	0.000573655	4.67207E-05	9.01547E-05	0.00012272	3.66957E-05	5.57671E-05	9.41557E-05	0.00013191	7.59329E-05	9.58428E-05
Unitized Wet deposition - Hg0			1.46364E-07	0.00000003	8.52857E-07	8.75E-08	1.72069E-07	8.30802E-08	4.94966E-08	2.4883E-07	9.72936E-08	5.7478E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	3.80891E-05	4.13933E-05	0.000829501	0.000215453	2.45983E-05	1.61476E-05	2.00938E-05	2.05989E-05	1.45434E-05	1.7833E-05	1.53867E-05	9.41323E-06	1.12102E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000369159	0.000428381	0.007659573	0.002247173	0.000233974	0.000145381	0.000178495	0.000189893	0.000126864	0.000156591	0.000117813	7.46801E-05	8.7986E-05

Emission Rates

Units 1 & 2

Compound	PM10 g/s	TSP g/s
Mercury, elemental	2.46E-03	2.46E-03
Mercury, methyl	2.46E-03	2.46E-03
Mercury, divalent	2.46E-03	2.46E-03
1,2,3,4,6,7,8,9-OCDD	4.00E-08	4.00E-08
1,2,3,4,6,7,8,9-OCDF	1.14E-08	1.14E-08
1,2,3,4,6,7,8-HpCDD	4.84E-08	4.84E-08
1,2,3,4,6,7,8-HpCDF	1.01E-07	1.01E-07
1,2,3,4,7,8,9-HpCDF	7.74E-09	7.74E-09
1,2,3,4,7,8-HxCDD	9.59E-09	9.59E-09
1,2,3,4,7,8-HxCDF	5.71E-08	5.71E-08
1,2,3,6,7,8-HxCDD	1.30E-08	1.30E-08
1,2,3,6,7,8-HxCDF	6.01E-08	6.01E-08
1,2,3,7,8,9-HxCDD	1.04E-08	1.04E-08
1,2,3,7,8,9-HxCDF	8.56E-09	8.56E-09
1,2,3,7,8-PeCDD	1.83E-08	1.83E-08
1,2,3,7,8-PeCDF	6.24E-08	6.24E-08
2,3,4,6,7,8-HxCDF	4.18E-08	4.18E-08
2,3,4,7,8-PeCDF	6.88E-08	6.88E-08
2,3,7,8-TCDD	7.79E-09	7.79E-09
2,3,7,8-TCDF	3.39E-08	3.39E-08
Arsenic	8.63E-05	8.63E-05
Beryllium	8.57E-06	8.57E-06
Cadmium	4.09E-04	4.09E-04
Chromium	4.41E-04	4.41E-04
Lead	1.61E-02	1.61E-02
Nickel	3.89E-04	3.89E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Poultry Area	West Loch	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	6.52E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	9.07E-06	2.09E-10	NC	2.80E-08	9.29E-08	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, divalent	4.60E-04	2.60E-09	1.36E-06	2.25E-06	1.66E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.81E-10	9.95E-17	3.52E-11	1.48E-11	2.85E-13	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.65E-10	4.47E-17	9.98E-12	4.19E-12	1.28E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	7.06E-10	1.91E-16	4.26E-11	1.72E-11	3.85E-13	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.51E-09	1.58E-15	8.89E-11	4.00E-11	1.13E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.36E-10	1.29E-16	6.80E-12	5.13E-12	1.02E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.51E-10	6.16E-17	8.43E-12	4.02E-12	9.15E-14	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	9.75E-10	2.31E-15	5.02E-11	2.18E-11	9.07E-13	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	2.08E-10	2.62E-16	1.14E-11	5.70E-12	1.65E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.04E-09	2.45E-15	5.28E-11	2.31E-11	9.64E-13	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.59E-10	2.06E-16	9.16E-12	4.10E-12	1.26E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.66E-10	3.66E-16	7.52E-12	3.57E-12	1.54E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	3.81E-10	1.77E-15	1.61E-11	9.36E-12	4.31E-13	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	1.83E-09	5.21E-15	5.47E-11	2.80E-11	1.90E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	7.28E-10	1.71E-15	3.67E-11	1.62E-11	6.77E-13	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	1.82E-09	1.00E-14	6.03E-11	3.00E-11	2.24E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	3.87E-10	8.92E-16	6.81E-12	3.52E-12	4.16E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	1.87E-09	1.68E-14	2.96E-11	1.35E-11	2.92E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	9.82E-12	2.20E-10	7.42E-08	2.78E-07	7.86E-13	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	1.36E-09	2.20E-11	7.37E-09	2.76E-08	1.95E-11	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	2.99E-09	1.05E-09	3.52E-07	1.32E-06	1.90E-09	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	3.92E-06	6.09E-09	3.79E-07	1.43E-06	1.37E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.75E-06	4.10E-08	1.39E-05	5.22E-05	1.53E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	3.05E-09	1.00E-09	3.35E-07	1.25E-06	2.43E-10	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Summary of EPCs (Non Cancer) Compound	Poultry Area Soil Cs_{tD} (mg/kg)	West Loch Water C_{dw} (mg/L)	Poultry Area Air C_a (ug/m3)	Poultry Area Produce - above P_{ag} (mg/kg DW)	Poultry Area Produce - root P_{bg} (mg/kg DW)	Poultry Area Beef A_{beef} (mg/kg FW)	Poultry Area Milk A_{milk} (mg/kg FW)	Poultry Area Chicken $A_{chicken}$ (mg/kg FW)	Poultry Area Eggs A_{egg} (mg/kg FW)	Poultry Area Pork A_{pork} (mg/kg FW)	West Loch Fish C_{fish} (mg/kg FW)
Mercury, elemental	NC	NC	6.52E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	1.78E-05	2.09E-10	NC	5.55E-08	1.86E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, divalent	9.17E-04	2.60E-09	1.36E-06	2.92E-06	3.32E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.01E-09	9.95E-17	3.52E-11	1.48E-11	4.96E-13	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	2.87E-10	4.47E-17	9.98E-12	4.20E-12	2.23E-13	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.23E-09	1.91E-16	4.26E-11	1.73E-11	6.71E-13	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	2.63E-09	1.58E-15	8.89E-11	4.02E-11	1.97E-12	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.37E-10	1.29E-16	6.80E-12	5.15E-12	1.78E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	2.63E-10	6.16E-17	8.43E-12	4.04E-12	1.59E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	1.69E-09	2.31E-15	5.02E-11	2.21E-11	1.58E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	3.61E-10	2.62E-16	1.14E-11	5.74E-12	2.87E-13	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.80E-09	2.45E-15	5.28E-11	2.34E-11	1.68E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	2.76E-10	2.06E-16	9.16E-12	4.13E-12	2.19E-13	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	2.89E-10	3.66E-16	7.52E-12	3.62E-12	2.69E-13	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	6.59E-10	1.77E-15	1.61E-11	9.52E-12	7.51E-13	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	3.18E-09	5.21E-15	5.47E-11	2.86E-11	3.31E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	1.26E-09	1.71E-15	3.67E-11	1.64E-11	1.18E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	3.16E-09	1.00E-14	6.03E-11	3.09E-11	3.89E-12	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	6.60E-10	8.92E-16	6.81E-12	3.66E-12	7.25E-13	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	3.19E-09	1.68E-14	2.96E-11	1.52E-11	5.08E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	9.82E-12	2.20E-10	7.42E-08	2.78E-07	7.86E-13	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	1.36E-09	2.20E-11	7.37E-09	2.76E-08	2.04E-11	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	2.99E-09	1.05E-09	3.52E-07	1.32E-06	1.91E-09	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	4.02E-06	6.09E-09	3.79E-07	1.44E-06	1.78E-08	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.75E-06	4.10E-08	1.39E-05	5.22E-05	1.58E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	3.05E-09	1.00E-09	3.35E-07	1.25E-06	2.44E-10	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Adult 1

H-POWER Expansion **Resident Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.69E-10	8.98E-06	Poultry Area
Water	NC	NC	West Loch
Air	1.22E-09	1.22E-05	Poultry Area
Produce	1.33E-09	8.41E-05	Poultry Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	3.59E-11	1.99E-06	Poultry Area
Eggs	2.33E-11	1.79E-06	Poultry Area
Pork	NC	NC	
Total	**2.78E-09**	**1.09E-04**	

NC - Not Calculated

H-POWER Expansion **Resident Adult**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	2.78E-09		1.09E-04	
Mercury, Elemental	NC		1.58E-09	0.0015%
Mercury, Methyl	NC		5.85E-07	0.5367%
Mercury, Divalent	NC		1.24E-05	11.3415%
1,2,3,4,6,7,8,9-OCDD	2.99E-13	0.0108%	2.65E-09	0.0024%
1,2,3,4,6,7,8,9-OCDF	8.49E-14	0.0031%	7.56E-10	0.0007%
1,2,3,4,6,7,8-HpCDD	1.19E-11	0.4274%	1.04E-07	0.0955%
1,2,3,4,6,7,8-HpCDF	2.62E-11	0.9451%	2.43E-07	0.2225%
1,2,3,4,7,8,9-HpCDF	2.69E-12	0.0969%	2.94E-08	0.0270%
1,2,3,4,7,8-HxCDD	2.56E-11	0.9222%	2.41E-07	0.2208%
1,2,3,4,7,8-HxCDF	1.48E-10	5.3197%	1.39E-06	1.2771%
1,2,3,6,7,8-HxCDD	3.57E-11	1.2853%	3.45E-07	0.3161%
1,2,3,6,7,8-HxCDF	1.56E-10	5.6214%	1.48E-06	1.3547%
1,2,3,7,8,9-HxCDD	2.70E-11	0.9743%	2.51E-07	0.2302%
1,2,3,7,8,9-HxCDF	2.33E-11	0.8407%	2.30E-07	0.2111%
1,2,3,7,8-PeCDD	5.59E-10	20.1538%	5.95E-06	5.4587%
1,2,3,7,8-PeCDF	5.52E-11	1.9872%	6.00E-07	0.5502%
2,3,4,6,7,8-HxCDF	1.09E-10	3.9231%	1.03E-06	0.9486%
2,3,4,7,8-PeCDF	5.96E-10	21.4665%	6.41E-06	5.8757%
2,3,7,8-TCDD	2.49E-10	8.9657%	3.02E-06	2.7721%
2,3,7,8-TCDF	1.07E-10	3.8582%	1.40E-06	1.2835%
Arsenic	1.88E-10	6.7793%	2.26E-06	2.0734%
Beryllium	5.53E-12	0.1991%	2.75E-07	0.2525%
Cadmium	3.04E-10	10.9574%	2.59E-06	2.3722%
Chromium	NC		5.30E-10	0.0005%
Lead	1.46E-10	5.2628%	6.70E-05	61.4283%
Nickel	NC		1.25E-06	1.1466%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Poultry Area Soil	West Loch Water	Poultry Area Air	Poultry Area Produce-ag	Poultry Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	6.52E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	9.07E-06	2.09E-10	NC	2.80E-08	9.29E-08	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, Divalent	4.60E-04	2.60E-09	1.36E-06	2.25E-06	1.66E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.81E-10	9.95E-17	3.52E-11	1.48E-11	2.85E-13	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.65E-10	4.47E-17	9.98E-12	4.19E-12	1.28E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	7.06E-10	1.91E-16	4.26E-11	1.72E-11	3.85E-13	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.51E-09	1.58E-15	8.89E-11	4.00E-11	1.13E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.36E-10	1.29E-16	6.80E-12	5.13E-12	1.02E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.51E-10	6.16E-17	8.43E-12	4.02E-12	9.15E-14	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	9.75E-10	2.31E-15	5.02E-11	2.18E-11	9.07E-13	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	2.08E-10	2.62E-16	1.14E-11	5.70E-12	1.65E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.04E-09	2.45E-15	5.28E-11	2.31E-11	9.64E-13	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.59E-10	2.06E-16	9.16E-12	4.10E-12	1.26E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.66E-10	3.66E-16	7.52E-12	3.57E-12	1.54E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	3.81E-10	1.77E-15	1.61E-11	9.36E-12	4.31E-13	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	1.83E-09	5.21E-15	5.47E-11	2.80E-11	1.90E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	7.28E-10	1.71E-15	3.67E-11	1.62E-11	6.77E-13	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	1.82E-09	1.00E-14	6.03E-11	3.00E-11	2.24E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	3.87E-10	8.92E-16	6.81E-12	3.52E-12	4.16E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	1.87E-09	1.68E-14	2.96E-11	1.35E-11	2.92E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	9.82E-12	2.20E-10	7.42E-08	2.78E-07	7.86E-13	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	1.36E-09	2.20E-11	7.37E-09	2.76E-08	1.95E-11	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	2.99E-09	1.05E-09	3.52E-07	1.32E-06	1.90E-09	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	3.92E-06	6.09E-09	3.79E-07	1.43E-06	1.37E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.75E-06	4.10E-08	1.39E-05	5.22E-05	1.53E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	3.05E-09	1.00E-09	3.35E-07	1.25E-06	2.43E-10	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Noncancer concentrations **H-POWER Expansion**	Poultry Area Soil	West Loch Water	Poultry Area Air	Poultry Area Produce-ag	Poultry Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	6.52E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.78E-05	2.09E-10	NC	5.55E-08	1.86E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, Divalent	9.17E-04	2.60E-09	1.36E-06	2.92E-06	3.32E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.01E-09	9.95E-17	3.52E-11	1.48E-11	4.96E-13	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	2.87E-10	4.47E-17	9.98E-12	4.20E-12	2.23E-13	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.23E-09	1.91E-16	4.26E-11	1.73E-11	6.71E-13	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	2.63E-09	1.58E-15	8.89E-11	4.02E-11	1.97E-12	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.37E-10	1.29E-16	6.80E-12	5.15E-12	1.78E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	2.63E-10	6.16E-17	8.43E-12	4.04E-12	1.59E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	1.69E-09	2.31E-15	5.02E-11	2.21E-11	1.58E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	3.61E-10	2.62E-16	1.14E-11	5.74E-12	2.87E-13	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.80E-09	2.45E-15	5.28E-11	2.34E-11	1.68E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	2.76E-10	2.06E-16	9.16E-12	4.13E-12	2.19E-13	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	2.89E-10	3.66E-16	7.52E-12	3.62E-12	2.69E-13	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	6.59E-10	1.77E-15	1.61E-11	9.52E-12	7.51E-13	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	3.18E-09	5.21E-15	5.47E-11	2.86E-11	3.31E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	1.26E-09	1.71E-15	3.67E-11	1.64E-11	1.18E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	3.16E-09	1.00E-14	6.03E-11	3.09E-11	3.89E-12	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	6.60E-10	8.92E-16	6.81E-12	3.66E-12	7.25E-13	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	3.19E-09	1.68E-14	2.96E-11	1.52E-11	5.08E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	9.82E-12	2.20E-10	7.42E-08	2.78E-07	7.86E-13	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	1.36E-09	2.20E-11	7.37E-09	2.76E-08	2.04E-11	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	2.99E-09	1.05E-09	3.52E-07	1.32E-06	1.91E-09	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	4.02E-06	6.09E-09	3.79E-07	1.44E-06	1.78E-08	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.75E-06	4.10E-08	1.39E-05	5.22E-05	1.58E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	3.05E-09	1.00E-09	3.35E-07	1.25E-06	2.44E-10	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

H-POWER Expansion **Resident Adult**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	1.53E-14	0.00E+00	1.41E-13	1.41E-13	0.00E+00	0.00E+00	0.00E+00	7.88E-16	5.12E-16	0.00E+00
1,2,3,4,6,7,8,9-OCDF	4.36E-15	0.00E+00	4.01E-14	4.00E-14	0.00E+00	0.00E+00	0.00E+00	2.86E-16	1.86E-16	0.00E+00
1,2,3,4,6,7,8-HpCDD	6.21E-13	0.00E+00	5.70E-12	5.48E-12	0.00E+00	0.00E+00	0.00E+00	4.08E-14	2.65E-14	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.33E-12	0.00E+00	1.19E-11	1.27E-11	0.00E+00	0.00E+00	0.00E+00	1.64E-13	1.07E-13	0.00E+00
1,2,3,4,7,8,9-HpCDF	1.20E-13	0.00E+00	9.11E-13	1.63E-12	0.00E+00	0.00E+00	0.00E+00	1.48E-14	9.60E-15	0.00E+00
1,2,3,4,7,8-HxCDD	1.33E-12	0.00E+00	1.13E-11	1.28E-11	0.00E+00	0.00E+00	0.00E+00	1.10E-13	7.12E-14	0.00E+00
1,2,3,4,7,8-HxCDF	8.59E-12	0.00E+00	6.71E-11	6.95E-11	0.00E+00	0.00E+00	0.00E+00	1.47E-12	9.55E-13	0.00E+00
1,2,3,6,7,8-HxCDD	1.83E-12	0.00E+00	1.53E-11	1.81E-11	0.00E+00	0.00E+00	0.00E+00	2.46E-13	1.60E-13	0.00E+00
1,2,3,6,7,8-HxCDF	9.14E-12	0.00E+00	7.07E-11	7.36E-11	0.00E+00	0.00E+00	0.00E+00	1.56E-12	1.02E-12	0.00E+00
1,2,3,7,8,9-HxCDD	1.40E-12	0.00E+00	1.23E-11	1.31E-11	0.00E+00	0.00E+00	0.00E+00	1.88E-13	1.22E-13	0.00E+00
1,2,3,7,8,9-HxCDF	1.46E-12	0.00E+00	1.01E-11	1.14E-11	0.00E+00	0.00E+00	0.00E+00	2.50E-13	1.63E-13	0.00E+00
1,2,3,7,8-PeCDD	3.35E-11	0.00E+00	2.16E-10	2.98E-10	0.00E+00	0.00E+00	0.00E+00	7.26E-12	4.71E-12	0.00E+00
1,2,3,7,8-PeCDF	4.84E-12	0.00E+00	2.20E-11	2.68E-11	0.00E+00	0.00E+00	0.00E+00	9.56E-13	6.21E-13	0.00E+00
2,3,4,6,7,8-HxCDF	6.41E-12	0.00E+00	4.91E-11	5.15E-11	0.00E+00	0.00E+00	0.00E+00	1.10E-12	7.13E-13	0.00E+00
2,3,4,7,8-PeCDF	4.82E-11	0.00E+00	2.42E-10	2.87E-10	0.00E+00	0.00E+00	0.00E+00	1.13E-11	7.31E-12	0.00E+00
2,3,7,8-TCDD	3.41E-11	0.00E+00	9.11E-11	1.13E-10	0.00E+00	0.00E+00	0.00E+00	6.70E-12	4.35E-12	0.00E+00
2,3,7,8-TCDF	1.65E-11	0.00E+00	3.96E-11	4.35E-11	0.00E+00	0.00E+00	0.00E+00	4.55E-12	2.96E-12	0.00E+00
Arsenic	8.65E-18	0.00E+00	9.97E-11	8.85E-11	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	5.53E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	6.66E-16	0.00E+00	1.98E-10	1.06E-10	0.00E+00	0.00E+00	0.00E+00	2.44E-14	6.54E-16	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	8.75E-15	0.00E+00	5.20E-11	9.41E-11	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Adult**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.6E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	2.4E-07	0.0E+00	NC	3.2E-07	0.0E+00	0.0E+00	0.0E+00	8.9E-09	1.0E-08	0.0E+00
Mercury, Divalent	4.2E-06	0.0E+00	9.0E-07	5.1E-06	0.0E+00	0.0E+00	0.0E+00	1.0E-06	1.2E-06	0.0E+00
1,2,3,4,6,7,8,9-OCDD	4.2E-10	0.0E+00	ND	2.2E-09	0.0E+00	0.0E+00	0.0E+00	2.1E-11	1.4E-11	0.0E+00
1,2,3,4,6,7,8,9-OCDF	1.2E-10	0.0E+00	ND	6.2E-10	0.0E+00	0.0E+00	0.0E+00	7.8E-12	5.0E-12	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.7E-08	0.0E+00	ND	8.5E-08	0.0E+00	0.0E+00	0.0E+00	1.1E-09	7.2E-10	0.0E+00
1,2,3,4,6,7,8-HpCDF	3.6E-08	0.0E+00	ND	2.0E-07	0.0E+00	0.0E+00	0.0E+00	4.4E-09	2.9E-09	0.0E+00
1,2,3,4,7,8,9-HpCDF	3.2E-09	0.0E+00	ND	2.6E-08	0.0E+00	0.0E+00	0.0E+00	4.0E-10	2.6E-10	0.0E+00
1,2,3,4,7,8-HxCDD	3.6E-08	0.0E+00	ND	2.0E-07	0.0E+00	0.0E+00	0.0E+00	3.0E-09	1.9E-09	0.0E+00
1,2,3,4,7,8-HxCDF	2.3E-07	0.0E+00	ND	1.1E-06	0.0E+00	0.0E+00	0.0E+00	4.0E-08	2.6E-08	0.0E+00
1,2,3,6,7,8-HxCDD	4.9E-08	0.0E+00	ND	2.8E-07	0.0E+00	0.0E+00	0.0E+00	6.7E-09	4.3E-09	0.0E+00
1,2,3,6,7,8-HxCDF	2.5E-07	0.0E+00	ND	1.2E-06	0.0E+00	0.0E+00	0.0E+00	4.2E-08	2.7E-08	0.0E+00
1,2,3,7,8,9-HxCDD	3.8E-08	0.0E+00	ND	2.0E-07	0.0E+00	0.0E+00	0.0E+00	5.1E-09	3.3E-09	0.0E+00
1,2,3,7,8,9-HxCDF	4.0E-08	0.0E+00	ND	1.8E-07	0.0E+00	0.0E+00	0.0E+00	6.8E-09	4.4E-09	0.0E+00
1,2,3,7,8-PeCDD	9.0E-07	0.0E+00	ND	4.7E-06	0.0E+00	0.0E+00	0.0E+00	2.0E-07	1.3E-07	0.0E+00
1,2,3,7,8-PeCDF	1.3E-07	0.0E+00	ND	4.3E-07	0.0E+00	0.0E+00	0.0E+00	2.6E-08	1.7E-08	0.0E+00
2,3,4,6,7,8-HxCDF	1.7E-07	0.0E+00	ND	8.1E-07	0.0E+00	0.0E+00	0.0E+00	3.0E-08	1.9E-08	0.0E+00
2,3,4,7,8-PeCDF	1.3E-06	0.0E+00	ND	4.6E-06	0.0E+00	0.0E+00	0.0E+00	3.0E-07	2.0E-07	0.0E+00
2,3,7,8-TCDD	9.0E-07	0.0E+00	ND	1.8E-06	0.0E+00	0.0E+00	0.0E+00	1.8E-07	1.2E-07	0.0E+00
2,3,7,8-TCDF	4.4E-07	0.0E+00	ND	7.6E-07	0.0E+00	0.0E+00	0.0E+00	1.2E-07	7.8E-08	0.0E+00
Arsenic	4.5E-14	0.0E+00	1.8E-06	4.6E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	9.3E-13	0.0E+00	2.7E-07	6.8E-09	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.2E-12	0.0E+00	1.3E-06	1.3E-06	0.0E+00	0.0E+00	0.0E+00	3.0E-10	8.0E-12	0.0E+00
Chromium	3.7E-12	0.0E+00	5.2E-11	4.7E-10	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	5.6E-09	0.0E+00	6.7E-06	6.0E-05	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	2.1E-13	0.0E+00	1.2E-06	3.1E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Child 2

H-POWER Expansion **Resident Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	3.16E-10	8.38E-05	Poultry Area
Water	NC	NC	West Loch
Air	6.07E-10	3.04E-05	Poultry Area
Produce	9.96E-10	3.17E-04	Poultry Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	4.89E-12	1.36E-06	Poultry Area
Eggs	3.35E-12	1.29E-06	Poultry Area
Pork	NC	NC	
Total	**1.93E-09**	**4.34E-04**	

NC - Not Calculated

H-POWER Expansion **Resident Child**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	1.93E-09		4.34E-04	
Mercury, Elemental	NC		3.94E-09	0.0009%
Mercury, Methyl	NC		3.78E-06	0.8726%
Mercury, Divalent	NC		6.37E-05	14.6797%
1,2,3,4,6,7,8,9-OCDD	2.05E-13	0.0106%	1.22E-08	0.0028%
1,2,3,4,6,7,8,9-OCDF	5.81E-14	0.0030%	3.46E-09	0.0008%
1,2,3,4,6,7,8-HpCDD	8.10E-12	0.4204%	4.79E-07	0.1104%
1,2,3,4,6,7,8-HpCDF	1.80E-11	0.9327%	1.09E-06	0.2511%
1,2,3,4,7,8,9-HpCDF	1.90E-12	0.0987%	1.26E-07	0.0291%
1,2,3,4,7,8-HxCDD	1.77E-11	0.9186%	1.09E-06	0.2511%
1,2,3,4,7,8-HxCDF	1.02E-10	5.2861%	6.33E-06	1.4592%
1,2,3,6,7,8-HxCDD	2.47E-11	1.2800%	1.54E-06	0.3541%
1,2,3,6,7,8-HxCDF	1.08E-10	5.5928%	6.72E-06	1.5488%
1,2,3,7,8,9-HxCDD	1.85E-11	0.9622%	1.13E-06	0.2599%
1,2,3,7,8,9-HxCDF	1.63E-11	0.8477%	1.05E-06	0.2426%
1,2,3,7,8-PeCDD	3.95E-10	20.5090%	2.64E-05	6.0955%
1,2,3,7,8-PeCDF	4.03E-11	2.0909%	2.86E-06	0.6593%
2,3,4,6,7,8-HxCDF	7.53E-11	3.9073%	4.71E-06	1.0848%
2,3,4,7,8-PeCDF	4.29E-10	22.2449%	2.99E-05	6.8872%
2,3,7,8-TCDD	1.95E-10	10.1417%	1.56E-05	3.5917%
2,3,7,8-TCDF	8.46E-11	4.3901%	7.15E-06	1.6486%
Arsenic	1.16E-10	6.0032%	6.20E-06	1.4289%
Beryllium	2.75E-12	0.1426%	6.93E-07	0.1599%
Cadmium	1.78E-10	9.2266%	8.07E-06	1.8595%
Chromium	NC		1.94E-09	0.0004%
Lead	9.62E-11	4.9908%	2.42E-04	55.7950%
Nickel	NC		3.15E-06	0.7260%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Poultry Area Soil	West Loch Water	Poultry Area Air	Poultry Area Produce-ag	Poultry Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	6.52E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	9.07E-06	2.09E-10	NC	2.80E-08	9.29E-08	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, Divalent	4.60E-04	2.60E-09	1.36E-06	2.25E-06	1.66E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.81E-10	9.95E-17	3.52E-11	1.48E-11	2.85E-13	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.65E-10	4.47E-17	9.98E-12	4.19E-12	1.28E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	7.06E-10	1.91E-16	4.26E-11	1.72E-11	3.85E-13	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.51E-09	1.58E-15	8.89E-11	4.00E-11	1.13E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.36E-10	1.29E-16	6.80E-12	5.13E-12	1.02E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.51E-10	6.16E-17	8.43E-12	4.02E-12	9.15E-14	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	9.75E-10	2.31E-15	5.02E-11	2.18E-11	9.07E-13	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	2.08E-10	2.62E-16	1.14E-11	5.70E-12	1.65E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.04E-09	2.45E-15	5.28E-11	2.31E-11	9.64E-13	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.59E-10	2.06E-16	9.16E-12	4.10E-12	1.26E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.66E-10	3.66E-16	7.52E-12	3.57E-12	1.54E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	3.81E-10	1.77E-15	1.61E-11	9.36E-12	4.31E-13	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	1.83E-09	5.21E-15	5.47E-11	2.80E-11	1.90E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	7.28E-10	1.71E-15	3.67E-11	1.62E-11	6.77E-13	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	1.82E-09	1.00E-14	6.03E-11	3.00E-11	2.24E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	3.87E-10	8.92E-16	6.81E-12	3.52E-12	4.16E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	1.87E-09	1.68E-14	2.96E-11	1.35E-11	2.92E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	9.82E-12	2.20E-10	7.42E-08	2.78E-07	7.86E-13	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	1.36E-09	2.20E-11	7.37E-09	2.76E-08	1.95E-11	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	2.99E-09	1.05E-09	3.52E-07	1.32E-06	1.90E-09	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	3.92E-06	6.09E-09	3.79E-07	1.43E-06	1.37E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.75E-06	4.10E-08	1.39E-05	5.22E-05	1.53E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	3.05E-09	1.00E-09	3.35E-07	1.25E-06	2.43E-10	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Noncancer concentrations **H-POWER Expansion**	Poultry Area Soil	West Loch Water	Poultry Area Air	Poultry Area Produce-ag	Poultry Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	6.52E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.78E-05	2.09E-10	NC	5.55E-08	1.86E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, Divalent	9.17E-04	2.60E-09	1.36E-06	2.92E-06	3.32E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.01E-09	9.95E-17	3.52E-11	1.48E-11	4.96E-13	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	2.87E-10	4.47E-17	9.98E-12	4.20E-12	2.23E-13	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.23E-09	1.91E-16	4.26E-11	1.73E-11	6.71E-13	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	2.63E-09	1.58E-15	8.89E-11	4.02E-11	1.97E-12	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.37E-10	1.29E-16	6.80E-12	5.15E-12	1.78E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	2.63E-10	6.16E-17	8.43E-12	4.04E-12	1.59E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	1.69E-09	2.31E-15	5.02E-11	2.21E-11	1.58E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	3.61E-10	2.62E-16	1.14E-11	5.74E-12	2.87E-13	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.80E-09	2.45E-15	5.28E-11	2.34E-11	1.68E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	2.76E-10	2.06E-16	9.16E-12	4.13E-12	2.19E-13	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	2.89E-10	3.66E-16	7.52E-12	3.62E-12	2.69E-13	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	6.59E-10	1.77E-15	1.61E-11	9.52E-12	7.51E-13	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	3.18E-09	5.21E-15	5.47E-11	2.86E-11	3.31E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	1.26E-09	1.71E-15	3.67E-11	1.64E-11	1.18E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	3.16E-09	1.00E-14	6.03E-11	3.09E-11	3.89E-12	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	6.60E-10	8.92E-16	6.81E-12	3.66E-12	7.25E-13	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	3.19E-09	1.68E-14	2.96E-11	1.52E-11	5.08E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	9.82E-12	2.20E-10	7.42E-08	2.78E-07	7.86E-13	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	1.36E-09	2.20E-11	7.37E-09	2.76E-08	2.04E-11	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	2.99E-09	1.05E-09	3.52E-07	1.32E-06	1.91E-09	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	4.02E-06	6.09E-09	3.79E-07	1.44E-06	1.78E-08	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.75E-06	4.10E-08	1.39E-05	5.22E-05	1.58E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	3.05E-09	1.00E-09	3.35E-07	1.25E-06	2.44E-10	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

H-POWER Expansion **Resident Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	2.86E-14	0.00E+00	7.02E-14	1.06E-13	0.00E+00	0.00E+00	0.00E+00	1.07E-16	7.37E-17	0.00E+00
1,2,3,4,6,7,8,9-OCDF	8.13E-15	0.00E+00	1.99E-14	3.00E-14	0.00E+00	0.00E+00	0.00E+00	3.90E-17	2.68E-17	0.00E+00
1,2,3,4,6,7,8-HpCDD	1.16E-12	0.00E+00	2.83E-12	4.10E-12	0.00E+00	0.00E+00	0.00E+00	5.57E-15	3.82E-15	0.00E+00
1,2,3,4,6,7,8-HpCDF	2.49E-12	0.00E+00	5.92E-12	9.53E-12	0.00E+00	0.00E+00	0.00E+00	2.24E-14	1.53E-14	0.00E+00
1,2,3,4,7,8,9-HpCDF	2.24E-13	0.00E+00	4.53E-13	1.22E-12	0.00E+00	0.00E+00	0.00E+00	2.02E-15	1.38E-15	0.00E+00
1,2,3,4,7,8-HxCDD	2.48E-12	0.00E+00	5.61E-12	9.58E-12	0.00E+00	0.00E+00	0.00E+00	1.50E-14	1.03E-14	0.00E+00
1,2,3,4,7,8-HxCDF	1.60E-11	0.00E+00	3.34E-11	5.21E-11	0.00E+00	0.00E+00	0.00E+00	2.00E-13	1.37E-13	0.00E+00
1,2,3,6,7,8-HxCDD	3.41E-12	0.00E+00	7.61E-12	1.36E-11	0.00E+00	0.00E+00	0.00E+00	3.36E-14	2.30E-14	0.00E+00
1,2,3,6,7,8-HxCDF	1.71E-11	0.00E+00	3.51E-11	5.52E-11	0.00E+00	0.00E+00	0.00E+00	2.13E-13	1.46E-13	0.00E+00
1,2,3,7,8,9-HxCDD	2.61E-12	0.00E+00	6.10E-12	9.79E-12	0.00E+00	0.00E+00	0.00E+00	2.57E-14	1.76E-14	0.00E+00
1,2,3,7,8,9-HxCDF	2.73E-12	0.00E+00	5.01E-12	8.54E-12	0.00E+00	0.00E+00	0.00E+00	3.42E-14	2.34E-14	0.00E+00
1,2,3,7,8-PeCDD	6.26E-11	0.00E+00	1.07E-10	2.24E-10	0.00E+00	0.00E+00	0.00E+00	9.90E-13	6.79E-13	0.00E+00
1,2,3,7,8-PeCDF	9.03E-12	0.00E+00	1.09E-11	2.01E-11	0.00E+00	0.00E+00	0.00E+00	1.30E-13	8.94E-14	0.00E+00
2,3,4,6,7,8-HxCDF	1.20E-11	0.00E+00	2.44E-11	3.87E-11	0.00E+00	0.00E+00	0.00E+00	1.50E-13	1.03E-13	0.00E+00
2,3,4,7,8-PeCDF	9.00E-11	0.00E+00	1.20E-10	2.16E-10	0.00E+00	0.00E+00	0.00E+00	1.53E-12	1.05E-12	0.00E+00
2,3,7,8-TCDD	6.36E-11	0.00E+00	4.53E-11	8.50E-11	0.00E+00	0.00E+00	0.00E+00	9.13E-13	6.26E-13	0.00E+00
2,3,7,8-TCDF	3.08E-11	0.00E+00	1.97E-11	3.31E-11	0.00E+00	0.00E+00	0.00E+00	6.21E-13	4.26E-13	0.00E+00
Arsenic	1.61E-17	0.00E+00	4.96E-11	6.61E-11	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	2.75E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.24E-15	0.00E+00	9.84E-11	7.94E-11	0.00E+00	0.00E+00	0.00E+00	3.33E-15	9.41E-17	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	1.63E-14	0.00E+00	2.59E-11	7.03E-11	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	3.9E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	2.3E-06	0.0E+00	NC	1.5E-06	0.0E+00	0.0E+00	0.0E+00	6.0E-09	7.2E-09	0.0E+00
Mercury, Divalent	3.9E-05	0.0E+00	2.2E-06	2.1E-05	0.0E+00	0.0E+00	0.0E+00	6.9E-07	8.3E-07	0.0E+00
1,2,3,4,6,7,8,9-OCDD	3.9E-09	0.0E+00	ND	8.2E-09	0.0E+00	0.0E+00	0.0E+00	1.5E-11	1.0E-11	0.0E+00
1,2,3,4,6,7,8,9-OCDF	1.1E-09	0.0E+00	ND	2.3E-09	0.0E+00	0.0E+00	0.0E+00	5.3E-12	3.6E-12	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.6E-07	0.0E+00	ND	3.2E-07	0.0E+00	0.0E+00	0.0E+00	7.5E-10	5.2E-10	0.0E+00
1,2,3,4,6,7,8-HpCDF	3.4E-07	0.0E+00	ND	7.5E-07	0.0E+00	0.0E+00	0.0E+00	3.0E-09	2.1E-09	0.0E+00
1,2,3,4,7,8,9-HpCDF	3.0E-08	0.0E+00	ND	9.6E-08	0.0E+00	0.0E+00	0.0E+00	2.7E-10	1.9E-10	0.0E+00
1,2,3,4,7,8-HxCDD	3.4E-07	0.0E+00	ND	7.5E-07	0.0E+00	0.0E+00	0.0E+00	2.0E-09	1.4E-09	0.0E+00
1,2,3,4,7,8-HxCDF	2.2E-06	0.0E+00	ND	4.1E-06	0.0E+00	0.0E+00	0.0E+00	2.7E-08	1.9E-08	0.0E+00
1,2,3,6,7,8-HxCDD	4.6E-07	0.0E+00	ND	1.1E-06	0.0E+00	0.0E+00	0.0E+00	4.5E-09	3.1E-09	0.0E+00
1,2,3,6,7,8-HxCDF	2.3E-06	0.0E+00	ND	4.4E-06	0.0E+00	0.0E+00	0.0E+00	2.9E-08	2.0E-08	0.0E+00
1,2,3,7,8,9-HxCDD	3.5E-07	0.0E+00	ND	7.7E-07	0.0E+00	0.0E+00	0.0E+00	3.5E-09	2.4E-09	0.0E+00
1,2,3,7,8,9-HxCDF	3.7E-07	0.0E+00	ND	6.8E-07	0.0E+00	0.0E+00	0.0E+00	4.6E-09	3.2E-09	0.0E+00
1,2,3,7,8-PeCDD	8.4E-06	0.0E+00	ND	1.8E-05	0.0E+00	0.0E+00	0.0E+00	1.3E-07	9.1E-08	0.0E+00
1,2,3,7,8-PeCDF	1.2E-06	0.0E+00	ND	1.6E-06	0.0E+00	0.0E+00	0.0E+00	1.8E-08	1.2E-08	0.0E+00
2,3,4,6,7,8-HxCDF	1.6E-06	0.0E+00	ND	3.1E-06	0.0E+00	0.0E+00	0.0E+00	2.0E-08	1.4E-08	0.0E+00
2,3,4,7,8-PeCDF	1.2E-05	0.0E+00	ND	1.7E-05	0.0E+00	0.0E+00	0.0E+00	2.1E-07	1.4E-07	0.0E+00
2,3,7,8-TCDD	8.4E-06	0.0E+00	ND	6.9E-06	0.0E+00	0.0E+00	0.0E+00	1.2E-07	8.3E-08	0.0E+00
2,3,7,8-TCDF	4.1E-06	0.0E+00	ND	2.9E-06	0.0E+00	0.0E+00	0.0E+00	8.2E-08	5.6E-08	0.0E+00
Arsenic	4.2E-13	0.0E+00	4.5E-06	1.7E-06	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	8.7E-12	0.0E+00	6.7E-07	2.5E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	7.6E-11	0.0E+00	3.2E-06	4.9E-06	0.0E+00	0.0E+00	0.0E+00	2.1E-10	5.8E-12	0.0E+00
Chromium	3.4E-11	0.0E+00	1.3E-10	1.8E-09	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	5.2E-08	0.0E+00	1.7E-05	2.3E-04	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	2.0E-12	0.0E+00	3.0E-06	1.2E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Unit 3 Calculations
Resident in Poultry Area

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project: H-POWER Expansion

Locations:
All Max
Poultry Area
Agriculture Area
Compost Area
Residential Area
West Loch
West Loch Watershed
West Loch Watershed Impervious
West Loch Watershed Pervious
Pearl Harbor
Pearl Harbor Watershed
Pearl Harbor Watershed Impervious
Pearl Harbor Watershed Pervious
Waikele Stream
Waikele Stream Watershed
Wahiawa
Wahiawa Watershed
Wahiawa Watershed Impervious
Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Poultry Area	2
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

		Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Air Modeling Results	**Symbol**	**Units**													
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.12364E-06	4.68833E-06	0.000169337	4.16325E-05	2.06069E-06	1.40845E-06	1.67361E-06	1.55181E-06	1.16504E-06	1.46067E-06	0.00000106	8.98971E-07	8.87714E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	2.69505E-05	3.55728E-05	0.000716117	0.000247493	1.70817E-05	9.49959E-06	1.17642E-05	1.16793E-05	6.97918E-06	9.58306E-06	0.00000572	3.24743E-06	3.72772E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	4.01355E-05	4.15061E-05	0.001246786	0.000260698	2.59769E-05	1.64887E-05	1.99835E-05	2.20146E-05	1.49788E-05	1.7859E-05	1.38967E-05	9.66918E-06	1.13007E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000374533	0.000416787	0.013351707	0.002869695	0.000235428	0.000141544	0.000172559	0.000192109	0.000124746	0.000151948	0.000110333	7.397E-05	8.61672E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.001269324	0.001223517	0.016980554	0.005055578	0.000866141	0.000683538	0.000882264	0.000824851	0.000652322	0.000795879	0.000681757	0.000502784	0.000599816
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.001264637	0.001202342	0.016809874	0.004971138	0.000856098	0.000660874	0.000849106	0.000808552	0.000627353	0.000763562	0.000641317	0.000485795	0.000569734
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.96332E-05	0.00000737	0.000334916	0.000024585	7.71414E-06	4.28608E-06	3.96244E-06	6.90681E-06	3.65888E-06	3.64028E-06	0.00000178	1.65668E-06	1.69834E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000185641	0.000101949	0.006451413	0.000447955	2.51769E-05	4.15559E-05	5.65554E-05	1.96172E-05	2.66416E-05	4.39255E-05	5.80167E-05	3.51009E-05	4.3353E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.001254956	0.001220427	0.01692135	0.005057125	0.000864098	0.000680432	0.000879414	0.000823217	0.000651256	0.000794129	0.000675737	0.000497788	0.000595199
Unitized air concentration - HgII			0.001206627	0.00118563	0.016733094	0.004981375	0.000831724	0.000638154	0.000834961	0.000780166	0.000601808	0.000746729	0.000630557	0.00045772	0.000551989
Unitized Dry deposition - HgII			0.000598224	0.000521713	0.018005304	0.002485268	0.000212502	0.000198084	0.000258185	0.000170194	0.000150836	0.00021375	0.000224297	0.000142514	0.000171397
Unitized Wet deposition - HgII			7.23873E-05	4.65256E-05	0.001319981	0.000183213	3.20955E-05	1.74755E-05	2.00334E-05	2.23946E-05	1.51276E-05	1.79687E-05	1.14833E-05	7.71625E-06	8.54413E-06
Unitized air concentration - Hg0			0.001235513	0.001209388	0.016765936	0.00503163	0.000861846	0.000674206	0.000870888	0.000822416	0.000647763	0.00078768	0.00066027	0.000489659	0.000585415
Unitized Dry deposition - Hg0			0.00047757	0.000258017	0.01749374	0.001151858	5.74728E-05	0.000100927	0.000138614	4.32802E-05	6.24654E-05	0.000106344	0.000140533	8.29958E-05	0.000103717
Unitized Wet deposition - Hg0			1.45455E-07	3.22222E-08	8.97143E-07	0.000000095	1.37241E-07	6.43285E-08	4.0757E-08	1.81489E-07	7.03214E-08	4.4703E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	4.32577E-05	4.61939E-05	0.001416126	0.00030233	2.80372E-05	1.7897E-05	2.16572E-05	2.35669E-05	1.61437E-05	1.93197E-05	0.00001496	1.05679E-05	1.2188E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000401483	0.000452359	0.014067826	0.003117188	0.00025251	0.000151043	0.000184323	0.000203789	0.000131725	0.000161531	0.000116053	7.72175E-05	8.98954E-05

Emission Rates

Unit 3

Compound	PM10 g/s	TSP g/s
Mercury, elemental	1.47E-03	1.47E-03
Mercury, methyl	1.47E-03	1.47E-03
Mercury, divalent	1.47E-03	1.47E-03
1,2,3,4,6,7,8,9-OCDD	8.42E-08	8.42E-08
1,2,3,4,6,7,8,9-OCDF	9.02E-09	9.02E-09
1,2,3,4,6,7,8-HpCDD	4.77E-08	4.77E-08
1,2,3,4,6,7,8-HpCDF	1.77E-08	1.77E-08
1,2,3,4,7,8,9-HpCDF	2.87E-09	2.87E-09
1,2,3,4,7,8-HxCDD	2.09E-09	2.09E-09
1,2,3,4,7,8-HxCDF	6.69E-09	6.69E-09
1,2,3,6,7,8-HxCDD	6.73E-09	6.73E-09
1,2,3,6,7,8-HxCDF	6.60E-09	6.60E-09
1,2,3,7,8,9-HxCDD	3.93E-09	3.93E-09
1,2,3,7,8,9-HxCDF	3.39E-09	3.39E-09
1,2,3,7,8-PeCDD	2.01E-09	2.01E-09
1,2,3,7,8-PeCDF	5.23E-09	5.23E-09
2,3,4,6,7,8-HxCDF	4.95E-09	4.95E-09
2,3,4,7,8-PeCDF	6.12E-09	6.12E-09
2,3,7,8-TCDD	9.90E-10	9.90E-10
2,3,7,8-TCDF	3.06E-09	3.06E-09
Arsenic	7.57E-06	7.57E-06
Beryllium	2.20E-06	2.20E-06
Cadmium	5.25E-04	5.25E-04
Chromium	8.80E-05	8.80E-05
Lead	7.36E-03	7.36E-03
Nickel	1.70E-04	1.70E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Poultry Area	West Loch	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	5.59E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	6.23E-06	1.43E-10	NC	1.92E-08	6.38E-08	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, divalent	3.16E-04	1.77E-09	1.17E-06	1.82E-06	1.14E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.39E-09	2.32E-16	1.07E-10	3.65E-11	6.82E-13	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.49E-10	3.93E-17	1.14E-11	3.90E-12	1.16E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	7.89E-10	2.08E-16	6.05E-11	1.97E-11	4.31E-13	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.01E-10	3.07E-16	2.25E-11	8.32E-12	2.26E-13	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.82E-11	5.34E-17	3.64E-12	2.47E-12	4.36E-14	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	3.76E-11	1.49E-17	2.65E-12	1.06E-12	2.28E-14	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.31E-10	3.01E-16	8.48E-12	3.04E-12	1.22E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.23E-10	1.51E-16	8.54E-12	3.60E-12	9.75E-14	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.31E-10	2.99E-16	8.37E-12	3.03E-12	1.22E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	6.84E-11	8.64E-17	4.99E-12	1.84E-12	5.42E-14	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.61E-11	1.62E-16	4.30E-12	1.73E-12	7.07E-14	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	4.85E-11	2.18E-16	2.55E-12	1.30E-12	5.49E-14	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	1.81E-10	4.93E-16	6.61E-12	2.98E-12	1.87E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	9.93E-11	2.25E-16	6.28E-12	2.29E-12	9.23E-14	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	1.91E-10	1.01E-15	7.75E-12	3.34E-12	2.34E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	5.88E-11	1.30E-16	1.25E-12	6.06E-13	6.33E-14	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	2.03E-10	1.75E-15	3.85E-12	1.64E-12	3.16E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	9.38E-13	2.02E-11	9.57E-09	2.68E-08	7.50E-14	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	3.80E-10	5.88E-12	2.78E-09	7.77E-09	5.43E-12	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	4.17E-09	1.41E-09	6.64E-07	1.86E-06	2.66E-09	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	8.51E-07	1.26E-09	1.11E-07	3.14E-07	2.97E-09	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	8.71E-07	1.95E-08	9.31E-06	2.62E-05	7.59E-08	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.45E-09	4.55E-10	2.15E-07	6.00E-07	1.15E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Summary of EPCs (Non Cancer)	Poultry Area	West Loch	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	5.59E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	1.22E-05	1.43E-10	NC	3.81E-08	1.27E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, divalent	6.30E-04	1.77E-09	1.17E-06	2.28E-06	2.28E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	2.42E-09	2.32E-16	1.07E-10	3.66E-11	1.19E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	2.59E-10	3.93E-17	1.14E-11	3.91E-12	2.01E-13	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	1.37E-09	2.08E-16	6.05E-11	1.97E-11	7.50E-13	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	5.24E-10	3.07E-16	2.25E-11	8.36E-12	3.93E-13	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	1.01E-10	5.34E-17	3.64E-12	2.48E-12	7.59E-14	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	6.55E-11	1.49E-17	2.65E-12	1.06E-12	3.97E-14	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	2.28E-10	3.01E-16	8.48E-12	3.07E-12	2.13E-13	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	2.14E-10	1.51E-16	8.54E-12	3.62E-12	1.70E-13	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	2.28E-10	2.99E-16	8.37E-12	3.06E-12	2.12E-13	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	1.19E-10	8.64E-17	4.99E-12	1.86E-12	9.45E-14	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	1.32E-10	1.62E-16	4.30E-12	1.75E-12	1.23E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	8.39E-11	2.18E-16	2.55E-12	1.32E-12	9.56E-14	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	3.14E-10	4.93E-16	6.61E-12	3.04E-12	3.26E-13	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.73E-10	2.25E-16	6.28E-12	2.32E-12	1.61E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	3.30E-10	1.01E-15	7.75E-12	3.44E-12	4.07E-13	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	1.00E-10	1.30E-16	1.25E-12	6.27E-13	1.10E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	3.45E-10	1.75E-15	3.85E-12	1.82E-12	5.49E-13	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	9.38E-13	2.02E-11	9.57E-09	2.68E-08	7.50E-14	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	3.80E-10	5.88E-12	2.78E-09	7.77E-09	5.68E-12	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	4.17E-09	1.41E-09	6.64E-07	1.86E-06	2.67E-09	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	8.72E-07	1.26E-09	1.11E-07	3.15E-07	3.86E-09	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	8.71E-07	1.95E-08	9.31E-06	2.62E-05	7.82E-08	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.45E-09	4.55E-10	2.15E-07	6.00E-07	1.16E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Adult 1

H-POWER Expansion **Resident Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	2.37E-11	3.68E-06	Poultry Area
Water	NC	NC	West Loch
Air	5.83E-10	8.83E-06	Poultry Area
Produce	3.69E-10	3.89E-05	Poultry Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	4.74E-12	8.32E-07	Poultry Area
Eggs	3.06E-12	8.84E-07	Poultry Area
Pork	NC	NC	
Total	**9.84E-10**	**5.31E-05**	

NC - Not Calculated

H-POWER Expansion **Resident Adult**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	9.84E-10		5.31E-05	
Mercury, Elemental	NC		1.36E-09	0.0026%
Mercury, Methyl	NC		4.02E-07	0.7568%
Mercury, Divalent	NC		9.11E-06	17.1360%
1,2,3,4,6,7,8,9-OCDD	8.18E-13	0.0831%	6.52E-09	0.0123%
1,2,3,4,6,7,8,9-OCDF	8.75E-14	0.0089%	6.99E-10	0.0013%
1,2,3,4,6,7,8-HpCDD	1.51E-11	1.5372%	1.19E-07	0.2231%
1,2,3,4,6,7,8-HpCDF	5.97E-12	0.6070%	5.01E-08	0.0943%
1,2,3,4,7,8,9-HpCDF	1.34E-12	0.1357%	1.40E-08	0.0263%
1,2,3,4,7,8-HxCDD	7.30E-12	0.7424%	6.29E-08	0.1184%
1,2,3,4,7,8-HxCDF	2.25E-11	2.2895%	1.93E-07	0.3626%
1,2,3,6,7,8-HxCDD	2.42E-11	2.4602%	2.15E-07	0.4049%
1,2,3,6,7,8-HxCDF	2.23E-11	2.2688%	1.92E-07	0.3611%
1,2,3,7,8,9-HxCDD	1.33E-11	1.3506%	1.12E-07	0.2105%
1,2,3,7,8,9-HxCDF	1.21E-11	1.2306%	1.10E-07	0.2067%
1,2,3,7,8-PeCDD	8.11E-11	8.2476%	8.09E-07	1.5227%
1,2,3,7,8-PeCDF	6.14E-12	0.6239%	6.25E-08	0.1176%
2,3,4,6,7,8-HxCDF	1.68E-11	1.7098%	1.45E-07	0.2733%
2,3,4,7,8-PeCDF	7.00E-11	7.1195%	7.01E-07	1.3186%
2,3,7,8-TCDD	4.29E-11	4.3621%	4.95E-07	0.9307%
2,3,7,8-TCDF	1.30E-11	1.3242%	1.60E-07	0.3017%
Arsenic	2.14E-11	2.1739%	2.77E-07	0.5209%
Beryllium	2.08E-12	0.2116%	1.03E-07	0.1940%
Cadmium	5.23E-10	53.1726%	4.26E-06	8.0172%
Chromium	NC		1.20E-10	0.0002%
Lead	8.21E-11	8.3408%	3.47E-05	65.3874%
Nickel	NC		7.97E-07	1.4990%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Poultry Area Soil	West Loch Water	Poultry Area Air	Poultry Area Produce-ag	Poultry Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	5.59E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	6.23E-06	1.43E-10	NC	1.92E-08	6.38E-08	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, Divalent	3.16E-04	1.77E-09	1.17E-06	1.82E-06	1.14E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.39E-09	2.32E-16	1.07E-10	3.65E-11	6.82E-13	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.49E-10	3.93E-17	1.14E-11	3.90E-12	1.16E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	7.89E-10	2.08E-16	6.05E-11	1.97E-11	4.31E-13	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.01E-10	3.07E-16	2.25E-11	8.32E-12	2.26E-13	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.82E-11	5.34E-17	3.64E-12	2.47E-12	4.36E-14	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	3.76E-11	1.49E-17	2.65E-12	1.06E-12	2.28E-14	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.31E-10	3.01E-16	8.48E-12	3.04E-12	1.22E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.23E-10	1.51E-16	8.54E-12	3.60E-12	9.75E-14	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.31E-10	2.99E-16	8.37E-12	3.03E-12	1.22E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	6.84E-11	8.64E-17	4.99E-12	1.84E-12	5.42E-14	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.61E-11	1.62E-16	4.30E-12	1.73E-12	7.07E-14	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	4.85E-11	2.18E-16	2.55E-12	1.30E-12	5.49E-14	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	1.81E-10	4.93E-16	6.61E-12	2.98E-12	1.87E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	9.93E-11	2.25E-16	6.28E-12	2.29E-12	9.23E-14	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	1.91E-10	1.01E-15	7.75E-12	3.34E-12	2.34E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	5.88E-11	1.30E-16	1.25E-12	6.06E-13	6.33E-14	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	2.03E-10	1.75E-15	3.85E-12	1.64E-12	3.16E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	9.38E-13	2.02E-11	9.57E-09	2.68E-08	7.50E-14	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	3.80E-10	5.88E-12	2.78E-09	7.77E-09	5.43E-12	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	4.17E-09	1.41E-09	6.64E-07	1.86E-06	2.66E-09	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	8.51E-07	1.26E-09	1.11E-07	3.14E-07	2.97E-09	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	8.71E-07	1.95E-08	9.31E-06	2.62E-05	7.59E-08	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.45E-09	4.55E-10	2.15E-07	6.00E-07	1.15E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Poultry Area Soil	West Loch Water	Poultry Area Air	Poultry Area Produce-ag	Poultry Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	5.59E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.22E-05	1.43E-10	NC	3.81E-08	1.27E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, Divalent	6.30E-04	1.77E-09	1.17E-06	2.28E-06	2.28E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	2.42E-09	2.32E-16	1.07E-10	3.66E-11	1.19E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	2.59E-10	3.93E-17	1.14E-11	3.91E-12	2.01E-13	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	1.37E-09	2.08E-16	6.05E-11	1.97E-11	7.50E-13	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	5.24E-10	3.07E-16	2.25E-11	8.36E-12	3.93E-13	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	1.01E-10	5.34E-17	3.64E-12	2.48E-12	7.59E-14	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	6.55E-11	1.49E-17	2.65E-12	1.06E-12	3.97E-14	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	2.28E-10	3.01E-16	8.48E-12	3.07E-12	2.13E-13	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	2.14E-10	1.51E-16	8.54E-12	3.62E-12	1.70E-13	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	2.28E-10	2.99E-16	8.37E-12	3.06E-12	2.12E-13	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	1.19E-10	8.64E-17	4.99E-12	1.86E-12	9.45E-14	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	1.32E-10	1.62E-16	4.30E-12	1.75E-12	1.23E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	8.39E-11	2.18E-16	2.55E-12	1.32E-12	9.56E-14	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	3.14E-10	4.93E-16	6.61E-12	3.04E-12	3.26E-13	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.73E-10	2.25E-16	6.28E-12	2.32E-12	1.61E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	3.30E-10	1.01E-15	7.75E-12	3.44E-12	4.07E-13	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	1.00E-10	1.30E-16	1.25E-12	6.27E-13	1.10E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	3.45E-10	1.75E-15	3.85E-12	1.82E-12	5.49E-13	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	9.38E-13	2.02E-11	9.57E-09	2.68E-08	7.50E-14	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	3.80E-10	5.88E-12	2.78E-09	7.77E-09	5.68E-12	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	4.17E-09	1.41E-09	6.64E-07	1.86E-06	2.67E-09	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	8.72E-07	1.26E-09	1.11E-07	3.15E-07	3.86E-09	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	8.71E-07	1.95E-08	9.31E-06	2.62E-05	7.82E-08	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.45E-09	4.55E-10	2.15E-07	6.00E-07	1.16E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

H-POWER Expansion **Resident Adult**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	3.67E-14	0.00E+00	4.29E-13	3.48E-13	0.00E+00	0.00E+00	0.00E+00	1.89E-15	1.23E-15	0.00E+00
1,2,3,4,6,7,8,9-OCDF	3.93E-15	0.00E+00	4.60E-14	3.72E-14	0.00E+00	0.00E+00	0.00E+00	2.58E-16	1.68E-16	0.00E+00
1,2,3,4,6,7,8-HpCDD	6.95E-13	0.00E+00	8.10E-12	6.26E-12	0.00E+00	0.00E+00	0.00E+00	4.57E-14	2.97E-14	0.00E+00
1,2,3,4,6,7,8-HpCDF	2.65E-13	0.00E+00	3.01E-12	2.65E-12	0.00E+00	0.00E+00	0.00E+00	3.27E-14	2.12E-14	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.12E-14	0.00E+00	4.88E-13	7.86E-13	0.00E+00	0.00E+00	0.00E+00	6.31E-15	4.10E-15	0.00E+00
1,2,3,4,7,8-HxCDD	3.31E-13	0.00E+00	3.55E-12	3.37E-12	0.00E+00	0.00E+00	0.00E+00	2.73E-14	1.78E-14	0.00E+00
1,2,3,4,7,8-HxCDF	1.16E-12	0.00E+00	1.14E-11	9.69E-12	0.00E+00	0.00E+00	0.00E+00	1.98E-13	1.29E-13	0.00E+00
1,2,3,6,7,8-HxCDD	1.08E-12	0.00E+00	1.14E-11	1.15E-11	0.00E+00	0.00E+00	0.00E+00	1.46E-13	9.47E-14	0.00E+00
1,2,3,6,7,8-HxCDF	1.15E-12	0.00E+00	1.12E-11	9.64E-12	0.00E+00	0.00E+00	0.00E+00	1.98E-13	1.28E-13	0.00E+00
1,2,3,7,8,9-HxCDD	6.02E-13	0.00E+00	6.68E-12	5.87E-12	0.00E+00	0.00E+00	0.00E+00	8.11E-14	5.27E-14	0.00E+00
1,2,3,7,8,9-HxCDF	6.70E-13	0.00E+00	5.75E-12	5.50E-12	0.00E+00	0.00E+00	0.00E+00	1.15E-13	7.45E-14	0.00E+00
1,2,3,7,8-PeCDD	4.27E-12	0.00E+00	3.41E-11	4.13E-11	0.00E+00	0.00E+00	0.00E+00	9.24E-13	6.00E-13	0.00E+00
1,2,3,7,8-PeCDF	4.77E-13	0.00E+00	2.66E-12	2.85E-12	0.00E+00	0.00E+00	0.00E+00	9.44E-14	6.13E-14	0.00E+00
2,3,4,6,7,8-HxCDF	8.74E-13	0.00E+00	8.41E-12	7.30E-12	0.00E+00	0.00E+00	0.00E+00	1.50E-13	9.72E-14	0.00E+00
2,3,4,7,8-PeCDF	5.04E-12	0.00E+00	3.11E-11	3.20E-11	0.00E+00	0.00E+00	0.00E+00	1.18E-12	7.64E-13	0.00E+00
2,3,7,8-TCDD	5.18E-12	0.00E+00	1.67E-11	1.94E-11	0.00E+00	0.00E+00	0.00E+00	1.02E-12	6.61E-13	0.00E+00
2,3,7,8-TCDF	1.79E-12	0.00E+00	5.16E-12	5.27E-12	0.00E+00	0.00E+00	0.00E+00	4.93E-13	3.20E-13	0.00E+00
Arsenic	8.26E-19	0.00E+00	1.29E-11	8.53E-12	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	2.08E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	9.31E-16	0.00E+00	3.73E-10	1.50E-10	0.00E+00	0.00E+00	0.00E+00	3.41E-14	9.13E-16	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	4.35E-15	0.00E+00	3.49E-11	4.72E-11	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Adult**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.4E-09	NC	lo uptake factc	NC	NC	NC	NC	NC
Mercury, Methyl	1.7E-07	0.0E+00	NC	2.2E-07	0.0E+00	0.0E+00	0.0E+00	6.1E-09	6.9E-09	0.0E+00
Mercury, Divalent	2.9E-06	0.0E+00	7.7E-07	4.0E-06	0.0E+00	0.0E+00	0.0E+00	7.0E-07	7.9E-07	0.0E+00
1,2,3,4,6,7,8,9-OCDD	1.0E-09	0.0E+00	ND	5.4E-09	0.0E+00	0.0E+00	0.0E+00	5.1E-11	3.3E-11	0.0E+00
1,2,3,4,6,7,8,9-OCDF	1.1E-10	0.0E+00	ND	5.8E-10	0.0E+00	0.0E+00	0.0E+00	7.0E-12	4.5E-12	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.9E-08	0.0E+00	ND	9.8E-08	0.0E+00	0.0E+00	0.0E+00	1.2E-09	8.0E-10	0.0E+00
1,2,3,4,6,7,8-HpCDF	7.2E-09	0.0E+00	ND	4.1E-08	0.0E+00	0.0E+00	0.0E+00	8.8E-10	5.7E-10	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.4E-09	0.0E+00	ND	1.2E-08	0.0E+00	0.0E+00	0.0E+00	1.7E-10	1.1E-10	0.0E+00
1,2,3,4,7,8-HxCDD	9.0E-09	0.0E+00	ND	5.3E-08	0.0E+00	0.0E+00	0.0E+00	7.4E-10	4.8E-10	0.0E+00
1,2,3,4,7,8-HxCDF	3.1E-08	0.0E+00	ND	1.5E-07	0.0E+00	0.0E+00	0.0E+00	5.4E-09	3.5E-09	0.0E+00
1,2,3,6,7,8-HxCDD	2.9E-08	0.0E+00	ND	1.8E-07	0.0E+00	0.0E+00	0.0E+00	3.9E-09	2.6E-09	0.0E+00
1,2,3,6,7,8-HxCDF	3.1E-08	0.0E+00	ND	1.5E-07	0.0E+00	0.0E+00	0.0E+00	5.3E-09	3.5E-09	0.0E+00
1,2,3,7,8,9-HxCDD	1.6E-08	0.0E+00	ND	9.2E-08	0.0E+00	0.0E+00	0.0E+00	2.2E-09	1.4E-09	0.0E+00
1,2,3,7,8,9-HxCDF	1.8E-08	0.0E+00	ND	8.7E-08	0.0E+00	0.0E+00	0.0E+00	3.1E-09	2.0E-09	0.0E+00
1,2,3,7,8-PeCDD	1.1E-07	0.0E+00	ND	6.5E-07	0.0E+00	0.0E+00	0.0E+00	2.5E-08	1.6E-08	0.0E+00
1,2,3,7,8-PeCDF	1.3E-08	0.0E+00	ND	4.5E-08	0.0E+00	0.0E+00	0.0E+00	2.5E-09	1.7E-09	0.0E+00
2,3,4,6,7,8-HxCDF	2.4E-08	0.0E+00	ND	1.1E-07	0.0E+00	0.0E+00	0.0E+00	4.0E-09	2.6E-09	0.0E+00
2,3,4,7,8-PeCDF	1.4E-07	0.0E+00	ND	5.1E-07	0.0E+00	0.0E+00	0.0E+00	3.2E-08	2.1E-08	0.0E+00
2,3,7,8-TCDD	1.4E-07	0.0E+00	ND	3.1E-07	0.0E+00	0.0E+00	0.0E+00	2.7E-08	1.8E-08	0.0E+00
2,3,7,8-TCDF	4.7E-08	0.0E+00	ND	9.2E-08	0.0E+00	0.0E+00	0.0E+00	1.3E-08	8.5E-09	0.0E+00
Arsenic	4.3E-15	0.0E+00	2.3E-07	4.4E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	2.6E-13	0.0E+00	1.0E-07	1.9E-09	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	1.1E-11	0.0E+00	2.4E-06	1.8E-06	0.0E+00	0.0E+00	0.0E+00	4.2E-10	1.1E-11	0.0E+00
Chromium	8.0E-13	0.0E+00	1.5E-11	1.0E-10	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.8E-09	0.0E+00	4.5E-06	3.0E-05	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	9.9E-14	0.0E+00	7.8E-07	1.5E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Child **2**

H-POWER Expansion **Resident Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	4.42E-11	3.44E-05	Poultry Area
Water	NC	NC	West Loch
Air	2.90E-10	2.20E-05	Poultry Area
Produce	2.76E-10	1.47E-04	Poultry Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**6.11E-10**	**2.03E-04**	

NC - Not Calculated

H-POWER Expansion **Resident Child**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	6.11E-10		2.03E-04	
Mercury, Elemental	NC		3.38E-09	0.0017%
Mercury, Methyl	NC		2.59E-06	1.2750%
Mercury, Divalent	NC		4.48E-05	22.0301%
1,2,3,4,6,7,8,9-OCDD	5.43E-13	0.0889%	2.97E-08	0.0146%
1,2,3,4,6,7,8,9-OCDF	5.81E-14	0.0095%	3.17E-09	0.0016%
1,2,3,4,6,7,8-HpCDD	1.00E-11	1.6388%	5.42E-07	0.2666%
1,2,3,4,6,7,8-HpCDF	3.97E-12	0.6505%	2.22E-07	0.1095%
1,2,3,4,7,8,9-HpCDF	9.27E-13	0.1517%	5.90E-08	0.0290%
1,2,3,4,7,8-HxCDD	4.91E-12	0.8043%	2.81E-07	0.1384%
1,2,3,4,7,8-HxCDF	1.51E-11	2.4673%	8.65E-07	0.4257%
1,2,3,6,7,8-HxCDD	1.63E-11	2.6660%	9.46E-07	0.4655%
1,2,3,6,7,8-HxCDF	1.50E-11	2.4484%	8.62E-07	0.4242%
1,2,3,7,8,9-HxCDD	8.84E-12	1.4481%	4.97E-07	0.2446%
1,2,3,7,8,9-HxCDF	8.23E-12	1.3480%	4.95E-07	0.2434%
1,2,3,7,8-PeCDD	5.59E-11	9.1476%	3.53E-06	1.7364%
1,2,3,7,8-PeCDF	4.35E-12	0.7127%	2.91E-07	0.1434%
2,3,4,6,7,8-HxCDF	1.13E-11	1.8474%	6.53E-07	0.3211%
2,3,4,7,8-PeCDF	4.89E-11	8.0063%	3.20E-06	1.5752%
2,3,7,8-TCDD	3.26E-11	5.3326%	2.47E-06	1.2142%
2,3,7,8-TCDF	9.90E-12	1.6211%	7.92E-07	0.3897%
Arsenic	1.28E-11	2.0909%	7.44E-07	0.3659%
Beryllium	1.04E-12	0.1695%	2.59E-07	0.1274%
Cadmium	2.98E-10	48.7353%	1.29E-05	6.3455%
Chromium	NC		4.34E-10	0.0002%
Lead	5.26E-11	8.6152%	1.24E-04	61.1269%
Nickel	NC		2.00E-06	0.9840%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Poultry Area Soil	West Loch Water	Poultry Area Air	Poultry Area Produce-ag	Poultry Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	5.59E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	6.23E-06	1.43E-10	NC	1.92E-08	6.38E-08	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, Divalent	3.16E-04	1.77E-09	1.17E-06	1.82E-06	1.14E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.39E-09	2.32E-16	1.07E-10	3.65E-11	6.82E-13	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.49E-10	3.93E-17	1.14E-11	3.90E-12	1.16E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	7.89E-10	2.08E-16	6.05E-11	1.97E-11	4.31E-13	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.01E-10	3.07E-16	2.25E-11	8.32E-12	2.26E-13	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.82E-11	5.34E-17	3.64E-12	2.47E-12	4.36E-14	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	3.76E-11	1.49E-17	2.65E-12	1.06E-12	2.28E-14	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.31E-10	3.01E-16	8.48E-12	3.04E-12	1.22E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.23E-10	1.51E-16	8.54E-12	3.60E-12	9.75E-14	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.31E-10	2.99E-16	8.37E-12	3.03E-12	1.22E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	6.84E-11	8.64E-17	4.99E-12	1.84E-12	5.42E-14	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.61E-11	1.62E-16	4.30E-12	1.73E-12	7.07E-14	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	4.85E-11	2.18E-16	2.55E-12	1.30E-12	5.49E-14	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	1.81E-10	4.93E-16	6.61E-12	2.98E-12	1.87E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	9.93E-11	2.25E-16	6.28E-12	2.29E-12	9.23E-14	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	1.91E-10	1.01E-15	7.75E-12	3.34E-12	2.34E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	5.88E-11	1.30E-16	1.25E-12	6.06E-13	6.33E-14	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	2.03E-10	1.75E-15	3.85E-12	1.64E-12	3.16E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	9.38E-13	2.02E-11	9.57E-09	2.68E-08	7.50E-14	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	3.80E-10	5.88E-12	2.78E-09	7.77E-09	5.43E-12	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	4.17E-09	1.41E-09	6.64E-07	1.86E-06	2.66E-09	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	8.51E-07	1.26E-09	1.11E-07	3.14E-07	2.97E-09	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	8.71E-07	1.95E-08	9.31E-06	2.62E-05	7.59E-08	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.45E-09	4.55E-10	2.15E-07	6.00E-07	1.15E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Poultry Area Soil	West Loch Water	Poultry Area Air	Poultry Area Produce-ag	Poultry Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	5.59E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.22E-05	1.43E-10	NC	3.81E-08	1.27E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, Divalent	6.30E-04	1.77E-09	1.17E-06	2.28E-06	2.28E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	2.42E-09	2.32E-16	1.07E-10	3.66E-11	1.19E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	2.59E-10	3.93E-17	1.14E-11	3.91E-12	2.01E-13	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	1.37E-09	2.08E-16	6.05E-11	1.97E-11	7.50E-13	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	5.24E-10	3.07E-16	2.25E-11	8.36E-12	3.93E-13	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	1.01E-10	5.34E-17	3.64E-12	2.48E-12	7.59E-14	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	6.55E-11	1.49E-17	2.65E-12	1.06E-12	3.97E-14	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	2.28E-10	3.01E-16	8.48E-12	3.07E-12	2.13E-13	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	2.14E-10	1.51E-16	8.54E-12	3.62E-12	1.70E-13	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	2.28E-10	2.99E-16	8.37E-12	3.06E-12	2.12E-13	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	1.19E-10	8.64E-17	4.99E-12	1.86E-12	9.45E-14	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	1.32E-10	1.62E-16	4.30E-12	1.75E-12	1.23E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	8.39E-11	2.18E-16	2.55E-12	1.32E-12	9.56E-14	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	3.14E-10	4.93E-16	6.61E-12	3.04E-12	3.26E-13	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.73E-10	2.25E-16	6.28E-12	2.32E-12	1.61E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	3.30E-10	1.01E-15	7.75E-12	3.44E-12	4.07E-13	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	1.00E-10	1.30E-16	1.25E-12	6.27E-13	1.10E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	3.45E-10	1.75E-15	3.85E-12	1.82E-12	5.49E-13	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	9.38E-13	2.02E-11	9.57E-09	2.68E-08	7.50E-14	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	3.80E-10	5.88E-12	2.78E-09	7.77E-09	5.68E-12	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	4.17E-09	1.41E-09	6.64E-07	1.86E-06	2.67E-09	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	8.72E-07	1.26E-09	1.11E-07	3.15E-07	3.86E-09	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	8.71E-07	1.95E-08	9.31E-06	2.62E-05	7.82E-08	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.45E-09	4.55E-10	2.15E-07	6.00E-07	1.16E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

H-POWER Expansion **Resident Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	6.86E-14	0.00E+00	2.14E-13	2.61E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	7.34E-15	0.00E+00	2.29E-14	2.79E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	1.30E-12	0.00E+00	4.03E-12	4.68E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	4.95E-13	0.00E+00	1.50E-12	1.98E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	9.56E-14	0.00E+00	2.43E-13	5.88E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	6.19E-13	0.00E+00	1.77E-12	2.53E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	2.16E-12	0.00E+00	5.65E-12	7.26E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	2.02E-12	0.00E+00	5.69E-12	8.58E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	2.15E-12	0.00E+00	5.57E-12	7.23E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	1.12E-12	0.00E+00	3.32E-12	4.40E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	1.25E-12	0.00E+00	2.86E-12	4.12E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	7.97E-12	0.00E+00	1.70E-11	3.09E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	8.91E-13	0.00E+00	1.32E-12	2.14E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	1.63E-12	0.00E+00	4.18E-12	5.47E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	9.40E-12	0.00E+00	1.55E-11	2.40E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	9.67E-12	0.00E+00	8.30E-12	1.46E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	3.33E-12	0.00E+00	2.57E-12	4.00E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	1.54E-18	0.00E+00	6.39E-12	6.38E-12	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	1.04E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.74E-15	0.00E+00	1.86E-10	1.12E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	8.11E-15	0.00E+00	1.73E-11	3.53E-11	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	3.4E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	1.6E-06	0.0E+00	NC	1.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	2.7E-05	0.0E+00	1.9E-06	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	9.3E-09	0.0E+00	ND	2.0E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	9.9E-10	0.0E+00	ND	2.2E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.8E-07	0.0E+00	ND	3.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	6.7E-08	0.0E+00	ND	1.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.3E-08	0.0E+00	ND	4.6E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	8.4E-08	0.0E+00	ND	2.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	2.9E-07	0.0E+00	ND	5.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.7E-07	0.0E+00	ND	6.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	2.9E-07	0.0E+00	ND	5.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.5E-07	0.0E+00	ND	3.5E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.7E-07	0.0E+00	ND	3.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	1.1E-06	0.0E+00	ND	2.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	1.2E-07	0.0E+00	ND	1.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	2.2E-07	0.0E+00	ND	4.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	1.3E-06	0.0E+00	ND	1.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.3E-06	0.0E+00	ND	1.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	4.4E-07	0.0E+00	ND	3.5E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	4.0E-14	0.0E+00	5.8E-07	1.7E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	2.4E-12	0.0E+00	2.5E-07	7.2E-09	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	1.1E-10	0.0E+00	6.0E-06	6.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	7.4E-12	0.0E+00	3.8E-11	3.9E-10	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.6E-08	0.0E+00	1.1E-05	1.1E-04	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	9.3E-13	0.0E+00	1.9E-06	5.5E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Units 1 & 2 Calculations
Farmer

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project: H-POWER Expansion

Locations:
All Max
Poultry Area
Agriculture Area
Compost Area
Residential Area
West Loch
West Loch Watershed
West Loch Watershed Impervious
West Loch Watershed Pervious
Pearl Harbor
Pearl Harbor Watershed
Pearl Harbor Watershed Impervious
Pearl Harbor Watershed Pervious
Waikele Stream
Waikele Stream Watershed
Wahiawa
Wahiawa Watershed
Wahiawa Watershed Impervious
Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Agriculture Area	3
Select the location for beef, dairy, pork, eggs, poultry raising	Agriculture Area	3
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

Unitized Air Modeling Results	Symbol	Units	Location: Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.46455E-06	4.37944E-06	0.000186393	0.000033865	1.93621E-06	1.37464E-06	1.61613E-06	1.46149E-06	1.1317E-06	1.40998E-06	9.83333E-07	8.84131E-07	8.59213E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	3.38523E-05	3.68356E-05	0.00075806	0.00023434	1.71645E-05	9.76055E-06	1.19425E-05	1.16923E-05	7.17437E-06	9.74894E-06	5.46667E-06	3.36044E-06	3.76898E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	0.000034625	3.70156E-05	0.000643109	0.000181585	2.26614E-05	1.47727E-05	1.84775E-05	1.91377E-05	1.34115E-05	1.6423E-05	1.44033E-05	8.52861E-06	1.03516E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000335306	0.000391544	0.006901513	0.002012835	0.000216809	0.00013562	0.000166552	0.0001782	0.00011969	0.000146841	0.00011235	7.13193E-05	8.42169E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.000879218	0.000800461	0.008591956	0.002852313	0.000510271	0.000446853	0.000701292	0.000475492	0.000425908	0.000607652	0.00078381	0.000317958	0.00045034
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.000860414	0.000780127	0.008545623	0.002814235	0.000495852	0.000441446	0.00068391	0.000468449	0.000421462	0.000594625	0.000749947	0.000319121	0.000443985
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.68845E-05	7.04722E-06	0.000311157	2.20675E-05	7.0269E-06	4.12962E-06	3.85475E-06	6.59223E-06	3.58509E-06	3.55522E-06	1.87667E-06	1.62769E-06	1.70537E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000150544	7.44283E-05	0.002883657	0.00022228	1.95931E-05	3.6231E-05	4.94079E-05	1.57333E-05	2.30601E-05	3.82578E-05	0.00005449	3.12193E-05	3.92822E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.000870941	0.000799849	0.008582527	0.002856068	0.000510282	0.000444023	0.000698883	0.0004744	0.000423892	0.000605529	0.000779117	0.00031358	0.000445597
Unitized air concentration - HgII			0.000836867	0.000780368	0.008522327	0.00282602	0.000495858	0.000425242	0.000670983	0.000460566	0.000405519	0.000580343	0.00073797	0.000293634	0.000419545
Unitized Dry deposition - HgII			0.000513978	0.000397487	0.009259773	0.001450035	0.000171102	0.000173203	0.000226938	0.000139525	0.000131513	0.000187547	0.00021364	0.000128137	0.000156247
Unitized Wet deposition - HgII			6.82945E-05	4.61633E-05	0.001260296	0.00017232	3.04645E-05	1.7167E-05	1.95452E-05	2.12377E-05	1.49035E-05	1.76076E-05	1.08633E-05	7.64211E-06	8.33146E-06
Unitized air concentration - Hg0			0.000858408	0.000793558	0.008547674	0.002847923	0.00050834	0.000438557	0.000692329	0.000473055	0.000420543	0.000600363	0.00076766	0.00030652	0.000437305
Unitized Dry deposition - Hg0			0.000392447	0.000191023	0.007891281	0.000573655	4.67207E-05	9.01547E-05	0.00012272	3.66957E-05	5.57671E-05	9.41557E-05	0.00013191	7.59329E-05	9.58428E-05
Unitized Wet deposition - Hg0			1.46364E-07	0.00000003	8.52857E-07	8.75E-08	1.72069E-07	8.30802E-08	4.94966E-08	2.4883E-07	9.72936E-08	5.7478E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	3.80891E-05	4.13933E-05	0.000829501	0.000215453	2.45983E-05	1.61476E-05	2.00938E-05	2.05989E-05	1.45434E-05	1.7833E-05	1.53867E-05	9.41323E-06	1.12102E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000369159	0.000428381	0.007659573	0.002247173	0.000233974	0.000145381	0.000178495	0.000189893	0.000126864	0.000156591	0.000117813	7.46801E-05	8.7986E-05

Emission Rates

Units 1 & 2

Compound	PM10 g/s	TSP g/s
Mercury, elemental	2.46E-03	2.46E-03
Mercury, methyl	2.46E-03	2.46E-03
Mercury, divalent	2.46E-03	2.46E-03
1,2,3,4,6,7,8,9-OCDD	4.00E-08	4.00E-08
1,2,3,4,6,7,8,9-OCDF	1.14E-08	1.14E-08
1,2,3,4,6,7,8-HpCDD	4.84E-08	4.84E-08
1,2,3,4,6,7,8-HpCDF	1.01E-07	1.01E-07
1,2,3,4,7,8,9-HpCDF	7.74E-09	7.74E-09
1,2,3,4,7,8-HxCDD	9.59E-09	9.59E-09
1,2,3,4,7,8-HxCDF	5.71E-08	5.71E-08
1,2,3,6,7,8-HxCDD	1.30E-08	1.30E-08
1,2,3,6,7,8-HxCDF	6.01E-08	6.01E-08
1,2,3,7,8,9-HxCDD	1.04E-08	1.04E-08
1,2,3,7,8,9-HxCDF	8.56E-09	8.56E-09
1,2,3,7,8-PeCDD	1.83E-08	1.83E-08
1,2,3,7,8-PeCDF	6.24E-08	6.24E-08
2,3,4,6,7,8-HxCDF	4.18E-08	4.18E-08
2,3,4,7,8-PeCDF	6.88E-08	6.88E-08
2,3,7,8-TCDD	7.79E-09	7.79E-09
2,3,7,8-TCDF	3.39E-08	3.39E-08
Arsenic	8.63E-05	8.63E-05
Beryllium	8.57E-06	8.57E-06
Cadmium	4.09E-04	4.09E-04
Chromium	4.41E-04	4.41E-04
Lead	1.61E-02	1.61E-02
Nickel	3.89E-04	3.89E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Agriculture Area	West Loch	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	6.02E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	6.91E-06	2.09E-10	NC	2.14E-08	7.08E-08	2.73E-09	9.56E-10	5.43E-10	5.43E-10	1.30E-11	1.42E-03
Mercury, divalent	3.50E-04	2.60E-09	1.27E-06	1.99E-06	1.27E-06	9.92E-07	3.68E-07	1.84E-07	1.84E-07	4.43E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	6.27E-10	9.95E-17	3.20E-11	1.57E-11	3.08E-13	2.14E-11	6.51E-12	6.98E-14	3.99E-14	3.21E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.78E-10	4.47E-17	9.09E-12	4.46E-12	1.38E-13	7.68E-12	2.33E-12	2.53E-14	1.45E-14	1.16E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	7.60E-10	1.91E-16	3.88E-11	1.84E-11	4.15E-13	2.75E-11	8.27E-12	1.08E-13	6.18E-14	4.50E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.60E-09	1.58E-15	8.10E-11	4.22E-11	1.20E-12	1.70E-10	5.21E-11	4.26E-13	2.43E-13	2.29E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.28E-10	1.29E-16	6.20E-12	5.11E-12	9.57E-14	4.60E-11	1.45E-11	3.41E-14	1.95E-14	4.58E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.53E-10	6.16E-17	7.67E-12	4.20E-12	9.30E-14	1.37E-11	4.23E-12	2.74E-14	1.57E-14	1.71E-12	3.19E-13
1,2,3,4,7,8-HxCDF	9.31E-10	2.31E-15	4.57E-11	2.30E-11	8.66E-13	1.28E-10	3.93E-11	3.45E-13	1.97E-13	1.79E-11	1.13E-10
1,2,3,6,7,8-HxCDD	2.08E-10	2.62E-16	1.04E-11	5.92E-12	1.65E-13	3.43E-11	1.07E-11	6.07E-14	3.47E-14	4.12E-12	6.58E-12
1,2,3,6,7,8-HxCDF	9.84E-10	2.45E-15	4.81E-11	2.43E-11	9.14E-13	1.39E-10	4.28E-11	3.65E-13	2.08E-13	1.92E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.65E-10	2.06E-16	8.34E-12	4.33E-12	1.31E-13	1.91E-11	5.87E-12	4.81E-14	2.75E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.45E-10	3.66E-16	6.85E-12	3.70E-12	1.35E-13	2.77E-11	8.59E-12	5.38E-14	3.07E-14	3.45E-12	1.79E-11
1,2,3,7,8-PeCDD	3.16E-10	1.77E-15	1.47E-11	9.46E-12	3.58E-13	1.22E-10	3.82E-11	1.48E-13	8.45E-14	1.34E-11	4.59E-11
1,2,3,7,8-PeCDF	1.22E-09	5.21E-15	4.99E-11	2.80E-11	1.27E-12	3.51E-10	1.10E-10	5.23E-13	2.99E-13	4.11E-11	1.76E-10
2,3,4,6,7,8-HxCDF	6.85E-10	1.71E-15	3.34E-11	1.70E-11	6.37E-13	9.99E-11	3.07E-11	2.54E-13	1.45E-13	1.36E-11	8.36E-11
2,3,4,7,8-PeCDF	1.29E-09	1.00E-14	5.50E-11	3.01E-11	1.58E-12	3.94E-10	1.23E-10	6.52E-13	3.72E-13	4.73E-11	2.03E-10
2,3,7,8-TCDD	1.92E-10	8.92E-16	6.23E-12	3.30E-12	2.06E-13	6.46E-11	2.03E-11	8.15E-14	4.66E-14	7.39E-12	3.07E-11
2,3,7,8-TCDF	8.84E-10	1.68E-14	2.71E-11	1.18E-11	1.38E-12	3.22E-10	1.00E-10	5.28E-13	3.02E-13	3.98E-11	1.67E-10
Arsenic	1.14E-11	2.20E-10	6.73E-08	3.24E-07	9.10E-13	6.93E-08	3.14E-09	NC	NC	NC	2.51E-08
Beryllium	1.58E-09	2.20E-11	6.68E-09	3.21E-08	2.25E-11	3.43E-09	4.66E-12	NC	NC	NC	1.36E-09
Cadmium	3.46E-09	1.05E-09	3.19E-07	1.53E-06	2.20E-09	1.96E-08	1.61E-09	2.74E-10	6.46E-12	1.37E-09	9.52E-07
Chromium	4.53E-06	6.09E-09	3.44E-07	1.67E-06	1.58E-08	9.85E-07	4.04E-07	NC	NC	NC	1.16E-07
Lead	2.03E-06	4.10E-08	1.26E-05	6.07E-05	1.77E-07	1.94E-06	2.44E-06	NC	NC	NC	3.69E-09
Nickel	3.53E-09	1.00E-09	3.04E-07	1.46E-06	2.81E-10	9.34E-07	2.35E-07	NC	NC	NC	7.80E-08

Summary of EPCs (Non Cancer)	Agriculture Area	West Loch	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	6.02E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	1.36E-05	2.09E-10	NC	4.24E-08	1.41E-07	5.32E-09	1.85E-09	1.07E-09	1.07E-09	2.54E-11	1.42E-03
Mercury, divalent	6.99E-04	2.60E-09	1.27E-06	2.50E-06	2.53E-06	1.90E-06	6.84E-07	3.68E-07	3.68E-07	8.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.09E-09	9.95E-17	3.20E-11	1.58E-11	5.36E-13	2.31E-11	6.78E-12	1.22E-13	6.94E-14	4.64E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	3.10E-10	4.47E-17	9.09E-12	4.48E-12	2.41E-13	8.27E-12	2.43E-12	4.41E-14	2.52E-14	1.68E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.32E-09	1.91E-16	3.88E-11	1.85E-11	7.22E-13	3.00E-11	8.70E-12	1.88E-13	1.08E-13	6.71E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	2.78E-09	1.58E-15	8.10E-11	4.24E-11	2.08E-12	1.80E-10	5.39E-11	7.41E-13	4.24E-13	3.16E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.22E-10	1.29E-16	6.20E-12	5.13E-12	1.67E-13	4.68E-11	1.47E-11	5.93E-14	3.39E-14	5.28E-12	2.37E-12
1,2,3,4,7,8-HxCDD	2.67E-10	6.16E-17	7.67E-12	4.22E-12	1.62E-13	1.43E-11	4.34E-12	4.77E-14	2.73E-14	2.27E-12	3.19E-13
1,2,3,4,7,8-HxCDF	1.62E-09	2.31E-15	4.57E-11	2.32E-11	1.51E-12	1.37E-10	4.08E-11	6.00E-13	3.43E-13	2.49E-11	1.13E-10
1,2,3,6,7,8-HxCDD	3.62E-10	2.62E-16	1.04E-11	5.96E-12	2.88E-13	3.57E-11	1.09E-11	1.05E-13	6.03E-14	5.36E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.71E-09	2.45E-15	4.81E-11	2.46E-11	1.59E-12	1.48E-10	4.43E-11	6.34E-13	3.62E-13	2.67E-11	1.20E-10
1,2,3,7,8,9-HxCDD	2.87E-10	2.06E-16	8.34E-12	4.36E-12	2.28E-13	2.02E-11	6.07E-12	8.35E-14	4.77E-14	3.56E-12	5.18E-12
1,2,3,7,8,9-HxCDF	2.52E-10	3.66E-16	6.85E-12	3.74E-12	2.35E-13	2.90E-11	8.82E-12	9.34E-14	5.34E-14	4.55E-12	1.79E-11
1,2,3,7,8-PeCDD	5.47E-10	1.77E-15	1.47E-11	9.59E-12	6.23E-13	1.25E-10	3.89E-11	2.56E-13	1.46E-13	1.64E-11	4.59E-11
1,2,3,7,8-PeCDF	2.12E-09	5.21E-15	4.99E-11	2.84E-11	2.21E-12	3.64E-10	1.12E-10	9.08E-13	5.19E-13	5.18E-11	1.76E-10
2,3,4,6,7,8-HxCDF	1.19E-09	1.71E-15	3.34E-11	1.72E-11	1.11E-12	1.06E-10	3.18E-11	4.41E-13	2.52E-13	1.88E-11	8.36E-11
2,3,4,7,8-PeCDF	2.23E-09	1.00E-14	5.50E-11	3.08E-11	2.75E-12	4.10E-10	1.26E-10	1.13E-12	6.44E-13	6.05E-11	2.03E-10
2,3,7,8-TCDD	3.27E-10	8.92E-16	6.23E-12	3.36E-12	3.59E-13	6.66E-11	2.06E-11	1.39E-13	7.94E-14	8.99E-12	3.07E-11
2,3,7,8-TCDF	1.51E-09	1.68E-14	2.71E-11	1.26E-11	2.40E-12	3.36E-10	1.03E-10	9.00E-13	5.14E-13	5.01E-11	1.67E-10
Arsenic	1.14E-11	2.20E-10	6.73E-08	3.24E-07	9.10E-13	6.93E-08	3.14E-09	NC	NC	NC	2.51E-08
Beryllium	1.58E-09	2.20E-11	6.68E-09	3.21E-08	2.35E-11	3.43E-09	4.66E-12	NC	NC	NC	1.36E-09
Cadmium	3.46E-09	1.05E-09	3.19E-07	1.53E-06	2.21E-09	1.96E-08	1.61E-09	2.75E-10	6.47E-12	1.37E-09	9.52E-07
Chromium	4.65E-06	6.09E-09	3.44E-07	1.67E-06	2.05E-08	9.86E-07	4.04E-07	NC	NC	NC	1.16E-07
Lead	2.03E-06	4.10E-08	1.26E-05	6.07E-05	1.82E-07	1.94E-06	2.44E-06	NC	NC	NC	3.69E-09
Nickel	3.53E-09	1.00E-09	3.04E-07	1.46E-06	2.82E-10	9.34E-07	2.35E-07	NC	NC	NC	7.80E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Farmer Adult **3**

H-POWER Expansion **Farmer Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.61E-10	6.63E-06	Agriculture Area
Water	NC	NC	West Loch
Air	1.48E-09	1.11E-05	Agriculture Area
Produce	2.75E-09	1.40E-04	Agriculture Area
Fish	NC	NC	
Beef	3.98E-08	4.94E-04	Agriculture Area
Milk	1.39E-07	1.76E-03	Agriculture Area
Poultry	3.34E-11	1.45E-06	Agriculture Area
Eggs	2.17E-11	1.33E-06	Agriculture Area
Pork	2.11E-09	3.12E-05	Agriculture Area
Total	**1.85E-07**	**2.45E-03**	

NC - Not Calculated

H-POWER Expansion **Farmer Adult**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	1.85E-07		2.45E-03	
Mercury, Elemental	NC		1.46E-09	0.0001%
Mercury, Methyl	NC		8.88E-07	0.0363%
Mercury, Divalent	NC		4.96E-05	2.0256%
1,2,3,4,6,7,8,9-OCDD	3.38E-12	0.0018%	3.95E-08	0.0016%
1,2,3,4,6,7,8,9-OCDF	1.17E-12	0.0006%	1.39E-08	0.0006%
1,2,3,4,6,7,8-HpCDD	1.42E-10	0.0767%	1.68E-06	0.0688%
1,2,3,4,6,7,8-HpCDF	8.10E-10	0.4367%	9.69E-06	0.3961%
1,2,3,4,7,8,9-HpCDF	2.16E-10	0.1166%	2.54E-06	0.1039%
1,2,3,4,7,8-HxCDD	6.63E-10	0.3576%	7.84E-06	0.3205%
1,2,3,4,7,8-HxCDF	6.03E-09	3.2509%	7.28E-05	2.9745%
1,2,3,6,7,8-HxCDD	1.62E-09	0.8732%	1.93E-05	0.7871%
1,2,3,6,7,8-HxCDF	6.55E-09	3.5304%	7.90E-05	3.2276%
1,2,3,7,8,9-HxCDD	9.07E-10	0.4893%	1.09E-05	0.4445%
1,2,3,7,8,9-HxCDF	1.30E-09	0.6989%	1.55E-05	0.6338%
1,2,3,7,8-PeCDD	5.66E-08	30.5451%	6.73E-04	27.4946%
1,2,3,7,8-PeCDF	4.89E-09	2.6378%	5.83E-05	2.3837%
2,3,4,6,7,8-HxCDF	4.69E-09	2.5296%	5.65E-05	2.3105%
2,3,4,7,8-PeCDF	5.48E-08	29.5638%	6.57E-04	26.8287%
2,3,7,8-TCDD	2.99E-08	16.1491%	3.56E-04	14.5441%
2,3,7,8-TCDF	1.48E-08	7.9974%	1.78E-04	7.2846%
Arsenic	4.31E-10	0.2322%	2.84E-06	0.1161%
Beryllium	6.68E-12	0.0036%	2.57E-07	0.0105%
Cadmium	4.95E-10	0.2672%	3.52E-06	0.1440%
Chromium	NC		5.18E-09	0.0002%
Lead	4.48E-10	0.2415%	1.91E-04	7.8061%
Nickel	NC		1.37E-06	0.0559%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Agriculture Area Soil	West Loch Water	Agriculture Area Air	Agriculture Area Produce-ag	Agriculture Area Produce-rt	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Poultry	Agriculture Area Eggs	Agriculture Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	6.02E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	6.91E-06	2.09E-10	NC	2.14E-08	7.08E-08	2.73E-09	9.56E-10	5.43E-10	5.43E-10	1.30E-11	1.42E-03
Mercury, Divalent	3.50E-04	2.60E-09	1.27E-06	1.99E-06	1.27E-06	9.92E-07	3.68E-07	1.84E-07	1.84E-07	4.43E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	6.27E-10	9.95E-17	3.20E-11	1.57E-11	3.08E-13	2.14E-11	6.51E-12	6.98E-14	3.99E-14	3.21E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.78E-10	4.47E-17	9.09E-12	4.46E-12	1.38E-13	7.68E-12	2.33E-12	2.53E-14	1.45E-14	1.16E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	7.60E-10	1.91E-16	3.88E-11	1.84E-11	4.15E-13	2.75E-11	8.27E-12	1.08E-13	6.18E-14	4.50E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.60E-09	1.58E-15	8.10E-11	4.22E-11	1.20E-12	1.70E-10	5.21E-11	4.26E-13	2.43E-13	2.29E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.28E-10	1.29E-16	6.20E-12	5.11E-12	9.57E-14	4.60E-11	1.45E-11	3.41E-14	1.95E-14	4.58E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.53E-10	6.16E-17	7.67E-12	4.20E-12	9.30E-14	1.37E-11	4.23E-12	2.74E-14	1.57E-14	1.71E-12	3.19E-13
1,2,3,4,7,8-HxCDF	9.31E-10	2.31E-15	4.57E-11	2.30E-11	8.66E-13	1.28E-10	3.93E-11	3.45E-13	1.97E-13	1.79E-11	1.13E-10
1,2,3,6,7,8-HxCDD	2.08E-10	2.62E-16	1.04E-11	5.92E-12	1.65E-13	3.43E-11	1.07E-11	6.07E-14	3.47E-14	4.12E-12	6.58E-12
1,2,3,6,7,8-HxCDF	9.84E-10	2.45E-15	4.81E-11	2.43E-11	9.14E-13	1.39E-10	4.28E-11	3.65E-13	2.08E-13	1.92E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.65E-10	2.06E-16	8.34E-12	4.33E-12	1.31E-13	1.91E-11	5.87E-12	4.81E-14	2.75E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.45E-10	3.66E-16	6.85E-12	3.70E-12	1.35E-13	2.77E-11	8.59E-12	5.38E-14	3.07E-14	3.45E-12	1.79E-11
1,2,3,7,8-PeCDD	3.16E-10	1.77E-15	1.47E-11	9.46E-12	3.58E-13	1.22E-10	3.82E-11	1.48E-13	8.45E-14	1.34E-11	4.59E-11
1,2,3,7,8-PeCDF	1.22E-09	5.21E-15	4.99E-11	2.80E-11	1.27E-12	3.51E-10	1.10E-10	5.23E-13	2.99E-13	4.11E-11	1.76E-10
2,3,4,6,7,8-HxCDF	6.85E-10	1.71E-15	3.34E-11	1.70E-11	6.37E-13	9.99E-11	3.07E-11	2.54E-13	1.45E-13	1.36E-11	8.36E-11
2,3,4,7,8-PeCDF	1.29E-09	1.00E-14	5.50E-11	3.01E-11	1.58E-12	3.94E-10	1.23E-10	6.52E-13	3.72E-13	4.73E-11	2.03E-10
2,3,7,8-TCDD	1.92E-10	8.92E-16	6.23E-12	3.30E-12	2.06E-13	6.46E-11	2.03E-11	8.15E-14	4.66E-14	7.39E-12	3.07E-11
2,3,7,8-TCDF	8.84E-10	1.68E-14	2.71E-11	1.18E-11	1.38E-12	3.22E-10	1.00E-10	5.28E-13	3.02E-13	3.98E-11	1.67E-10
Arsenic	1.14E-11	2.20E-10	6.73E-08	3.24E-07	9.10E-13	6.93E-08	3.14E-09	NC	NC	NC	2.51E-08
Beryllium	1.58E-09	2.20E-11	6.68E-09	3.21E-08	2.25E-11	3.43E-09	4.66E-12	NC	NC	NC	1.36E-09
Cadmium	3.46E-09	1.05E-09	3.19E-07	1.53E-06	2.20E-09	1.96E-08	1.61E-09	2.74E-10	6.46E-12	1.37E-09	9.52E-07
Chromium	4.53E-06	6.09E-09	3.44E-07	1.67E-06	1.58E-08	9.85E-07	4.04E-07	NC	NC	NC	1.16E-07
Lead	2.03E-06	4.10E-08	1.26E-05	6.07E-05	1.77E-07	1.94E-06	2.44E-06	NC	NC	NC	3.69E-09
Nickel	3.53E-09	1.00E-09	3.04E-07	1.46E-06	2.81E-10	9.34E-07	2.35E-07	NC	NC	NC	7.80E-08

Noncancer concentrations **H-POWER Expansion**	Agriculture Area Soil	West Loch Water	Agriculture Area Air	Agriculture Area Produce-ag	Agriculture Area Produce-rt	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Poultry	Agriculture Area Eggs	Agriculture Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	6.02E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.36E-05	2.09E-10	NC	4.24E-08	1.41E-07	5.32E-09	1.85E-09	1.07E-09	1.07E-09	2.54E-11	1.42E-03
Mercury, Divalent	6.99E-04	2.60E-09	1.27E-06	2.50E-06	2.53E-06	1.90E-06	6.84E-07	3.68E-07	3.68E-07	8.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.09E-09	9.95E-17	3.20E-11	1.58E-11	5.36E-13	2.31E-11	6.78E-12	1.22E-13	6.94E-14	4.64E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	3.10E-10	4.47E-17	9.09E-12	4.48E-12	2.41E-13	8.27E-12	2.43E-12	4.41E-14	2.52E-14	1.68E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.32E-09	1.91E-16	3.88E-11	1.85E-11	7.22E-13	3.00E-11	8.70E-12	1.88E-13	1.08E-13	6.71E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	2.78E-09	1.58E-15	8.10E-11	4.24E-11	2.08E-12	1.80E-10	5.39E-11	7.41E-13	4.24E-13	3.16E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.22E-10	1.29E-16	6.20E-12	5.13E-12	1.67E-13	4.68E-11	1.47E-11	5.93E-14	3.39E-14	5.28E-12	2.37E-12
1,2,3,4,7,8-HxCDD	2.67E-10	6.16E-17	7.67E-12	4.22E-12	1.62E-13	1.43E-11	4.34E-12	4.77E-14	2.73E-14	2.27E-12	3.19E-13
1,2,3,4,7,8-HxCDF	1.62E-09	2.31E-15	4.57E-11	2.32E-11	1.51E-12	1.37E-10	4.08E-11	6.00E-13	3.43E-13	2.49E-11	1.13E-10
1,2,3,6,7,8-HxCDD	3.62E-10	2.62E-16	1.04E-11	5.96E-12	2.88E-13	3.57E-11	1.09E-11	1.05E-13	6.03E-14	5.36E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.71E-09	2.45E-15	4.81E-11	2.46E-11	1.59E-12	1.48E-10	4.43E-11	6.34E-13	3.62E-13	2.67E-11	1.20E-10
1,2,3,7,8,9-HxCDD	2.87E-10	2.06E-16	8.34E-12	4.36E-12	2.28E-13	2.02E-11	6.07E-12	8.35E-14	4.77E-14	3.56E-12	5.18E-12
1,2,3,7,8,9-HxCDF	2.52E-10	3.66E-16	6.85E-12	3.74E-12	2.35E-13	2.90E-11	8.82E-12	9.34E-14	5.34E-14	4.55E-12	1.79E-11
1,2,3,7,8-PeCDD	5.47E-10	1.77E-15	1.47E-11	9.59E-12	6.23E-13	1.25E-10	3.89E-11	2.56E-13	1.46E-13	1.64E-11	4.59E-11
1,2,3,7,8-PeCDF	2.12E-09	5.21E-15	4.99E-11	2.84E-11	2.21E-12	3.64E-10	1.12E-10	9.08E-13	5.19E-13	5.18E-11	1.76E-10
2,3,4,6,7,8-HxCDF	1.19E-09	1.71E-15	3.34E-11	1.72E-11	1.11E-12	1.06E-10	3.18E-11	4.41E-13	2.52E-13	1.88E-11	8.36E-11
2,3,4,7,8-PeCDF	2.23E-09	1.00E-14	5.50E-11	3.08E-11	2.75E-12	4.10E-10	1.26E-10	1.13E-12	6.44E-13	6.05E-11	2.03E-10
2,3,7,8-TCDD	3.27E-10	8.92E-16	6.23E-12	3.36E-12	3.59E-13	6.66E-11	2.06E-11	1.39E-13	7.94E-14	8.99E-12	3.07E-11
2,3,7,8-TCDF	1.51E-09	1.68E-14	2.71E-11	1.26E-11	2.40E-12	3.36E-10	1.03E-10	9.00E-13	5.14E-13	5.01E-11	1.67E-10
Arsenic	1.14E-11	2.20E-10	6.73E-08	3.24E-07	9.10E-13	6.93E-08	3.14E-09	NC	NC	NC	2.51E-08
Beryllium	1.58E-09	2.20E-11	6.68E-09	3.21E-08	2.35E-11	3.43E-09	4.66E-12	NC	NC	NC	1.36E-09
Cadmium	3.46E-09	1.05E-09	3.19E-07	1.53E-06	2.21E-09	1.96E-08	1.61E-09	2.75E-10	6.47E-12	1.37E-09	9.52E-07
Chromium	4.65E-06	6.09E-09	3.44E-07	1.67E-06	2.05E-08	9.86E-07	4.04E-07	NC	NC	NC	1.16E-07
Lead	2.03E-06	4.10E-08	1.26E-05	6.07E-05	1.82E-07	1.94E-06	2.44E-06	NC	NC	NC	3.69E-09
Nickel	3.53E-09	1.00E-09	3.04E-07	1.46E-06	2.82E-10	9.34E-07	2.35E-07	NC	NC	NC	7.80E-08

H-POWER Expansion **Farmer Adult**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	2.21E-14	0.00E+00	1.71E-13	3.00E-13	0.00E+00	6.45E-13	2.19E-12	1.14E-15	7.37E-16	4.36E-14
1,2,3,4,6,7,8,9-OCDF	6.28E-15	0.00E+00	4.87E-14	8.51E-14	0.00E+00	2.31E-13	7.85E-13	4.12E-16	2.68E-16	1.57E-14
1,2,3,4,6,7,8-HpCDD	8.92E-13	0.00E+00	6.92E-12	1.17E-11	0.00E+00	2.76E-11	9.29E-11	5.86E-14	3.81E-14	2.03E-12
1,2,3,4,6,7,8-HpCDF	1.87E-12	0.00E+00	1.45E-11	2.68E-11	0.00E+00	1.70E-10	5.86E-10	2.31E-13	1.50E-13	1.04E-11
1,2,3,4,7,8,9-HpCDF	1.50E-13	0.00E+00	1.11E-12	3.24E-12	0.00E+00	4.62E-11	1.63E-10	1.85E-14	1.20E-14	2.07E-12
1,2,3,4,7,8-HxCDD	1.80E-12	0.00E+00	1.37E-11	2.67E-11	0.00E+00	1.37E-10	4.76E-10	1.49E-13	9.65E-14	7.73E-12
1,2,3,4,7,8-HxCDF	1.09E-11	0.00E+00	8.15E-11	1.46E-10	0.00E+00	1.29E-09	4.42E-09	1.87E-12	1.22E-12	8.08E-11
1,2,3,6,7,8-HxCDD	2.44E-12	0.00E+00	1.86E-11	3.76E-11	0.00E+00	3.44E-10	1.20E-09	3.29E-13	2.14E-13	1.86E-11
1,2,3,6,7,8-HxCDF	1.16E-11	0.00E+00	8.58E-11	1.55E-10	0.00E+00	1.40E-09	4.81E-09	1.98E-12	1.28E-12	8.69E-11
1,2,3,7,8,9-HxCDD	1.94E-12	0.00E+00	1.49E-11	2.75E-11	0.00E+00	1.91E-10	6.59E-10	2.61E-13	1.69E-13	1.17E-11
1,2,3,7,8,9-HxCDF	1.70E-12	0.00E+00	1.22E-11	2.35E-11	0.00E+00	2.78E-10	9.65E-10	2.92E-13	1.89E-13	1.56E-11
1,2,3,7,8-PeCDD	3.71E-11	0.00E+00	2.62E-10	6.01E-10	0.00E+00	1.22E-08	4.29E-08	8.03E-12	5.21E-12	6.04E-10
1,2,3,7,8-PeCDF	4.30E-12	0.00E+00	2.67E-11	5.33E-11	0.00E+00	1.06E-09	3.69E-09	8.51E-13	5.53E-13	5.57E-11
2,3,4,6,7,8-HxCDF	8.05E-12	0.00E+00	5.97E-11	1.08E-10	0.00E+00	1.00E-09	3.45E-09	1.38E-12	8.95E-13	6.17E-11
2,3,4,7,8-PeCDF	4.54E-11	0.00E+00	2.95E-10	5.75E-10	0.00E+00	1.19E-08	4.14E-08	1.06E-11	6.89E-12	6.42E-10
2,3,7,8-TCDD	2.25E-11	0.00E+00	1.11E-10	2.10E-10	0.00E+00	6.48E-09	2.28E-08	4.42E-12	2.87E-12	3.34E-10
2,3,7,8-TCDF	1.04E-11	0.00E+00	4.84E-11	7.56E-11	0.00E+00	3.23E-09	1.13E-08	2.87E-12	1.86E-12	1.80E-10
Arsenic	1.34E-17	0.00E+00	1.21E-10	2.05E-10	0.00E+00	6.94E-11	3.53E-11	NC	NC	NC
Beryllium	ND	ND	6.68E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.03E-15	0.00E+00	2.39E-10	2.47E-10	0.00E+00	4.99E-12	4.58E-12	3.77E-14	1.01E-15	1.56E-13
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	1.35E-14	0.00E+00	6.29E-11	2.18E-10	0.00E+00	1.10E-11	1.56E-10	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Farmer Adult**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.5E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	1.9E-07	0.0E+00	NC	3.8E-07	0.0E+00	6.2E-08	2.4E-07	6.7E-09	7.7E-09	1.3E-10
Mercury, Divalent	3.2E-06	0.0E+00	8.4E-07	6.6E-06	0.0E+00	7.4E-06	3.0E-05	7.8E-07	8.8E-07	1.5E-08
1,2,3,4,6,7,8,9-OCDD	4.5E-10	0.0E+00	ND	3.5E-09	0.0E+00	8.1E-09	2.7E-08	2.3E-11	1.5E-11	7.3E-10
1,2,3,4,6,7,8,9-OCDF	1.3E-10	0.0E+00	ND	1.0E-09	0.0E+00	2.9E-09	9.6E-09	8.4E-12	5.4E-12	2.7E-10
1,2,3,4,6,7,8-HpCDD	1.8E-08	0.0E+00	ND	1.4E-07	0.0E+00	3.5E-07	1.1E-06	1.2E-09	7.7E-10	3.5E-08
1,2,3,4,6,7,8-HpCDF	3.8E-08	0.0E+00	ND	3.1E-07	0.0E+00	2.1E-06	7.1E-06	4.7E-09	3.0E-09	1.7E-07
1,2,3,4,7,8,9-HpCDF	3.0E-09	0.0E+00	ND	3.8E-08	0.0E+00	5.5E-07	1.9E-06	3.8E-10	2.4E-10	2.8E-08
1,2,3,4,7,8-HxCDD	3.7E-08	0.0E+00	ND	3.1E-07	0.0E+00	1.7E-06	5.7E-06	3.0E-09	2.0E-09	1.2E-07
1,2,3,4,7,8-HxCDF	2.2E-07	0.0E+00	ND	1.7E-06	0.0E+00	1.6E-05	5.3E-05	3.8E-08	2.5E-08	1.3E-06
1,2,3,6,7,8-HxCDD	5.0E-08	0.0E+00	ND	4.4E-07	0.0E+00	4.2E-06	1.4E-05	6.7E-09	4.3E-09	2.8E-07
1,2,3,6,7,8-HxCDF	2.3E-07	0.0E+00	ND	1.8E-06	0.0E+00	1.7E-05	5.8E-05	4.0E-08	2.6E-08	1.4E-06
1,2,3,7,8,9-HxCDD	3.9E-08	0.0E+00	ND	3.2E-07	0.0E+00	2.4E-06	8.0E-06	5.3E-09	3.4E-09	1.9E-07
1,2,3,7,8,9-HxCDF	3.5E-08	0.0E+00	ND	2.8E-07	0.0E+00	3.4E-06	1.2E-05	5.9E-09	3.8E-09	2.4E-07
1,2,3,7,8-PeCDD	7.5E-07	0.0E+00	ND	7.1E-06	0.0E+00	1.5E-04	5.1E-04	1.6E-07	1.1E-07	8.6E-06
1,2,3,7,8-PeCDF	8.7E-08	0.0E+00	ND	6.3E-07	0.0E+00	1.3E-05	4.4E-05	1.7E-08	1.1E-08	8.2E-07
2,3,4,6,7,8-HxCDF	1.6E-07	0.0E+00	ND	1.3E-06	0.0E+00	1.2E-05	4.2E-05	2.8E-08	1.8E-08	9.9E-07
2,3,4,7,8-PeCDF	9.2E-07	0.0E+00	ND	6.9E-06	0.0E+00	1.4E-04	4.9E-04	2.1E-07	1.4E-07	9.6E-06
2,3,7,8-TCDD	4.5E-07	0.0E+00	ND	2.5E-06	0.0E+00	7.8E-05	2.7E-04	8.8E-08	5.7E-08	4.7E-06
2,3,7,8-TCDF	2.1E-07	0.0E+00	ND	9.5E-07	0.0E+00	3.9E-05	1.4E-04	5.7E-08	3.7E-08	2.6E-06
Arsenic	5.2E-14	0.0E+00	1.6E-06	8.0E-07	0.0E+00	2.7E-07	1.4E-07	NC	NC	NC
Beryllium	1.1E-12	0.0E+00	2.4E-07	1.2E-08	0.0E+00	2.0E-09	3.1E-11	NC	NC	NC
Cadmium	9.5E-12	0.0E+00	1.2E-06	2.3E-06	0.0E+00	4.6E-08	4.2E-08	3.5E-10	9.3E-12	1.4E-09
Chromium	4.2E-12	0.0E+00	4.7E-11	8.3E-10	0.0E+00	7.7E-10	3.5E-09	NC	NC	NC
Lead	6.5E-09	0.0E+00	6.1E-06	1.0E-04	0.0E+00	5.3E-06	7.5E-05	NC	NC	NC
Nickel	2.4E-13	0.0E+00	1.1E-06	5.4E-08	0.0E+00	5.5E-08	1.5E-07	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Farmer Child **4**

H-Power Expansion **Farmer Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	2.26E-10	6.19E-05	Agriculture Area
Water	NC	NC	West Loch
Air	5.53E-10	2.76E-05	Agriculture Area
Produce	1.56E-09	5.30E-04	Agriculture Area
Fish	NC	NC	
Beef	3.67E-09	3.04E-04	Agriculture Area
Milk	3.46E-08	2.92E-03	Agriculture Area
Poultry	3.41E-12	9.92E-07	Agriculture Area
Eggs	2.34E-12	9.54E-07	Agriculture Area
Pork	2.42E-10	2.38E-05	Agriculture Area
Total	**4.09E-08**	**3.87E-03**	

NC - Not Calculated

H-Power Expansion **Farmer Child**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	4.09E-08		3.87E-03	
Mercury, Elemental	NC		3.64E-09	0.0001%
Mercury, Methyl	NC		4.04E-06	0.1043%
Mercury, Divalent	NC		1.14E-04	2.9546%
1,2,3,4,6,7,8,9-OCDD	8.75E-13	0.0021%	6.73E-08	0.0017%
1,2,3,4,6,7,8,9-OCDF	2.94E-13	0.0007%	2.28E-08	0.0006%
1,2,3,4,6,7,8-HpCDD	3.64E-11	0.0890%	2.82E-06	0.0729%
1,2,3,4,6,7,8-HpCDF	1.86E-10	0.4549%	1.47E-05	0.3794%
1,2,3,4,7,8,9-HpCDF	4.76E-11	0.1165%	3.72E-06	0.0962%
1,2,3,4,7,8-HxCDD	1.55E-10	0.3786%	1.21E-05	0.3124%
1,2,3,4,7,8-HxCDF	1.36E-09	3.3196%	1.08E-04	2.7951%
1,2,3,6,7,8-HxCDD	3.64E-10	0.8897%	2.87E-05	0.7400%
1,2,3,6,7,8-HxCDF	1.47E-09	3.6001%	1.17E-04	3.0298%
1,2,3,7,8,9-HxCDD	2.07E-10	0.5065%	1.64E-05	0.4233%
1,2,3,7,8,9-HxCDF	2.88E-10	0.7044%	2.28E-05	0.5895%
1,2,3,7,8-PeCDD	1.24E-08	30.2608%	9.76E-04	25.2087%
1,2,3,7,8-PeCDF	1.07E-09	2.6172%	8.47E-05	2.1880%
2,3,4,6,7,8-HxCDF	1.05E-09	2.5764%	8.39E-05	2.1668%
2,3,4,7,8-PeCDF	1.20E-08	29.2900%	9.52E-04	24.5800%
2,3,7,8-TCDD	6.50E-09	15.9000%	5.14E-04	13.2658%
2,3,7,8-TCDF	3.20E-09	7.8363%	2.56E-04	6.6104%
Arsenic	1.76E-10	0.4311%	7.47E-06	0.1928%
Beryllium	2.49E-12	0.0061%	6.52E-07	0.0168%
Cadmium	2.30E-10	0.5634%	1.15E-05	0.2983%
Chromium	NC		9.60E-09	0.0002%
Lead	1.87E-10	0.4566%	5.38E-04	13.8883%
Nickel	NC		3.24E-06	0.0838%

NC - Not Calculated

Cancer concentrations **H-Power Expansion**	Agriculture Area Soil	West Loch Water	Agriculture Area Air	Agriculture Area Produce-ag	Agriculture Area Produce-rt	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Poultry	Agriculture Area Eggs	Agriculture Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	6.02E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	6.91E-06	2.09E-10	NC	2.14E-08	7.08E-08	2.73E-09	9.56E-10	5.43E-10	5.43E-10	1.30E-11	1.42E-03
Mercury, Divalent	3.50E-04	2.60E-09	1.27E-06	1.99E-06	1.27E-06	9.92E-07	3.68E-07	1.84E-07	1.84E-07	4.43E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	6.27E-10	9.95E-17	3.20E-11	1.57E-11	3.08E-13	2.14E-11	6.51E-12	6.98E-14	3.99E-14	3.21E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.78E-10	4.47E-17	9.09E-12	4.46E-12	1.38E-13	7.68E-12	2.33E-12	2.53E-14	1.45E-14	1.16E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	7.60E-10	1.91E-16	3.88E-11	1.84E-11	4.15E-13	2.75E-11	8.27E-12	1.08E-13	6.18E-14	4.50E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.60E-09	1.58E-15	8.10E-11	4.22E-11	1.20E-12	1.70E-10	5.21E-11	4.26E-13	2.43E-13	2.29E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.28E-10	1.29E-16	6.20E-12	5.11E-12	9.57E-14	4.60E-11	1.45E-11	3.41E-14	1.95E-14	4.58E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.53E-10	6.16E-17	7.67E-12	4.20E-12	9.30E-14	1.37E-11	4.23E-12	2.74E-14	1.57E-14	1.71E-12	3.19E-13
1,2,3,4,7,8-HxCDF	9.31E-10	2.31E-15	4.57E-11	2.30E-11	8.66E-13	1.28E-10	3.93E-11	3.45E-13	1.97E-13	1.79E-11	1.13E-10
1,2,3,6,7,8-HxCDD	2.08E-10	2.62E-16	1.04E-11	5.92E-12	1.65E-13	3.43E-11	1.07E-11	6.07E-14	3.47E-14	4.12E-12	6.58E-12
1,2,3,6,7,8-HxCDF	9.84E-10	2.45E-15	4.81E-11	2.43E-11	9.14E-13	1.39E-10	4.28E-11	3.65E-13	2.08E-13	1.92E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.65E-10	2.06E-16	8.34E-12	4.33E-12	1.31E-13	1.91E-11	5.87E-12	4.81E-14	2.75E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.45E-10	3.66E-16	6.85E-12	3.70E-12	1.35E-13	2.77E-11	8.59E-12	5.38E-14	3.07E-14	3.45E-12	1.79E-11
1,2,3,7,8-PeCDD	3.16E-10	1.77E-15	1.47E-11	9.46E-12	3.58E-13	1.22E-10	3.82E-11	1.48E-13	8.45E-14	1.34E-11	4.59E-11
1,2,3,7,8-PeCDF	1.22E-09	5.21E-15	4.99E-11	2.80E-11	1.27E-12	3.51E-10	1.10E-10	5.23E-13	2.99E-13	4.11E-11	1.76E-10
2,3,4,6,7,8-HxCDF	6.85E-10	1.71E-15	3.34E-11	1.70E-11	6.37E-13	9.99E-11	3.07E-11	2.54E-13	1.45E-13	1.36E-11	8.36E-11
2,3,4,7,8-PeCDF	1.29E-09	1.00E-14	5.50E-11	3.01E-11	1.58E-12	3.94E-10	1.23E-10	6.52E-13	3.72E-13	4.73E-11	2.03E-10
2,3,7,8-TCDD	1.92E-10	8.92E-16	6.23E-12	3.30E-12	2.06E-13	6.46E-11	2.03E-11	8.15E-14	4.66E-14	7.39E-12	3.07E-11
2,3,7,8-TCDF	8.84E-10	1.68E-14	2.71E-11	1.18E-11	1.38E-12	3.22E-10	1.00E-10	5.28E-13	3.02E-13	3.98E-11	1.67E-10
Arsenic	1.14E-11	2.20E-10	6.73E-08	3.24E-07	9.10E-13	6.93E-08	3.14E-09	NC	NC	NC	2.51E-08
Beryllium	1.58E-09	2.20E-11	6.68E-09	3.21E-08	2.25E-11	3.43E-09	4.66E-12	NC	NC	NC	1.36E-09
Cadmium	3.46E-09	1.05E-09	3.19E-07	1.53E-06	2.20E-09	1.96E-08	1.61E-09	2.74E-10	6.46E-12	1.37E-09	9.52E-07
Chromium	4.53E-06	6.09E-09	3.44E-07	1.67E-06	1.58E-08	9.85E-07	4.04E-07	NC	NC	NC	1.16E-07
Lead	2.03E-06	4.10E-08	1.26E-05	6.07E-05	1.77E-07	1.94E-06	2.44E-06	NC	NC	NC	3.69E-09
Nickel	3.53E-09	1.00E-09	3.04E-07	1.46E-06	2.81E-10	9.34E-07	2.35E-07	NC	NC	NC	7.80E-08

Noncancer concentrations **H-Power Expansion**	Agriculture Area Soil	West Loch Water	Agriculture Area Air	Agriculture Area Produce-ag	Agriculture Area Produce-rt	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Poultry	Agriculture Area Eggs	Agriculture Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	6.02E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.36E-05	2.09E-10	NC	4.24E-08	1.41E-07	5.32E-09	1.85E-09	1.07E-09	1.07E-09	2.54E-11	1.42E-03
Mercury, Divalent	6.99E-04	2.60E-09	1.27E-06	2.50E-06	2.53E-06	1.90E-06	6.84E-07	3.68E-07	3.68E-07	8.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.09E-09	9.95E-17	3.20E-11	1.58E-11	5.36E-13	2.31E-11	6.78E-12	1.22E-13	6.94E-14	4.64E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	3.10E-10	4.47E-17	9.09E-12	4.48E-12	2.41E-13	8.27E-12	2.43E-12	4.41E-14	2.52E-14	1.68E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.32E-09	1.91E-16	3.88E-11	1.85E-11	7.22E-13	3.00E-11	8.70E-12	1.88E-13	1.08E-13	6.71E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	2.78E-09	1.58E-15	8.10E-11	4.24E-11	2.08E-12	1.80E-10	5.39E-11	7.41E-13	4.24E-13	3.16E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.22E-10	1.29E-16	6.20E-12	5.13E-12	1.67E-13	4.68E-11	1.47E-11	5.93E-14	3.39E-14	5.28E-12	2.37E-12
1,2,3,4,7,8-HxCDD	2.67E-10	6.16E-17	7.67E-12	4.22E-12	1.62E-13	1.43E-11	4.34E-12	4.77E-14	2.73E-14	2.27E-12	3.19E-13
1,2,3,4,7,8-HxCDF	1.62E-09	2.31E-15	4.57E-11	2.32E-11	1.51E-12	1.37E-10	4.08E-11	6.00E-13	3.43E-13	2.49E-11	1.13E-10
1,2,3,6,7,8-HxCDD	3.62E-10	2.62E-16	1.04E-11	5.96E-12	2.88E-13	3.57E-11	1.09E-11	1.05E-13	6.03E-14	5.36E-12	6.58E-12
1,2,3,6,7,8-HxCDF	1.71E-09	2.45E-15	4.81E-11	2.46E-11	1.59E-12	1.48E-10	4.43E-11	6.34E-13	3.62E-13	2.67E-11	1.20E-10
1,2,3,7,8,9-HxCDD	2.87E-10	2.06E-16	8.34E-12	4.36E-12	2.28E-13	2.02E-11	6.07E-12	8.35E-14	4.77E-14	3.56E-12	5.18E-12
1,2,3,7,8,9-HxCDF	2.52E-10	3.66E-16	6.85E-12	3.74E-12	2.35E-13	2.90E-11	8.82E-12	9.34E-14	5.34E-14	4.55E-12	1.79E-11
1,2,3,7,8-PeCDD	5.47E-10	1.77E-15	1.47E-11	9.59E-12	6.23E-13	1.25E-10	3.89E-11	2.56E-13	1.46E-13	1.64E-11	4.59E-11
1,2,3,7,8-PeCDF	2.12E-09	5.21E-15	4.99E-11	2.84E-11	2.21E-12	3.64E-10	1.12E-10	9.08E-13	5.19E-13	5.18E-11	1.76E-10
2,3,4,6,7,8-HxCDF	1.19E-09	1.71E-15	3.34E-11	1.72E-11	1.11E-12	1.06E-10	3.18E-11	4.41E-13	2.52E-13	1.88E-11	8.36E-11
2,3,4,7,8-PeCDF	2.23E-09	1.00E-14	5.50E-11	3.08E-11	2.75E-12	4.10E-10	1.26E-10	1.13E-12	6.44E-13	6.05E-11	2.03E-10
2,3,7,8-TCDD	3.27E-10	8.92E-16	6.23E-12	3.36E-12	3.59E-13	6.66E-11	2.06E-11	1.39E-13	7.94E-14	8.99E-12	3.07E-11
2,3,7,8-TCDF	1.51E-09	1.68E-14	2.71E-11	1.26E-11	2.40E-12	3.36E-10	1.03E-10	9.00E-13	5.14E-13	5.01E-11	1.67E-10
Arsenic	1.14E-11	2.20E-10	6.73E-08	3.24E-07	9.10E-13	6.93E-08	3.14E-09	NC	NC	NC	2.51E-08
Beryllium	1.58E-09	2.20E-11	6.68E-09	3.21E-08	2.35E-11	3.43E-09	4.66E-12	NC	NC	NC	1.36E-09
Cadmium	3.46E-09	1.05E-09	3.19E-07	1.53E-06	2.21E-09	1.96E-08	1.61E-09	2.75E-10	6.47E-12	1.37E-09	9.52E-07
Chromium	4.65E-06	6.09E-09	3.44E-07	1.67E-06	2.05E-08	9.86E-07	4.04E-07	NC	NC	NC	1.16E-07
Lead	2.03E-06	4.10E-08	1.26E-05	6.07E-05	1.82E-07	1.94E-06	2.44E-06	NC	NC	NC	3.69E-09
Nickel	3.53E-09	1.00E-09	3.04E-07	1.46E-06	2.82E-10	9.34E-07	2.35E-07	NC	NC	NC	7.80E-08

H-Power Expansion **Farmer Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	3.09E-14	0.00E+00	6.39E-14	1.70E-13	0.00E+00	5.95E-14	5.46E-13	1.16E-16	7.96E-17	4.99E-15
1,2,3,4,6,7,8,9-OCDF	8.79E-15	0.00E+00	1.82E-14	4.82E-14	0.00E+00	2.13E-14	1.95E-13	4.22E-17	2.89E-17	1.80E-15
1,2,3,4,6,7,8-HpCDD	1.25E-12	0.00E+00	2.58E-12	6.63E-12	0.00E+00	2.55E-12	2.31E-11	6.00E-15	4.11E-15	2.33E-13
1,2,3,4,6,7,8-HpCDF	2.62E-12	0.00E+00	5.39E-12	1.52E-11	0.00E+00	1.57E-11	1.46E-10	2.36E-14	1.62E-14	1.19E-12
1,2,3,4,7,8,9-HpCDF	2.10E-13	0.00E+00	4.13E-13	1.84E-12	0.00E+00	4.26E-12	4.07E-11	1.89E-15	1.30E-15	2.37E-13
1,2,3,4,7,8-HxCDD	2.52E-12	0.00E+00	5.11E-12	1.51E-11	0.00E+00	1.26E-11	1.18E-10	1.52E-14	1.04E-14	8.85E-13
1,2,3,4,7,8-HxCDF	1.53E-11	0.00E+00	3.04E-11	8.29E-11	0.00E+00	1.19E-10	1.10E-09	1.91E-13	1.31E-13	9.26E-12
1,2,3,6,7,8-HxCDD	3.42E-12	0.00E+00	6.93E-12	2.13E-11	0.00E+00	3.17E-11	2.98E-10	3.37E-14	2.31E-14	2.14E-12
1,2,3,6,7,8-HxCDF	1.62E-11	0.00E+00	3.20E-11	8.77E-11	0.00E+00	1.29E-10	1.20E-09	2.02E-13	1.39E-13	9.96E-12
1,2,3,7,8,9-HxCDD	2.71E-12	0.00E+00	5.55E-12	1.56E-11	0.00E+00	1.77E-11	1.64E-10	2.67E-14	1.83E-14	1.34E-12
1,2,3,7,8,9-HxCDF	2.38E-12	0.00E+00	4.56E-12	1.34E-11	0.00E+00	2.56E-11	2.40E-10	2.98E-14	2.05E-14	1.79E-12
1,2,3,7,8-PeCDD	5.19E-11	0.00E+00	9.77E-11	3.41E-10	0.00E+00	1.13E-09	1.07E-08	8.21E-13	5.63E-13	6.92E-11
1,2,3,7,8-PeCDF	6.03E-12	0.00E+00	9.97E-12	3.03E-11	0.00E+00	9.73E-11	9.19E-10	8.70E-14	5.97E-14	6.38E-12
2,3,4,6,7,8-HxCDF	1.13E-11	0.00E+00	2.23E-11	6.13E-11	0.00E+00	9.24E-11	8.58E-10	1.41E-13	9.66E-14	7.06E-12
2,3,4,7,8-PeCDF	6.36E-11	0.00E+00	1.10E-10	3.27E-10	0.00E+00	1.09E-09	1.03E-08	1.08E-12	7.44E-13	7.35E-11
2,3,7,8-TCDD	3.15E-11	0.00E+00	4.15E-11	1.19E-10	0.00E+00	5.98E-10	5.67E-09	4.52E-13	3.10E-13	3.83E-11
2,3,7,8-TCDF	1.45E-11	0.00E+00	1.81E-11	4.33E-11	0.00E+00	2.98E-10	2.81E-09	2.93E-13	2.01E-13	2.06E-11
Arsenic	1.87E-17	0.00E+00	4.50E-11	1.16E-10	0.00E+00	6.40E-12	8.78E-12	NC	NC	NC
Beryllium	ND	ND	2.49E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.44E-15	0.00E+00	8.92E-11	1.39E-10	0.00E+00	4.60E-13	1.14E-12	3.86E-15	1.09E-16	1.79E-14
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	1.89E-14	0.00E+00	2.34E-11	1.23E-10	0.00E+00	1.02E-12	3.87E-11	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-Power Expansion **Farmer Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	3.6E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	1.7E-06	0.0E+00	NC	1.9E-06	0.0E+00	3.8E-08	4.0E-07	4.6E-09	5.5E-09	1.0E-10
Mercury, Divalent	3.0E-05	0.0E+00	2.1E-06	2.7E-05	0.0E+00	4.6E-06	5.0E-05	5.3E-07	6.3E-07	1.2E-08
1,2,3,4,6,7,8,9-OCDD	4.2E-09	0.0E+00	ND	1.3E-08	0.0E+00	5.0E-09	4.4E-08	1.6E-11	1.1E-11	5.6E-10
1,2,3,4,6,7,8,9-OCDF	1.2E-09	0.0E+00	ND	3.8E-09	0.0E+00	1.8E-09	1.6E-08	5.7E-12	3.9E-12	2.0E-10
1,2,3,4,6,7,8-HpCDD	1.7E-07	0.0E+00	ND	5.2E-07	0.0E+00	2.2E-07	1.9E-06	8.1E-10	5.6E-10	2.7E-08
1,2,3,4,6,7,8-HpCDF	3.6E-07	0.0E+00	ND	1.2E-06	0.0E+00	1.3E-06	1.2E-05	3.2E-09	2.2E-09	1.3E-07
1,2,3,4,7,8,9-HpCDF	2.8E-08	0.0E+00	ND	1.4E-07	0.0E+00	3.4E-07	3.2E-06	2.6E-10	1.8E-10	2.1E-08
1,2,3,4,7,8-HxCDD	3.4E-07	0.0E+00	ND	1.2E-06	0.0E+00	1.0E-06	9.4E-06	2.1E-09	1.4E-09	9.1E-08
1,2,3,4,7,8-HxCDF	2.1E-06	0.0E+00	ND	6.5E-06	0.0E+00	9.8E-06	8.9E-05	2.6E-08	1.8E-08	1.0E-06
1,2,3,6,7,8-HxCDD	4.6E-07	0.0E+00	ND	1.7E-06	0.0E+00	2.6E-06	2.4E-05	4.6E-09	3.1E-09	2.2E-07
1,2,3,6,7,8-HxCDF	2.2E-06	0.0E+00	ND	6.9E-06	0.0E+00	1.1E-05	9.6E-05	2.7E-08	1.9E-08	1.1E-06
1,2,3,7,8,9-HxCDD	3.7E-07	0.0E+00	ND	1.2E-06	0.0E+00	1.5E-06	1.3E-05	3.6E-09	2.5E-09	1.4E-07
1,2,3,7,8,9-HxCDF	3.2E-07	0.0E+00	ND	1.1E-06	0.0E+00	2.1E-06	1.9E-05	4.0E-09	2.8E-09	1.8E-07
1,2,3,7,8-PeCDD	7.0E-06	0.0E+00	ND	2.7E-05	0.0E+00	9.0E-05	8.5E-04	1.1E-07	7.6E-08	6.6E-06
1,2,3,7,8-PeCDF	8.1E-07	0.0E+00	ND	2.4E-06	0.0E+00	7.8E-06	7.3E-05	1.2E-08	8.1E-09	6.3E-07
2,3,4,6,7,8-HxCDF	1.5E-06	0.0E+00	ND	4.8E-06	0.0E+00	7.6E-06	6.9E-05	1.9E-08	1.3E-08	7.6E-07
2,3,4,7,8-PeCDF	8.6E-06	0.0E+00	ND	2.6E-05	0.0E+00	8.9E-05	8.2E-04	1.5E-07	1.0E-07	7.3E-06
2,3,7,8-TCDD	4.2E-06	0.0E+00	ND	9.5E-06	0.0E+00	4.8E-05	4.5E-04	6.0E-08	4.1E-08	3.6E-06
2,3,7,8-TCDF	1.9E-06	0.0E+00	ND	3.6E-06	0.0E+00	2.4E-05	2.2E-04	3.9E-08	2.7E-08	2.0E-06
Arsenic	4.8E-13	0.0E+00	4.1E-06	3.0E-06	0.0E+00	1.7E-07	2.3E-07	NC	NC	NC
Beryllium	1.0E-11	0.0E+00	6.1E-07	4.5E-08	0.0E+00	1.2E-09	5.1E-11	NC	NC	NC
Cadmium	8.8E-11	0.0E+00	2.9E-06	8.6E-06	0.0E+00	2.8E-08	7.0E-08	2.4E-10	6.7E-12	1.1E-09
Chromium	4.0E-11	0.0E+00	1.2E-10	3.1E-09	0.0E+00	4.7E-10	5.9E-09	NC	NC	NC
Lead	6.1E-08	0.0E+00	1.5E-05	4.0E-04	0.0E+00	3.3E-06	1.2E-04	NC	NC	NC
Nickel	2.3E-12	0.0E+00	2.8E-06	2.0E-07	0.0E+00	3.4E-08	2.6E-07	NC	NC	NC

Unit 3 Calculations
Farmer

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Agriculture Area	3
Select the location for beef, dairy, pork, eggs, poultry raising	Agriculture Area	3
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

Unitized Air Modeling Results	Symbol	Units Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.12364E-06	4.68833E-06	0.000169337	4.16325E-05	2.06069E-06	1.40845E-06	1.67361E-06	1.55181E-06	1.16504E-06	1.46067E-06	0.00000106	8.98971E-07	8.87714E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	2.69505E-05	3.55728E-05	0.000716117	0.000247493	1.70817E-05	9.49959E-06	1.17642E-05	1.16793E-05	6.97918E-06	9.58306E-06	0.00000572	3.24743E-06	3.72772E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	4.01355E-05	4.15061E-05	0.001246786	0.000260698	2.59769E-05	1.64887E-05	1.99835E-05	2.20146E-05	1.49788E-05	1.7859E-05	1.38967E-05	9.66918E-06	1.13007E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000374533	0.000416787	0.013351707	0.002869695	0.000235428	0.000141544	0.000172559	0.000192109	0.000124746	0.000151948	0.000110333	7.397E-05	8.61672E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.001269324	0.001223517	0.016980554	0.005055578	0.000866141	0.000683538	0.000882264	0.000824851	0.000652322	0.000795879	0.000681757	0.000502784	0.000599816
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.001264637	0.001202342	0.016809874	0.004971138	0.000856098	0.000660874	0.000849106	0.000808552	0.000627353	0.000763562	0.000641317	0.000485795	0.000569734
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.96332E-05	0.00000737	0.000334916	0.000024585	7.71414E-06	4.28608E-06	3.96244E-06	6.90681E-06	3.65888E-06	3.64028E-06	0.00000178	1.65668E-06	1.69834E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000185641	0.000101949	0.006451413	0.000447955	2.51769E-05	4.15559E-05	5.65554E-05	1.96172E-05	2.66416E-05	4.39255E-05	5.80167E-05	3.51009E-05	4.3353E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.001254956	0.001220427	0.01692135	0.005057125	0.000864098	0.000680432	0.000879414	0.000823217	0.000651256	0.000794129	0.000675737	0.000497788	0.000595199
Unitized air concentration - HgII			0.001206627	0.00118563	0.016733094	0.004981375	0.000831724	0.000638154	0.000834961	0.000780166	0.000601808	0.000746729	0.000630557	0.00045772	0.000551989
Unitized Dry deposition - HgII			0.000598224	0.000521713	0.018005304	0.002485268	0.000212502	0.000198084	0.000258185	0.000170194	0.000150836	0.00021375	0.000224297	0.000142514	0.000171397
Unitized Wet deposition - HgII			7.23873E-05	4.65256E-05	0.001319981	0.000183213	3.20955E-05	1.74755E-05	2.00334E-05	2.23946E-05	1.51276E-05	1.79687E-05	1.14833E-05	7.71625E-06	8.54413E-06
Unitized air concentration - Hg0			0.001235513	0.001209388	0.016765936	0.00503163	0.000861846	0.000674206	0.000870888	0.000822416	0.000647763	0.00078768	0.00066027	0.000489659	0.000585415
Unitized Dry deposition - Hg0			0.00047757	0.000258017	0.01749374	0.001151858	5.74728E-05	0.000100927	0.000138614	4.32802E-05	6.24654E-05	0.000106344	0.000140533	8.29958E-05	0.000103717
Unitized Wet deposition - Hg0			1.45455E-07	3.22222E-08	8.97143E-07	0.000000095	1.37241E-07	6.43285E-08	4.0757E-08	1.81489E-07	7.03214E-08	4.4703E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	4.32577E-05	4.61939E-05	0.001416126	0.00030233	2.80372E-05	1.7897E-05	2.16572E-05	2.35669E-05	1.61437E-05	1.93197E-05	0.00001496	1.05679E-05	1.2188E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000401483	0.000452359	0.014067826	0.003117188	0.00025251	0.000151043	0.000184323	0.000203789	0.000131725	0.000161531	0.000116053	7.72175E-05	8.98954E-05

Emission Rates

Unit 3

Compound	PM10 g/s	TSP g/s
Mercury, elemental	1.47E-03	1.47E-03
Mercury, methyl	1.47E-03	1.47E-03
Mercury, divalent	1.47E-03	1.47E-03
1,2,3,4,6,7,8,9-OCDD	8.42E-08	8.42E-08
1,2,3,4,6,7,8,9-OCDF	9.02E-09	9.02E-09
1,2,3,4,6,7,8-HpCDD	4.77E-08	4.77E-08
1,2,3,4,6,7,8-HpCDF	1.77E-08	1.77E-08
1,2,3,4,7,8,9-HpCDF	2.87E-09	2.87E-09
1,2,3,4,7,8-HxCDD	2.09E-09	2.09E-09
1,2,3,4,7,8-HxCDF	6.69E-09	6.69E-09
1,2,3,6,7,8-HxCDD	6.73E-09	6.73E-09
1,2,3,6,7,8-HxCDF	6.60E-09	6.60E-09
1,2,3,7,8,9-HxCDD	3.93E-09	3.93E-09
1,2,3,7,8,9-HxCDF	3.39E-09	3.39E-09
1,2,3,7,8-PeCDD	2.01E-09	2.01E-09
1,2,3,7,8-PeCDF	5.23E-09	5.23E-09
2,3,4,6,7,8-HxCDF	4.95E-09	4.95E-09
2,3,4,7,8-PeCDF	6.12E-09	6.12E-09
2,3,7,8-TCDD	9.90E-10	9.90E-10
2,3,7,8-TCDF	3.06E-09	3.06E-09
Arsenic	7.57E-06	7.57E-06
Beryllium	2.20E-06	2.20E-06
Cadmium	5.25E-04	5.25E-04
Chromium	8.80E-05	8.80E-05
Lead	7.36E-03	7.36E-03
Nickel	1.70E-04	1.70E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Agriculture Area	West Loch	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	5.48E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	5.28E-06	1.43E-10	NC	1.63E-08	5.41E-08	2.08E-09	7.28E-10	4.15E-10	4.15E-10	9.91E-12	9.70E-04
Mercury, divalent	2.68E-04	1.77E-09	1.15E-06	1.73E-06	9.67E-07	7.69E-07	2.89E-07	1.41E-07	1.41E-07	3.39E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.48E-09	2.32E-16	1.03E-10	3.82E-11	7.24E-13	5.79E-11	1.77E-11	1.64E-13	9.38E-14	8.19E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.58E-10	3.93E-17	1.10E-11	4.07E-12	1.23E-13	7.80E-12	2.38E-12	2.25E-14	1.28E-14	1.11E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	8.36E-10	2.08E-16	5.83E-11	2.06E-11	4.56E-13	3.34E-11	1.01E-11	1.19E-13	6.79E-14	5.21E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.13E-10	3.07E-16	2.16E-11	8.65E-12	2.35E-13	3.98E-11	1.23E-11	8.35E-14	4.77E-14	5.04E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.40E-11	5.34E-17	3.51E-12	2.49E-12	4.05E-14	2.52E-11	7.98E-12	1.44E-14	8.23E-15	2.42E-12	9.77E-13
1,2,3,4,7,8-HxCDD	3.77E-11	1.49E-17	2.56E-12	1.10E-12	2.28E-14	4.12E-12	1.28E-12	6.73E-15	3.85E-15	4.85E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.24E-10	3.01E-16	8.18E-12	3.16E-12	1.15E-13	2.01E-11	6.21E-12	4.60E-14	2.63E-14	2.64E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.22E-10	1.51E-16	8.23E-12	3.71E-12	9.65E-14	2.48E-11	7.76E-12	3.55E-14	2.03E-14	2.82E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.23E-10	2.99E-16	8.07E-12	3.14E-12	1.14E-13	2.06E-11	6.36E-12	4.56E-14	2.60E-14	2.68E-12	1.46E-11
1,2,3,7,8,9-HxCDD	6.99E-11	8.64E-17	4.81E-12	1.92E-12	5.54E-14	9.67E-12	2.99E-12	2.04E-14	1.16E-14	1.23E-12	2.17E-12
1,2,3,7,8,9-HxCDF	6.62E-11	1.62E-16	4.14E-12	1.77E-12	6.15E-14	1.53E-11	4.79E-12	2.45E-14	1.40E-14	1.81E-12	7.93E-12
1,2,3,7,8-PeCDD	4.02E-11	2.18E-16	2.46E-12	1.31E-12	4.56E-14	1.94E-11	6.09E-12	1.88E-14	1.08E-14	2.03E-12	5.63E-12
1,2,3,7,8-PeCDF	1.24E-10	4.93E-16	6.39E-12	2.99E-12	1.28E-13	4.28E-11	1.34E-11	5.30E-14	3.03E-14	4.79E-12	1.66E-11
2,3,4,6,7,8-HxCDF	9.26E-11	2.25E-16	6.06E-12	2.37E-12	8.60E-14	1.60E-11	4.95E-12	3.43E-14	1.96E-14	2.06E-12	1.10E-11
2,3,4,7,8-PeCDF	1.37E-10	1.01E-15	7.48E-12	3.36E-12	1.68E-13	5.05E-11	1.58E-11	6.94E-14	3.97E-14	5.78E-12	2.03E-11
2,3,7,8-TCDD	3.16E-11	1.30E-16	1.21E-12	5.88E-13	3.40E-14	1.23E-11	3.87E-12	1.34E-14	7.67E-15	1.36E-12	4.47E-12
2,3,7,8-TCDF	1.05E-10	1.75E-15	3.74E-12	1.51E-12	1.63E-13	4.36E-11	1.36E-11	6.26E-14	3.58E-14	5.18E-12	1.73E-11
Arsenic	1.05E-12	2.02E-11	9.10E-09	3.01E-08	8.44E-14	6.44E-09	2.92E-10	NC	NC	NC	2.30E-09
Beryllium	4.27E-10	5.88E-12	2.64E-09	8.72E-09	6.10E-12	9.31E-10	1.27E-12	NC	NC	NC	3.65E-10
Cadmium	4.69E-09	1.41E-09	6.31E-07	2.09E-06	2.99E-09	2.67E-08	2.19E-09	3.72E-10	8.76E-12	1.86E-09	1.28E-06
Chromium	9.56E-07	1.26E-09	1.06E-07	3.52E-07	3.34E-09	2.08E-07	8.53E-08	NC	NC	NC	2.40E-08
Lead	9.79E-07	1.95E-08	8.85E-06	2.94E-05	8.54E-08	9.39E-07	1.18E-06	NC	NC	NC	1.76E-09
Nickel	1.63E-09	4.55E-10	2.04E-07	6.73E-07	1.30E-10	4.32E-07	1.09E-07	NC	NC	NC	3.55E-08

Summary of EPCs (Non Cancer)	Agriculture Area	West Loch	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	Agriculture Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	5.48E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	1.04E-05	1.43E-10	NC	3.23E-08	1.08E-07	4.06E-09	1.41E-09	8.15E-10	8.15E-10	1.94E-11	9.70E-04
Mercury, divalent	5.34E-04	1.77E-09	1.15E-06	2.12E-06	1.93E-06	1.46E-06	5.30E-07	2.81E-07	2.81E-07	6.73E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	2.57E-09	2.32E-16	1.03E-10	3.82E-11	1.26E-12	6.17E-11	1.84E-11	2.86E-13	1.63E-13	1.16E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	2.75E-10	3.93E-17	1.10E-11	4.08E-12	2.14E-13	8.32E-12	2.47E-12	3.91E-14	2.24E-14	1.57E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	1.46E-09	2.08E-16	5.83E-11	2.07E-11	7.94E-13	3.62E-11	1.06E-11	2.07E-13	1.18E-13	7.65E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	5.44E-10	3.07E-16	2.16E-11	8.69E-12	4.09E-13	4.17E-11	1.26E-11	1.45E-13	8.30E-14	6.75E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	9.40E-11	5.34E-17	3.51E-12	2.50E-12	7.05E-14	2.55E-11	8.04E-12	2.51E-14	1.43E-14	2.72E-12	9.77E-13
1,2,3,4,7,8-HxCDD	6.56E-11	1.49E-17	2.56E-12	1.10E-12	3.98E-14	4.28E-12	1.31E-12	1.17E-14	6.70E-15	6.22E-13	7.72E-14
1,2,3,4,7,8-HxCDF	2.15E-10	3.01E-16	8.18E-12	3.19E-12	2.01E-13	2.12E-11	6.41E-12	7.99E-14	4.56E-14	3.58E-12	1.48E-11
1,2,3,6,7,8-HxCDD	2.11E-10	1.51E-16	8.23E-12	3.73E-12	1.68E-13	2.57E-11	7.91E-12	6.16E-14	3.52E-14	3.54E-12	3.78E-12
1,2,3,6,7,8-HxCDF	2.14E-10	2.99E-16	8.07E-12	3.17E-12	1.99E-13	2.17E-11	6.56E-12	7.92E-14	4.53E-14	3.61E-12	1.46E-11
1,2,3,7,8,9-HxCDD	1.21E-10	8.64E-17	4.81E-12	1.93E-12	9.66E-14	1.01E-11	3.07E-12	3.54E-14	2.02E-14	1.64E-12	2.17E-12
1,2,3,7,8,9-HxCDF	1.15E-10	1.62E-16	4.14E-12	1.79E-12	1.07E-13	1.59E-11	4.89E-12	4.26E-14	2.44E-14	2.31E-12	7.93E-12
1,2,3,7,8-PeCDD	6.97E-11	2.18E-16	2.46E-12	1.33E-12	7.94E-14	1.98E-11	6.18E-12	3.26E-14	1.87E-14	2.41E-12	5.63E-12
1,2,3,7,8-PeCDF	2.15E-10	4.93E-16	6.39E-12	3.04E-12	2.24E-13	4.41E-11	1.37E-11	9.21E-14	5.26E-14	5.87E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.61E-10	2.25E-16	6.06E-12	2.40E-12	1.50E-13	1.68E-11	5.10E-12	5.96E-14	3.41E-14	2.76E-12	1.10E-11
2,3,4,7,8-PeCDF	2.38E-10	1.01E-15	7.48E-12	3.43E-12	2.93E-13	5.23E-11	1.61E-11	1.20E-13	6.86E-14	7.18E-12	2.03E-11
2,3,7,8-TCDD	5.38E-11	1.30E-16	1.21E-12	5.99E-13	5.92E-14	1.26E-11	3.93E-12	2.29E-14	1.31E-14	1.62E-12	4.47E-12
2,3,7,8-TCDF	1.78E-10	1.75E-15	3.74E-12	1.60E-12	2.84E-13	4.52E-11	1.40E-11	1.07E-13	6.10E-14	6.41E-12	1.73E-11
Arsenic	1.05E-12	2.02E-11	9.10E-09	3.01E-08	8.44E-14	6.44E-09	2.92E-10	NC	NC	NC	2.30E-09
Beryllium	4.27E-10	5.88E-12	2.64E-09	8.72E-09	6.38E-12	9.31E-10	1.27E-12	NC	NC	NC	3.65E-10
Cadmium	4.69E-09	1.41E-09	6.31E-07	2.09E-06	2.99E-09	2.67E-08	2.19E-09	3.73E-10	8.77E-12	1.86E-09	1.28E-06
Chromium	9.80E-07	1.26E-09	1.06E-07	3.54E-07	4.33E-09	2.08E-07	8.54E-08	NC	NC	NC	2.40E-08
Lead	9.79E-07	1.95E-08	8.85E-06	2.94E-05	8.79E-08	9.39E-07	1.18E-06	NC	NC	NC	1.76E-09
Nickel	1.63E-09	4.55E-10	2.04E-07	6.73E-07	1.30E-10	4.32E-07	1.09E-07	NC	NC	NC	3.55E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Farmer Adult **3**

H-POWER Expansion **Farmer Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	2.39E-11	3.06E-06	Agriculture Area
Water	NC	NC	West Loch
Air	7.43E-10	8.42E-06	Agriculture Area
Produce	7.90E-10	6.36E-05	Agriculture Area
Fish	NC	NC	
Beef	6.49E-09	8.64E-05	Agriculture Area
Milk	2.28E-08	3.30E-04	Agriculture Area
Poultry	4.63E-12	6.91E-07	Agriculture Area
Eggs	2.98E-12	7.39E-07	Agriculture Area
Pork	3.30E-10	4.75E-06	Agriculture Area
Total	**3.12E-08**	**4.97E-04**	

NC - Not Calculated

H-POWER Expansion **Farmer Adult**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	3.12E-08		4.97E-04	
Mercury, Elemental	NC		1.33E-09	0.0003%
Mercury, Methyl	NC		6.78E-07	0.1364%
Mercury, Divalent	NC		3.89E-05	7.8156%
1,2,3,4,6,7,8,9-OCDD	9.16E-12	0.0294%	1.05E-07	0.0212%
1,2,3,4,6,7,8,9-OCDF	1.20E-12	0.0038%	1.39E-08	0.0028%
1,2,3,4,6,7,8-HpCDD	1.74E-10	0.5574%	2.02E-06	0.4070%
1,2,3,4,6,7,8-HpCDF	1.90E-10	0.6097%	2.25E-06	0.4534%
1,2,3,4,7,8,9-HpCDF	1.18E-10	0.3793%	1.39E-06	0.2789%
1,2,3,4,7,8-HxCDD	2.00E-10	0.6405%	2.34E-06	0.4711%
1,2,3,4,7,8-HxCDF	9.48E-10	3.0412%	1.14E-05	2.2827%
1,2,3,6,7,8-HxCDD	1.17E-09	3.7637%	1.39E-05	2.7889%
1,2,3,6,7,8-HxCDF	9.70E-10	3.1096%	1.16E-05	2.3325%
1,2,3,7,8,9-HxCDD	4.60E-10	1.4753%	5.47E-06	1.0992%
1,2,3,7,8,9-HxCDF	7.19E-10	2.3067%	8.55E-06	1.7194%
1,2,3,7,8-PeCDD	9.01E-09	28.8926%	1.07E-04	21.4264%
1,2,3,7,8-PeCDF	5.97E-10	1.9154%	7.09E-06	1.4258%
2,3,4,6,7,8-HxCDF	7.53E-10	2.4149%	9.00E-06	1.8101%
2,3,4,7,8-PeCDF	7.04E-09	22.5696%	8.38E-05	16.8589%
2,3,7,8-TCDD	5.71E-09	18.3147%	6.77E-05	13.6115%
2,3,7,8-TCDF	2.01E-09	6.4495%	2.41E-05	4.8427%
Arsenic	4.51E-11	0.1447%	3.33E-07	0.0670%
Beryllium	2.64E-12	0.0085%	1.00E-07	0.0201%
Cadmium	8.22E-10	2.6349%	5.51E-06	1.1082%
Chromium	NC		1.10E-09	0.0002%
Lead	2.30E-10	0.7386%	9.37E-05	18.8459%
Nickel	NC		8.65E-07	0.1739%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Agriculture Area Soil	West Loch Water	Agriculture Area Air	Agriculture Area Produce-ag	Agriculture Area Produce-rt	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Poultry	Agriculture Area Eggs	Agriculture Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	5.48E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	5.28E-06	1.43E-10	NC	1.63E-08	5.41E-08	2.08E-09	7.28E-10	4.15E-10	4.15E-10	9.91E-12	9.70E-04
Mercury, Divalent	2.68E-04	1.77E-09	1.15E-06	1.73E-06	9.67E-07	7.69E-07	2.89E-07	1.41E-07	1.41E-07	3.39E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.48E-09	2.32E-16	1.03E-10	3.82E-11	7.24E-13	5.79E-11	1.77E-11	1.64E-13	9.38E-14	8.19E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.58E-10	3.93E-17	1.10E-11	4.07E-12	1.23E-13	7.80E-12	2.38E-12	2.25E-14	1.28E-14	1.11E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	8.36E-10	2.08E-16	5.83E-11	2.06E-11	4.56E-13	3.34E-11	1.01E-11	1.19E-13	6.79E-14	5.21E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.13E-10	3.07E-16	2.16E-11	8.65E-12	2.35E-13	3.98E-11	1.23E-11	8.35E-14	4.77E-14	5.04E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.40E-11	5.34E-17	3.51E-12	2.49E-12	4.05E-14	2.52E-11	7.98E-12	1.44E-14	8.23E-15	2.42E-12	9.77E-13
1,2,3,4,7,8-HxCDD	3.77E-11	1.49E-17	2.56E-12	1.10E-12	2.28E-14	4.12E-12	1.28E-12	6.73E-15	3.85E-15	4.85E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.24E-10	3.01E-16	8.18E-12	3.16E-12	1.15E-13	2.01E-11	6.21E-12	4.60E-14	2.63E-14	2.64E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.22E-10	1.51E-16	8.23E-12	3.71E-12	9.65E-14	2.48E-11	7.76E-12	3.55E-14	2.03E-14	2.82E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.23E-10	2.99E-16	8.07E-12	3.14E-12	1.14E-13	2.06E-11	6.36E-12	4.56E-14	2.60E-14	2.68E-12	1.46E-11
1,2,3,7,8,9-HxCDD	6.99E-11	8.64E-17	4.81E-12	1.92E-12	5.54E-14	9.67E-12	2.99E-12	2.04E-14	1.16E-14	1.23E-12	2.17E-12
1,2,3,7,8,9-HxCDF	6.62E-11	1.62E-16	4.14E-12	1.77E-12	6.15E-14	1.53E-11	4.79E-12	2.45E-14	1.40E-14	1.81E-12	7.93E-12
1,2,3,7,8-PeCDD	4.02E-11	2.18E-16	2.46E-12	1.31E-12	4.56E-14	1.94E-11	6.09E-12	1.88E-14	1.08E-14	2.03E-12	5.63E-12
1,2,3,7,8-PeCDF	1.24E-10	4.93E-16	6.39E-12	2.99E-12	1.28E-13	4.28E-11	1.34E-11	5.30E-14	3.03E-14	4.79E-12	1.66E-11
2,3,4,6,7,8-HxCDF	9.26E-11	2.25E-16	6.06E-12	2.37E-12	8.60E-14	1.60E-11	4.95E-12	3.43E-14	1.96E-14	2.06E-12	1.10E-11
2,3,4,7,8-PeCDF	1.37E-10	1.01E-15	7.48E-12	3.36E-12	1.68E-13	5.05E-11	1.58E-11	6.94E-14	3.97E-14	5.78E-12	2.03E-11
2,3,7,8-TCDD	3.16E-11	1.30E-16	1.21E-12	5.88E-13	3.40E-14	1.23E-11	3.87E-12	1.34E-14	7.67E-15	1.36E-12	4.47E-12
2,3,7,8-TCDF	1.05E-10	1.75E-15	3.74E-12	1.51E-12	1.63E-13	4.36E-11	1.36E-11	6.26E-14	3.58E-14	5.18E-12	1.73E-11
Arsenic	1.05E-12	2.02E-11	9.10E-09	3.01E-08	8.44E-14	6.44E-09	2.92E-10	NC	NC	NC	2.30E-09
Beryllium	4.27E-10	5.88E-12	2.64E-09	8.72E-09	6.10E-12	9.31E-10	1.27E-12	NC	NC	NC	3.65E-10
Cadmium	4.69E-09	1.41E-09	6.31E-07	2.09E-06	2.99E-09	2.67E-08	2.19E-09	3.72E-10	8.76E-12	1.86E-09	1.28E-06
Chromium	9.56E-07	1.26E-09	1.06E-07	3.52E-07	3.34E-09	2.08E-07	8.53E-08	NC	NC	NC	2.40E-08
Lead	9.79E-07	1.95E-08	8.85E-06	2.94E-05	8.54E-08	9.39E-07	1.18E-06	NC	NC	NC	1.76E-09
Nickel	1.63E-09	4.55E-10	2.04E-07	6.73E-07	1.30E-10	4.32E-07	1.09E-07	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Agriculture Area Soil	West Loch Water	Agriculture Area Air	Agriculture Area Produce-ag	Agriculture Area Produce-rt	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Poultry	Agriculture Area Eggs	Agriculture Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	5.48E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.04E-05	1.43E-10	NC	3.23E-08	1.08E-07	4.06E-09	1.41E-09	8.15E-10	8.15E-10	1.94E-11	9.70E-04
Mercury, Divalent	5.34E-04	1.77E-09	1.15E-06	2.12E-06	1.93E-06	1.46E-06	5.30E-07	2.81E-07	2.81E-07	6.73E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	2.57E-09	2.32E-16	1.03E-10	3.82E-11	1.26E-12	6.17E-11	1.84E-11	2.86E-13	1.63E-13	1.16E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	2.75E-10	3.93E-17	1.10E-11	4.08E-12	2.14E-13	8.32E-12	2.47E-12	3.91E-14	2.24E-14	1.57E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	1.46E-09	2.08E-16	5.83E-11	2.07E-11	7.94E-13	3.62E-11	1.06E-11	2.07E-13	1.18E-13	7.65E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	5.44E-10	3.07E-16	2.16E-11	8.69E-12	4.09E-13	4.17E-11	1.26E-11	1.45E-13	8.30E-14	6.75E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	9.40E-11	5.34E-17	3.51E-12	2.50E-12	7.05E-14	2.55E-11	8.04E-12	2.51E-14	1.43E-14	2.72E-12	9.77E-13
1,2,3,4,7,8-HxCDD	6.56E-11	1.49E-17	2.56E-12	1.10E-12	3.98E-14	4.28E-12	1.31E-12	1.17E-14	6.70E-15	6.22E-13	7.72E-14
1,2,3,4,7,8-HxCDF	2.15E-10	3.01E-16	8.18E-12	3.19E-12	2.01E-13	2.12E-11	6.41E-12	7.99E-14	4.56E-14	3.58E-12	1.48E-11
1,2,3,6,7,8-HxCDD	2.11E-10	1.51E-16	8.23E-12	3.73E-12	1.68E-13	2.57E-11	7.91E-12	6.16E-14	3.52E-14	3.54E-12	3.78E-12
1,2,3,6,7,8-HxCDF	2.14E-10	2.99E-16	8.07E-12	3.17E-12	1.99E-13	2.17E-11	6.56E-12	7.92E-14	4.53E-14	3.61E-12	1.46E-11
1,2,3,7,8,9-HxCDD	1.21E-10	8.64E-17	4.81E-12	1.93E-12	9.66E-14	1.01E-11	3.07E-12	3.54E-14	2.02E-14	1.64E-12	2.17E-12
1,2,3,7,8,9-HxCDF	1.15E-10	1.62E-16	4.14E-12	1.79E-12	1.07E-13	1.59E-11	4.89E-12	4.26E-14	2.44E-14	2.31E-12	7.93E-12
1,2,3,7,8-PeCDD	6.97E-11	2.18E-16	2.46E-12	1.33E-12	7.94E-14	1.98E-11	6.18E-12	3.26E-14	1.87E-14	2.41E-12	5.63E-12
1,2,3,7,8-PeCDF	2.15E-10	4.93E-16	6.39E-12	3.04E-12	2.24E-13	4.41E-11	1.37E-11	9.21E-14	5.26E-14	5.87E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.61E-10	2.25E-16	6.06E-12	2.40E-12	1.50E-13	1.68E-11	5.10E-12	5.96E-14	3.41E-14	2.76E-12	1.10E-11
2,3,4,7,8-PeCDF	2.38E-10	1.01E-15	7.48E-12	3.43E-12	2.93E-13	5.23E-11	1.61E-11	1.20E-13	6.86E-14	7.18E-12	2.03E-11
2,3,7,8-TCDD	5.38E-11	1.30E-16	1.21E-12	5.99E-13	5.92E-14	1.26E-11	3.93E-12	2.29E-14	1.31E-14	1.62E-12	4.47E-12
2,3,7,8-TCDF	1.78E-10	1.75E-15	3.74E-12	1.60E-12	2.84E-13	4.52E-11	1.40E-11	1.07E-13	6.10E-14	6.41E-12	1.73E-11
Arsenic	1.05E-12	2.02E-11	9.10E-09	3.01E-08	8.44E-14	6.44E-09	2.92E-10	NC	NC	NC	2.30E-09
Beryllium	4.27E-10	5.88E-12	2.64E-09	8.72E-09	6.38E-12	9.31E-10	1.27E-12	NC	NC	NC	3.65E-10
Cadmium	4.69E-09	1.41E-09	6.31E-07	2.09E-06	2.99E-09	2.67E-08	2.19E-09	3.73E-10	8.77E-12	1.86E-09	1.28E-06
Chromium	9.80E-07	1.26E-09	1.06E-07	3.54E-07	4.33E-09	2.08E-07	8.54E-08	NC	NC	NC	2.40E-08
Lead	9.79E-07	1.95E-08	8.85E-06	2.94E-05	8.79E-08	9.39E-07	1.18E-06	NC	NC	NC	1.76E-09
Nickel	1.63E-09	4.55E-10	2.04E-07	6.73E-07	1.30E-10	4.32E-07	1.09E-07	NC	NC	NC	3.55E-08

H-POWER Expansion **Farmer Adult**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	5.20E-14	0.00E+00	5.52E-13	7.27E-13	0.00E+00	1.74E-12	5.97E-12	2.67E-15	1.73E-15	1.11E-13
1,2,3,4,6,7,8,9-OCDF	5.57E-15	0.00E+00	5.91E-14	7.77E-14	0.00E+00	2.35E-13	8.03E-13	3.66E-16	2.37E-16	1.51E-14
1,2,3,4,6,7,8-HpCDD	9.81E-13	0.00E+00	1.04E-11	1.31E-11	0.00E+00	3.35E-11	1.13E-10	6.45E-14	4.19E-14	2.36E-12
1,2,3,4,6,7,8-HpCDF	3.67E-13	0.00E+00	3.86E-12	5.49E-12	0.00E+00	3.99E-11	1.38E-10	4.53E-14	2.94E-14	2.28E-12
1,2,3,4,7,8,9-HpCDF	6.34E-14	0.00E+00	6.27E-13	1.58E-12	0.00E+00	2.53E-11	8.96E-11	7.81E-15	5.07E-15	1.09E-12
1,2,3,4,7,8-HxCDD	4.43E-13	0.00E+00	4.57E-12	6.96E-12	0.00E+00	4.13E-11	1.44E-10	3.65E-14	2.37E-14	2.19E-12
1,2,3,4,7,8-HxCDF	1.46E-12	0.00E+00	1.46E-11	2.01E-11	0.00E+00	2.02E-10	6.98E-10	2.49E-13	1.62E-13	1.19E-11
1,2,3,6,7,8-HxCDD	1.43E-12	0.00E+00	1.47E-11	2.35E-11	0.00E+00	2.49E-10	8.72E-10	1.92E-13	1.25E-13	1.27E-11
1,2,3,6,7,8-HxCDF	1.44E-12	0.00E+00	1.44E-11	2.00E-11	0.00E+00	2.07E-10	7.15E-10	2.47E-13	1.61E-13	1.21E-11
1,2,3,7,8,9-HxCDD	8.21E-13	0.00E+00	8.59E-12	1.22E-11	0.00E+00	9.69E-11	3.36E-10	1.11E-13	7.18E-14	5.55E-12
1,2,3,7,8,9-HxCDF	7.77E-13	0.00E+00	7.40E-12	1.13E-11	0.00E+00	1.54E-10	5.38E-10	1.33E-13	8.64E-14	8.17E-12
1,2,3,7,8-PeCDD	4.72E-12	0.00E+00	4.39E-11	8.34E-11	0.00E+00	1.94E-09	6.84E-09	1.02E-12	6.64E-13	9.17E-11
1,2,3,7,8-PeCDF	4.37E-13	0.00E+00	3.42E-12	5.71E-12	0.00E+00	1.29E-10	4.52E-10	8.63E-14	5.60E-14	6.49E-12
2,3,4,6,7,8-HxCDF	1.09E-12	0.00E+00	1.08E-11	1.51E-11	0.00E+00	1.61E-10	5.56E-10	1.86E-13	1.21E-13	9.30E-12
2,3,4,7,8-PeCDF	4.84E-12	0.00E+00	4.01E-11	6.42E-11	0.00E+00	1.52E-09	5.33E-09	1.13E-12	7.34E-13	7.83E-11
2,3,7,8-TCDD	3.71E-12	0.00E+00	2.16E-11	3.74E-11	0.00E+00	1.24E-09	4.35E-09	7.28E-13	4.73E-13	6.15E-11
2,3,7,8-TCDF	1.23E-12	0.00E+00	6.68E-12	9.63E-12	0.00E+00	4.37E-10	1.53E-09	3.40E-13	2.21E-13	2.34E-11
Arsenic	1.24E-18	0.00E+00	1.63E-11	1.91E-11	0.00E+00	6.46E-12	3.28E-12	NC	NC	NC
Beryllium	ND	ND	2.64E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.39E-15	0.00E+00	4.73E-10	3.35E-10	0.00E+00	6.79E-12	6.22E-12	5.11E-14	1.37E-15	2.13E-13
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	6.51E-15	0.00E+00	4.42E-11	1.06E-10	0.00E+00	5.33E-12	7.53E-11	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Farmer Adult**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.3E-09	NC	Jo uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	1.4E-07	0.0E+00	NC	2.9E-07	0.0E+00	4.8E-08	1.9E-07	5.2E-09	5.9E-09	1.0E-10
Mercury, Divalent	2.4E-06	0.0E+00	7.6E-07	5.5E-06	0.0E+00	5.7E-06	2.3E-05	5.9E-07	6.7E-07	1.2E-08
1,2,3,4,6,7,8,9-OCDD	1.1E-09	0.0E+00	ND	8.5E-09	0.0E+00	2.2E-08	7.2E-08	5.4E-11	3.5E-11	1.8E-09
1,2,3,4,6,7,8,9-OCDF	1.1E-10	0.0E+00	ND	9.1E-10	0.0E+00	2.9E-09	9.7E-09	7.4E-12	4.8E-12	2.5E-10
1,2,3,4,6,7,8-HpCDD	2.0E-08	0.0E+00	ND	1.5E-07	0.0E+00	4.2E-07	1.4E-06	1.3E-09	8.5E-10	4.0E-08
1,2,3,4,6,7,8-HpCDF	7.5E-09	0.0E+00	ND	6.5E-08	0.0E+00	4.9E-07	1.7E-06	9.2E-10	6.0E-10	3.6E-08
1,2,3,4,7,8,9-HpCDF	1.3E-09	0.0E+00	ND	1.9E-08	0.0E+00	3.0E-07	1.1E-06	1.6E-10	1.0E-10	1.4E-08
1,2,3,4,7,8-HxCDD	9.0E-09	0.0E+00	ND	8.2E-08	0.0E+00	5.0E-07	1.7E-06	7.4E-10	4.8E-10	3.3E-08
1,2,3,4,7,8-HxCDF	3.0E-08	0.0E+00	ND	2.4E-07	0.0E+00	2.5E-06	8.4E-06	5.1E-09	3.3E-09	1.9E-07
1,2,3,6,7,8-HxCDD	2.9E-08	0.0E+00	ND	2.8E-07	0.0E+00	3.0E-06	1.0E-05	3.9E-09	2.5E-09	1.9E-07
1,2,3,6,7,8-HxCDF	2.9E-08	0.0E+00	ND	2.4E-07	0.0E+00	2.5E-06	8.6E-06	5.0E-09	3.3E-09	1.9E-07
1,2,3,7,8,9-HxCDD	1.7E-08	0.0E+00	ND	1.4E-07	0.0E+00	1.2E-06	4.0E-06	2.2E-09	1.5E-09	8.7E-08
1,2,3,7,8,9-HxCDF	1.6E-08	0.0E+00	ND	1.3E-07	0.0E+00	1.9E-06	6.4E-06	2.7E-09	1.8E-09	1.2E-07
1,2,3,7,8-PeCDD	9.5E-08	0.0E+00	ND	9.9E-07	0.0E+00	2.3E-05	8.1E-05	2.1E-08	1.3E-08	1.3E-06
1,2,3,7,8-PeCDF	8.8E-09	0.0E+00	ND	6.8E-08	0.0E+00	1.5E-06	5.4E-06	1.7E-09	1.1E-09	9.3E-08
2,3,4,6,7,8-HxCDF	2.2E-08	0.0E+00	ND	1.8E-07	0.0E+00	2.0E-06	6.7E-06	3.8E-09	2.4E-09	1.5E-07
2,3,4,7,8-PeCDF	9.8E-08	0.0E+00	ND	7.7E-07	0.0E+00	1.8E-05	6.3E-05	2.3E-08	1.5E-08	1.1E-06
2,3,7,8-TCDD	7.4E-08	0.0E+00	ND	4.5E-07	0.0E+00	1.5E-05	5.2E-05	1.4E-08	9.4E-09	8.6E-07
2,3,7,8-TCDF	2.4E-08	0.0E+00	ND	1.2E-07	0.0E+00	5.3E-06	1.8E-05	6.8E-09	4.4E-09	3.4E-07
Arsenic	4.8E-15	0.0E+00	2.2E-07	7.4E-08	0.0E+00	2.5E-08	1.3E-08	NC	NC	NC
Beryllium	2.9E-13	0.0E+00	9.6E-08	3.2E-09	0.0E+00	5.4E-10	8.3E-12	NC	NC	NC
Cadmium	1.3E-11	0.0E+00	2.3E-06	3.1E-06	0.0E+00	6.3E-08	5.7E-08	4.7E-10	1.3E-11	2.0E-09
Chromium	8.9E-13	0.0E+00	1.5E-11	1.7E-10	0.0E+00	1.6E-10	7.5E-10	NC	NC	NC
Lead	3.1E-09	0.0E+00	4.3E-06	5.1E-05	0.0E+00	2.6E-06	3.6E-05	NC	NC	NC
Nickel	1.1E-13	0.0E+00	7.4E-07	2.5E-08	0.0E+00	2.5E-08	7.1E-08	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult Resident Child Farmer Adult Farmer Child Fisher Adult Fisher Child

Select a receptor: Farmer Child **4**

H-POWER Expansion **Farmer Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	3.34E-11	2.86E-05	Agriculture Area
Water	NC	NC	West Loch
Air	2.77E-10	2.09E-05	Agriculture Area
Produce	4.47E-10	2.42E-04	Agriculture Area
Fish	NC	NC	
Beef	5.99E-10	5.31E-05	Agriculture Area
Milk	5.67E-09	5.47E-04	Agriculture Area
Poultry	4.74E-13	4.71E-07	Agriculture Area
Eggs	3.22E-13	5.32E-07	Agriculture Area
Pork	3.77E-11	3.63E-06	Agriculture Area
Total	**7.07E-09**	**8.96E-04**	

NC - Not Calculated

H-POWER Expansion **Farmer Child**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	7.07E-09		8.96E-04	
Mercury, Elemental	NC		3.31E-09	0.0004%
Mercury, Methyl	NC		3.08E-06	0.3441%
Mercury, Divalent	NC		9.02E-05	10.0634%
1,2,3,4,6,7,8,9-OCDD	2.35E-12	0.0332%	1.77E-07	0.0197%
1,2,3,4,6,7,8,9-OCDF	2.97E-13	0.0042%	2.26E-08	0.0025%
1,2,3,4,6,7,8-HpCDD	4.43E-11	0.6262%	3.36E-06	0.3745%
1,2,3,4,6,7,8-HpCDF	4.34E-11	0.6140%	3.39E-06	0.3785%
1,2,3,4,7,8,9-HpCDF	2.60E-11	0.3675%	2.02E-06	0.2259%
1,2,3,4,7,8-HxCDD	4.62E-11	0.6538%	3.58E-06	0.3990%
1,2,3,4,7,8-HxCDF	2.13E-10	3.0075%	1.68E-05	1.8735%
1,2,3,6,7,8-HxCDD	2.62E-10	3.7102%	2.05E-05	2.2883%
1,2,3,6,7,8-HxCDF	2.17E-10	3.0709%	1.71E-05	1.9125%
1,2,3,7,8,9-HxCDD	1.04E-10	1.4772%	8.18E-06	0.9127%
1,2,3,7,8,9-HxCDF	1.59E-10	2.2518%	1.25E-05	1.3980%
1,2,3,7,8-PeCDD	1.96E-09	27.7714%	1.54E-04	17.2078%
1,2,3,7,8-PeCDF	1.30E-10	1.8437%	1.03E-05	1.1463%
2,3,4,6,7,8-HxCDF	1.68E-10	2.3819%	1.33E-05	1.4828%
2,3,4,7,8-PeCDF	1.53E-09	21.6966%	1.21E-04	13.5307%
2,3,7,8-TCDD	1.24E-09	17.5177%	9.76E-05	10.8895%
2,3,7,8-TCDF	4.34E-10	6.1418%	3.46E-05	3.8563%
Arsenic	1.83E-11	0.2585%	8.66E-07	0.0966%
Beryllium	9.85E-13	0.0139%	2.52E-07	0.0281%
Cadmium	3.68E-10	5.2088%	1.75E-05	1.9518%
Chromium	NC		2.04E-09	0.0002%
Lead	9.54E-11	1.3492%	2.63E-04	29.3852%
Nickel	NC		2.08E-06	0.2317%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Agriculture Area Soil	West Loch Water	Agriculture Area Air	Agriculture Area Produce-ag	Agriculture Area Produce-rt	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Poultry	Agriculture Area Eggs	Agriculture Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	5.48E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	5.28E-06	1.43E-10	NC	1.63E-08	5.41E-08	2.08E-09	7.28E-10	4.15E-10	4.15E-10	9.91E-12	9.70E-04
Mercury, Divalent	2.68E-04	1.77E-09	1.15E-06	1.73E-06	9.67E-07	7.69E-07	2.89E-07	1.41E-07	1.41E-07	3.39E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.48E-09	2.32E-16	1.03E-10	3.82E-11	7.24E-13	5.79E-11	1.77E-11	1.64E-13	9.38E-14	8.19E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.58E-10	3.93E-17	1.10E-11	4.07E-12	1.23E-13	7.80E-12	2.38E-12	2.25E-14	1.28E-14	1.11E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	8.36E-10	2.08E-16	5.83E-11	2.06E-11	4.56E-13	3.34E-11	1.01E-11	1.19E-13	6.79E-14	5.21E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.13E-10	3.07E-16	2.16E-11	8.65E-12	2.35E-13	3.98E-11	1.23E-11	8.35E-14	4.77E-14	5.04E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.40E-11	5.34E-17	3.51E-12	2.49E-12	4.05E-14	2.52E-11	7.98E-12	1.44E-14	8.23E-15	2.42E-12	9.77E-13
1,2,3,4,7,8-HxCDD	3.77E-11	1.49E-17	2.56E-12	1.10E-12	2.28E-14	4.12E-12	1.28E-12	6.73E-15	3.85E-15	4.85E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.24E-10	3.01E-16	8.18E-12	3.16E-12	1.15E-13	2.01E-11	6.21E-12	4.60E-14	2.63E-14	2.64E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.22E-10	1.51E-16	8.23E-12	3.71E-12	9.65E-14	2.48E-11	7.76E-12	3.55E-14	2.03E-14	2.82E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.23E-10	2.99E-16	8.07E-12	3.14E-12	1.14E-13	2.06E-11	6.36E-12	4.56E-14	2.60E-14	2.68E-12	1.46E-11
1,2,3,7,8,9-HxCDD	6.99E-11	8.64E-17	4.81E-12	1.92E-12	5.54E-14	9.67E-12	2.99E-12	2.04E-14	1.16E-14	1.23E-12	2.17E-12
1,2,3,7,8,9-HxCDF	6.62E-11	1.62E-16	4.14E-12	1.77E-12	6.15E-14	1.53E-11	4.79E-12	2.45E-14	1.40E-14	1.81E-12	7.93E-12
1,2,3,7,8-PeCDD	4.02E-11	2.18E-16	2.46E-12	1.31E-12	4.56E-14	1.94E-11	6.09E-12	1.88E-14	1.08E-14	2.03E-12	5.63E-12
1,2,3,7,8-PeCDF	1.24E-10	4.93E-16	6.39E-12	2.99E-12	1.28E-13	4.28E-11	1.34E-11	5.30E-14	3.03E-14	4.79E-12	1.66E-11
2,3,4,6,7,8-HxCDF	9.26E-11	2.25E-16	6.06E-12	2.37E-12	8.60E-14	1.60E-11	4.95E-12	3.43E-14	1.96E-14	2.06E-12	1.10E-11
2,3,4,7,8-PeCDF	1.37E-10	1.01E-15	7.48E-12	3.36E-12	1.68E-13	5.05E-11	1.58E-11	6.94E-14	3.97E-14	5.78E-12	2.03E-11
2,3,7,8-TCDD	3.16E-11	1.30E-16	1.21E-12	5.88E-13	3.40E-14	1.23E-11	3.87E-12	1.34E-14	7.67E-15	1.36E-12	4.47E-12
2,3,7,8-TCDF	1.05E-10	1.75E-15	3.74E-12	1.51E-12	1.63E-13	4.36E-11	1.36E-11	6.26E-14	3.58E-14	5.18E-12	1.73E-11
Arsenic	1.05E-12	2.02E-11	9.10E-09	3.01E-08	8.44E-14	6.44E-09	2.92E-10	NC	NC	NC	2.30E-09
Beryllium	4.27E-10	5.88E-12	2.64E-09	8.72E-09	6.10E-12	9.31E-10	1.27E-12	NC	NC	NC	3.65E-10
Cadmium	4.69E-09	1.41E-09	6.31E-07	2.09E-06	2.99E-09	2.67E-08	2.19E-09	3.72E-10	8.76E-12	1.86E-09	1.28E-06
Chromium	9.56E-07	1.26E-09	1.06E-07	3.52E-07	3.34E-09	2.08E-07	8.53E-08	NC	NC	NC	2.40E-08
Lead	9.79E-07	1.95E-08	8.85E-06	2.94E-05	8.54E-08	9.39E-07	1.18E-06	NC	NC	NC	1.76E-09
Nickel	1.63E-09	4.55E-10	2.04E-07	6.73E-07	1.30E-10	4.32E-07	1.09E-07	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Agriculture Area Soil	West Loch Water	Agriculture Area Air	Agriculture Area Produce-ag	Agriculture Area Produce-rt	Agriculture Area Beef	Agriculture Area Milk	Agriculture Area Poultry	Agriculture Area Eggs	Agriculture Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	5.48E-10	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.04E-05	1.43E-10	NC	3.23E-08	1.08E-07	4.06E-09	1.41E-09	8.15E-10	8.15E-10	1.94E-11	9.70E-04
Mercury, Divalent	5.34E-04	1.77E-09	1.15E-06	2.12E-06	1.93E-06	1.46E-06	5.30E-07	2.81E-07	2.81E-07	6.73E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	2.57E-09	2.32E-16	1.03E-10	3.82E-11	1.26E-12	6.17E-11	1.84E-11	2.86E-13	1.63E-13	1.16E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	2.75E-10	3.93E-17	1.10E-11	4.08E-12	2.14E-13	8.32E-12	2.47E-12	3.91E-14	2.24E-14	1.57E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	1.46E-09	2.08E-16	5.83E-11	2.07E-11	7.94E-13	3.62E-11	1.06E-11	2.07E-13	1.18E-13	7.65E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	5.44E-10	3.07E-16	2.16E-11	8.69E-12	4.09E-13	4.17E-11	1.26E-11	1.45E-13	8.30E-14	6.75E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	9.40E-11	5.34E-17	3.51E-12	2.50E-12	7.05E-14	2.55E-11	8.04E-12	2.51E-14	1.43E-14	2.72E-12	9.77E-13
1,2,3,4,7,8-HxCDD	6.56E-11	1.49E-17	2.56E-12	1.10E-12	3.98E-14	4.28E-12	1.31E-12	1.17E-14	6.70E-15	6.22E-13	7.72E-14
1,2,3,4,7,8-HxCDF	2.15E-10	3.01E-16	8.18E-12	3.19E-12	2.01E-13	2.12E-11	6.41E-12	7.99E-14	4.56E-14	3.58E-12	1.48E-11
1,2,3,6,7,8-HxCDD	2.11E-10	1.51E-16	8.23E-12	3.73E-12	1.68E-13	2.57E-11	7.91E-12	6.16E-14	3.52E-14	3.54E-12	3.78E-12
1,2,3,6,7,8-HxCDF	2.14E-10	2.99E-16	8.07E-12	3.17E-12	1.99E-13	2.17E-11	6.56E-12	7.92E-14	4.53E-14	3.61E-12	1.46E-11
1,2,3,7,8,9-HxCDD	1.21E-10	8.64E-17	4.81E-12	1.93E-12	9.66E-14	1.01E-11	3.07E-12	3.54E-14	2.02E-14	1.64E-12	2.17E-12
1,2,3,7,8,9-HxCDF	1.15E-10	1.62E-16	4.14E-12	1.79E-12	1.07E-13	1.59E-11	4.89E-12	4.26E-14	2.44E-14	2.31E-12	7.93E-12
1,2,3,7,8-PeCDD	6.97E-11	2.18E-16	2.46E-12	1.33E-12	7.94E-14	1.98E-11	6.18E-12	3.26E-14	1.87E-14	2.41E-12	5.63E-12
1,2,3,7,8-PeCDF	2.15E-10	4.93E-16	6.39E-12	3.04E-12	2.24E-13	4.41E-11	1.37E-11	9.21E-14	5.26E-14	5.87E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.61E-10	2.25E-16	6.06E-12	2.40E-12	1.50E-13	1.68E-11	5.10E-12	5.96E-14	3.41E-14	2.76E-12	1.10E-11
2,3,4,7,8-PeCDF	2.38E-10	1.01E-15	7.48E-12	3.43E-12	2.93E-13	5.23E-11	1.61E-11	1.20E-13	6.86E-14	7.18E-12	2.03E-11
2,3,7,8-TCDD	5.38E-11	1.30E-16	1.21E-12	5.99E-13	5.92E-14	1.26E-11	3.93E-12	2.29E-14	1.31E-14	1.62E-12	4.47E-12
2,3,7,8-TCDF	1.78E-10	1.75E-15	3.74E-12	1.60E-12	2.84E-13	4.52E-11	1.40E-11	1.07E-13	6.10E-14	6.41E-12	1.73E-11
Arsenic	1.05E-12	2.02E-11	9.10E-09	3.01E-08	8.44E-14	6.44E-09	2.92E-10	NC	NC	NC	2.30E-09
Beryllium	4.27E-10	5.88E-12	2.64E-09	8.72E-09	6.38E-12	9.31E-10	1.27E-12	NC	NC	NC	3.65E-10
Cadmium	4.69E-09	1.41E-09	6.31E-07	2.09E-06	2.99E-09	2.67E-08	2.19E-09	3.73E-10	8.77E-12	1.86E-09	1.28E-06
Chromium	9.80E-07	1.26E-09	1.06E-07	3.54E-07	4.33E-09	2.08E-07	8.54E-08	NC	NC	NC	2.40E-08
Lead	9.79E-07	1.95E-08	8.85E-06	2.94E-05	8.79E-08	9.39E-07	1.18E-06	NC	NC	NC	1.76E-09
Nickel	1.63E-09	4.55E-10	2.04E-07	6.73E-07	1.30E-10	4.32E-07	1.09E-07	NC	NC	NC	3.55E-08

H-POWER Expansion **Farmer Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	7.28E-14	0.00E+00	2.06E-13	4.12E-13	0.00E+00	1.61E-13	1.49E-12	2.73E-16	1.87E-16	1.27E-14
1,2,3,4,6,7,8,9-OCDF	7.79E-15	0.00E+00	2.20E-14	4.40E-14	0.00E+00	2.16E-14	2.00E-13	3.74E-17	2.56E-17	1.72E-15
1,2,3,4,6,7,8-HpCDD	1.37E-12	0.00E+00	3.88E-12	7.42E-12	0.00E+00	3.09E-12	2.82E-11	6.59E-15	4.52E-15	2.70E-13
1,2,3,4,6,7,8-HpCDF	5.14E-13	0.00E+00	1.44E-12	3.11E-12	0.00E+00	3.68E-12	3.44E-11	4.63E-15	3.18E-15	2.61E-13
1,2,3,4,7,8,9-HpCDF	8.88E-14	0.00E+00	2.34E-13	8.94E-13	0.00E+00	2.33E-12	2.23E-11	7.99E-16	5.48E-16	1.25E-13
1,2,3,4,7,8-HxCDD	6.20E-13	0.00E+00	1.70E-12	3.94E-12	0.00E+00	3.81E-12	3.59E-11	3.74E-15	2.56E-15	2.51E-13
1,2,3,4,7,8-HxCDF	2.04E-12	0.00E+00	5.45E-12	1.14E-11	0.00E+00	1.86E-11	1.74E-10	2.55E-14	1.75E-14	1.37E-12
1,2,3,6,7,8-HxCDD	2.00E-12	0.00E+00	5.48E-12	1.33E-11	0.00E+00	2.30E-11	2.17E-10	1.97E-14	1.35E-14	1.46E-12
1,2,3,6,7,8-HxCDF	2.02E-12	0.00E+00	5.37E-12	1.13E-11	0.00E+00	1.91E-11	1.78E-10	2.53E-14	1.73E-14	1.39E-12
1,2,3,7,8,9-HxCDD	1.15E-12	0.00E+00	3.20E-12	6.90E-12	0.00E+00	8.94E-12	8.36E-11	1.13E-14	7.75E-15	6.36E-13
1,2,3,7,8,9-HxCDF	1.09E-12	0.00E+00	2.76E-12	6.39E-12	0.00E+00	1.42E-11	1.34E-10	1.36E-14	9.33E-15	9.36E-13
1,2,3,7,8-PeCDD	6.61E-12	0.00E+00	1.64E-11	4.73E-11	0.00E+00	1.79E-10	1.70E-09	1.05E-13	7.17E-14	1.05E-11
1,2,3,7,8-PeCDF	6.11E-13	0.00E+00	1.28E-12	3.24E-12	0.00E+00	1.19E-11	1.13E-10	8.83E-15	6.05E-15	7.44E-13
2,3,4,6,7,8-HxCDF	1.52E-12	0.00E+00	4.03E-12	8.56E-12	0.00E+00	1.48E-11	1.38E-10	1.90E-14	1.31E-14	1.07E-12
2,3,4,7,8-PeCDF	6.78E-12	0.00E+00	1.49E-11	3.65E-11	0.00E+00	1.40E-10	1.33E-09	1.16E-13	7.92E-14	8.97E-12
2,3,7,8-TCDD	5.19E-12	0.00E+00	8.05E-12	2.13E-11	0.00E+00	1.14E-10	1.08E-09	7.45E-14	5.11E-14	7.05E-12
2,3,7,8-TCDF	1.72E-12	0.00E+00	2.49E-12	5.50E-12	0.00E+00	4.03E-11	3.81E-10	3.48E-14	2.38E-14	2.68E-12
Arsenic	1.73E-18	0.00E+00	6.08E-12	1.08E-11	0.00E+00	5.95E-13	8.16E-13	NC	NC	NC
Beryllium	ND	ND	9.85E-13	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.95E-15	0.00E+00	1.77E-10	1.90E-10	0.00E+00	6.26E-13	1.55E-12	5.23E-15	1.48E-16	2.44E-14
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	9.12E-15	0.00E+00	1.65E-11	5.97E-11	0.00E+00	4.92E-13	1.87E-11	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Farmer Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	3.3E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	1.3E-06	0.0E+00	NC	1.4E-06	0.0E+00	2.9E-08	3.1E-07	3.5E-09	4.2E-09	7.8E-11
Mercury, Divalent	2.3E-05	0.0E+00	1.9E-06	2.3E-05	0.0E+00	3.5E-06	3.8E-05	4.0E-07	4.9E-07	9.0E-09
1,2,3,4,6,7,8,9-OCDD	9.9E-09	0.0E+00	ND	3.2E-08	0.0E+00	1.3E-08	1.2E-07	3.7E-11	2.5E-11	1.4E-09
1,2,3,4,6,7,8,9-OCDF	1.1E-09	0.0E+00	ND	3.4E-09	0.0E+00	1.8E-09	1.6E-08	5.1E-12	3.5E-12	1.9E-10
1,2,3,4,6,7,8-HpCDD	1.9E-07	0.0E+00	ND	5.8E-07	0.0E+00	2.6E-07	2.3E-06	8.9E-10	6.1E-10	3.1E-08
1,2,3,4,6,7,8-HpCDF	7.0E-08	0.0E+00	ND	2.4E-07	0.0E+00	3.0E-07	2.7E-06	6.3E-10	4.3E-10	2.7E-08
1,2,3,4,7,8,9-HpCDF	1.2E-08	0.0E+00	ND	7.0E-08	0.0E+00	1.8E-07	1.7E-06	1.1E-10	7.4E-11	1.1E-08
1,2,3,4,7,8-HxCDD	8.4E-08	0.0E+00	ND	3.1E-07	0.0E+00	3.1E-07	2.9E-06	5.1E-10	3.5E-10	2.5E-08
1,2,3,4,7,8-HxCDF	2.8E-07	0.0E+00	ND	9.0E-07	0.0E+00	1.5E-06	1.4E-05	3.4E-09	2.4E-09	1.4E-07
1,2,3,6,7,8-HxCDD	2.7E-07	0.0E+00	ND	1.0E-06	0.0E+00	1.8E-06	1.7E-05	2.7E-09	1.8E-09	1.4E-07
1,2,3,6,7,8-HxCDF	2.7E-07	0.0E+00	ND	8.9E-07	0.0E+00	1.6E-06	1.4E-05	3.4E-09	2.3E-09	1.5E-07
1,2,3,7,8,9-HxCDD	1.6E-07	0.0E+00	ND	5.4E-07	0.0E+00	7.3E-07	6.7E-06	1.5E-09	1.0E-09	6.6E-08
1,2,3,7,8,9-HxCDF	1.5E-07	0.0E+00	ND	5.0E-07	0.0E+00	1.1E-06	1.1E-05	1.8E-09	1.3E-09	9.3E-08
1,2,3,7,8-PeCDD	8.9E-07	0.0E+00	ND	3.7E-06	0.0E+00	1.4E-05	1.3E-04	1.4E-08	9.7E-09	9.7E-07
1,2,3,7,8-PeCDF	8.3E-08	0.0E+00	ND	2.6E-07	0.0E+00	9.5E-07	8.9E-06	1.2E-09	8.2E-10	7.1E-08
2,3,4,6,7,8-HxCDF	2.1E-07	0.0E+00	ND	6.8E-07	0.0E+00	1.2E-06	1.1E-05	2.6E-09	1.8E-09	1.1E-07
2,3,4,7,8-PeCDF	9.1E-07	0.0E+00	ND	2.9E-06	0.0E+00	1.1E-05	1.1E-04	1.6E-08	1.1E-08	8.7E-07
2,3,7,8-TCDD	6.9E-07	0.0E+00	ND	1.7E-06	0.0E+00	9.1E-06	8.5E-05	9.9E-09	6.8E-09	6.5E-07
2,3,7,8-TCDF	2.3E-07	0.0E+00	ND	4.6E-07	0.0E+00	3.3E-06	3.0E-05	4.6E-09	3.2E-09	2.6E-07
Arsenic	4.5E-14	0.0E+00	5.5E-07	2.8E-07	0.0E+00	1.5E-08	2.1E-08	NC	NC	NC
Beryllium	2.7E-12	0.0E+00	2.4E-07	1.2E-08	0.0E+00	3.3E-10	1.4E-11	NC	NC	NC
Cadmium	1.2E-10	0.0E+00	5.7E-06	1.2E-05	0.0E+00	3.8E-08	9.5E-08	3.2E-10	9.1E-12	1.5E-09
Chromium	8.4E-12	0.0E+00	3.6E-11	6.6E-10	0.0E+00	1.0E-10	1.2E-09	NC	NC	NC
Lead	2.9E-08	0.0E+00	1.1E-05	1.9E-04	0.0E+00	1.6E-06	6.0E-05	NC	NC	NC
Nickel	1.0E-12	0.0E+00	1.8E-06	9.4E-08	0.0E+00	1.6E-08	1.2E-07	NC	NC	NC

Units 1 & 2 Calculations
Resident

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Residential Area	5
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

		Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Air Modeling Results	**Symbol**	**Units**													
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.46455E-06	4.37944E-06	0.000186393	0.000033865	1.93621E-06	1.37464E-06	1.61613E-06	1.46149E-06	1.1317E-06	1.40998E-06	9.83333E-07	8.84131E-07	8.59213E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	3.38523E-05	3.68356E-05	0.00075806	0.00023434	1.71645E-05	9.76055E-06	1.19425E-05	1.16923E-05	7.17437E-06	9.74894E-06	5.46667E-06	3.36044E-06	3.76898E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	0.000034625	3.70156E-05	0.000643109	0.000181585	2.26614E-05	1.47727E-05	1.84775E-05	1.91377E-05	1.34115E-05	1.6423E-05	1.44033E-05	8.52861E-06	1.03516E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000335306	0.000391544	0.006901513	0.002012835	0.000216809	0.00013562	0.000166552	0.0001782	0.00011969	0.000146841	0.00011235	7.13193E-05	8.42169E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.000879218	0.000800461	0.008591956	0.002852313	0.000510271	0.000446853	0.000701292	0.000475492	0.000425908	0.000607652	0.00078381	0.000317958	0.00045034
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.000860414	0.000780127	0.008545623	0.002814235	0.000495852	0.000441446	0.00068391	0.000468449	0.000421462	0.000594625	0.000749947	0.000319121	0.000443985
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.68845E-05	7.04722E-06	0.000311157	2.20675E-05	7.0269E-06	4.12962E-06	3.85475E-06	6.59223E-06	3.58509E-06	3.55522E-06	1.87667E-06	1.62769E-06	1.70537E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000150544	7.44283E-05	0.002883657	0.00022228	1.95931E-05	3.6231E-05	4.94079E-05	1.57333E-05	2.30601E-05	3.82578E-05	0.00005449	3.12193E-05	3.92822E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.000870941	0.000799849	0.008582527	0.002856068	0.000510282	0.000444023	0.000698883	0.0004744	0.000423892	0.000605529	0.000779117	0.00031358	0.000445597
Unitized air concentration - HgII			0.000836867	0.000780368	0.008522327	0.00282602	0.000495858	0.000425242	0.000670983	0.000460566	0.000405519	0.000580343	0.00073797	0.000293634	0.000419545
Unitized Dry deposition - HgII			0.000513978	0.000397487	0.009259773	0.001450035	0.000171102	0.000173203	0.000226938	0.000139525	0.000131513	0.000187547	0.00021364	0.000128137	0.000156247
Unitized Wet deposition - HgII			6.82945E-05	4.61633E-05	0.001260296	0.00017232	3.04645E-05	1.7167E-05	1.95452E-05	2.12377E-05	1.49035E-05	1.76076E-05	1.08633E-05	7.64211E-06	8.33146E-06
Unitized air concentration - Hg0			0.000858408	0.000793558	0.008547674	0.002847923	0.00050834	0.000438557	0.000692329	0.000473055	0.000420543	0.000600363	0.00076766	0.00030652	0.000437305
Unitized Dry deposition - Hg0			0.000392447	0.000191023	0.007891281	0.000573655	4.67207E-05	9.01547E-05	0.00012272	3.66957E-05	5.57671E-05	9.41557E-05	0.00013191	7.59329E-05	9.58428E-05
Unitized Wet deposition - Hg0			1.46364E-07	0.00000003	8.52857E-07	8.75E-08	1.72069E-07	8.30802E-08	4.94966E-08	2.4883E-07	9.72936E-08	5.7478E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	3.80891E-05	4.13933E-05	0.000829501	0.000215453	2.45983E-05	1.61476E-05	2.00938E-05	2.05989E-05	1.45434E-05	1.7833E-05	1.53867E-05	9.41323E-06	1.12102E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000369159	0.000428381	0.007659573	0.002247173	0.000233974	0.000145381	0.000178495	0.000189893	0.000126864	0.000156591	0.000117813	7.46801E-05	8.7986E-05

Emission Rates

Units 1 & 2

Compound	PM10 g/s	TSP g/s
Mercury, elemental	2.46E-03	2.46E-03
Mercury, methyl	2.46E-03	2.46E-03
Mercury, divalent	2.46E-03	2.46E-03
1,2,3,4,6,7,8,9-OCDD	4.00E-08	4.00E-08
1,2,3,4,6,7,8,9-OCDF	1.14E-08	1.14E-08
1,2,3,4,6,7,8-HpCDD	4.84E-08	4.84E-08
1,2,3,4,6,7,8-HpCDF	1.01E-07	1.01E-07
1,2,3,4,7,8,9-HpCDF	7.74E-09	7.74E-09
1,2,3,4,7,8-HxCDD	9.59E-09	9.59E-09
1,2,3,4,7,8-HxCDF	5.71E-08	5.71E-08
1,2,3,6,7,8-HxCDD	1.30E-08	1.30E-08
1,2,3,6,7,8-HxCDF	6.01E-08	6.01E-08
1,2,3,7,8,9-HxCDD	1.04E-08	1.04E-08
1,2,3,7,8,9-HxCDF	8.56E-09	8.56E-09
1,2,3,7,8-PeCDD	1.83E-08	1.83E-08
1,2,3,7,8-PeCDF	6.24E-08	6.24E-08
2,3,4,6,7,8-HxCDF	4.18E-08	4.18E-08
2,3,4,7,8-PeCDF	6.88E-08	6.88E-08
2,3,7,8-TCDD	7.79E-09	7.79E-09
2,3,7,8-TCDF	3.39E-08	3.39E-08
Arsenic	8.63E-05	8.63E-05
Beryllium	8.57E-06	8.57E-06
Cadmium	4.09E-04	4.09E-04
Chromium	4.41E-04	4.41E-04
Lead	1.61E-02	1.61E-02
Nickel	3.89E-04	3.89E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Residential Area	West Loch	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	2.53E-05	2.09E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, divalent	1.28E-03	2.60E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	9.95E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	4.47E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.91E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	1.58E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.29E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	7.83E-10	6.16E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	4.66E-09	2.31E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.06E-09	2.62E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	4.91E-09	2.45E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.06E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	7.03E-10	3.66E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	1.50E-09	1.77E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	5.23E-09	5.21E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	3.41E-09	1.71E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	5.69E-09	1.00E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	6.62E-10	8.92E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	2.91E-09	1.68E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	2.38E-05	6.09E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Summary of EPCs (Non Cancer)	Residential Area	West Loch	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_{a}	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	4.96E-05	2.09E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, divalent	2.56E-03	2.60E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	9.95E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	4.47E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.91E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	1.58E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.29E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.36E-09	6.16E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	8.09E-09	2.31E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.84E-09	2.62E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	8.53E-09	2.45E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.06E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.22E-09	3.66E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	2.60E-09	1.77E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	9.08E-09	5.21E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	5.93E-09	1.71E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	9.85E-09	1.00E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	1.13E-09	8.92E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	4.95E-09	1.68E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	2.44E-05	6.09E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Adult 1

H-POWER Expansion **Resident Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	5.36E-10	2.68E-05	Residential Area
Water	NC	NC	West Loch
Air	3.97E-09	4.00E-05	Residential Area
Produce	6.50E-09	4.68E-04	Residential Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**1.10E-08**	**5.35E-04**	

NC - Not Calculated

H-POWER Expansion **Resident Adult**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	1.10E-08		5.35E-04	
Mercury, Elemental	NC		5.25E-09	0.0010%
Mercury, Methyl	NC		1.58E-06	0.2962%
Mercury, Divalent	NC		3.05E-05	5.7029%
1,2,3,4,6,7,8,9-OCDD	1.29E-12	0.0117%	1.40E-08	0.0026%
1,2,3,4,6,7,8,9-OCDF	3.67E-13	0.0033%	3.98E-09	0.0007%
1,2,3,4,6,7,8-HpCDD	5.14E-11	0.4668%	5.54E-07	0.1036%
1,2,3,4,6,7,8-HpCDF	1.12E-10	1.0130%	1.23E-06	0.2292%
1,2,3,4,7,8,9-HpCDF	1.06E-11	0.0964%	1.26E-07	0.0236%
1,2,3,4,7,8-HxCDD	1.08E-10	0.9786%	1.19E-06	0.2227%
1,2,3,4,7,8-HxCDF	6.17E-10	5.6036%	6.75E-06	1.2623%
1,2,3,6,7,8-HxCDD	1.49E-10	1.3498%	1.66E-06	0.3101%
1,2,3,6,7,8-HxCDF	6.51E-10	5.9090%	7.12E-06	1.3324%
1,2,3,7,8,9-HxCDD	1.15E-10	1.0412%	1.26E-06	0.2355%
1,2,3,7,8,9-HxCDF	9.49E-11	0.8615%	1.05E-06	0.1961%
1,2,3,7,8-PeCDD	2.20E-09	19.9637%	2.52E-05	4.7057%
1,2,3,7,8-PeCDF	2.05E-10	1.8625%	2.27E-06	0.4241%
2,3,4,6,7,8-HxCDF	4.53E-10	4.1153%	4.96E-06	0.9286%
2,3,4,7,8-PeCDF	2.26E-09	20.4924%	2.50E-05	4.6820%
2,3,7,8-TCDD	7.77E-10	7.0545%	8.22E-06	1.5379%
2,3,7,8-TCDF	3.03E-10	2.7511%	3.11E-06	0.5825%
Arsenic	8.62E-10	7.8257%	8.68E-06	1.6226%
Beryllium	1.81E-11	0.1641%	9.20E-07	0.1721%
Cadmium	1.29E-09	11.7188%	1.21E-05	2.2626%
Chromium	NC		3.07E-09	0.0006%
Lead	7.40E-10	6.7170%	3.87E-04	72.3813%
Nickel	NC		4.18E-06	0.7813%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.53E-05	2.09E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, Divalent	1.28E-03	2.60E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	9.95E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	4.47E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.91E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	1.58E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.29E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	7.83E-10	6.16E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	4.66E-09	2.31E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.06E-09	2.62E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	4.91E-09	2.45E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.06E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	7.03E-10	3.66E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	1.50E-09	1.77E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	5.23E-09	5.21E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	3.41E-09	1.71E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	5.69E-09	1.00E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	6.62E-10	8.92E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	2.91E-09	1.68E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	2.38E-05	6.09E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.96E-05	2.09E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, Divalent	2.56E-03	2.60E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	9.95E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	4.47E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.91E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	1.58E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.29E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.36E-09	6.16E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	8.09E-09	2.31E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.84E-09	2.62E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	8.53E-09	2.45E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.06E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.22E-09	3.66E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	2.60E-09	1.77E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	9.08E-09	5.21E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	5.93E-09	1.71E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	9.85E-09	1.00E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	1.13E-09	8.92E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	4.95E-09	1.68E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	2.44E-05	6.09E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

H-POWER Expansion **Resident Adult**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	8.61E-14	0.00E+00	4.58E-13	7.48E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.45E-14	0.00E+00	1.30E-13	2.12E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	3.47E-12	0.00E+00	1.85E-11	2.94E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	7.26E-12	0.00E+00	3.86E-11	6.57E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.59E-13	0.00E+00	2.96E-12	7.10E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	6.90E-12	0.00E+00	3.66E-11	6.43E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	4.10E-11	0.00E+00	2.18E-10	3.58E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	9.32E-12	0.00E+00	4.96E-11	8.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	4.32E-11	0.00E+00	2.29E-10	3.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	7.46E-12	0.00E+00	3.98E-11	6.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	6.19E-12	0.00E+00	3.27E-11	5.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	1.32E-10	0.00E+00	7.00E-10	1.37E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.38E-11	0.00E+00	7.15E-11	1.20E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	3.00E-11	0.00E+00	1.59E-10	2.64E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	1.50E-10	0.00E+00	7.88E-10	1.32E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	5.83E-11	0.00E+00	2.98E-10	4.21E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	2.56E-11	0.00E+00	1.30E-10	1.48E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	5.25E-17	0.00E+00	3.26E-10	5.36E-10	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	1.81E-11	ND	ND	ND	ND	ND	ND	ND
Cadmium	4.04E-15	0.00E+00	6.47E-10	6.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	5.31E-14	0.00E+00	1.70E-10	5.70E-10	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ND - Not Determined			3.97384E-09	6.50351E-09						

H-POWER Expansion **Resident Adult**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.3E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.8E-07	0.0E+00	NC	9.0E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.2E-05	0.0E+00	3.0E-06	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	2.3E-09	0.0E+00	ND	1.2E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.6E-10	0.0E+00	ND	3.3E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	9.4E-08	0.0E+00	ND	4.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	2.0E-07	0.0E+00	ND	1.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.5E-08	0.0E+00	ND	1.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	1.9E-07	0.0E+00	ND	1.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.1E-06	0.0E+00	ND	5.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.5E-07	0.0E+00	ND	1.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.2E-06	0.0E+00	ND	6.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	2.0E-07	0.0E+00	ND	1.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.7E-07	0.0E+00	ND	8.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.6E-06	0.0E+00	ND	2.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.7E-07	0.0E+00	ND	1.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	8.1E-07	0.0E+00	ND	4.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	4.0E-06	0.0E+00	ND	2.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.5E-06	0.0E+00	ND	6.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	6.8E-07	0.0E+00	ND	2.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	2.7E-13	0.0E+00	5.9E-06	2.8E-06	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	5.7E-12	0.0E+00	8.8E-07	4.1E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	5.0E-11	0.0E+00	4.2E-06	7.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.2E-11	0.0E+00	1.7E-10	2.9E-09	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	3.4E-08	0.0E+00	2.2E-05	3.6E-04	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	1.3E-12	0.0E+00	4.0E-06	1.9E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult Resident Child Farmer Adult Farmer Child Fisher Adult Fisher Child

Select a receptor: Resident Child 2

H-POWER Expansion **Resident Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.00E-09	2.50E-04	Residential Area
Water	NC	NC	West Loch
Air	1.98E-09	9.96E-05	Residential Area
Produce	4.87E-09	1.76E-03	Residential Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**7.85E-09**	**2.11E-03**	

NC - Not Calculated

H-POWER Expansion **Resident Child**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	7.85E-09		2.11E-03	
Mercury, Elemental	NC		1.31E-08	0.0006%
Mercury, Methyl	NC		1.05E-05	0.5001%
Mercury, Divalent	NC		1.80E-04	8.5635%
1,2,3,4,6,7,8,9-OCDD	9.48E-13	0.0121%	6.55E-08	0.0031%
1,2,3,4,6,7,8,9-OCDF	2.69E-13	0.0034%	1.86E-08	0.0009%
1,2,3,4,6,7,8-HpCDD	3.77E-11	0.4806%	2.60E-06	0.1236%
1,2,3,4,6,7,8-HpCDF	8.20E-11	1.0441%	5.70E-06	0.2705%
1,2,3,4,7,8,9-HpCDF	7.83E-12	0.0997%	5.57E-07	0.0265%
1,2,3,4,7,8-HxCDD	7.92E-11	1.0090%	5.51E-06	0.2616%
1,2,3,4,7,8-HxCDF	4.53E-10	5.7769%	3.15E-05	1.4980%
1,2,3,6,7,8-HxCDD	1.09E-10	1.3922%	7.63E-06	0.3623%
1,2,3,6,7,8-HxCDF	4.78E-10	6.0929%	3.33E-05	1.5809%
1,2,3,7,8,9-HxCDD	8.42E-11	1.0730%	5.85E-06	0.2779%
1,2,3,7,8,9-HxCDF	6.98E-11	0.8890%	4.87E-06	0.2314%
1,2,3,7,8-PeCDD	1.62E-09	20.6275%	1.14E-04	5.4327%
1,2,3,7,8-PeCDF	1.51E-10	1.9264%	1.06E-05	0.5037%
2,3,4,6,7,8-HxCDF	3.33E-10	4.2434%	2.32E-05	1.1011%
2,3,4,7,8-PeCDF	1.66E-09	21.1745%	1.17E-04	5.5459%
2,3,7,8-TCDD	5.73E-10	7.2970%	3.96E-05	1.8791%
2,3,7,8-TCDF	2.24E-10	2.8486%	1.56E-05	0.7389%
Arsenic	5.63E-10	7.1663%	2.50E-05	1.1897%
Beryllium	8.99E-12	0.1145%	2.34E-06	0.1111%
Cadmium	8.03E-10	10.2265%	4.00E-05	1.8981%
Chromium	NC		1.14E-08	0.0005%
Lead	5.10E-10	6.5024%	1.42E-03	67.3938%
Nickel	NC		1.06E-05	0.5046%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.53E-05	2.09E-10	NC	7.89E-08	2.59E-07	3.57E-09	1.25E-09	7.13E-10	7.13E-10	1.70E-11	1.42E-03
Mercury, Divalent	1.28E-03	2.60E-09	4.59E-06	7.22E-06	4.63E-06	1.28E-06	4.71E-07	2.42E-07	2.42E-07	5.81E-09	2.60E-09
1,2,3,4,6,7,8,9-OCDD	3.26E-09	9.95E-17	1.14E-10	7.83E-11	1.60E-12	2.13E-11	6.48E-12	6.46E-14	3.69E-14	3.09E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	9.26E-10	4.47E-17	3.24E-11	2.22E-11	7.19E-13	7.61E-12	2.32E-12	2.35E-14	1.34E-14	1.11E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	3.95E-09	1.91E-16	1.38E-10	9.25E-11	2.15E-12	2.68E-11	8.06E-12	1.00E-13	5.73E-14	4.28E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	8.24E-09	1.58E-15	2.89E-10	2.06E-10	6.18E-12	1.72E-10	5.31E-11	4.03E-13	2.30E-13	2.27E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	6.35E-10	1.29E-16	2.21E-11	2.23E-11	4.76E-13	4.93E-11	1.56E-11	3.63E-14	2.08E-14	4.93E-12	2.37E-12
1,2,3,4,7,8-HxCDD	7.83E-10	6.16E-17	2.73E-11	2.02E-11	4.75E-13	1.41E-11	4.39E-12	2.70E-14	1.54E-14	1.75E-12	3.19E-13
1,2,3,4,7,8-HxCDF	4.66E-09	2.31E-15	1.63E-10	1.12E-10	4.33E-12	1.31E-10	4.03E-11	3.61E-13	2.07E-13	1.87E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.06E-09	2.62E-16	3.71E-11	2.82E-11	8.39E-13	3.57E-11	1.11E-11	6.05E-14	3.46E-14	4.26E-12	6.58E-12
1,2,3,6,7,8-HxCDF	4.91E-09	2.45E-15	1.71E-10	1.19E-10	4.56E-12	1.43E-10	4.39E-11	3.85E-13	2.20E-13	2.02E-11	1.20E-10
1,2,3,7,8,9-HxCDD	8.47E-10	2.06E-16	2.97E-11	2.12E-11	6.72E-13	1.94E-11	5.99E-12	4.63E-14	2.65E-14	2.58E-12	5.18E-12
1,2,3,7,8,9-HxCDF	7.03E-10	3.66E-16	2.44E-11	1.76E-11	6.53E-13	2.91E-11	9.01E-12	6.16E-14	3.52E-14	3.79E-12	1.79E-11
1,2,3,7,8-PeCDD	1.50E-09	1.77E-15	5.23E-11	4.29E-11	1.70E-12	1.30E-10	4.08E-11	1.78E-13	1.02E-13	1.49E-11	4.59E-11
1,2,3,7,8-PeCDF	5.23E-09	5.21E-15	1.78E-10	1.25E-10	5.42E-12	3.82E-10	1.18E-10	7.83E-13	4.48E-13	5.03E-11	1.76E-10
2,3,4,6,7,8-HxCDF	3.41E-09	1.71E-15	1.19E-10	8.28E-11	3.17E-12	1.03E-10	3.16E-11	2.70E-13	1.54E-13	1.44E-11	8.36E-11
2,3,4,7,8-PeCDF	5.69E-09	1.00E-14	1.96E-10	1.38E-10	6.98E-12	4.26E-10	1.32E-10	9.22E-13	5.27E-13	5.69E-11	2.03E-10
2,3,7,8-TCDD	6.62E-10	8.92E-16	2.22E-11	1.32E-11	7.12E-13	7.25E-11	2.24E-11	1.65E-13	9.40E-14	1.01E-11	3.07E-11
2,3,7,8-TCDF	2.91E-09	1.68E-14	9.68E-11	4.63E-11	4.53E-12	3.69E-10	1.13E-10	1.12E-12	6.40E-13	5.84E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.18E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.37E-10	5.58E-12	1.17E-09	9.52E-07
Chromium	2.38E-05	6.09E-09	1.24E-06	8.68E-06	8.29E-08	8.47E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.28E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.96E-05	2.09E-10	NC	1.56E-07	5.17E-07	6.97E-09	2.43E-09	1.40E-09	1.40E-09	3.34E-11	1.42E-03
Mercury, Divalent	2.56E-03	2.60E-09	4.59E-06	9.08E-06	9.26E-06	2.48E-06	8.85E-07	4.83E-07	4.83E-07	1.16E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	5.68E-09	9.95E-17	1.14E-10	7.85E-11	2.78E-12	2.28E-11	6.73E-12	1.12E-13	6.43E-14	4.42E-12	1.46E-13
1,2,3,4,6,7,8,9-OCDF	1.61E-09	4.47E-17	3.24E-11	2.23E-11	1.25E-12	8.15E-12	2.41E-12	4.09E-14	2.33E-14	1.59E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	6.87E-09	1.91E-16	1.38E-10	9.28E-11	3.75E-12	2.91E-11	8.46E-12	1.75E-13	9.98E-14	6.33E-12	5.26E-13
1,2,3,4,6,7,8-HpCDF	1.43E-08	1.58E-15	2.89E-10	2.08E-10	1.08E-11	1.82E-10	5.48E-11	7.02E-13	4.01E-13	3.10E-11	2.90E-11
1,2,3,4,7,8,9-HpCDF	1.10E-09	1.29E-16	2.21E-11	2.24E-11	8.29E-13	5.02E-11	1.57E-11	6.32E-14	3.61E-14	5.67E-12	2.37E-12
1,2,3,4,7,8-HxCDD	1.36E-09	6.16E-17	2.73E-11	2.03E-11	8.27E-13	1.48E-11	4.50E-12	4.69E-14	2.68E-14	2.30E-12	3.19E-13
1,2,3,4,7,8-HxCDF	8.09E-09	2.31E-15	1.63E-10	1.14E-10	7.54E-12	1.40E-10	4.18E-11	6.28E-13	3.59E-13	2.60E-11	1.13E-10
1,2,3,6,7,8-HxCDD	1.84E-09	2.62E-16	3.71E-11	2.84E-11	1.46E-12	3.72E-11	1.14E-11	1.05E-13	6.01E-14	5.50E-12	6.58E-12
1,2,3,6,7,8-HxCDF	8.53E-09	2.45E-15	1.71E-10	1.20E-10	7.94E-12	1.52E-10	4.55E-11	6.68E-13	3.82E-13	2.80E-11	1.20E-10
1,2,3,7,8,9-HxCDD	1.47E-09	2.06E-16	2.97E-11	2.13E-11	1.17E-12	2.05E-11	6.18E-12	8.04E-14	4.60E-14	3.53E-12	5.18E-12
1,2,3,7,8,9-HxCDF	1.22E-09	3.66E-16	2.44E-11	1.78E-11	1.14E-12	3.06E-11	9.27E-12	1.07E-13	6.11E-14	5.04E-12	1.79E-11
1,2,3,7,8-PeCDD	2.60E-09	1.77E-15	5.23E-11	4.35E-11	2.96E-12	1.35E-10	4.16E-11	3.09E-13	1.77E-13	1.85E-11	4.59E-11
1,2,3,7,8-PeCDF	9.08E-09	5.21E-15	1.78E-10	1.27E-10	9.45E-12	4.01E-10	1.22E-10	1.36E-12	7.77E-13	6.62E-11	1.76E-10
2,3,4,6,7,8-HxCDF	5.93E-09	1.71E-15	1.19E-10	8.37E-11	5.52E-12	1.09E-10	3.27E-11	4.69E-13	2.68E-13	1.99E-11	8.36E-11
2,3,4,7,8-PeCDF	9.85E-09	1.00E-14	1.96E-10	1.41E-10	1.21E-11	4.49E-10	1.36E-10	1.60E-12	9.12E-13	7.55E-11	2.03E-10
2,3,7,8-TCDD	1.13E-09	8.92E-16	2.22E-11	1.34E-11	1.24E-12	7.63E-11	2.31E-11	2.81E-13	1.60E-13	1.33E-11	3.07E-11
2,3,7,8-TCDF	4.95E-09	1.68E-14	9.68E-11	4.88E-11	7.88E-12	3.98E-10	1.18E-10	1.91E-12	1.09E-12	8.02E-11	1.67E-10
Arsenic	5.97E-11	2.20E-10	2.43E-07	1.69E-06	4.77E-12	5.95E-08	2.70E-09	NC	NC	NC	2.51E-08
Beryllium	8.26E-09	2.20E-11	2.41E-08	1.67E-07	1.23E-10	2.95E-09	4.01E-12	NC	NC	NC	1.36E-09
Cadmium	1.81E-08	1.05E-09	1.15E-06	7.99E-06	1.16E-08	1.69E-08	1.38E-09	2.38E-10	5.59E-12	1.17E-09	9.52E-07
Chromium	2.44E-05	6.09E-09	1.24E-06	8.71E-06	1.08E-07	8.48E-07	3.47E-07	NC	NC	NC	1.16E-07
Lead	1.06E-05	4.10E-08	4.54E-05	3.16E-04	9.56E-07	1.67E-06	2.10E-06	NC	NC	NC	3.69E-09
Nickel	1.85E-08	1.00E-09	1.09E-06	7.58E-06	1.48E-09	8.03E-07	2.02E-07	NC	NC	NC	7.80E-08

H-POWER Expansion **Resident Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	1.61E-13	0.00E+00	2.28E-13	5.60E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	4.57E-14	0.00E+00	6.47E-14	1.59E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	6.49E-12	0.00E+00	9.20E-12	2.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.35E-11	0.00E+00	1.92E-11	4.92E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	1.04E-12	0.00E+00	1.47E-12	5.31E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	1.29E-11	0.00E+00	1.82E-11	4.81E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	7.66E-11	0.00E+00	1.08E-10	2.69E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	1.74E-11	0.00E+00	2.47E-11	6.72E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	8.07E-11	0.00E+00	1.14E-10	2.83E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	1.39E-11	0.00E+00	1.98E-11	5.05E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	1.16E-11	0.00E+00	1.63E-11	4.20E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.47E-10	0.00E+00	3.48E-10	1.02E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	2.58E-11	0.00E+00	3.55E-11	8.99E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.61E-11	0.00E+00	7.93E-11	1.98E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.81E-10	0.00E+00	3.92E-10	9.90E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.09E-10	0.00E+00	1.48E-10	3.16E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	4.78E-11	0.00E+00	6.44E-11	1.11E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	9.81E-17	0.00E+00	1.62E-10	4.00E-10	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.99E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	7.55E-15	0.00E+00	3.22E-10	4.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	9.92E-14	0.00E+00	8.46E-11	4.26E-10	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.3E-08	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.3E-06	0.0E+00	NC	4.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-04	0.0E+00	7.6E-06	6.4E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	2.2E-08	0.0E+00	ND	4.4E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.2E-09	0.0E+00	ND	1.2E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	8.8E-07	0.0E+00	ND	1.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	1.8E-06	0.0E+00	ND	3.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	1.4E-07	0.0E+00	ND	4.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	1.7E-06	0.0E+00	ND	3.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.0E-05	0.0E+00	ND	2.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	2.4E-06	0.0E+00	ND	5.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.1E-05	0.0E+00	ND	2.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.9E-06	0.0E+00	ND	4.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	1.6E-06	0.0E+00	ND	3.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.3E-05	0.0E+00	ND	8.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.5E-06	0.0E+00	ND	7.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	7.6E-06	0.0E+00	ND	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	3.8E-05	0.0E+00	ND	7.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.4E-05	0.0E+00	ND	2.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	6.3E-06	0.0E+00	ND	9.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	2.5E-12	0.0E+00	1.5E-05	1.0E-05	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	5.3E-11	0.0E+00	2.2E-06	1.5E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	4.6E-10	0.0E+00	1.0E-05	3.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.1E-10	0.0E+00	4.2E-10	1.1E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	3.2E-07	0.0E+00	5.5E-05	1.4E-03	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	1.2E-11	0.0E+00	9.9E-06	7.0E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Unit 3 Calculations
Resident

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil, air, produce exposure	Residential Area	5
Select the location for beef, dairy, pork, eggs, poultry raising	Poultry Area	2
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

Unitized Air Modeling Results	Symbol	Units Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.12364E-06	4.68833E-06	0.000169337	4.16325E-05	2.06069E-06	1.40845E-06	1.67361E-06	1.55181E-06	1.16504E-06	1.46067E-06	0.00000106	8.98971E-07	8.87714E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	2.69505E-05	3.55728E-05	0.000716117	0.000247493	1.70817E-05	9.49959E-06	1.17642E-05	1.16793E-05	6.97918E-06	9.58306E-06	0.00000572	3.24743E-06	3.72772E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	4.01355E-05	4.15061E-05	0.001246786	0.000260698	2.59769E-05	1.64887E-05	1.99835E-05	2.20146E-05	1.49788E-05	1.7859E-05	1.38967E-05	9.66918E-06	1.13007E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000374533	0.000416787	0.013351707	0.002869695	0.000235428	0.000141544	0.000172559	0.000192109	0.000124746	0.000151948	0.000110333	7.397E-05	8.61672E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.001269324	0.001223517	0.016980554	0.005055578	0.000866141	0.000683538	0.000882264	0.000824851	0.000652322	0.000795879	0.000681757	0.000502784	0.000599816
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.001264637	0.001202342	0.016809874	0.004971138	0.000856098	0.000660874	0.000849106	0.000808552	0.000627353	0.000763562	0.000641317	0.000485795	0.000569734
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.96332E-05	0.00000737	0.000334916	0.000024585	7.71414E-06	4.28608E-06	3.96244E-06	6.90681E-06	3.65888E-06	3.64028E-06	0.00000178	1.65668E-06	1.69834E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000185641	0.000101949	0.006451413	0.000447955	2.51769E-05	4.15559E-05	5.65554E-05	1.96172E-05	2.66416E-05	4.39255E-05	5.80167E-05	3.51009E-05	4.3353E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.001254956	0.001220427	0.01692135	0.005057125	0.000864098	0.000680432	0.000879414	0.000823217	0.000651256	0.000794129	0.000675737	0.000497788	0.000595199
Unitized air concentration - HgII			0.001206627	0.00118563	0.016733094	0.004981375	0.000831724	0.000638154	0.000834961	0.000780166	0.000601808	0.000746729	0.000630557	0.00045772	0.000551989
Unitized Dry deposition - HgII			0.000598224	0.000521713	0.018005304	0.002485268	0.000212502	0.000198084	0.000258185	0.000170194	0.000150836	0.00021375	0.000224297	0.000142514	0.000171397
Unitized Wet deposition - HgII			7.23873E-05	4.65256E-05	0.001319981	0.000183213	3.20955E-05	1.74755E-05	2.00334E-05	2.23946E-05	1.51276E-05	1.79687E-05	1.14833E-05	7.71625E-06	8.54413E-06
Unitized air concentration - Hg0			0.001235513	0.001209388	0.016765936	0.00503163	0.000861846	0.000674206	0.000870888	0.000822416	0.000647763	0.00078768	0.00066027	0.000489659	0.000585415
Unitized Dry deposition - Hg0			0.00047757	0.000258017	0.01749374	0.001151858	5.74728E-05	0.000100927	0.000138614	4.32802E-05	6.24654E-05	0.000106344	0.000140533	8.29958E-05	0.000103717
Unitized Wet deposition - Hg0			1.45455E-07	3.22222E-08	8.97143E-07	0.000000095	1.37241E-07	6.43285E-08	4.0757E-08	1.81489E-07	7.03214E-08	4.4703E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	4.32577E-05	4.61939E-05	0.001416126	0.00030233	2.80372E-05	1.7897E-05	2.16572E-05	2.35669E-05	1.61437E-05	1.93197E-05	0.00001496	1.05679E-05	1.2188E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000401483	0.000452359	0.014067826	0.003117188	0.00025251	0.000151043	0.000184323	0.000203789	0.000131725	0.000161531	0.000116053	7.72175E-05	8.98954E-05

Emission Rates

Unit 3

Compound	PM10 g/s	TSP g/s
Mercury, elemental	1.47E-03	1.47E-03
Mercury, methyl	1.47E-03	1.47E-03
Mercury, divalent	1.47E-03	1.47E-03
1,2,3,4,6,7,8,9-OCDD	8.42E-08	8.42E-08
1,2,3,4,6,7,8,9-OCDF	9.02E-09	9.02E-09
1,2,3,4,6,7,8-HpCDD	4.77E-08	4.77E-08
1,2,3,4,6,7,8-HpCDF	1.77E-08	1.77E-08
1,2,3,4,7,8,9-HpCDF	2.87E-09	2.87E-09
1,2,3,4,7,8-HxCDD	2.09E-09	2.09E-09
1,2,3,4,7,8-HxCDF	6.69E-09	6.69E-09
1,2,3,6,7,8-HxCDD	6.73E-09	6.73E-09
1,2,3,6,7,8-HxCDF	6.60E-09	6.60E-09
1,2,3,7,8,9-HxCDD	3.93E-09	3.93E-09
1,2,3,7,8,9-HxCDF	3.39E-09	3.39E-09
1,2,3,7,8-PeCDD	2.01E-09	2.01E-09
1,2,3,7,8-PeCDF	5.23E-09	5.23E-09
2,3,4,6,7,8-HxCDF	4.95E-09	4.95E-09
2,3,4,7,8-PeCDF	6.12E-09	6.12E-09
2,3,7,8-TCDD	9.90E-10	9.90E-10
2,3,7,8-TCDF	3.06E-09	3.06E-09
Arsenic	7.57E-06	7.57E-06
Beryllium	2.20E-06	2.20E-06
Cadmium	5.25E-04	5.25E-04
Chromium	8.80E-05	8.80E-05
Lead	7.36E-03	7.36E-03
Nickel	1.70E-04	1.70E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Residential Area	West Loch	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	2.48E-05	1.43E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, divalent	1.26E-03	1.77E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.32E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	3.93E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.08E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.07E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	5.34E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	2.42E-10	1.49E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	7.82E-10	3.01E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.51E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	7.73E-10	2.99E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	4.52E-10	8.64E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	1.62E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	2.42E-10	2.18E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	6.83E-10	4.93E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	5.81E-10	2.25E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	7.77E-10	1.01E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	1.49E-10	1.30E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	4.79E-10	1.75E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	6.58E-06	1.26E-09	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Summary of EPCs (Non Cancer)	Residential Area	West Loch	Residential Area	Residential Area	Residential Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	Poultry Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	4.86E-05	1.43E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, divalent	2.51E-03	1.77E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.32E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	3.93E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.08E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.07E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	5.34E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	4.21E-10	1.49E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.36E-09	3.01E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.51E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.34E-09	2.99E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	7.85E-10	8.64E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	1.62E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	4.19E-10	2.18E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	1.19E-09	4.93E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.01E-09	2.25E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	1.34E-09	1.01E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	2.54E-10	1.30E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	8.16E-10	1.75E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	6.75E-06	1.26E-09	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Adult 1

H-POWER Expansion **Resident Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.04E-10	1.49E-05	Residential Area
Water	NC	NC	West Loch
Air	2.30E-09	3.49E-05	Residential Area
Produce	2.51E-09	2.80E-04	Residential Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**4.91E-09**	**3.29E-04**	

NC - Not Calculated

H-POWER Expansion **Resident Adult**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	4.91E-09		3.29E-04	
Mercury, Elemental	NC		5.53E-09	0.0017%
Mercury, Methyl	NC		1.55E-06	0.4711%
Mercury, Divalent	NC		3.07E-05	9.3313%
1,2,3,4,6,7,8,9-OCDD	4.23E-12	0.0860%	4.22E-08	0.0128%
1,2,3,4,6,7,8,9-OCDF	4.52E-13	0.0092%	4.51E-09	0.0014%
1,2,3,4,6,7,8-HpCDD	7.84E-11	1.5957%	7.76E-07	0.2355%
1,2,3,4,6,7,8-HpCDF	3.04E-11	0.6189%	3.09E-07	0.0939%
1,2,3,4,7,8,9-HpCDF	6.33E-12	0.1289%	7.20E-08	0.0219%
1,2,3,4,7,8-HxCDD	3.68E-11	0.7494%	3.79E-07	0.1149%
1,2,3,4,7,8-HxCDF	1.13E-10	2.2993%	1.14E-06	0.3472%
1,2,3,6,7,8-HxCDD	1.21E-10	2.4598%	1.26E-06	0.3819%
1,2,3,6,7,8-HxCDF	1.12E-10	2.2741%	1.13E-06	0.3439%
1,2,3,7,8,9-HxCDD	6.75E-11	1.3734%	6.86E-07	0.2082%
1,2,3,7,8,9-HxCDF	5.92E-11	1.2046%	6.11E-07	0.1854%
1,2,3,7,8-PeCDD	3.84E-10	7.8230%	4.16E-06	1.2636%
1,2,3,7,8-PeCDF	2.78E-11	0.5648%	2.91E-07	0.0884%
2,3,4,6,7,8-HxCDF	8.40E-11	1.7104%	8.53E-07	0.2590%
2,3,4,7,8-PeCDF	3.22E-10	6.5510%	3.37E-06	1.0234%
2,3,7,8-TCDD	1.68E-10	3.4171%	1.74E-06	0.5288%
2,3,7,8-TCDF	4.72E-11	0.9604%	4.80E-07	0.1457%
Arsenic	1.16E-10	2.3700%	1.26E-06	0.3812%
Beryllium	8.18E-12	0.1666%	4.13E-07	0.1253%
Cadmium	2.63E-09	53.4289%	2.37E-05	7.2028%
Chromium	NC		8.70E-10	0.0003%
Lead	5.02E-10	10.2085%	2.51E-04	76.2628%
Nickel	NC		3.19E-06	0.9677%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.48E-05	1.43E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, Divalent	1.26E-03	1.77E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.32E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	3.93E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.08E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.07E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	5.34E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	2.42E-10	1.49E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	7.82E-10	3.01E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.51E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	7.73E-10	2.99E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	4.52E-10	8.64E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	1.62E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	2.42E-10	2.18E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	6.83E-10	4.93E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	5.81E-10	2.25E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	7.77E-10	1.01E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	1.49E-10	1.30E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	4.79E-10	1.75E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	6.58E-06	1.26E-09	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.86E-05	1.43E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, Divalent	2.51E-03	1.77E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.32E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	3.93E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.08E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.07E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	5.34E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	4.21E-10	1.49E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.36E-09	3.01E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.51E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.34E-09	2.99E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	7.85E-10	8.64E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	1.62E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	4.19E-10	2.18E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	1.19E-09	4.93E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.01E-09	2.25E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	1.34E-09	1.01E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	2.54E-10	1.30E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	8.16E-10	1.75E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	6.75E-06	1.26E-09	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

H-POWER Expansion **Resident Adult**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	2.55E-13	0.00E+00	1.71E-12	2.26E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.73E-14	0.00E+00	1.83E-13	2.42E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	4.81E-12	0.00E+00	3.23E-11	4.14E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.79E-12	0.00E+00	1.20E-11	1.66E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	2.98E-13	0.00E+00	1.94E-12	4.09E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	2.13E-12	0.00E+00	1.42E-11	2.05E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	6.88E-12	0.00E+00	4.53E-11	6.08E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	6.85E-12	0.00E+00	4.55E-11	6.85E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	6.81E-12	0.00E+00	4.46E-11	6.03E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	3.98E-12	0.00E+00	2.66E-11	3.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	3.57E-12	0.00E+00	2.29E-11	3.27E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.13E-11	0.00E+00	1.36E-10	2.27E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.80E-12	0.00E+00	1.06E-11	1.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.12E-12	0.00E+00	3.35E-11	4.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.05E-11	0.00E+00	1.24E-10	1.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.31E-11	0.00E+00	6.70E-11	8.78E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	4.22E-12	0.00E+00	2.07E-11	2.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	6.40E-18	0.00E+00	5.05E-11	6.59E-11	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.18E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	7.20E-15	0.00E+00	1.47E-09	1.16E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	3.36E-14	0.00E+00	1.37E-10	3.64E-10	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined 2.30259E-09 2.50767E-09

H-POWER Expansion **Resident Adult**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.5E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.7E-07	0.0E+00	NC	8.9E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-05	0.0E+00	3.2E-06	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	6.9E-09	0.0E+00	ND	3.5E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	7.4E-10	0.0E+00	ND	3.8E-09	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.3E-07	0.0E+00	ND	6.5E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	4.8E-08	0.0E+00	ND	2.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	8.1E-09	0.0E+00	ND	6.4E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	5.8E-08	0.0E+00	ND	3.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.9E-07	0.0E+00	ND	9.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.9E-07	0.0E+00	ND	1.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.8E-07	0.0E+00	ND	9.5E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.1E-07	0.0E+00	ND	5.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	9.6E-08	0.0E+00	ND	5.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	5.7E-07	0.0E+00	ND	3.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.9E-08	0.0E+00	ND	2.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	1.4E-07	0.0E+00	ND	7.2E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	5.5E-07	0.0E+00	ND	2.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.5E-07	0.0E+00	ND	1.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.1E-07	0.0E+00	ND	3.7E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	3.3E-14	0.0E+00	9.1E-07	3.4E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	2.0E-12	0.0E+00	4.0E-07	1.5E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.8E-11	0.0E+00	9.5E-06	1.4E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	6.2E-12	0.0E+00	6.0E-11	8.0E-10	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.2E-08	0.0E+00	1.8E-05	2.3E-04	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	7.7E-13	0.0E+00	3.1E-06	1.1E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult Resident Child Farmer Adult Farmer Child Fisher Adult Fisher Child

Select a receptor: Resident Child 2

H-POWER Expansion **Resident Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.93E-10	1.39E-04	Residential Area
Water	NC	NC	West Loch
Air	1.15E-09	8.67E-05	Residential Area
Produce	1.88E-09	1.05E-03	Residential Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**3.21E-09**	**1.28E-03**	

NC - Not Calculated

H-POWER Expansion **Resident Child**
Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	3.21E-09		1.28E-03	
Mercury, Elemental	NC		1.38E-08	0.0011%
Mercury, Methyl	NC		1.03E-05	0.8084%
Mercury, Divalent	NC		1.80E-04	14.0724%
1,2,3,4,6,7,8,9-OCDD	3.02E-12	0.0939%	1.97E-07	0.0154%
1,2,3,4,6,7,8,9-OCDF	3.23E-13	0.0100%	2.11E-08	0.0016%
1,2,3,4,6,7,8-HpCDD	5.60E-11	1.7410%	3.64E-06	0.2847%
1,2,3,4,6,7,8-HpCDF	2.18E-11	0.6770%	1.43E-06	0.1120%
1,2,3,4,7,8,9-HpCDF	4.59E-12	0.1426%	3.15E-07	0.0247%
1,2,3,4,7,8-HxCDD	2.64E-11	0.8211%	1.74E-06	0.1364%
1,2,3,4,7,8-HxCDF	8.10E-11	2.5185%	5.33E-06	0.4178%
1,2,3,6,7,8-HxCDD	8.67E-11	2.6979%	5.75E-06	0.4506%
1,2,3,6,7,8-HxCDF	8.01E-11	2.4919%	5.28E-06	0.4138%
1,2,3,7,8,9-HxCDD	4.83E-11	1.5024%	3.17E-06	0.2485%
1,2,3,7,8,9-HxCDF	4.26E-11	1.3241%	2.83E-06	0.2218%
1,2,3,7,8-PeCDD	2.78E-10	8.6373%	1.88E-05	1.4755%
1,2,3,7,8-PeCDF	2.01E-11	0.6268%	1.37E-06	0.1070%
2,3,4,6,7,8-HxCDF	6.03E-11	1.8746%	3.98E-06	0.3115%
2,3,4,7,8-PeCDF	2.33E-10	7.2485%	1.58E-05	1.2347%
2,3,7,8-TCDD	1.24E-10	3.8482%	8.50E-06	0.6655%
2,3,7,8-TCDF	3.50E-11	1.0873%	2.44E-06	0.1911%
Arsenic	7.44E-11	2.3140%	3.55E-06	0.2780%
Beryllium	4.07E-12	0.1266%	1.04E-06	0.0818%
Cadmium	1.60E-09	49.6198%	7.68E-05	6.0132%
Chromium	NC		3.21E-09	0.0003%
Lead	3.41E-10	10.5964%	9.17E-04	71.8002%
Nickel	NC		8.07E-06	0.6321%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	2.48E-05	1.43E-10	NC	7.72E-08	2.54E-07	2.45E-09	8.56E-10	4.90E-10	4.90E-10	1.17E-11	9.70E-04
Mercury, Divalent	1.26E-03	1.77E-09	4.82E-06	7.46E-06	4.54E-06	8.96E-07	3.33E-07	1.66E-07	1.66E-07	4.00E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	9.65E-09	2.32E-16	4.26E-10	2.37E-10	4.73E-12	5.71E-11	1.75E-11	1.55E-13	8.83E-14	7.92E-12	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.03E-09	3.93E-17	4.56E-11	2.53E-11	8.02E-13	7.69E-12	2.35E-12	2.12E-14	1.21E-14	1.07E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	5.46E-09	2.08E-16	2.41E-10	1.30E-10	2.98E-12	3.26E-11	9.86E-12	1.12E-13	6.41E-14	5.01E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	2.03E-09	3.07E-16	8.94E-11	5.23E-11	1.52E-12	3.97E-11	1.23E-11	8.03E-14	4.59E-14	4.98E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.38E-10	5.34E-17	1.45E-11	1.29E-11	2.54E-13	2.58E-11	8.16E-12	1.55E-14	8.87E-15	2.50E-12	9.77E-13
1,2,3,4,7,8-HxCDD	2.42E-10	1.49E-17	1.06E-11	6.45E-12	1.47E-13	4.15E-12	1.29E-12	6.72E-15	3.84E-15	4.89E-13	7.72E-14
1,2,3,4,7,8-HxCDF	7.82E-10	3.01E-16	3.38E-11	1.91E-11	7.27E-13	2.03E-11	6.24E-12	4.87E-14	2.78E-14	2.73E-12	1.48E-11
1,2,3,6,7,8-HxCDD	7.78E-10	1.51E-16	3.40E-11	2.15E-11	6.17E-13	2.51E-11	7.85E-12	3.59E-14	2.05E-14	2.86E-12	3.78E-12
1,2,3,6,7,8-HxCDF	7.73E-10	2.99E-16	3.34E-11	1.89E-11	7.18E-13	2.07E-11	6.39E-12	4.86E-14	2.78E-14	2.77E-12	1.46E-11
1,2,3,7,8,9-HxCDD	4.52E-10	8.64E-17	1.99E-11	1.16E-11	3.58E-13	9.67E-12	2.99E-12	1.99E-14	1.14E-14	1.22E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.05E-10	1.62E-16	1.71E-11	1.03E-11	3.77E-13	1.56E-11	4.86E-12	2.82E-14	1.61E-14	1.93E-12	7.93E-12
1,2,3,7,8-PeCDD	2.42E-10	2.18E-16	1.02E-11	7.13E-12	2.74E-13	1.98E-11	6.23E-12	2.27E-14	1.30E-14	2.17E-12	5.63E-12
1,2,3,7,8-PeCDF	6.83E-10	4.93E-16	2.64E-11	1.60E-11	7.08E-13	4.44E-11	1.38E-11	7.73E-14	4.42E-14	5.54E-12	1.66E-11
2,3,4,6,7,8-HxCDF	5.81E-10	2.25E-16	2.50E-11	1.43E-11	5.40E-13	1.61E-11	4.98E-12	3.68E-14	2.10E-14	2.14E-12	1.10E-11
2,3,4,7,8-PeCDF	7.77E-10	1.01E-15	3.09E-11	1.85E-11	9.52E-13	5.23E-11	1.63E-11	9.64E-14	5.51E-14	6.61E-12	2.03E-11
2,3,7,8-TCDD	1.49E-10	1.30E-16	5.01E-12	2.75E-12	1.60E-13	1.30E-11	4.04E-12	2.50E-14	1.43E-14	1.71E-12	4.47E-12
2,3,7,8-TCDF	4.79E-10	1.75E-15	1.55E-11	6.96E-12	7.46E-13	4.68E-11	1.44E-11	1.21E-13	6.93E-14	6.90E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.20E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.31E-10	7.80E-12	1.66E-09	1.28E-06
Chromium	6.58E-06	1.26E-09	4.38E-07	2.43E-06	2.30E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	5.88E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.93E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Residential Area Soil	West Loch Water	Residential Area Air	Residential Area Produce-ag	Residential Area Produce-rt	Poultry Area Beef	Poultry Area Milk	Poultry Area Poultry	Poultry Area Eggs	Poultry Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	4.86E-05	1.43E-10	NC	1.52E-07	5.07E-07	4.79E-09	1.67E-09	9.61E-10	9.61E-10	2.29E-11	9.70E-04
Mercury, Divalent	2.51E-03	1.77E-09	4.82E-06	9.29E-06	9.08E-06	1.72E-06	6.17E-07	3.32E-07	3.32E-07	7.94E-09	1.77E-09
1,2,3,4,6,7,8,9-OCDD	1.68E-08	2.32E-16	4.26E-10	2.37E-10	8.24E-12	6.07E-11	1.81E-11	2.69E-13	1.54E-13	1.11E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	1.80E-09	3.93E-17	4.56E-11	2.54E-11	1.40E-12	8.18E-12	2.44E-12	3.69E-14	2.11E-14	1.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	9.50E-09	2.08E-16	2.41E-10	1.30E-10	5.19E-12	3.52E-11	1.03E-11	1.95E-13	1.12E-13	7.31E-12	5.73E-13
1,2,3,4,6,7,8-HpCDF	3.54E-09	3.07E-16	8.94E-11	5.26E-11	2.65E-12	4.16E-11	1.26E-11	1.40E-13	7.99E-14	6.62E-12	5.61E-12
1,2,3,4,7,8,9-HpCDF	5.89E-10	5.34E-17	1.45E-11	1.29E-11	4.42E-13	2.61E-11	8.22E-12	2.70E-14	1.54E-14	2.82E-12	9.77E-13
1,2,3,4,7,8-HxCDD	4.21E-10	1.49E-17	1.06E-11	6.47E-12	2.56E-13	4.31E-12	1.32E-12	1.17E-14	6.69E-15	6.26E-13	7.72E-14
1,2,3,4,7,8-HxCDF	1.36E-09	3.01E-16	3.38E-11	1.93E-11	1.27E-12	2.14E-11	6.44E-12	8.45E-14	4.83E-14	3.72E-12	1.48E-11
1,2,3,6,7,8-HxCDD	1.35E-09	1.51E-16	3.40E-11	2.16E-11	1.08E-12	2.60E-11	8.00E-12	6.23E-14	3.56E-14	3.59E-12	3.78E-12
1,2,3,6,7,8-HxCDF	1.34E-09	2.99E-16	3.34E-11	1.91E-11	1.25E-12	2.19E-11	6.60E-12	8.44E-14	4.82E-14	3.76E-12	1.46E-11
1,2,3,7,8,9-HxCDD	7.85E-10	8.64E-17	1.99E-11	1.17E-11	6.24E-13	1.01E-11	3.07E-12	3.46E-14	1.98E-14	1.63E-12	2.17E-12
1,2,3,7,8,9-HxCDF	7.04E-10	1.62E-16	1.71E-11	1.04E-11	6.56E-13	1.63E-11	4.98E-12	4.90E-14	2.80E-14	2.50E-12	7.93E-12
1,2,3,7,8-PeCDD	4.19E-10	2.18E-16	1.02E-11	7.23E-12	4.77E-13	2.04E-11	6.33E-12	3.93E-14	2.25E-14	2.63E-12	5.63E-12
1,2,3,7,8-PeCDF	1.19E-09	4.93E-16	2.64E-11	1.63E-11	1.23E-12	4.63E-11	1.42E-11	1.34E-13	7.67E-14	7.11E-12	1.66E-11
2,3,4,6,7,8-HxCDF	1.01E-09	2.25E-16	2.50E-11	1.44E-11	9.41E-13	1.70E-11	5.14E-12	6.39E-14	3.65E-14	2.89E-12	1.10E-11
2,3,4,7,8-PeCDF	1.34E-09	1.01E-15	3.09E-11	1.89E-11	1.66E-12	5.47E-11	1.67E-11	1.67E-13	9.53E-14	8.55E-12	2.03E-11
2,3,7,8-TCDD	2.54E-10	1.30E-16	5.01E-12	2.81E-12	2.79E-13	1.36E-11	4.15E-12	4.26E-14	2.44E-14	2.20E-12	4.47E-12
2,3,7,8-TCDF	8.16E-10	1.75E-15	1.55E-11	7.38E-12	1.30E-12	5.00E-11	1.50E-11	2.06E-13	1.18E-13	9.27E-12	1.73E-11
Arsenic	7.27E-12	2.02E-11	3.76E-08	2.07E-07	5.81E-13	5.74E-09	2.60E-10	NC	NC	NC	2.30E-09
Beryllium	2.94E-09	5.88E-12	1.09E-08	6.00E-08	4.39E-11	8.31E-10	1.13E-12	NC	NC	NC	3.65E-10
Cadmium	3.23E-08	1.41E-09	2.61E-06	1.44E-05	2.06E-08	2.38E-08	1.95E-09	3.32E-10	7.81E-12	1.66E-09	1.28E-06
Chromium	6.75E-06	1.26E-09	4.38E-07	2.44E-06	2.98E-08	1.86E-07	7.61E-08	NC	NC	NC	2.40E-08
Lead	6.74E-06	1.95E-08	3.66E-05	2.02E-04	6.06E-07	8.37E-07	1.05E-06	NC	NC	NC	1.76E-09
Nickel	1.12E-08	4.55E-10	8.44E-07	4.63E-06	8.95E-10	3.85E-07	9.69E-08	NC	NC	NC	3.55E-08

H-POWER Expansion **Resident Child**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	4.76E-13	0.00E+00	8.51E-13	1.69E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	5.09E-14	0.00E+00	9.11E-14	1.81E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	8.97E-12	0.00E+00	1.60E-11	3.10E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	3.34E-12	0.00E+00	5.96E-12	1.25E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	5.56E-13	0.00E+00	9.67E-13	3.06E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	3.98E-12	0.00E+00	7.04E-12	1.54E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	1.29E-11	0.00E+00	2.25E-11	4.56E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	1.28E-11	0.00E+00	2.27E-11	5.13E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	1.27E-11	0.00E+00	2.22E-11	4.52E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	7.43E-12	0.00E+00	1.32E-11	2.76E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	6.66E-12	0.00E+00	1.14E-11	2.45E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	3.98E-11	0.00E+00	6.76E-11	1.70E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	3.37E-12	0.00E+00	5.28E-12	1.15E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	9.55E-12	0.00E+00	1.67E-11	3.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	3.83E-11	0.00E+00	6.18E-11	1.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	2.45E-11	0.00E+00	3.33E-11	6.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	7.88E-12	0.00E+00	1.03E-11	1.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	1.19E-17	0.00E+00	2.51E-11	4.92E-11	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	4.07E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.34E-14	0.00E+00	7.30E-10	8.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	6.28E-14	0.00E+00	6.82E-11	2.72E-10	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Child**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.4E-08	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	6.2E-06	0.0E+00	NC	4.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	1.1E-04	0.0E+00	7.9E-06	6.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	6.4E-08	0.0E+00	ND	1.3E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	6.9E-09	0.0E+00	ND	1.4E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	1.2E-06	0.0E+00	ND	2.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	4.5E-07	0.0E+00	ND	9.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	7.5E-08	0.0E+00	ND	2.4E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	5.4E-07	0.0E+00	ND	1.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.7E-06	0.0E+00	ND	3.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.7E-06	0.0E+00	ND	4.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.7E-06	0.0E+00	ND	3.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	1.0E-06	0.0E+00	ND	2.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	9.0E-07	0.0E+00	ND	1.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	5.4E-06	0.0E+00	ND	1.3E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.5E-07	0.0E+00	ND	9.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	1.3E-06	0.0E+00	ND	2.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	5.2E-06	0.0E+00	ND	1.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.2E-06	0.0E+00	ND	5.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.0E-06	0.0E+00	ND	1.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	3.1E-13	0.0E+00	2.3E-06	1.3E-06	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	1.9E-11	0.0E+00	9.9E-07	5.5E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	8.3E-10	0.0E+00	2.4E-05	5.3E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	5.8E-11	0.0E+00	1.5E-10	3.0E-09	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	2.0E-07	0.0E+00	4.4E-05	8.7E-04	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	7.2E-12	0.0E+00	7.6E-06	4.3E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Units 1 & 2 Calculations
Resident using Compost

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project	H-POWER Expansion
Locations	All Max
	Poultry Area
	Agriculture Area
	Compost Area
	Residential Area
	West Loch
	West Loch Watershed
	West Loch Watershed Impervious
	West Loch Watershed Pervious
	Pearl Harbor
	Pearl Harbor Watershed
	Pearl Harbor Watershed Impervious
	Pearl Harbor Watershed Pervious
	Waikele Stream
	Waikele Stream Watershed
	Wahiawa
	Wahiawa Watershed
	Wahiawa Watershed Impervious
	Wahiawa Watershed Pervious

Select the location for soil and produce exposure	Compost Area	4
Select the location for air, beef, dairy, pork, eggs, poultry raising	Residential Area	5
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

		Location:	Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Air Modeling Results	**Symbol**	**Units**													
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.46455E-06	4.37944E-06	0.000186393	0.000033865	1.93621E-06	1.37464E-06	1.61613E-06	1.46149E-06	1.1317E-06	1.40998E-06	9.83333E-07	8.84131E-07	8.59213E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	3.38523E-05	3.68356E-05	0.00075806	0.00023434	1.71645E-05	9.76055E-06	1.19425E-05	1.16923E-05	7.17437E-06	9.74894E-06	5.46667E-06	3.36044E-06	3.76898E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	0.000034625	3.70156E-05	0.000643109	0.000181585	2.26614E-05	1.47727E-05	1.84775E-05	1.91377E-05	1.34115E-05	1.6423E-05	1.44033E-05	8.52861E-06	1.03516E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000335306	0.000391544	0.006901513	0.002012835	0.000216809	0.00013562	0.000166552	0.0001782	0.00011969	0.000146841	0.00011235	7.13193E-05	8.42169E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.000879218	0.000800461	0.008591956	0.002852313	0.000510271	0.000446853	0.000701292	0.000475492	0.000425908	0.000607652	0.00078381	0.000317958	0.00045034
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.000860414	0.000780127	0.008545623	0.002814235	0.000495852	0.000441446	0.00068391	0.000468449	0.000421462	0.000594625	0.000749947	0.000319121	0.000443985
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.68845E-05	7.04722E-06	0.000311157	2.20675E-05	7.0269E-06	4.12962E-06	3.85475E-06	6.59223E-06	3.58509E-06	3.55522E-06	1.87667E-06	1.62769E-06	1.70537E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000150544	7.44283E-05	0.002883657	0.00022228	1.95931E-05	3.6231E-05	4.94079E-05	1.57333E-05	2.30601E-05	3.82578E-05	0.00005449	3.12193E-05	3.92822E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.000870941	0.000799849	0.008582527	0.002856068	0.000510282	0.000444023	0.000698883	0.0004744	0.000423892	0.000605529	0.000779117	0.00031358	0.000445597
Unitized air concentration - HgII			0.000836867	0.000780368	0.008522327	0.00282602	0.000495858	0.000425242	0.000670983	0.000460566	0.000405519	0.000580343	0.00073797	0.000293634	0.000419545
Unitized Dry deposition - HgII			0.000513978	0.000397487	0.009259773	0.001450035	0.000171102	0.000173203	0.000226938	0.000139525	0.000131513	0.000187547	0.00021364	0.000128137	0.000156247
Unitized Wet deposition - HgII			6.82945E-05	4.61633E-05	0.001260296	0.00017232	3.04645E-05	1.7167E-05	1.95452E-05	2.12377E-05	1.49035E-05	1.76076E-05	1.08633E-05	7.64211E-06	8.33146E-06
Unitized air concentration - Hg0			0.000858408	0.000793558	0.008547674	0.002847923	0.00050834	0.000438557	0.000692329	0.000473055	0.000420543	0.000600363	0.00076766	0.00030652	0.000437305
Unitized Dry deposition - Hg0			0.000392447	0.000191023	0.007891281	0.000573655	4.67207E-05	9.01547E-05	0.00012272	3.66957E-05	5.57671E-05	9.41557E-05	0.00013191	7.59329E-05	9.58428E-05
Unitized Wet deposition - Hg0			1.46364E-07	0.00000003	8.52857E-07	8.75E-08	1.72069E-07	8.30802E-08	4.94966E-08	2.4883E-07	9.72936E-08	5.7478E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	3.80891E-05	4.13933E-05	0.000829501	0.000215453	2.45983E-05	1.61476E-05	2.00938E-05	2.05989E-05	1.45434E-05	1.7833E-05	1.53867E-05	9.41323E-06	1.12102E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000369159	0.000428381	0.007659573	0.002247173	0.000233974	0.000145381	0.000178495	0.000189893	0.000126864	0.000156591	0.000117813	7.46801E-05	8.7986E-05

Emission Rates

Units 1 & 2

Compound	PM10 g/s	TSP g/s
Mercury, elemental	2.46E-03	2.46E-03
Mercury, methyl	2.46E-03	2.46E-03
Mercury, divalent	2.46E-03	2.46E-03
1,2,3,4,6,7,8,9-OCDD	4.00E-08	4.00E-08
1,2,3,4,6,7,8,9-OCDF	1.14E-08	1.14E-08
1,2,3,4,6,7,8-HpCDD	4.84E-08	4.84E-08
1,2,3,4,6,7,8-HpCDF	1.01E-07	1.01E-07
1,2,3,4,7,8,9-HpCDF	7.74E-09	7.74E-09
1,2,3,4,7,8-HxCDD	9.59E-09	9.59E-09
1,2,3,4,7,8-HxCDF	5.71E-08	5.71E-08
1,2,3,6,7,8-HxCDD	1.30E-08	1.30E-08
1,2,3,6,7,8-HxCDF	6.01E-08	6.01E-08
1,2,3,7,8,9-HxCDD	1.04E-08	1.04E-08
1,2,3,7,8,9-HxCDF	8.56E-09	8.56E-09
1,2,3,7,8-PeCDD	1.83E-08	1.83E-08
1,2,3,7,8-PeCDF	6.24E-08	6.24E-08
2,3,4,6,7,8-HxCDF	4.18E-08	4.18E-08
2,3,4,7,8-PeCDF	6.88E-08	6.88E-08
2,3,7,8-TCDD	7.79E-09	7.79E-09
2,3,7,8-TCDF	3.39E-08	3.39E-08
Arsenic	8.63E-05	8.63E-05
Beryllium	8.57E-06	8.57E-06
Cadmium	4.09E-04	4.09E-04
Chromium	4.41E-04	4.41E-04
Lead	1.61E-02	1.61E-02
Nickel	3.89E-04	3.89E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Compost Area	West Loch	Residential Area	Compost Area	Compost Area	Residential Area	Residential Area	Residential Area	Residential Area	Residential Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	1.64E-04	2.09E-10	NC	5.06E-07	1.68E-06	1.00E-08	3.53E-09	1.99E-09	1.99E-09	4.75E-11	1.42E-03
Mercury, divalent	8.30E-03	2.60E-09	4.59E-06	2.82E-05	3.00E-05	3.63E-06	1.35E-06	6.74E-07	6.74E-07	1.62E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.26E-08	9.95E-17	1.14E-10	2.89E-10	6.19E-12	9.62E-11	2.90E-11	3.63E-13	2.07E-13	1.55E-11	1.46E-13
1,2,3,4,6,7,8,9-OCDF	3.58E-09	4.47E-17	3.24E-11	8.21E-11	2.78E-12	3.46E-11	1.04E-11	1.32E-13	7.52E-14	5.58E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.53E-08	1.91E-16	1.38E-10	3.44E-10	8.36E-12	1.29E-10	3.84E-11	5.61E-13	3.21E-13	2.22E-11	5.26E-13
1,2,3,4,6,7,8-HpCDF	3.26E-08	1.58E-15	2.89E-10	7.57E-10	2.44E-11	7.24E-10	2.21E-10	2.20E-12	1.26E-12	1.06E-10	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.82E-09	1.29E-16	2.21E-11	7.71E-11	2.11E-12	1.73E-10	5.44E-11	1.69E-13	9.67E-14	1.81E-11	2.37E-12
1,2,3,4,7,8-HxCDD	3.21E-09	6.16E-17	2.73E-11	7.34E-11	1.95E-12	5.62E-11	1.73E-11	1.40E-13	7.99E-14	7.58E-12	3.19E-13
1,2,3,4,7,8-HxCDF	2.03E-08	2.31E-15	1.63E-10	4.14E-10	1.89E-11	5.47E-10	1.66E-10	1.73E-12	9.86E-13	8.13E-11	1.13E-10
1,2,3,6,7,8-HxCDD	4.39E-09	2.62E-16	3.71E-11	1.02E-10	3.48E-12	1.39E-10	4.28E-11	3.09E-13	1.76E-13	1.80E-11	6.58E-12
1,2,3,6,7,8-HxCDF	2.16E-08	2.45E-15	1.71E-10	4.36E-10	2.00E-11	5.91E-10	1.80E-10	1.82E-12	1.04E-12	8.70E-11	1.20E-10
1,2,3,7,8,9-HxCDD	3.40E-09	2.06E-16	2.97E-11	7.77E-11	2.70E-12	8.15E-11	2.48E-11	2.47E-13	1.41E-13	1.19E-11	5.18E-12
1,2,3,7,8,9-HxCDF	3.36E-09	3.66E-16	2.44E-11	6.38E-11	3.12E-12	1.12E-10	3.44E-11	2.60E-13	1.49E-13	1.48E-11	1.79E-11
1,2,3,7,8-PeCDD	7.58E-09	1.77E-15	5.23E-11	1.53E-10	8.59E-12	4.68E-10	1.46E-10	7.03E-13	4.01E-13	5.40E-11	4.59E-11
1,2,3,7,8-PeCDF	3.43E-08	5.21E-15	1.78E-10	4.47E-10	3.56E-11	1.34E-09	4.16E-10	2.24E-12	1.28E-12	1.61E-10	1.76E-10
2,3,4,6,7,8-HxCDF	1.51E-08	1.71E-15	1.19E-10	3.04E-10	1.40E-11	4.21E-10	1.29E-10	1.26E-12	7.23E-13	6.14E-11	8.36E-11
2,3,4,7,8-PeCDF	3.47E-08	1.00E-14	1.96E-10	4.99E-10	4.25E-11	1.52E-09	4.73E-10	2.88E-12	1.64E-12	1.89E-10	2.03E-10
2,3,7,8-TCDD	6.77E-09	8.92E-16	2.22E-11	4.55E-11	7.28E-12	2.35E-10	7.36E-11	2.81E-13	1.61E-13	2.63E-11	3.07E-11
2,3,7,8-TCDF	3.24E-08	1.68E-14	9.68E-11	1.78E-10	5.05E-11	1.16E-09	3.63E-10	1.74E-12	9.93E-13	1.39E-10	1.67E-10
Arsenic	2.04E-10	2.20E-10	2.43E-07	5.76E-06	1.63E-11	3.61E-07	1.63E-08	NC	NC	NC	2.51E-08
Beryllium	2.82E-08	2.20E-11	2.41E-08	5.71E-07	4.04E-10	1.79E-08	2.43E-11	NC	NC	NC	1.36E-09
Cadmium	6.19E-08	1.05E-09	1.15E-06	2.73E-05	3.95E-08	1.02E-07	8.37E-09	1.44E-09	3.38E-11	7.11E-09	9.52E-07
Chromium	8.12E-05	6.09E-09	1.24E-06	2.97E-05	2.84E-07	5.13E-06	2.10E-06	NC	NC	NC	1.16E-07
Lead	3.64E-05	4.10E-08	4.54E-05	1.08E-03	3.17E-06	1.01E-05	1.27E-05	NC	NC	NC	3.69E-09
Nickel	6.33E-08	1.00E-09	1.09E-06	2.59E-05	5.04E-09	4.86E-06	1.22E-06	NC	NC	NC	7.80E-08

Summary of EPCs (Non Cancer)	Compost Area	West Loch	Residential Area	Compost Area	Compost Area	Residential Area	Residential Area	Residential Area	Residential Area	Residential Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	3.21E-04	2.09E-10	NC	1.00E-06	3.35E-06	1.95E-08	6.81E-09	3.90E-09	3.90E-09	9.31E-11	1.42E-03
Mercury, divalent	1.66E-02	2.60E-09	4.59E-06	4.03E-05	6.00E-05	6.96E-06	2.50E-06	1.35E-06	1.35E-06	3.22E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	2.20E-08	9.95E-17	1.14E-10	2.90E-10	1.08E-11	1.05E-10	3.04E-11	6.31E-13	3.61E-13	2.29E-11	1.46E-13
1,2,3,4,6,7,8,9-OCDF	6.24E-09	4.47E-17	3.24E-11	8.24E-11	4.85E-12	3.76E-11	1.09E-11	2.29E-13	1.31E-13	8.28E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	2.67E-08	1.91E-16	1.38E-10	3.45E-10	1.46E-11	1.42E-10	4.06E-11	9.77E-13	5.58E-13	3.37E-11	5.26E-13
1,2,3,4,6,7,8-HpCDF	5.67E-08	1.58E-15	2.89E-10	7.62E-10	4.26E-11	7.76E-10	2.30E-10	3.83E-12	2.19E-12	1.51E-10	2.90E-11
1,2,3,4,7,8,9-HpCDF	4.91E-09	1.29E-16	2.21E-11	7.75E-11	3.68E-12	1.77E-10	5.51E-11	2.95E-13	1.68E-13	2.15E-11	2.37E-12
1,2,3,4,7,8-HxCDD	5.59E-09	6.16E-17	2.73E-11	7.37E-11	3.39E-12	5.95E-11	1.78E-11	2.43E-13	1.39E-13	1.04E-11	3.19E-13
1,2,3,4,7,8-HxCDF	3.53E-08	2.31E-15	1.63E-10	4.19E-10	3.29E-11	5.89E-10	1.74E-10	3.00E-12	1.71E-12	1.17E-10	1.13E-10
1,2,3,6,7,8-HxCDD	7.63E-09	2.62E-16	3.71E-11	1.03E-10	6.07E-12	1.46E-10	4.41E-11	5.36E-13	3.06E-13	2.43E-11	6.58E-12
1,2,3,6,7,8-HxCDF	3.75E-08	2.45E-15	1.71E-10	4.42E-10	3.49E-11	6.35E-10	1.88E-10	3.16E-12	1.81E-12	1.24E-10	1.20E-10
1,2,3,7,8,9-HxCDD	5.91E-09	2.06E-16	2.97E-11	7.83E-11	4.70E-12	8.73E-11	2.58E-11	4.29E-13	2.45E-13	1.69E-11	5.18E-12
1,2,3,7,8,9-HxCDF	5.84E-09	3.66E-16	2.44E-11	6.47E-11	5.44E-12	1.18E-10	3.55E-11	4.53E-13	2.59E-13	2.01E-11	1.79E-11
1,2,3,7,8-PeCDD	1.31E-08	1.77E-15	5.23E-11	1.56E-10	1.50E-11	4.86E-10	1.49E-10	1.22E-12	6.95E-13	6.82E-11	4.59E-11
1,2,3,7,8-PeCDF	5.95E-08	5.21E-15	1.78E-10	4.59E-10	6.19E-11	1.39E-09	4.26E-10	3.89E-12	2.22E-12	2.06E-10	1.76E-10
2,3,4,6,7,8-HxCDF	2.62E-08	1.71E-15	1.19E-10	3.08E-10	2.44E-11	4.52E-10	1.34E-10	2.20E-12	1.26E-12	8.72E-11	8.36E-11
2,3,4,7,8-PeCDF	6.01E-08	1.00E-14	1.96E-10	5.17E-10	7.40E-11	1.60E-09	4.86E-10	4.98E-12	2.84E-12	2.48E-10	2.03E-10
2,3,7,8-TCDD	1.15E-08	8.92E-16	2.22E-11	4.79E-11	1.27E-11	2.41E-10	7.48E-11	4.80E-13	2.74E-13	3.18E-11	3.07E-11
2,3,7,8-TCDF	5.52E-08	1.68E-14	9.68E-11	2.07E-10	8.79E-11	1.21E-09	3.72E-10	2.96E-12	1.69E-12	1.73E-10	1.67E-10
Arsenic	2.04E-10	2.20E-10	2.43E-07	5.76E-06	1.63E-11	3.61E-07	1.63E-08	NC	NC	NC	2.51E-08
Beryllium	2.82E-08	2.20E-11	2.41E-08	5.71E-07	4.22E-10	1.79E-08	2.43E-11	NC	NC	NC	1.36E-09
Cadmium	6.19E-08	1.05E-09	1.15E-06	2.73E-05	3.96E-08	1.02E-07	8.37E-09	1.44E-09	3.39E-11	7.11E-09	9.52E-07
Chromium	8.33E-05	6.09E-09	1.24E-06	2.98E-05	3.68E-07	5.13E-06	2.10E-06	NC	NC	NC	1.16E-07
Lead	3.64E-05	4.10E-08	4.54E-05	1.08E-03	3.27E-06	1.01E-05	1.27E-05	NC	NC	NC	3.69E-09
Nickel	6.33E-08	1.00E-09	1.09E-06	2.59E-05	5.05E-09	4.86E-06	1.22E-06	NC	NC	NC	7.80E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Adult **1**

H-POWER Expansion **Resident Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	3.23E-09	1.67E-04	Compost Area
Water	NC	NC	West Loch
Air	3.97E-09	4.00E-05	Residential Area
Produce	2.31E-08	1.64E-03	Compost Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**3.03E-08**	**1.84E-03**	

NC - Not Calculated

H-POWER Expansion **Resident Adult**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	3.03E-08		1.84E-03	
Mercury, Elemental	NC		5.25E-09	0.0003%
Mercury, Methyl	NC		1.02E-05	0.5553%
Mercury, Divalent	NC		1.50E-04	8.1568%
1,2,3,4,6,7,8,9-OCDD	3.56E-12	0.0117%	5.22E-08	0.0028%
1,2,3,4,6,7,8,9-OCDF	1.01E-12	0.0033%	1.48E-08	0.0008%
1,2,3,4,6,7,8-HpCDD	1.41E-10	0.4658%	2.07E-06	0.1124%
1,2,3,4,6,7,8-HpCDF	3.08E-10	1.0162%	4.56E-06	0.2471%
1,2,3,4,7,8,9-HpCDF	3.00E-11	0.0988%	4.52E-07	0.0245%
1,2,3,4,7,8-HxCDD	2.99E-10	0.9842%	4.42E-06	0.2397%
1,2,3,4,7,8-HxCDF	1.71E-09	5.6498%	2.56E-05	1.3899%
1,2,3,6,7,8-HxCDD	4.13E-10	1.3618%	6.15E-06	0.3332%
1,2,3,6,7,8-HxCDF	1.81E-09	5.9614%	2.71E-05	1.4679%
1,2,3,7,8,9-HxCDD	3.17E-10	1.0453%	4.69E-06	0.2545%
1,2,3,7,8,9-HxCDF	2.66E-10	0.8753%	4.01E-06	0.2176%
1,2,3,7,8-PeCDD	6.23E-09	20.5344%	9.54E-05	5.1731%
1,2,3,7,8-PeCDF	5.90E-10	1.9451%	9.30E-06	0.5046%
2,3,4,6,7,8-HxCDF	1.26E-09	4.1541%	1.89E-05	1.0236%
2,3,4,7,8-PeCDF	6.48E-09	21.3674%	1.02E-04	5.5261%
2,3,7,8-TCDD	2.35E-09	7.7502%	3.98E-05	2.1588%
2,3,7,8-TCDF	9.90E-10	3.2610%	1.80E-05	0.9774%
Arsenic	2.16E-09	7.1058%	1.54E-05	0.8345%
Beryllium	1.81E-11	0.0596%	1.02E-06	0.0553%
Cadmium	2.85E-09	9.3759%	3.12E-05	1.6915%
Chromium	NC		1.01E-08	0.0005%
Lead	2.12E-09	6.9729%	1.27E-03	68.8007%
Nickel	NC		4.63E-06	0.2511%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Compost Area Soil	West Loch Water	Residential Area Air	Compost Area Produce-ag	Compost Area Produce-rt	Residential Area Beef	Residential Area Milk	Residential Area Poultry	Residential Area Eggs	Residential Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.64E-04	2.09E-10	NC	5.06E-07	1.68E-06	1.00E-08	3.53E-09	1.99E-09	1.99E-09	4.75E-11	1.42E-03
Mercury, Divalent	8.30E-03	2.60E-09	4.59E-06	2.82E-05	3.00E-05	3.63E-06	1.35E-06	6.74E-07	6.74E-07	1.62E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.26E-08	9.95E-17	1.14E-10	2.89E-10	6.19E-12	9.62E-11	2.90E-11	3.63E-13	2.07E-13	1.55E-11	1.46E-13
1,2,3,4,6,7,8,9-OCDF	3.58E-09	4.47E-17	3.24E-11	8.21E-11	2.78E-12	3.46E-11	1.04E-11	1.32E-13	7.52E-14	5.58E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.53E-08	1.91E-16	1.38E-10	3.44E-10	8.36E-12	1.29E-10	3.84E-11	5.61E-13	3.21E-13	2.22E-11	5.26E-13
1,2,3,4,6,7,8-HpCDF	3.26E-08	1.58E-15	2.89E-10	7.57E-10	2.44E-11	7.24E-10	2.21E-10	2.20E-12	1.26E-12	1.06E-10	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.82E-09	1.29E-16	2.21E-11	7.71E-11	2.11E-12	1.73E-10	5.44E-11	1.69E-13	9.67E-14	1.81E-11	2.37E-12
1,2,3,4,7,8-HxCDD	3.21E-09	6.16E-17	2.73E-11	7.34E-11	1.95E-12	5.62E-11	1.73E-11	1.40E-13	7.99E-14	7.58E-12	3.19E-13
1,2,3,4,7,8-HxCDF	2.03E-08	2.31E-15	1.63E-10	4.14E-10	1.89E-11	5.47E-10	1.66E-10	1.73E-12	9.86E-13	8.13E-11	1.13E-10
1,2,3,6,7,8-HxCDD	4.39E-09	2.62E-16	3.71E-11	1.02E-10	3.48E-12	1.39E-10	4.28E-11	3.09E-13	1.76E-13	1.80E-11	6.58E-12
1,2,3,6,7,8-HxCDF	2.16E-08	2.45E-15	1.71E-10	4.36E-10	2.00E-11	5.91E-10	1.80E-10	1.82E-12	1.04E-12	8.70E-11	1.20E-10
1,2,3,7,8,9-HxCDD	3.40E-09	2.06E-16	2.97E-11	7.77E-11	2.70E-12	8.15E-11	2.48E-11	2.47E-13	1.41E-13	1.19E-11	5.18E-12
1,2,3,7,8,9-HxCDF	3.36E-09	3.66E-16	2.44E-11	6.38E-11	3.12E-12	1.12E-10	3.44E-11	2.60E-13	1.49E-13	1.48E-11	1.79E-11
1,2,3,7,8-PeCDD	7.58E-09	1.77E-15	5.23E-11	1.53E-10	8.59E-12	4.68E-10	1.46E-10	7.03E-13	4.01E-13	5.40E-11	4.59E-11
1,2,3,7,8-PeCDF	3.43E-08	5.21E-15	1.78E-10	4.47E-10	3.56E-11	1.34E-09	4.16E-10	2.24E-12	1.28E-12	1.61E-10	1.76E-10
2,3,4,6,7,8-HxCDF	1.51E-08	1.71E-15	1.19E-10	3.04E-10	1.40E-11	4.21E-10	1.29E-10	1.26E-12	7.23E-13	6.14E-11	8.36E-11
2,3,4,7,8-PeCDF	3.47E-08	1.00E-14	1.96E-10	4.99E-10	4.25E-11	1.52E-09	4.73E-10	2.88E-12	1.64E-12	1.89E-10	2.03E-10
2,3,7,8-TCDD	6.77E-09	8.92E-16	2.22E-11	4.55E-11	7.28E-12	2.35E-10	7.36E-11	2.81E-13	1.61E-13	2.63E-11	3.07E-11
2,3,7,8-TCDF	3.24E-08	1.68E-14	9.68E-11	1.78E-10	5.05E-11	1.16E-09	3.63E-10	1.74E-12	9.93E-13	1.39E-10	1.67E-10
Arsenic	2.04E-10	2.20E-10	2.43E-07	5.76E-06	1.63E-11	3.61E-07	1.63E-08	NC	NC	NC	2.51E-08
Beryllium	2.82E-08	2.20E-11	2.41E-08	5.71E-07	4.04E-10	1.79E-08	2.43E-11	NC	NC	NC	1.36E-09
Cadmium	6.19E-08	1.05E-09	1.15E-06	2.73E-05	3.95E-08	1.02E-07	8.37E-09	1.44E-09	3.38E-11	7.11E-09	9.52E-07
Chromium	8.12E-05	6.09E-09	1.24E-06	2.97E-05	2.84E-07	5.13E-06	2.10E-06	NC	NC	NC	1.16E-07
Lead	3.64E-05	4.10E-08	4.54E-05	1.08E-03	3.17E-06	1.01E-05	1.27E-05	NC	NC	NC	3.69E-09
Nickel	6.33E-08	1.00E-09	1.09E-06	2.59E-05	5.04E-09	4.86E-06	1.22E-06	NC	NC	NC	7.80E-08

Noncancer concentrations **H-POWER Expansion**	Compost Area Soil	West Loch Water	Residential Area Air	Compost Area Produce-ag	Compost Area Produce-rt	Residential Area Beef	Residential Area Milk	Residential Area Poultry	Residential Area Eggs	Residential Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	3.21E-04	2.09E-10	NC	1.00E-06	3.35E-06	1.95E-08	6.81E-09	3.90E-09	3.90E-09	9.31E-11	1.42E-03
Mercury, Divalent	1.66E-02	2.60E-09	4.59E-06	4.03E-05	6.00E-05	6.96E-06	2.50E-06	1.35E-06	1.35E-06	3.22E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	2.20E-08	9.95E-17	1.14E-10	2.90E-10	1.08E-11	1.05E-10	3.04E-11	6.31E-13	3.61E-13	2.29E-11	1.46E-13
1,2,3,4,6,7,8,9-OCDF	6.24E-09	4.47E-17	3.24E-11	8.24E-11	4.85E-12	3.76E-11	1.09E-11	2.29E-13	1.31E-13	8.28E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	2.67E-08	1.91E-16	1.38E-10	3.45E-10	1.46E-11	1.42E-10	4.06E-11	9.77E-13	5.58E-13	3.37E-11	5.26E-13
1,2,3,4,6,7,8-HpCDF	5.67E-08	1.58E-15	2.89E-10	7.62E-10	4.26E-11	7.76E-10	2.30E-10	3.83E-12	2.19E-12	1.51E-10	2.90E-11
1,2,3,4,7,8,9-HpCDF	4.91E-09	1.29E-16	2.21E-11	7.75E-11	3.68E-12	1.77E-10	5.51E-11	2.95E-13	1.68E-13	2.15E-11	2.37E-12
1,2,3,4,7,8-HxCDD	5.59E-09	6.16E-17	2.73E-11	7.37E-11	3.39E-12	5.95E-11	1.78E-11	2.43E-13	1.39E-13	1.04E-11	3.19E-13
1,2,3,4,7,8-HxCDF	3.53E-08	2.31E-15	1.63E-10	4.19E-10	3.29E-11	5.89E-10	1.74E-10	3.00E-12	1.71E-12	1.17E-10	1.13E-10
1,2,3,6,7,8-HxCDD	7.63E-09	2.62E-16	3.71E-11	1.03E-10	6.07E-12	1.46E-10	4.41E-11	5.36E-13	3.06E-13	2.43E-11	6.58E-12
1,2,3,6,7,8-HxCDF	3.75E-08	2.45E-15	1.71E-10	4.42E-10	3.49E-11	6.35E-10	1.88E-10	3.16E-12	1.81E-12	1.24E-10	1.20E-10
1,2,3,7,8,9-HxCDD	5.91E-09	2.06E-16	2.97E-11	7.83E-11	4.70E-12	8.73E-11	2.58E-11	4.29E-13	2.45E-13	1.69E-11	5.18E-12
1,2,3,7,8,9-HxCDF	5.84E-09	3.66E-16	2.44E-11	6.47E-11	5.44E-12	1.18E-10	3.55E-11	4.53E-13	2.59E-13	2.01E-11	1.79E-11
1,2,3,7,8-PeCDD	1.31E-08	1.77E-15	5.23E-11	1.56E-10	1.50E-11	4.86E-10	1.49E-10	1.22E-12	6.95E-13	6.82E-11	4.59E-11
1,2,3,7,8-PeCDF	5.95E-08	5.21E-15	1.78E-10	4.59E-10	6.19E-11	1.39E-09	4.26E-10	3.89E-12	2.22E-12	2.06E-10	1.76E-10
2,3,4,6,7,8-HxCDF	2.62E-08	1.71E-15	1.19E-10	3.08E-10	2.44E-11	4.52E-10	1.34E-10	2.20E-12	1.26E-12	8.72E-11	8.36E-11
2,3,4,7,8-PeCDF	6.01E-08	1.00E-14	1.96E-10	5.17E-10	7.40E-11	1.60E-09	4.86E-10	4.98E-12	2.84E-12	2.48E-10	2.03E-10
2,3,7,8-TCDD	1.15E-08	8.92E-16	2.22E-11	4.79E-11	1.27E-11	2.41E-10	7.48E-11	4.80E-13	2.74E-13	3.18E-11	3.07E-11
2,3,7,8-TCDF	5.52E-08	1.68E-14	9.68E-11	2.07E-10	8.79E-11	1.21E-09	3.72E-10	2.96E-12	1.69E-12	1.73E-10	1.67E-10
Arsenic	2.04E-10	2.20E-10	2.43E-07	5.76E-06	1.63E-11	3.61E-07	1.63E-08	NC	NC	NC	2.51E-08
Beryllium	2.82E-08	2.20E-11	2.41E-08	5.71E-07	4.22E-10	1.79E-08	2.43E-11	NC	NC	NC	1.36E-09
Cadmium	6.19E-08	1.05E-09	1.15E-06	2.73E-05	3.96E-08	1.02E-07	8.37E-09	1.44E-09	3.39E-11	7.11E-09	9.52E-07
Chromium	8.33E-05	6.09E-09	1.24E-06	2.98E-05	3.68E-07	5.13E-06	2.10E-06	NC	NC	NC	1.16E-07
Lead	3.64E-05	4.10E-08	4.54E-05	1.08E-03	3.27E-06	1.01E-05	1.27E-05	NC	NC	NC	3.69E-09
Nickel	6.33E-08	1.00E-09	1.09E-06	2.59E-05	5.05E-09	4.86E-06	1.22E-06	NC	NC	NC	7.80E-08

H-POWER Expansion **Resident Adult**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	3.33E-13	0.00E+00	4.58E-13	2.76E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	9.47E-14	0.00E+00	1.30E-13	7.85E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	1.35E-11	0.00E+00	1.85E-11	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	2.87E-11	0.00E+00	3.86E-11	2.41E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	2.48E-12	0.00E+00	2.96E-12	2.45E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	2.83E-11	0.00E+00	3.66E-11	2.34E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	1.79E-10	0.00E+00	2.18E-10	1.32E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	3.87E-11	0.00E+00	4.96E-11	3.25E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	1.90E-10	0.00E+00	2.29E-10	1.39E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	3.00E-11	0.00E+00	3.98E-11	2.47E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	2.96E-11	0.00E+00	3.27E-11	2.03E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	6.68E-10	0.00E+00	7.00E-10	4.86E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	9.06E-11	0.00E+00	7.15E-11	4.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	1.33E-10	0.00E+00	1.59E-10	9.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	9.17E-10	0.00E+00	7.88E-10	4.78E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	5.96E-10	0.00E+00	2.98E-10	1.46E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	2.86E-10	0.00E+00	1.30E-10	5.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	1.79E-16	0.00E+00	3.26E-10	1.83E-09	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	1.81E-11	ND	ND	ND	ND	ND	ND	ND
Cadmium	1.38E-14	0.00E+00	6.47E-10	2.20E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	1.81E-13	0.00E+00	1.70E-10	1.95E-09	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Adult**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.3E-09	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	4.4E-06	0.0E+00	NC	5.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	7.6E-05	0.0E+00	3.0E-06	7.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	9.0E-09	0.0E+00	ND	4.3E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	2.6E-09	0.0E+00	ND	1.2E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	3.7E-07	0.0E+00	ND	1.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	7.8E-07	0.0E+00	ND	3.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	6.7E-08	0.0E+00	ND	3.8E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	7.7E-07	0.0E+00	ND	3.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	4.8E-06	0.0E+00	ND	2.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	1.0E-06	0.0E+00	ND	5.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	5.1E-06	0.0E+00	ND	2.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	8.1E-07	0.0E+00	ND	3.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	8.0E-07	0.0E+00	ND	3.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	1.8E-05	0.0E+00	ND	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	2.4E-06	0.0E+00	ND	6.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	3.6E-06	0.0E+00	ND	1.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	2.5E-05	0.0E+00	ND	7.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.6E-05	0.0E+00	ND	2.4E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	7.6E-06	0.0E+00	ND	1.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	9.3E-13	0.0E+00	5.9E-06	9.5E-06	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	1.9E-11	0.0E+00	8.8E-07	1.4E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	1.7E-10	0.0E+00	4.2E-06	2.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	7.6E-11	0.0E+00	1.7E-10	9.8E-09	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	1.2E-07	0.0E+00	2.2E-05	1.2E-03	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	4.3E-12	0.0E+00	4.0E-06	6.4E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Child 2

H-POWER Expansion **Resident Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	6.03E-09	1.56E-03	Compost Area
Water	NC	NC	West Loch
Air	1.98E-09	9.96E-05	Residential Area
Produce	1.74E-08	6.17E-03	Compost Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**2.54E-08**	**7.82E-03**	

NC - Not Calculated

H-POWER Expansion **Resident Child**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	2.54E-08		7.82E-03	
Mercury, Elemental	NC		1.31E-08	0.0002%
Mercury, Methyl	NC		6.82E-05	0.8713%
Mercury, Divalent	NC		1.01E-03	12.9505%
1,2,3,4,6,7,8,9-OCDD	2.92E-12	0.0115%	2.46E-07	0.0031%
1,2,3,4,6,7,8,9-OCDF	8.30E-13	0.0033%	7.00E-08	0.0009%
1,2,3,4,6,7,8-HpCDD	1.16E-10	0.4581%	9.81E-06	0.1255%
1,2,3,4,6,7,8-HpCDF	2.53E-10	0.9983%	2.14E-05	0.2741%
1,2,3,4,7,8,9-HpCDF	2.45E-11	0.0965%	2.07E-06	0.0264%
1,2,3,4,7,8-HxCDD	2.46E-10	0.9695%	2.09E-05	0.2666%
1,2,3,4,7,8-HxCDF	1.43E-09	5.6363%	1.23E-04	1.5764%
1,2,3,6,7,8-HxCDD	3.40E-10	1.3411%	2.89E-05	0.3695%
1,2,3,6,7,8-HxCDF	1.51E-09	5.9529%	1.30E-04	1.6670%
1,2,3,7,8,9-HxCDD	2.61E-10	1.0289%	2.21E-05	0.2831%
1,2,3,7,8,9-HxCDF	2.24E-10	0.8827%	1.96E-05	0.2499%
1,2,3,7,8-PeCDD	5.25E-09	20.6679%	4.59E-04	5.8727%
1,2,3,7,8-PeCDF	5.27E-10	2.0755%	4.87E-05	0.6232%
2,3,4,6,7,8-HxCDF	1.05E-09	4.1511%	9.10E-05	1.1634%
2,3,4,7,8-PeCDF	5.70E-09	22.4582%	5.22E-04	6.6774%
2,3,7,8-TCDD	2.36E-09	9.3166%	2.39E-04	3.0574%
2,3,7,8-TCDF	1.04E-09	4.0854%	1.11E-04	1.4197%
Arsenic	1.53E-09	6.0271%	5.01E-05	0.6408%
Beryllium	8.99E-12	0.0354%	2.71E-06	0.0347%
Cadmium	1.96E-09	7.7399%	1.11E-04	1.4229%
Chromium	NC		3.78E-08	0.0005%
Lead	1.54E-09	6.0640%	4.71E-03	60.2655%
Nickel	NC		1.23E-05	0.1574%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Compost Area Soil	West Loch Water	Residential Area Air	Compost Area Produce-ag	Compost Area Produce-rt	Residential Area Beef	Residential Area Milk	Residential Area Poultry	Residential Area Eggs	Residential Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.64E-04	2.09E-10	NC	5.06E-07	1.68E-06	1.00E-08	3.53E-09	1.99E-09	1.99E-09	4.75E-11	1.42E-03
Mercury, Divalent	8.30E-03	2.60E-09	4.59E-06	2.82E-05	3.00E-05	3.63E-06	1.35E-06	6.74E-07	6.74E-07	1.62E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	1.26E-08	9.95E-17	1.14E-10	2.89E-10	6.19E-12	9.62E-11	2.90E-11	3.63E-13	2.07E-13	1.55E-11	1.46E-13
1,2,3,4,6,7,8,9-OCDF	3.58E-09	4.47E-17	3.24E-11	8.21E-11	2.78E-12	3.46E-11	1.04E-11	1.32E-13	7.52E-14	5.58E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	1.53E-08	1.91E-16	1.38E-10	3.44E-10	8.36E-12	1.29E-10	3.84E-11	5.61E-13	3.21E-13	2.22E-11	5.26E-13
1,2,3,4,6,7,8-HpCDF	3.26E-08	1.58E-15	2.89E-10	7.57E-10	2.44E-11	7.24E-10	2.21E-10	2.20E-12	1.26E-12	1.06E-10	2.90E-11
1,2,3,4,7,8,9-HpCDF	2.82E-09	1.29E-16	2.21E-11	7.71E-11	2.11E-12	1.73E-10	5.44E-11	1.69E-13	9.67E-14	1.81E-11	2.37E-12
1,2,3,4,7,8-HxCDD	3.21E-09	6.16E-17	2.73E-11	7.34E-11	1.95E-12	5.62E-11	1.73E-11	1.40E-13	7.99E-14	7.58E-12	3.19E-13
1,2,3,4,7,8-HxCDF	2.03E-08	2.31E-15	1.63E-10	4.14E-10	1.89E-11	5.47E-10	1.66E-10	1.73E-12	9.86E-13	8.13E-11	1.13E-10
1,2,3,6,7,8-HxCDD	4.39E-09	2.62E-16	3.71E-11	1.02E-10	3.48E-12	1.39E-10	4.28E-11	3.09E-13	1.76E-13	1.80E-11	6.58E-12
1,2,3,6,7,8-HxCDF	2.16E-08	2.45E-15	1.71E-10	4.36E-10	2.00E-11	5.91E-10	1.80E-10	1.82E-12	1.04E-12	8.70E-11	1.20E-10
1,2,3,7,8,9-HxCDD	3.40E-09	2.06E-16	2.97E-11	7.77E-11	2.70E-12	8.15E-11	2.48E-11	2.47E-13	1.41E-13	1.19E-11	5.18E-12
1,2,3,7,8,9-HxCDF	3.36E-09	3.66E-16	2.44E-11	6.38E-11	3.12E-12	1.12E-10	3.44E-11	2.60E-13	1.49E-13	1.48E-11	1.79E-11
1,2,3,7,8-PeCDD	7.58E-09	1.77E-15	5.23E-11	1.53E-10	8.59E-12	4.68E-10	1.46E-10	7.03E-13	4.01E-13	5.40E-11	4.59E-11
1,2,3,7,8-PeCDF	3.43E-08	5.21E-15	1.78E-10	4.47E-10	3.56E-11	1.34E-09	4.16E-10	2.24E-12	1.28E-12	1.61E-10	1.76E-10
2,3,4,6,7,8-HxCDF	1.51E-08	1.71E-15	1.19E-10	3.04E-10	1.40E-11	4.21E-10	1.29E-10	1.26E-12	7.23E-13	6.14E-11	8.36E-11
2,3,4,7,8-PeCDF	3.47E-08	1.00E-14	1.96E-10	4.99E-10	4.25E-11	1.52E-09	4.73E-10	2.88E-12	1.64E-12	1.89E-10	2.03E-10
2,3,7,8-TCDD	6.77E-09	8.92E-16	2.22E-11	4.55E-11	7.28E-12	2.35E-10	7.36E-11	2.81E-13	1.61E-13	2.63E-11	3.07E-11
2,3,7,8-TCDF	3.24E-08	1.68E-14	9.68E-11	1.78E-10	5.05E-11	1.16E-09	3.63E-10	1.74E-12	9.93E-13	1.39E-10	1.67E-10
Arsenic	2.04E-10	2.20E-10	2.43E-07	5.76E-06	1.63E-11	3.61E-07	1.63E-08	NC	NC	NC	2.51E-08
Beryllium	2.82E-08	2.20E-11	2.41E-08	5.71E-07	4.04E-10	1.79E-08	2.43E-11	NC	NC	NC	1.36E-09
Cadmium	6.19E-08	1.05E-09	1.15E-06	2.73E-05	3.95E-08	1.02E-07	8.37E-09	1.44E-09	3.38E-11	7.11E-09	9.52E-07
Chromium	8.12E-05	6.09E-09	1.24E-06	2.97E-05	2.84E-07	5.13E-06	2.10E-06	NC	NC	NC	1.16E-07
Lead	3.64E-05	4.10E-08	4.54E-05	1.08E-03	3.17E-06	1.01E-05	1.27E-05	NC	NC	NC	3.69E-09
Nickel	6.33E-08	1.00E-09	1.09E-06	2.59E-05	5.04E-09	4.86E-06	1.22E-06	NC	NC	NC	7.80E-08

Noncancer concentrations H-POWER Expansion	Compost Area Soil	West Loch Water	Residential Area Air	Compost Area Produce-ag	Compost Area Produce-rt	Residential Area Beef	Residential Area Milk	Residential Area Poultry	Residential Area Eggs	Residential Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.16E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	3.21E-04	2.09E-10	NC	1.00E-06	3.35E-06	1.95E-08	6.81E-09	3.90E-09	3.90E-09	9.31E-11	1.42E-03
Mercury, Divalent	1.66E-02	2.60E-09	4.59E-06	4.03E-05	6.00E-05	6.96E-06	2.50E-06	1.35E-06	1.35E-06	3.22E-08	2.60E-09
1,2,3,4,6,7,8,9-OCDD	2.20E-08	9.95E-17	1.14E-10	2.90E-10	1.08E-11	1.05E-10	3.04E-11	6.31E-13	3.61E-13	2.29E-11	1.46E-13
1,2,3,4,6,7,8,9-OCDF	6.24E-09	4.47E-17	3.24E-11	8.24E-11	4.85E-12	3.76E-11	1.09E-11	2.29E-13	1.31E-13	8.28E-12	1.23E-13
1,2,3,4,6,7,8-HpCDD	2.67E-08	1.91E-16	1.38E-10	3.45E-10	1.46E-11	1.42E-10	4.06E-11	9.77E-13	5.58E-13	3.37E-11	5.26E-13
1,2,3,4,6,7,8-HpCDF	5.67E-08	1.58E-15	2.89E-10	7.62E-10	4.26E-11	7.76E-10	2.30E-10	3.83E-12	2.19E-12	1.51E-10	2.90E-11
1,2,3,4,7,8,9-HpCDF	4.91E-09	1.29E-16	2.21E-11	7.75E-11	3.68E-12	1.77E-10	5.51E-11	2.95E-13	1.68E-13	2.15E-11	2.37E-12
1,2,3,4,7,8-HxCDD	5.59E-09	6.16E-17	2.73E-11	7.37E-11	3.39E-12	5.95E-11	1.78E-11	2.43E-13	1.39E-13	1.04E-11	3.19E-13
1,2,3,4,7,8-HxCDF	3.53E-08	2.31E-15	1.63E-10	4.19E-10	3.29E-11	5.89E-10	1.74E-10	3.00E-12	1.71E-12	1.17E-10	1.13E-10
1,2,3,6,7,8-HxCDD	7.63E-09	2.62E-16	3.71E-11	1.03E-10	6.07E-12	1.46E-10	4.41E-11	5.36E-13	3.06E-13	2.43E-11	6.58E-12
1,2,3,6,7,8-HxCDF	3.75E-08	2.45E-15	1.71E-10	4.42E-10	3.49E-11	6.35E-10	1.88E-10	3.16E-12	1.81E-12	1.24E-10	1.20E-10
1,2,3,7,8,9-HxCDD	5.91E-09	2.06E-16	2.97E-11	7.83E-11	4.70E-12	8.73E-11	2.58E-11	4.29E-13	2.45E-13	1.69E-11	5.18E-12
1,2,3,7,8,9-HxCDF	5.84E-09	3.66E-16	2.44E-11	6.47E-11	5.44E-12	1.18E-10	3.55E-11	4.53E-13	2.59E-13	2.01E-11	1.79E-11
1,2,3,7,8-PeCDD	1.31E-08	1.77E-15	5.23E-11	1.56E-10	1.50E-11	4.86E-10	1.49E-10	1.22E-12	6.95E-13	6.82E-11	4.59E-11
1,2,3,7,8-PeCDF	5.95E-08	5.21E-15	1.78E-10	4.59E-10	6.19E-11	1.39E-09	4.26E-10	3.89E-12	2.22E-12	2.06E-10	1.76E-10
2,3,4,6,7,8-HxCDF	2.62E-08	1.71E-15	1.19E-10	3.08E-10	2.44E-11	4.52E-10	1.34E-10	2.20E-12	1.26E-12	8.72E-11	8.36E-11
2,3,4,7,8-PeCDF	6.01E-08	1.00E-14	1.96E-10	5.17E-10	7.40E-11	1.60E-09	4.86E-10	4.98E-12	2.84E-12	2.48E-10	2.03E-10
2,3,7,8-TCDD	1.15E-08	8.92E-16	2.22E-11	4.79E-11	1.27E-11	2.41E-10	7.48E-11	4.80E-13	2.74E-13	3.18E-11	3.07E-11
2,3,7,8-TCDF	5.52E-08	1.68E-14	9.68E-11	2.07E-10	8.79E-11	1.21E-09	3.72E-10	2.96E-12	1.69E-12	1.73E-10	1.67E-10
Arsenic	2.04E-10	2.20E-10	2.43E-07	5.76E-06	1.63E-11	3.61E-07	1.63E-08	NC	NC	NC	2.51E-08
Beryllium	2.82E-08	2.20E-11	2.41E-08	5.71E-07	4.22E-10	1.79E-08	2.43E-11	NC	NC	NC	1.36E-09
Cadmium	6.19E-08	1.05E-09	1.15E-06	2.73E-05	3.96E-08	1.02E-07	8.37E-09	1.44E-09	3.39E-11	7.11E-09	9.52E-07
Chromium	8.33E-05	6.09E-09	1.24E-06	2.98E-05	3.68E-07	5.13E-06	2.10E-06	NC	NC	NC	1.16E-07
Lead	3.64E-05	4.10E-08	4.54E-05	1.08E-03	3.27E-06	1.01E-05	1.27E-05	NC	NC	NC	3.69E-09
Nickel	6.33E-08	1.00E-09	1.09E-06	2.59E-05	5.05E-09	4.86E-06	1.22E-06	NC	NC	NC	7.80E-08

H-POWER Expansion **Resident Child**

Specific Incremental Lifetime Cancer Risk

Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	6.22E-13	0.00E+00	2.28E-13	2.07E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	1.77E-13	0.00E+00	6.47E-14	5.88E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	2.52E-11	0.00E+00	9.20E-12	8.19E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	5.36E-11	0.00E+00	1.92E-11	1.81E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	4.63E-12	0.00E+00	1.47E-12	1.84E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	5.28E-11	0.00E+00	1.82E-11	1.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	3.34E-10	0.00E+00	1.08E-10	9.89E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	7.22E-11	0.00E+00	2.47E-11	2.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	3.54E-10	0.00E+00	1.14E-10	1.04E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	5.59E-11	0.00E+00	1.98E-11	1.85E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	5.52E-11	0.00E+00	1.63E-11	1.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	1.25E-09	0.00E+00	3.48E-10	3.65E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.69E-10	0.00E+00	3.55E-11	3.22E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	2.48E-10	0.00E+00	7.93E-11	7.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	1.71E-09	0.00E+00	3.92E-10	3.60E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.11E-09	0.00E+00	1.48E-10	1.10E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	5.33E-10	0.00E+00	6.44E-11	4.39E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	3.35E-16	0.00E+00	1.62E-10	1.37E-09	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.99E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	2.58E-14	0.00E+00	3.22E-10	1.64E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	3.39E-13	0.00E+00	8.46E-11	1.45E-09	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Child**
Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.3E-08	NC	Io uptake facto	NC	NC	NC	NC	NC
Mercury, Methyl	4.1E-05	0.0E+00	NC	2.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	7.1E-04	0.0E+00	7.6E-06	3.0E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	8.4E-08	0.0E+00	ND	1.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	2.4E-08	0.0E+00	ND	4.6E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	3.4E-06	0.0E+00	ND	6.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	7.3E-06	0.0E+00	ND	1.4E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	6.3E-07	0.0E+00	ND	1.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	7.1E-06	0.0E+00	ND	1.4E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	4.5E-05	0.0E+00	ND	7.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	9.8E-06	0.0E+00	ND	1.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	4.8E-05	0.0E+00	ND	8.3E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	7.6E-06	0.0E+00	ND	1.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	7.5E-06	0.0E+00	ND	1.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	1.7E-04	0.0E+00	ND	2.9E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	2.3E-05	0.0E+00	ND	2.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	3.4E-05	0.0E+00	ND	5.7E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	2.3E-04	0.0E+00	ND	2.9E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	1.5E-04	0.0E+00	ND	9.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	7.1E-05	0.0E+00	ND	4.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	8.7E-12	0.0E+00	1.5E-05	3.5E-05	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	1.8E-10	0.0E+00	2.2E-06	5.3E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	1.6E-09	0.0E+00	1.0E-05	1.0E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	7.1E-10	0.0E+00	4.2E-10	3.7E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	1.1E-06	0.0E+00	5.5E-05	4.7E-03	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	4.0E-11	0.0E+00	9.9E-06	2.4E-06	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Unit 3 Calculations
Resident using Compost

This spreadsheet estimates exposure point concentrations in:
1. Soil for direct contact at the receptor's home
2. Air for inhalation at the receptor's home
3. Backyard produce at the receptor's home
4. Beef, dairy, pork, poultry, eggs from a farm location
5. Drinking water from a surface water body
6. Fish from a surface water body

Project: H-POWER Expansion

Locations:
All Max
Poultry Area
Agriculture Area
Compost Area
Residential Area
West Loch
West Loch Watershed
West Loch Watershed Impervious
West Loch Watershed Pervious
Pearl Harbor
Pearl Harbor Watershed
Pearl Harbor Watershed Impervious
Pearl Harbor Watershed Pervious
Waikele Stream
Waikele Stream Watershed
Wahiawa
Wahiawa Watershed
Wahiawa Watershed Impervious
Wahiawa Watershed Pervious

Select the location for soil and produce exposure	Compost Area	4
Select the location for air, beef, dairy, pork, eggs, poultry raising	Residential Area	5
Select the location for the impervious area of the watershed	West Loch Watershed Impervious	8
Select the location for the pervious area of the watershed	West Loch Watershed Pervious	9
Select the location for the drinking water and fish exposure water body	West Loch	6

Unitized Air Modeling Results	Symbol	Units	Location: Poultry Area	Agriculture Area	Compost Area	Residential Area	West Loch	West Loch Watershed Impervious	West Loch Watershed Pervious	Pearl Harbor	Pearl Harbor Watershed Impervious	Pearl Harbor Watershed Pervious	Wahiawa	Wahiawa Watershed Impervious	Wahiawa Watershed Pervious
Unitized Wet deposition - Particle bound	(Dywp_pb)	(g/m2-y) / (g/s)	3.12364E-06	4.68833E-06	0.000169337	4.16325E-05	2.06069E-06	1.40845E-06	1.67361E-06	1.55181E-06	1.16504E-06	1.46067E-06	0.00000106	8.98971E-07	8.87714E-07
Unitized Wet deposition - Particle phase	(Dywp)	(g/m2-y) / (g/s)	2.69505E-05	3.55728E-05	0.000716117	0.000247493	1.70817E-05	9.49959E-06	1.17642E-05	1.16793E-05	6.97918E-06	9.58306E-06	0.00000572	3.24743E-06	3.72772E-06
Unitized Dry deposition - Particle bound	(Dydp_pb)	(g/m2-y) / (g/s)	4.01355E-05	4.15061E-05	0.001246786	0.000260698	2.59769E-05	1.64887E-05	1.99835E-05	2.20146E-05	1.49788E-05	1.7859E-05	1.38967E-05	9.66918E-06	1.13007E-05
Unitized Dry deposition - Particle phase	(Dydp)	(g/m2-y) / (g/s)	0.000374533	0.000416787	0.013351707	0.002869695	0.000235428	0.000141544	0.000172559	0.000192109	0.000124746	0.000151948	0.000110333	7.397E-05	8.61672E-05
Unitized Air concentration - Particle bound	(cyp_pb)	(ug/m3) / (g/s)	0.001269324	0.001223517	0.016980554	0.005055578	0.000866141	0.000683538	0.000882264	0.000824851	0.000652322	0.000795879	0.000681757	0.000502784	0.000599816
Unitized Air concentration - Particle phase	(cyp)	(ug/m3) / (g/s)	0.001264637	0.001202342	0.016809874	0.004971138	0.000856098	0.000660874	0.000849106	0.000808552	0.000627353	0.000763562	0.000641317	0.000485795	0.000569734
Unitized Wet deposition - Vapors	(Dywv)	(g/m2-y) / (g/s)	3.96332E-05	0.00000737	0.000334916	0.000024585	7.71414E-06	4.28608E-06	3.96244E-06	6.90681E-06	3.65888E-06	3.64028E-06	0.00000178	1.65668E-06	1.69834E-06
Unitized Dry deposition - Vapors	(Dydv)	(g/m2-y) / (g/s)	0.000185641	0.000101949	0.006451413	0.000447955	2.51769E-05	4.15559E-05	5.65554E-05	1.96172E-05	2.66416E-05	4.39255E-05	5.80167E-05	3.51009E-05	4.3353E-05
Unitized Air concentration - Vapors	(Cyv)	(ug/m3) / (g/s)	0.001254956	0.001220427	0.01692135	0.005057125	0.000864098	0.000680432	0.000879414	0.000823217	0.000651256	0.000794129	0.000675737	0.000497788	0.000595199
Unitized air concentration - HgII			0.001206627	0.00118563	0.016733094	0.004981375	0.000831724	0.000638154	0.000834961	0.000780166	0.000601808	0.000746729	0.000630557	0.00045772	0.000551989
Unitized Dry deposition - HgII			0.000598224	0.000521713	0.018005304	0.002485268	0.000212502	0.000198084	0.000258185	0.000170194	0.000150836	0.00021375	0.000224297	0.000142514	0.000171397
Unitized Wet deposition - HgII			7.23873E-05	4.65256E-05	0.001319981	0.000183213	3.20955E-05	1.74755E-05	2.00334E-05	2.23946E-05	1.51276E-05	1.79687E-05	1.14833E-05	7.71625E-06	8.54413E-06
Unitized air concentration - Hg0			0.001235513	0.001209388	0.016765936	0.00503163	0.000861846	0.000674206	0.000870888	0.000822416	0.000647763	0.00078768	0.00066027	0.000489659	0.000585415
Unitized Dry deposition - Hg0			0.00047757	0.000258017	0.01749374	0.001151858	5.74728E-05	0.000100927	0.000138614	4.32802E-05	6.24654E-05	0.000106344	0.000140533	8.29958E-05	0.000103717
Unitized Wet deposition - Hg0			1.45455E-07	3.22222E-08	8.97143E-07	0.000000095	1.37241E-07	6.43285E-08	4.0757E-08	1.81489E-07	7.03214E-08	4.4703E-08	0.00000001	0.00000001	0.00000001
Unitized Wet+Dry deposition - Particle bound	(Dytwp_pb)	(g/m2-y) / (g/s)	4.32577E-05	4.61939E-05	0.001416126	0.00030233	2.80372E-05	1.7897E-05	2.16572E-05	2.35669E-05	1.61437E-05	1.93197E-05	0.00001496	1.05679E-05	1.2188E-05
Unitized Wet+Dry deposition - Particle phase	(Dytwp)	(g/m2-y) / (g/s)	0.000401483	0.000452359	0.014067826	0.003117188	0.00025251	0.000151043	0.000184323	0.000203789	0.000131725	0.000161531	0.000116053	7.72175E-05	8.98954E-05

Emission Rates

Unit 3

Compound	PM10 g/s	TSP g/s
Mercury, elemental	1.47E-03	1.47E-03
Mercury, methyl	1.47E-03	1.47E-03
Mercury, divalent	1.47E-03	1.47E-03
1,2,3,4,6,7,8,9-OCDD	8.42E-08	8.42E-08
1,2,3,4,6,7,8,9-OCDF	9.02E-09	9.02E-09
1,2,3,4,6,7,8-HpCDD	4.77E-08	4.77E-08
1,2,3,4,6,7,8-HpCDF	1.77E-08	1.77E-08
1,2,3,4,7,8,9-HpCDF	2.87E-09	2.87E-09
1,2,3,4,7,8-HxCDD	2.09E-09	2.09E-09
1,2,3,4,7,8-HxCDF	6.69E-09	6.69E-09
1,2,3,6,7,8-HxCDD	6.73E-09	6.73E-09
1,2,3,6,7,8-HxCDF	6.60E-09	6.60E-09
1,2,3,7,8,9-HxCDD	3.93E-09	3.93E-09
1,2,3,7,8,9-HxCDF	3.39E-09	3.39E-09
1,2,3,7,8-PeCDD	2.01E-09	2.01E-09
1,2,3,7,8-PeCDF	5.23E-09	5.23E-09
2,3,4,6,7,8-HxCDF	4.95E-09	4.95E-09
2,3,4,7,8-PeCDF	6.12E-09	6.12E-09
2,3,7,8-TCDD	9.90E-10	9.90E-10
2,3,7,8-TCDF	3.06E-09	3.06E-09
Arsenic	7.57E-06	7.57E-06
Beryllium	2.20E-06	2.20E-06
Cadmium	5.25E-04	5.25E-04
Chromium	8.80E-05	8.80E-05
Lead	7.36E-03	7.36E-03
Nickel	1.70E-04	1.70E-04

Values are linked to tab "Q" of file "inputs.xls."

Summary of EPCs (Cancer)	Compost Area	West Loch	Residential Area	Compost Area	Compost Area	Residential Area	Residential Area	Residential Area	Residential Area	Residential Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	C_s	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	1.80E-04	1.43E-10	NC	5.54E-07	1.84E-06	9.81E-09	3.45E-09	1.95E-09	1.95E-09	4.65E-11	9.70E-04
Mercury, divalent	9.10E-03	1.77E-09	4.82E-06	3.22E-05	3.29E-05	3.58E-06	1.33E-06	6.61E-07	6.61E-07	1.59E-08	1.77E-09
1,2,3,4,6,7,8,9-OCDD	4.55E-08	2.32E-16	4.26E-10	1.09E-09	2.23E-11	3.10E-10	9.37E-11	1.07E-12	6.13E-13	4.78E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	4.87E-09	3.93E-17	4.56E-11	1.17E-10	3.78E-12	4.19E-11	1.27E-11	1.47E-13	8.39E-14	6.50E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	2.58E-08	2.08E-16	2.41E-10	6.06E-10	1.41E-11	1.89E-10	5.65E-11	7.76E-13	4.43E-13	3.16E-11	5.73E-13
1,2,3,4,6,7,8-HpCDF	9.82E-09	3.07E-16	8.94E-11	2.38E-10	7.36E-12	2.00E-10	6.12E-11	5.42E-13	3.10E-13	2.78E-11	5.61E-12
1,2,3,4,7,8,9-HpCDF	1.87E-09	5.34E-17	1.45E-11	5.29E-11	1.40E-12	1.10E-10	3.46E-11	9.03E-14	5.16E-14	1.11E-11	9.77E-13
1,2,3,4,7,8-HxCDD	1.22E-09	1.49E-17	1.06E-11	2.90E-11	7.40E-13	1.98E-11	6.11E-12	4.32E-14	2.47E-14	2.55E-12	7.72E-14
1,2,3,4,7,8-HxCDF	4.23E-09	3.01E-16	3.38E-11	8.73E-11	3.93E-12	1.01E-10	3.09E-11	2.90E-13	1.66E-13	1.45E-11	1.48E-11
1,2,3,6,7,8-HxCDD	3.98E-09	1.51E-16	3.40E-11	9.57E-11	3.16E-12	1.17E-10	3.63E-11	2.27E-13	1.30E-13	1.45E-11	3.78E-12
1,2,3,6,7,8-HxCDF	4.21E-09	2.99E-16	3.34E-11	8.63E-11	3.91E-12	1.03E-10	3.14E-11	2.87E-13	1.64E-13	1.45E-11	1.46E-11
1,2,3,7,8,9-HxCDD	2.22E-09	8.64E-17	1.99E-11	5.28E-11	1.76E-12	4.85E-11	1.49E-11	1.32E-13	7.53E-14	6.75E-12	2.17E-12
1,2,3,7,8,9-HxCDF	2.42E-09	1.62E-16	1.71E-11	4.58E-11	2.25E-12	7.22E-11	2.23E-11	1.50E-13	8.58E-14	9.20E-12	7.93E-12
1,2,3,7,8-PeCDD	1.54E-09	2.18E-16	1.02E-11	3.06E-11	1.74E-12	8.65E-11	2.71E-11	1.13E-13	6.48E-14	9.65E-12	5.63E-12
1,2,3,7,8-PeCDF	5.61E-09	4.93E-16	2.64E-11	6.89E-11	5.81E-12	1.90E-10	5.92E-11	2.92E-13	1.67E-13	2.24E-11	1.66E-11
2,3,4,6,7,8-HxCDF	3.19E-09	2.25E-16	2.50E-11	6.49E-11	2.96E-12	7.94E-11	2.43E-11	2.15E-13	1.23E-13	1.11E-11	1.10E-11
2,3,4,7,8-PeCDF	5.95E-09	1.01E-15	3.09E-11	8.14E-11	7.29E-12	2.28E-10	7.09E-11	3.92E-13	2.24E-13	2.76E-11	2.03E-11
2,3,7,8-TCDD	1.79E-09	1.30E-16	5.01E-12	1.10E-11	1.92E-12	5.22E-11	1.64E-11	6.33E-14	3.62E-14	5.90E-12	4.47E-12
2,3,7,8-TCDF	6.14E-09	1.75E-15	1.55E-11	3.13E-11	9.56E-12	1.84E-10	5.75E-11	2.86E-13	1.64E-13	2.24E-11	1.73E-11
Arsenic	3.29E-11	2.02E-11	3.76E-08	9.47E-07	2.63E-12	4.44E-08	2.01E-09	NC	NC	NC	2.30E-09
Beryllium	1.33E-08	5.88E-12	1.09E-08	2.74E-07	1.90E-10	6.42E-09	8.72E-12	NC	NC	NC	3.65E-10
Cadmium	1.46E-07	1.41E-09	2.61E-06	6.56E-05	9.32E-08	1.84E-07	1.51E-08	2.56E-09	6.03E-11	1.28E-08	1.28E-06
Chromium	2.98E-05	1.26E-09	4.38E-07	1.11E-05	1.04E-07	1.43E-06	5.88E-07	NC	NC	NC	2.40E-08
Lead	3.05E-05	1.95E-08	3.66E-05	9.24E-04	2.66E-06	6.47E-06	8.14E-06	NC	NC	NC	1.76E-09
Nickel	5.07E-08	4.55E-10	8.44E-07	2.12E-05	4.04E-09	2.97E-06	7.49E-07	NC	NC	NC	3.55E-08

Summary of EPCs (Non Cancer)	Compost Area	West Loch	Residential Area	Compost Area	Compost Area	Residential Area	Residential Area	Residential Area	Residential Area	Residential Area	West Loch
Compound	Soil	Water	Air	Produce - above	Produce - root	Beef	Milk	Chicken	Eggs	Pork	Fish
	Cs_{tD}	C_{dw}	C_a	P_{ag}	P_{bg}	A_{beef}	A_{milk}	$A_{chicken}$	A_{egg}	A_{pork}	C_{fish}
	(mg/kg)	(mg/L)	(ug/m3)	(mg/kg DW)	(mg/kg DW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)	(mg/kg FW)
Mercury, elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, methyl	3.52E-04	1.43E-10	NC	1.10E-06	3.67E-06	1.91E-08	6.67E-09	3.83E-09	3.83E-09	9.13E-11	9.70E-04
Mercury, divalent	1.82E-02	1.77E-09	4.82E-06	4.54E-05	6.58E-05	6.84E-06	2.46E-06	1.32E-06	1.32E-06	3.16E-08	1.77E-09
1,2,3,4,6,7,8,9-OCDD	7.92E-08	2.32E-16	4.26E-10	1.10E-09	3.88E-11	3.35E-10	9.80E-11	1.87E-12	1.07E-12	6.98E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	8.48E-09	3.93E-17	4.56E-11	1.17E-10	6.58E-12	4.53E-11	1.32E-11	2.56E-13	1.46E-13	9.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	4.49E-08	2.08E-16	2.41E-10	6.07E-10	2.45E-11	2.07E-10	5.96E-11	1.35E-12	7.72E-13	4.75E-11	5.73E-13
1,2,3,4,6,7,8-HpCDF	1.71E-08	3.07E-16	8.94E-11	2.40E-10	1.28E-11	2.13E-10	6.34E-11	9.43E-13	5.39E-13	3.89E-11	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.25E-09	5.34E-17	1.45E-11	5.32E-11	2.44E-12	1.12E-10	3.50E-11	1.57E-13	8.98E-14	1.30E-11	9.77E-13
1,2,3,4,7,8-HxCDD	2.13E-09	1.49E-17	1.06E-11	2.91E-11	1.29E-12	2.08E-11	6.29E-12	7.53E-14	4.30E-14	3.43E-12	7.72E-14
1,2,3,4,7,8-HxCDF	7.34E-09	3.01E-16	3.38E-11	8.84E-11	6.85E-12	1.08E-10	3.22E-11	5.03E-13	2.88E-13	2.04E-11	1.48E-11
1,2,3,6,7,8-HxCDD	6.92E-09	1.51E-16	3.40E-11	9.64E-11	5.50E-12	1.23E-10	3.73E-11	3.94E-13	2.25E-13	1.91E-11	3.78E-12
1,2,3,6,7,8-HxCDF	7.32E-09	2.99E-16	3.34E-11	8.74E-11	6.82E-12	1.10E-10	3.27E-11	4.98E-13	2.85E-13	2.04E-11	1.46E-11
1,2,3,7,8,9-HxCDD	3.86E-09	8.64E-17	1.99E-11	5.32E-11	3.07E-12	5.16E-11	1.54E-11	2.29E-13	1.31E-13	9.44E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.21E-09	1.62E-16	1.71E-11	4.64E-11	3.92E-12	7.58E-11	2.30E-11	2.61E-13	1.49E-13	1.23E-11	7.93E-12
1,2,3,7,8-PeCDD	2.66E-09	2.18E-16	1.02E-11	3.13E-11	3.03E-12	8.93E-11	2.76E-11	1.96E-13	1.12E-13	1.19E-11	5.63E-12
1,2,3,7,8-PeCDF	9.73E-09	4.93E-16	2.64E-11	7.09E-11	1.01E-11	1.97E-10	6.05E-11	5.08E-13	2.90E-13	2.83E-11	1.66E-11
2,3,4,6,7,8-HxCDF	5.54E-09	2.25E-16	2.50E-11	6.57E-11	5.16E-12	8.45E-11	2.52E-11	3.74E-13	2.14E-13	1.55E-11	1.10E-11
2,3,4,7,8-PeCDF	1.03E-08	1.01E-15	3.09E-11	8.44E-11	1.27E-11	2.38E-10	7.27E-11	6.79E-13	3.88E-13	3.55E-11	2.03E-11
2,3,7,8-TCDD	3.04E-09	1.30E-16	5.01E-12	1.16E-11	3.35E-12	5.36E-11	1.66E-11	1.08E-13	6.17E-14	7.13E-12	4.47E-12
2,3,7,8-TCDF	1.04E-08	1.75E-15	1.55E-11	3.67E-11	1.66E-11	1.92E-10	5.90E-11	4.88E-13	2.79E-13	2.79E-11	1.73E-11
Arsenic	3.29E-11	2.02E-11	3.76E-08	9.47E-07	2.63E-12	4.44E-08	2.01E-09	NC	NC	NC	2.30E-09
Beryllium	1.33E-08	5.88E-12	1.09E-08	2.74E-07	1.99E-10	6.42E-09	8.72E-12	NC	NC	NC	3.65E-10
Cadmium	1.46E-07	1.41E-09	2.61E-06	6.56E-05	9.33E-08	1.84E-07	1.51E-08	2.57E-09	6.04E-11	1.28E-08	1.28E-06
Chromium	3.05E-05	1.26E-09	4.38E-07	1.11E-05	1.35E-07	1.44E-06	5.88E-07	NC	NC	NC	2.40E-08
Lead	3.05E-05	1.95E-08	3.66E-05	9.24E-04	2.74E-06	6.47E-06	8.14E-06	NC	NC	NC	1.76E-09
Nickel	5.07E-08	4.55E-10	8.44E-07	2.12E-05	4.05E-09	2.97E-06	7.49E-07	NC	NC	NC	3.55E-08

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Adult 1

H-POWER Expansion **Resident Adult**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	7.42E-10	1.08E-04	Compost Area
Water	NC	NC	West Loch
Air	2.30E-09	3.49E-05	Residential Area
Produce	1.13E-08	1.28E-03	Compost Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**1.43E-08**	**1.43E-03**	

NC - Not Calculated

H-POWER Expansion **Resident Adult**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	1.43E-08		1.43E-03	
Mercury, Elemental	NC		5.53E-09	0.0004%
Mercury, Methyl	NC		1.12E-05	0.7860%
Mercury, Divalent	NC		1.67E-04	11.6771%
1,2,3,4,6,7,8,9-OCDD	1.34E-11	0.0932%	1.96E-07	0.0137%
1,2,3,4,6,7,8,9-OCDF	1.43E-12	0.0100%	2.09E-08	0.0015%
1,2,3,4,6,7,8-HpCDD	2.48E-10	1.7276%	3.63E-06	0.2540%
1,2,3,4,6,7,8-HpCDF	9.65E-11	0.6730%	1.42E-06	0.0997%
1,2,3,4,7,8,9-HpCDF	2.04E-11	0.1424%	3.08E-07	0.0216%
1,2,3,4,7,8-HxCDD	1.17E-10	0.8164%	1.73E-06	0.1213%
1,2,3,4,7,8-HxCDF	3.61E-10	2.5140%	5.39E-06	0.3778%
1,2,3,6,7,8-HxCDD	3.85E-10	2.6871%	5.73E-06	0.4014%
1,2,3,6,7,8-HxCDF	3.57E-10	2.4878%	5.34E-06	0.3743%
1,2,3,7,8,9-HxCDD	2.14E-10	1.4947%	3.17E-06	0.2219%
1,2,3,7,8,9-HxCDF	1.90E-10	1.3258%	2.88E-06	0.2019%
1,2,3,7,8-PeCDD	1.25E-09	8.7005%	1.92E-05	1.3442%
1,2,3,7,8-PeCDF	9.15E-11	0.6378%	1.46E-06	0.1022%
2,3,4,6,7,8-HxCDF	2.68E-10	1.8721%	4.02E-06	0.2819%
2,3,4,7,8-PeCDF	1.06E-09	7.3979%	1.68E-05	1.1803%
2,3,7,8-TCDD	5.78E-10	4.0277%	1.00E-05	0.7016%
2,3,7,8-TCDF	1.76E-10	1.2254%	3.29E-06	0.2305%
Arsenic	3.52E-10	2.4511%	2.47E-06	0.1734%
Beryllium	8.18E-12	0.0571%	4.66E-07	0.0326%
Cadmium	6.75E-09	47.0982%	7.44E-05	5.2151%
Chromium	NC		3.76E-09	0.0003%
Lead	1.80E-09	12.5604%	1.08E-03	75.9334%
Nickel	NC		3.60E-06	0.2520%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Compost Area Soil	West Loch Water	Residential Area Air	Compost Area Produce-ag	Compost Area Produce-rt	Residential Area Beef	Residential Area Milk	Residential Area Poultry	Residential Area Eggs	Residential Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.80E-04	1.43E-10	NC	5.54E-07	1.84E-06	9.81E-09	3.45E-09	1.95E-09	1.95E-09	4.65E-11	9.70E-04
Mercury, Divalent	9.10E-03	1.77E-09	4.82E-06	3.22E-05	3.29E-05	3.58E-06	1.33E-06	6.61E-07	6.61E-07	1.59E-08	1.77E-09
1,2,3,4,6,7,8,9-OCDD	4.55E-08	2.32E-16	4.26E-10	1.09E-09	2.23E-11	3.10E-10	9.37E-11	1.07E-12	6.13E-13	4.78E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	4.87E-09	3.93E-17	4.56E-11	1.17E-10	3.78E-12	4.19E-11	1.27E-11	1.47E-13	8.39E-14	6.50E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	2.58E-08	2.08E-16	2.41E-10	6.06E-10	1.41E-11	1.89E-10	5.65E-11	7.76E-13	4.43E-13	3.16E-11	5.73E-13
1,2,3,4,6,7,8-HpCDF	9.82E-09	3.07E-16	8.94E-11	2.38E-10	7.36E-12	2.00E-10	6.12E-11	5.42E-13	3.10E-13	2.78E-11	5.61E-12
1,2,3,4,7,8,9-HpCDF	1.87E-09	5.34E-17	1.45E-11	5.29E-11	1.40E-12	1.10E-10	3.46E-11	9.03E-14	5.16E-14	1.11E-11	9.77E-13
1,2,3,4,7,8-HxCDD	1.22E-09	1.49E-17	1.06E-11	2.90E-11	7.40E-13	1.98E-11	6.11E-12	4.32E-14	2.47E-14	2.55E-12	7.72E-14
1,2,3,4,7,8-HxCDF	4.23E-09	3.01E-16	3.38E-11	8.73E-11	3.93E-12	1.01E-10	3.09E-11	2.90E-13	1.66E-13	1.45E-11	1.48E-11
1,2,3,6,7,8-HxCDD	3.98E-09	1.51E-16	3.40E-11	9.57E-11	3.16E-12	1.17E-10	3.63E-11	2.27E-13	1.30E-13	1.45E-11	3.78E-12
1,2,3,6,7,8-HxCDF	4.21E-09	2.99E-16	3.34E-11	8.63E-11	3.91E-12	1.03E-10	3.14E-11	2.87E-13	1.64E-13	1.45E-11	1.46E-11
1,2,3,7,8,9-HxCDD	2.22E-09	8.64E-17	1.99E-11	5.28E-11	1.76E-12	4.85E-11	1.49E-11	1.32E-13	7.53E-14	6.75E-12	2.17E-12
1,2,3,7,8,9-HxCDF	2.42E-09	1.62E-16	1.71E-11	4.58E-11	2.25E-12	7.22E-11	2.23E-11	1.50E-13	8.58E-14	9.20E-12	7.93E-12
1,2,3,7,8-PeCDD	1.54E-09	2.18E-16	1.02E-11	3.06E-11	1.74E-12	8.65E-11	2.71E-11	1.13E-13	6.48E-14	9.65E-12	5.63E-12
1,2,3,7,8-PeCDF	5.61E-09	4.93E-16	2.64E-11	6.89E-11	5.81E-12	1.90E-10	5.92E-11	2.92E-13	1.67E-13	2.24E-11	1.66E-11
2,3,4,6,7,8-HxCDF	3.19E-09	2.25E-16	2.50E-11	6.49E-11	2.96E-12	7.94E-11	2.43E-11	2.15E-13	1.23E-13	1.11E-11	1.10E-11
2,3,4,7,8-PeCDF	5.95E-09	1.01E-15	3.09E-11	8.14E-11	7.29E-12	2.28E-10	7.09E-11	3.92E-13	2.24E-13	2.76E-11	2.03E-11
2,3,7,8-TCDD	1.79E-09	1.30E-16	5.01E-12	1.10E-11	1.92E-12	5.22E-11	1.64E-11	6.33E-14	3.62E-14	5.90E-12	4.47E-12
2,3,7,8-TCDF	6.14E-09	1.75E-15	1.55E-11	3.13E-11	9.56E-12	1.84E-10	5.75E-11	2.86E-13	1.64E-13	2.24E-11	1.73E-11
Arsenic	3.29E-11	2.02E-11	3.76E-08	9.47E-07	2.63E-12	4.44E-08	2.01E-09	NC	NC	NC	2.30E-09
Beryllium	1.33E-08	5.88E-12	1.09E-08	2.74E-07	1.90E-10	6.42E-09	8.72E-12	NC	NC	NC	3.65E-10
Cadmium	1.46E-07	1.41E-09	2.61E-06	6.56E-05	9.32E-08	1.84E-07	1.51E-08	2.56E-09	6.03E-11	1.28E-08	1.28E-06
Chromium	2.98E-05	1.26E-09	4.38E-07	1.11E-05	1.04E-07	1.43E-06	5.88E-07	NC	NC	NC	2.40E-08
Lead	3.05E-05	1.95E-08	3.66E-05	9.24E-04	2.66E-06	6.47E-06	8.14E-06	NC	NC	NC	1.76E-09
Nickel	5.07E-08	4.55E-10	8.44E-07	2.12E-05	4.04E-09	2.97E-06	7.49E-07	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Compost Area Soil	West Loch Water	Residential Area Air	Compost Area Produce-ag	Compost Area Produce-rt	Residential Area Beef	Residential Area Milk	Residential Area Poultry	Residential Area Eggs	Residential Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	3.52E-04	1.43E-10	NC	1.10E-06	3.67E-06	1.91E-08	6.67E-09	3.83E-09	3.83E-09	9.13E-11	9.70E-04
Mercury, Divalent	1.82E-02	1.77E-09	4.82E-06	4.54E-05	6.58E-05	6.84E-06	2.46E-06	1.32E-06	1.32E-06	3.16E-08	1.77E-09
1,2,3,4,6,7,8,9-OCDD	7.92E-08	2.32E-16	4.26E-10	1.10E-09	3.88E-11	3.35E-10	9.80E-11	1.87E-12	1.07E-12	6.98E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	8.48E-09	3.93E-17	4.56E-11	1.17E-10	6.58E-12	4.53E-11	1.32E-11	2.56E-13	1.46E-13	9.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	4.49E-08	2.08E-16	2.41E-10	6.07E-10	2.45E-11	2.07E-10	5.96E-11	1.35E-12	7.72E-13	4.75E-11	5.73E-13
1,2,3,4,6,7,8-HpCDF	1.71E-08	3.07E-16	8.94E-11	2.40E-10	1.28E-11	2.13E-10	6.34E-11	9.43E-13	5.39E-13	3.89E-11	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.25E-09	5.34E-17	1.45E-11	5.32E-11	2.44E-12	1.12E-10	3.50E-11	1.57E-13	8.98E-14	1.30E-11	9.77E-13
1,2,3,4,7,8-HxCDD	2.13E-09	1.49E-17	1.06E-11	2.91E-11	1.29E-12	2.08E-11	6.29E-12	7.53E-14	4.30E-14	3.43E-12	7.72E-14
1,2,3,4,7,8-HxCDF	7.34E-09	3.01E-16	3.38E-11	8.84E-11	6.85E-12	1.08E-10	3.22E-11	5.03E-13	2.88E-13	2.04E-11	1.48E-11
1,2,3,6,7,8-HxCDD	6.92E-09	1.51E-16	3.40E-11	9.64E-11	5.50E-12	1.23E-10	3.73E-11	3.94E-13	2.25E-13	1.91E-11	3.78E-12
1,2,3,6,7,8-HxCDF	7.32E-09	2.99E-16	3.34E-11	8.74E-11	6.82E-12	1.10E-10	3.27E-11	4.98E-13	2.85E-13	2.04E-11	1.46E-11
1,2,3,7,8,9-HxCDD	3.86E-09	8.64E-17	1.99E-11	5.32E-11	3.07E-12	5.16E-11	1.54E-11	2.29E-13	1.31E-13	9.44E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.21E-09	1.62E-16	1.71E-11	4.64E-11	3.92E-12	7.58E-11	2.30E-11	2.61E-13	1.49E-13	1.23E-11	7.93E-12
1,2,3,7,8-PeCDD	2.66E-09	2.18E-16	1.02E-11	3.13E-11	3.03E-12	8.93E-11	2.76E-11	1.96E-13	1.12E-13	1.19E-11	5.63E-12
1,2,3,7,8-PeCDF	9.73E-09	4.93E-16	2.64E-11	7.09E-11	1.01E-11	1.97E-10	6.05E-11	5.08E-13	2.90E-13	2.83E-11	1.66E-11
2,3,4,6,7,8-HxCDF	5.54E-09	2.25E-16	2.50E-11	6.57E-11	5.16E-12	8.45E-11	2.52E-11	3.74E-13	2.14E-13	1.55E-11	1.10E-11
2,3,4,7,8-PeCDF	1.03E-08	1.01E-15	3.09E-11	8.44E-11	1.27E-11	2.38E-10	7.27E-11	6.79E-13	3.88E-13	3.55E-11	2.03E-11
2,3,7,8-TCDD	3.04E-09	1.30E-16	5.01E-12	1.16E-11	3.35E-12	5.36E-11	1.66E-11	1.08E-13	6.17E-14	7.13E-12	4.47E-12
2,3,7,8-TCDF	1.04E-08	1.75E-15	1.55E-11	3.67E-11	1.66E-11	1.92E-10	5.90E-11	4.88E-13	2.79E-13	2.79E-11	1.73E-11
Arsenic	3.29E-11	2.02E-11	3.76E-08	9.47E-07	2.63E-12	4.44E-08	2.01E-09	NC	NC	NC	2.30E-09
Beryllium	1.33E-08	5.88E-12	1.09E-08	2.74E-07	1.99E-10	6.42E-09	8.72E-12	NC	NC	NC	3.65E-10
Cadmium	1.46E-07	1.41E-09	2.61E-06	6.56E-05	9.33E-08	1.84E-07	1.51E-08	2.57E-09	6.04E-11	1.28E-08	1.28E-06
Chromium	3.05E-05	1.26E-09	4.38E-07	1.11E-05	1.35E-07	1.44E-06	5.88E-07	NC	NC	NC	2.40E-08
Lead	3.05E-05	1.95E-08	3.66E-05	9.24E-04	2.74E-06	6.47E-06	8.14E-06	NC	NC	NC	1.76E-09
Nickel	5.07E-08	4.55E-10	8.44E-07	2.12E-05	4.05E-09	2.97E-06	7.49E-07	NC	NC	NC	3.55E-08

H-POWER Expansion **Resident Adult**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	1.20E-12	0.00E+00	1.71E-12	1.04E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	1.29E-13	0.00E+00	1.83E-13	1.12E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	2.27E-11	0.00E+00	3.23E-11	1.93E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	8.65E-12	0.00E+00	1.20E-11	7.59E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	1.64E-12	0.00E+00	1.94E-12	1.68E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	1.08E-11	0.00E+00	1.42E-11	9.22E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	3.72E-11	0.00E+00	4.53E-11	2.78E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	3.51E-11	0.00E+00	4.55E-11	3.05E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	3.71E-11	0.00E+00	4.46E-11	2.75E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	1.96E-11	0.00E+00	2.66E-11	1.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	2.13E-11	0.00E+00	2.29E-11	1.46E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	1.35E-10	0.00E+00	1.36E-10	9.77E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	1.48E-11	0.00E+00	1.06E-11	6.60E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	2.81E-11	0.00E+00	3.35E-11	2.07E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	1.57E-10	0.00E+00	1.24E-10	7.80E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	1.57E-10	0.00E+00	6.70E-11	3.53E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	5.40E-11	0.00E+00	2.07E-11	1.01E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	2.89E-17	0.00E+00	5.05E-11	3.01E-10	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	8.18E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	3.26E-14	0.00E+00	1.47E-09	5.29E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	1.52E-13	0.00E+00	1.37E-10	1.66E-09	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Adult**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	5.5E-09	NC	No uptake factor	NC	NC	NC	NC	NC
Mercury, Methyl	4.8E-06	0.0E+00	NC	6.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	8.3E-05	0.0E+00	3.2E-06	8.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	3.3E-08	0.0E+00	ND	1.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	3.5E-09	0.0E+00	ND	1.7E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	6.2E-07	0.0E+00	ND	3.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	2.3E-07	0.0E+00	ND	1.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	4.5E-08	0.0E+00	ND	2.6E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	2.9E-07	0.0E+00	ND	1.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	1.0E-06	0.0E+00	ND	4.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	9.5E-07	0.0E+00	ND	4.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	1.0E-06	0.0E+00	ND	4.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	5.3E-07	0.0E+00	ND	2.6E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	5.8E-07	0.0E+00	ND	2.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.6E-06	0.0E+00	ND	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	4.0E-07	0.0E+00	ND	1.1E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	7.6E-07	0.0E+00	ND	3.3E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	4.2E-06	0.0E+00	ND	1.3E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	4.2E-06	0.0E+00	ND	5.8E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.4E-06	0.0E+00	ND	1.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	1.5E-13	0.0E+00	9.1E-07	1.6E-06	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	9.1E-12	0.0E+00	4.0E-07	6.8E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	4.0E-10	0.0E+00	9.5E-06	6.5E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.8E-11	0.0E+00	6.0E-11	3.7E-09	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	9.8E-08	0.0E+00	1.8E-05	1.1E-03	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	3.5E-12	0.0E+00	3.1E-06	5.2E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Project	H-POWER Expansion
Receptors	Resident Adult
	Resident Child
	Farmer Adult
	Farmer Child
	Fisher Adult
	Fisher Child

Select a receptor: Resident Child 2

H-POWER Expansion **Resident Child**

Pathway-Specific Risk Summary

Pathway	Risk	Hazard Quotient	Location
Soil	1.39E-09	1.01E-03	Compost Area
Water	NC	NC	West Loch
Air	1.15E-09	8.67E-05	Residential Area
Produce	8.46E-09	4.84E-03	Compost Area
Fish	NC	NC	
Beef	NC	NC	
Milk	NC	NC	
Poultry	NC	NC	
Eggs	NC	NC	
Pork	NC	NC	
Total	**1.10E-08**	**5.94E-03**	

NC - Not Calculated

H-POWER Expansion **Resident Child**

Chemical-Specific Risk Summary

	Risk	% of Total	Hazard Index	% of Total
Total	1.10E-08		5.94E-03	
Mercury, Elemental	NC		1.38E-08	0.0002%
Mercury, Methyl	NC		7.47E-05	1.2580%
Mercury, Divalent	NC		1.12E-03	18.8200%
1,2,3,4,6,7,8,9-OCDD	1.09E-11	0.0993%	9.15E-07	0.0154%
1,2,3,4,6,7,8,9-OCDF	1.17E-12	0.0106%	9.81E-08	0.0017%
1,2,3,4,6,7,8-HpCDD	2.03E-10	1.8453%	1.70E-05	0.2869%
1,2,3,4,6,7,8-HpCDF	7.90E-11	0.7184%	6.65E-06	0.1120%
1,2,3,4,7,8,9-HpCDF	1.66E-11	0.1514%	1.40E-06	0.0237%
1,2,3,4,7,8-HxCDD	9.61E-11	0.8747%	8.12E-06	0.1368%
1,2,3,4,7,8-HxCDF	3.01E-10	2.7346%	2.59E-05	0.4361%
1,2,3,6,7,8-HxCDD	3.16E-10	2.8794%	2.68E-05	0.4514%
1,2,3,6,7,8-HxCDF	2.98E-10	2.7093%	2.57E-05	0.4327%
1,2,3,7,8,9-HxCDD	1.76E-10	1.5996%	1.48E-05	0.2501%
1,2,3,7,8,9-HxCDF	1.61E-10	1.4620%	1.41E-05	0.2368%
1,2,3,7,8-PeCDD	1.05E-09	9.5830%	9.25E-05	1.5590%
1,2,3,7,8-PeCDF	8.26E-11	0.7518%	7.74E-06	0.1304%
2,3,4,6,7,8-HxCDF	2.24E-10	2.0407%	1.94E-05	0.3262%
2,3,4,7,8-PeCDF	9.42E-10	8.5708%	8.72E-05	1.4691%
2,3,7,8-TCDD	5.95E-10	5.4112%	6.13E-05	1.0322%
2,3,7,8-TCDF	1.89E-10	1.7157%	2.06E-05	0.3464%
Arsenic	2.50E-10	2.2749%	8.10E-06	0.1365%
Beryllium	4.07E-12	0.0370%	1.24E-06	0.0209%
Cadmium	4.68E-09	42.5908%	2.66E-04	4.4856%
Chromium	NC		1.41E-08	0.0002%
Lead	1.31E-09	11.9392%	4.03E-03	67.8699%
Nickel	NC		9.60E-06	0.1617%

NC - Not Calculated

Cancer concentrations **H-POWER Expansion**	Compost Area Soil	West Loch Water	Residential Area Air	Compost Area Produce-ag	Compost Area Produce-rt	Residential Area Beef	Residential Area Milk	Residential Area Poultry	Residential Area Eggs	Residential Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	1.80E-04	1.43E-10	NC	5.54E-07	1.84E-06	9.81E-09	3.45E-09	1.95E-09	1.95E-09	4.65E-11	9.70E-04
Mercury, Divalent	9.10E-03	1.77E-09	4.82E-06	3.22E-05	3.29E-05	3.58E-06	1.33E-06	6.61E-07	6.61E-07	1.59E-08	1.77E-09
1,2,3,4,6,7,8,9-OCDD	4.55E-08	2.32E-16	4.26E-10	1.09E-09	2.23E-11	3.10E-10	9.37E-11	1.07E-12	6.13E-13	4.78E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	4.87E-09	3.93E-17	4.56E-11	1.17E-10	3.78E-12	4.19E-11	1.27E-11	1.47E-13	8.39E-14	6.50E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	2.58E-08	2.08E-16	2.41E-10	6.06E-10	1.41E-11	1.89E-10	5.65E-11	7.76E-13	4.43E-13	3.16E-11	5.73E-13
1,2,3,4,6,7,8-HpCDF	9.82E-09	3.07E-16	8.94E-11	2.38E-10	7.36E-12	2.00E-10	6.12E-11	5.42E-13	3.10E-13	2.78E-11	5.61E-12
1,2,3,4,7,8,9-HpCDF	1.87E-09	5.34E-17	1.45E-11	5.29E-11	1.40E-12	1.10E-10	3.46E-11	9.03E-14	5.16E-14	1.11E-11	9.77E-13
1,2,3,4,7,8-HxCDD	1.22E-09	1.49E-17	1.06E-11	2.90E-11	7.40E-13	1.98E-11	6.11E-12	4.32E-14	2.47E-14	2.55E-12	7.72E-14
1,2,3,4,7,8-HxCDF	4.23E-09	3.01E-16	3.38E-11	8.73E-11	3.93E-12	1.01E-10	3.09E-11	2.90E-13	1.66E-13	1.45E-11	1.48E-11
1,2,3,6,7,8-HxCDD	3.98E-09	1.51E-16	3.40E-11	9.57E-11	3.16E-12	1.17E-10	3.63E-11	2.27E-13	1.30E-13	1.45E-11	3.78E-12
1,2,3,6,7,8-HxCDF	4.21E-09	2.99E-16	3.34E-11	8.63E-11	3.91E-12	1.03E-10	3.14E-11	2.87E-13	1.64E-13	1.45E-11	1.46E-11
1,2,3,7,8,9-HxCDD	2.22E-09	8.64E-17	1.99E-11	5.28E-11	1.76E-12	4.85E-11	1.49E-11	1.32E-13	7.53E-14	6.75E-12	2.17E-12
1,2,3,7,8,9-HxCDF	2.42E-09	1.62E-16	1.71E-11	4.58E-11	2.25E-12	7.22E-11	2.23E-11	1.50E-13	8.58E-14	9.20E-12	7.93E-12
1,2,3,7,8-PeCDD	1.54E-09	2.18E-16	1.02E-11	3.06E-11	1.74E-12	8.65E-11	2.71E-11	1.13E-13	6.48E-14	9.65E-12	5.63E-12
1,2,3,7,8-PeCDF	5.61E-09	4.93E-16	2.64E-11	6.89E-11	5.81E-12	1.90E-10	5.92E-11	2.92E-13	1.67E-13	2.24E-11	1.66E-11
2,3,4,6,7,8-HxCDF	3.19E-09	2.25E-16	2.50E-11	6.49E-11	2.96E-12	7.94E-11	2.43E-11	2.15E-13	1.23E-13	1.11E-11	1.10E-11
2,3,4,7,8-PeCDF	5.95E-09	1.01E-15	3.09E-11	8.14E-11	7.29E-12	2.28E-10	7.09E-11	3.92E-13	2.24E-13	2.76E-11	2.03E-11
2,3,7,8-TCDD	1.79E-09	1.30E-16	5.01E-12	1.10E-11	1.92E-12	5.22E-11	1.64E-11	6.33E-14	3.62E-14	5.90E-12	4.47E-12
2,3,7,8-TCDF	6.14E-09	1.75E-15	1.55E-11	3.13E-11	9.56E-12	1.84E-10	5.75E-11	2.86E-13	1.64E-13	2.24E-11	1.73E-11
Arsenic	3.29E-11	2.02E-11	3.76E-08	9.47E-07	2.63E-12	4.44E-08	2.01E-09	NC	NC	NC	2.30E-09
Beryllium	1.33E-08	5.88E-12	1.09E-08	2.74E-07	1.90E-10	6.42E-09	8.72E-12	NC	NC	NC	3.65E-10
Cadmium	1.46E-07	1.41E-09	2.61E-06	6.56E-05	9.32E-08	1.84E-07	1.51E-08	2.56E-09	6.03E-11	1.28E-08	1.28E-06
Chromium	2.98E-05	1.26E-09	4.38E-07	1.11E-05	1.04E-07	1.43E-06	5.88E-07	NC	NC	NC	2.40E-08
Lead	3.05E-05	1.95E-08	3.66E-05	9.24E-04	2.66E-06	6.47E-06	8.14E-06	NC	NC	NC	1.76E-09
Nickel	5.07E-08	4.55E-10	8.44E-07	2.12E-05	4.04E-09	2.97E-06	7.49E-07	NC	NC	NC	3.55E-08

Noncancer concentrations **H-POWER Expansion**	Compost Area Soil	West Loch Water	Residential Area Air	Compost Area Produce-ag	Compost Area Produce-rt	Residential Area Beef	Residential Area Milk	Residential Area Poultry	Residential Area Eggs	Residential Area Pork	West Loch Fish
Mercury, Elemental	NC	NC	2.28E-09	NC	NC	NC	NC	NC	NC	NC	No uptake factor
Mercury, Methyl	3.52E-04	1.43E-10	NC	1.10E-06	3.67E-06	1.91E-08	6.67E-09	3.83E-09	3.83E-09	9.13E-11	9.70E-04
Mercury, Divalent	1.82E-02	1.77E-09	4.82E-06	4.54E-05	6.58E-05	6.84E-06	2.46E-06	1.32E-06	1.32E-06	3.16E-08	1.77E-09
1,2,3,4,6,7,8,9-OCDD	7.92E-08	2.32E-16	4.26E-10	1.10E-09	3.88E-11	3.35E-10	9.80E-11	1.87E-12	1.07E-12	6.98E-11	3.40E-13
1,2,3,4,6,7,8,9-OCDF	8.48E-09	3.93E-17	4.56E-11	1.17E-10	6.58E-12	4.53E-11	1.32E-11	2.56E-13	1.46E-13	9.51E-12	1.08E-13
1,2,3,4,6,7,8-HpCDD	4.49E-08	2.08E-16	2.41E-10	6.07E-10	2.45E-11	2.07E-10	5.96E-11	1.35E-12	7.72E-13	4.75E-11	5.73E-13
1,2,3,4,6,7,8-HpCDF	1.71E-08	3.07E-16	8.94E-11	2.40E-10	1.28E-11	2.13E-10	6.34E-11	9.43E-13	5.39E-13	3.89E-11	5.61E-12
1,2,3,4,7,8,9-HpCDF	3.25E-09	5.34E-17	1.45E-11	5.32E-11	2.44E-12	1.12E-10	3.50E-11	1.57E-13	8.98E-14	1.30E-11	9.77E-13
1,2,3,4,7,8-HxCDD	2.13E-09	1.49E-17	1.06E-11	2.91E-11	1.29E-12	2.08E-11	6.29E-12	7.53E-14	4.30E-14	3.43E-12	7.72E-14
1,2,3,4,7,8-HxCDF	7.34E-09	3.01E-16	3.38E-11	8.84E-11	6.85E-12	1.08E-10	3.22E-11	5.03E-13	2.88E-13	2.04E-11	1.48E-11
1,2,3,6,7,8-HxCDD	6.92E-09	1.51E-16	3.40E-11	9.64E-11	5.50E-12	1.23E-10	3.73E-11	3.94E-13	2.25E-13	1.91E-11	3.78E-12
1,2,3,6,7,8-HxCDF	7.32E-09	2.99E-16	3.34E-11	8.74E-11	6.82E-12	1.10E-10	3.27E-11	4.98E-13	2.85E-13	2.04E-11	1.46E-11
1,2,3,7,8,9-HxCDD	3.86E-09	8.64E-17	1.99E-11	5.32E-11	3.07E-12	5.16E-11	1.54E-11	2.29E-13	1.31E-13	9.44E-12	2.17E-12
1,2,3,7,8,9-HxCDF	4.21E-09	1.62E-16	1.71E-11	4.64E-11	3.92E-12	7.58E-11	2.30E-11	2.61E-13	1.49E-13	1.23E-11	7.93E-12
1,2,3,7,8-PeCDD	2.66E-09	2.18E-16	1.02E-11	3.13E-11	3.03E-12	8.93E-11	2.76E-11	1.96E-13	1.12E-13	1.19E-11	5.63E-12
1,2,3,7,8-PeCDF	9.73E-09	4.93E-16	2.64E-11	7.09E-11	1.01E-11	1.97E-10	6.05E-11	5.08E-13	2.90E-13	2.83E-11	1.66E-11
2,3,4,6,7,8-HxCDF	5.54E-09	2.25E-16	2.50E-11	6.57E-11	5.16E-12	8.45E-11	2.52E-11	3.74E-13	2.14E-13	1.55E-11	1.10E-11
2,3,4,7,8-PeCDF	1.03E-08	1.01E-15	3.09E-11	8.44E-11	1.27E-11	2.38E-10	7.27E-11	6.79E-13	3.88E-13	3.55E-11	2.03E-11
2,3,7,8-TCDD	3.04E-09	1.30E-16	5.01E-12	1.16E-11	3.35E-12	5.36E-11	1.66E-11	1.08E-13	6.17E-14	7.13E-12	4.47E-12
2,3,7,8-TCDF	1.04E-08	1.75E-15	1.55E-11	3.67E-11	1.66E-11	1.92E-10	5.90E-11	4.88E-13	2.79E-13	2.79E-11	1.73E-11
Arsenic	3.29E-11	2.02E-11	3.76E-08	9.47E-07	2.63E-12	4.44E-08	2.01E-09	NC	NC	NC	2.30E-09
Beryllium	1.33E-08	5.88E-12	1.09E-08	2.74E-07	1.99E-10	6.42E-09	8.72E-12	NC	NC	NC	3.65E-10
Cadmium	1.46E-07	1.41E-09	2.61E-06	6.56E-05	9.33E-08	1.84E-07	1.51E-08	2.57E-09	6.04E-11	1.28E-08	1.28E-06
Chromium	3.05E-05	1.26E-09	4.38E-07	1.11E-05	1.35E-07	1.44E-06	5.88E-07	NC	NC	NC	2.40E-08
Lead	3.05E-05	1.95E-08	3.66E-05	9.24E-04	2.74E-06	6.47E-06	8.14E-06	NC	NC	NC	1.76E-09
Nickel	5.07E-08	4.55E-10	8.44E-07	2.12E-05	4.05E-09	2.97E-06	7.49E-07	NC	NC	NC	3.55E-08

H-POWER Expansion **Resident Child**
Specific Incremental Lifetime Cancer Risk
Risk = *LADI x CSF*

Risk = Incremental lifetime cancer risk (unitless)
LADI = Lifetime average daily intake (mg/kg-day)
CSF = Cancer slope factor $(mg/kg\text{-}day)^{-1}$

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Methyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Mercury, Divalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3,4,6,7,8,9-OCDD	2.24E-12	0.00E+00	8.51E-13	7.82E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8,9-OCDF	2.40E-13	0.00E+00	9.11E-14	8.38E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDD	4.24E-11	0.00E+00	1.60E-11	1.44E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,6,7,8-HpCDF	1.61E-11	0.00E+00	5.96E-12	5.69E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8,9-HpCDF	3.07E-12	0.00E+00	9.67E-13	1.26E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDD	2.01E-11	0.00E+00	7.04E-12	6.90E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,4,7,8-HxCDF	6.95E-11	0.00E+00	2.25E-11	2.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDD	6.55E-11	0.00E+00	2.27E-11	2.28E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,6,7,8-HxCDF	6.93E-11	0.00E+00	2.22E-11	2.06E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDD	3.66E-11	0.00E+00	1.32E-11	1.26E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8,9-HxCDF	3.98E-11	0.00E+00	1.14E-11	1.09E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDD	2.52E-10	0.00E+00	6.76E-11	7.33E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1,2,3,7,8-PeCDF	2.76E-11	0.00E+00	5.28E-12	4.97E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,6,7,8-HxCDF	5.24E-11	0.00E+00	1.67E-11	1.55E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,4,7,8-PeCDF	2.93E-10	0.00E+00	6.18E-11	5.87E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDD	2.93E-10	0.00E+00	3.33E-11	2.68E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2,3,7,8-TCDF	1.01E-10	0.00E+00	1.03E-11	7.74E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	5.40E-17	0.00E+00	2.51E-11	2.25E-10	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Beryllium	ND	ND	4.07E-12	ND	ND	ND	ND	ND	ND	ND
Cadmium	6.08E-14	0.00E+00	7.30E-10	3.95E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Lead	2.84E-13	0.00E+00	6.82E-11	1.24E-09	0.00E+00	0.00E+00	0.00E+00	NC	NC	NC
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

ND - Not Determined

H-POWER Expansion **Resident Child**

Pathway-Specific Hazard Quotients

$$HQ = \frac{ADI}{RfD}$$

HQ : Hazard quotient (unitless)
ADI : Average daily intake (mg/kg-day)
RfD : Reference dose (mg/kg-day)

	Soil	Water	Air	Produce	Fish	Beef	Milk	Poultry	Eggs	Pork
Mercury, Elemental	NC	NC	1.4E-08	NC	No uptake factor	NC	NC	NC	NC	NC
Mercury, Methyl	4.5E-05	0.0E+00	NC	3.0E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Mercury, Divalent	7.7E-04	0.0E+00	7.9E-06	3.4E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDD	3.0E-07	0.0E+00	ND	6.1E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8,9-OCDF	3.3E-08	0.0E+00	ND	6.6E-08	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDD	5.7E-06	0.0E+00	ND	1.1E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,6,7,8-HpCDF	2.2E-06	0.0E+00	ND	4.5E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8,9-HpCDF	4.2E-07	0.0E+00	ND	9.9E-07	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDD	2.7E-06	0.0E+00	ND	5.4E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,4,7,8-HxCDF	9.4E-06	0.0E+00	ND	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDD	8.8E-06	0.0E+00	ND	1.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,6,7,8-HxCDF	9.4E-06	0.0E+00	ND	1.6E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDD	4.9E-06	0.0E+00	ND	9.9E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8,9-HxCDF	5.4E-06	0.0E+00	ND	8.7E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDD	3.4E-05	0.0E+00	ND	5.9E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
1,2,3,7,8-PeCDF	3.7E-06	0.0E+00	ND	4.0E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,6,7,8-HxCDF	7.1E-06	0.0E+00	ND	1.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,4,7,8-PeCDF	3.9E-05	0.0E+00	ND	4.8E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDD	3.9E-05	0.0E+00	ND	2.2E-05	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
2,3,7,8-TCDF	1.3E-05	0.0E+00	ND	7.2E-06	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Arsenic	1.4E-12	0.0E+00	2.3E-06	5.8E-06	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Beryllium	8.5E-11	0.0E+00	9.9E-07	2.5E-07	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Cadmium	3.7E-09	0.0E+00	2.4E-05	2.4E-04	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00
Chromium	2.6E-10	0.0E+00	1.5E-10	1.4E-08	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Lead	9.1E-07	0.0E+00	4.4E-05	4.0E-03	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC
Nickel	3.2E-11	0.0E+00	7.6E-06	2.0E-06	0.0E+00	0.0E+00	0.0E+00	NC	NC	NC

Appendix F – Alternative Analysis for the Expansion of H-POWER

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Alternatives Analysis for the Expansion of H-POWER

Submitted to the Department of Environmental Services,
City and County of Honolulu

Pacific Waste
CONSULTING GROUP

December 2008

Alternatives Analysis for the Expansion of H-POWER

Submitted to the City and County of Honolulu

Department of Environmental Services

December 2008

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Executive Summary

This appendix reviews the alternatives to the proposed H-POWER Expansion. Those alternatives consist of other technologies for processing MSW and an alternative disposal site located on the mainland. The following includes a summary of the report and evaluation.

1.1 Alternatives Considered

The following alternatives to the proposed project were evaluated:

- No Project – The expansion would not be built, with no alternative site or technology available.

- Delayed Project – The action on the expansion would be delayed. The delayed and no action alternatives have the same effect, and the delayed project action could increase the cost of the expansion.

- Transshipment – Oahu's MSW would be baled and transported to a mainland landfill for disposal in Washington, Oregon, or Idaho. Even with this alternative, not all MSW can be transshipped.

- Alternative Technologies – Technologies other than the expansion that could reduce the amount of material requiring disposal and generate electricity or another beneficial reuse product. Alternative technologies that were considered include:

    1. Thermal and non-thermal technologies; and

    2. Enhanced recycling.

The analysis was performed for each of the alternatives. The examination of alternative technologies involved a review of currently operating facilities and includes information describing the technologies.

Alternative technologies were compared to criteria or guidelines established by the City & County of Honolulu in the June 20, 2007 *Competitive Sealed Proposal for Alternative Technology*. The transshipment requirements were compared to criteria or guidelines established in the City's bid documents from January 22, 2008.

1.2 No Project Alternative

Under this alternative, Unit #3 of H–POWER would not be constructed. The existing plant could continue to operate providing energy recovery, recycling and disposal reduction. These benefits would not be increased by the construction of the expansion. Several actions would result:

- Under this alternative, the City would continue to send the MSW that would be converted to energy in H–POWER Unit #3 to the Waimanalo Gulch Sanitary Landfill. The landfill is currently in the environmental process to obtain approval for a 92.5-acre expansion to allow for operation of the landfill for at least an additional 15 years. The landfill currently receives ash, residue, and non-processibles waste from H–POWER. It is also the disposal site for MSW that exceeds the capacity at H–POWER.[1] The Landfill would continue to receive about 900 TPD of MSW that would have been reduced to 225 TPD through operation of Unit #3. Truck traffic to the landfill would have been reduced by the operation of Unit #3. The result would be a reduction in the life of the landfill.

- The loss of energy produced by the expansion would decrease the amount of energy produced from this renewable fuel, which is from five to eight percent of the island needs. Under this alternative, that energy benefit would not be realized and oil would be imported to offset the lost power.

1.3 Delayed Project Alternative

This alternative would have the project benefits realized, but at a later time. The results would be:

- The Waimanalo Gulch Sanitary Landfill would continue to receive about 900 TPD of MSW, but for a limited amount of time. The impact on the life of the landfill would be reduced compared to the "No project" alternative, but the landfill life would be shortened.

- The energy penalty due to the loss of generation from the expansion would occur, but would be reversed when the expansion was built.
- The project cost would likely increase if for no other reason than inflation.

The environmental benefits of the expansion are not realized with the *No Project* alternative and are postponed with the *Delayed Project* alternative. The positive energy impacts are likewise not realized or delayed. There are likely increases in cost of the *Delayed Project* alternative. Taken together the negative impacts of not building the project or delaying it are greater than building the project.

1.4 Technology Alternatives

Alternative technologies would be used in lieu of an H-POWER expansion, but the environmental and economic performance of energy from waste (EfW) is well documented through long-term

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1 Draft Environmental Impact Statement Waimanalo Gulch Sanitary Landfill Expansion, May 2008.

operation, which is not the case with alternative technologies.

The alternatives fall into several categories:

- Alternative Technology — Thermal. These processes use heat to reduce the waste to energy or a fuel that can be used to produce energy and may produce recyclables. Pyrolysis, gasification, and EfW are examples of thermal processes.

- Alternative Technology — Non-thermal. These processes produce a material, such as compost, that is sold and may also have an energy output. Digestion and hydrolysis are two examples of non-thermal technology.

- Alternative Disposal Location — Transshipment to the Mainland. This alternative would have the waste material shrink wrapped at a facility in Honolulu, barged to the mainland, and disposed at a landfill there.

- Alternative Technology — Enhanced Recycling. Rather than burning the waste in an incinerator, such as H–POWER, this alternative would institute additional recycling programs to remove the materials from the waste stream. The City has characterized the H–POWER plant as "recycling to energy" as it reuses the energy value of the waste as electricity.

1.4.1 City & County of Honolulu Requirements for Alternative Technologies

In its June 20, 2007 *Competitive Sealed Proposal for Alternative Technology* the C&C identified the following six minimum requirements (not applicable to the Alternative Disposal Location or for Alternative Technology — Enhanced Recycling): [2]

- "There exists at least one (1) operational facility processing municipal solid waste that over the past two (2) years has been operating at a rate of at least five hundred (500) TPD in which the Offeror or its design and operational members have been substantially involved. Names, addresses, and phone numbers of persons that can be contacted at the facility or at the agency responsible for the facility shall be provided.

- Such facility has been operated successfully for the past two (2) years and has been fully operational eighty five percent (85 percent) of this time while meeting all performance and environmental compliance requirements.

2 City and County of Honolulu, Notice to Bidders, Project to Construct and Operate Alternative Energy Facility and/or H–POWER Facility. Competitive Sealed Proposals for Alternative Technology (CSP) NO. 037, 16 January 2007.

- The facility without major modification or equipment changes, other than for the acceptable application of good engineering practice for scale up or scale down, would substantially represent the system proposed for Honolulu.

- The product produced at the facility has for the past two (2) years been marketed and resulted in the beneficial reuse of energy. The Offeror shall provide descriptions and documentation of the beneficial reuse such as, operating reports, weight records, names of purchasers, revenues from sales, etc. in sufficient detail to demonstrate fulfillment of this requirement. For example, producing steam for steam sale is not as complex as producing steam for generating electric power. For an Offeror to be able to claim an ability to contract for electric power to a utility, the Offeror must demonstrate that it has power purchase contracts on going and that the utility or energy customer, to which the power is to be sold, provides evidence in writing that it shall enter into a power purchase contract based on its understanding of the proposed facility's ability to produce such power. If energy sales at existing facilities are not comparable to those proposed, anticipated revenues shall not be included in the Offeror's Price Proposal. Research and development projects or similar efforts that have not resulted in a contracted marketed product with actual sales are not acceptable and shall not be included as Revenue in the Offeror's Price Proposal. For the Options proposed, the selected Offerors shall participate with the City in the development and maintenance of the Power Purchase Agreement (PPA) between the City and the Utility similar to the PPA included as Appendix D of the Contract Documents. In order to assure a good understanding of the Hawaiian Electric Co., Inc. service requirements, the Offeror shall complete and submit Sections 1 and 2 of Attachment 'A' as part of its Proposal. In addition, the selected Contractor shall be required to enter into an Interconnection Requirements Study Agreement as provided for in Attachment 'B'. Attachment 'C' Sample Information on Performance Requirements is provided as information for the bidders. The specific values for these performance parameters would be finalized in the course of the PPA negotiations. It is understood that the selected Contractor shall be responsible for the payment of all cost required for the development of and adherence to conditions of the Power Purchase Agreement and those of Attachments 'A', 'B' and 'C' of this Notice to Bidders and for the payment of all penalties for non performance due to Contractors fault associated with these Contract Documents.

- The proposed Facility shall be commercially available such that: (1) The design is proven and the proposed facility is not the first of its kind; (2) The equipment proposed has operated successfully at least eighty-five percent (85 percent) of rated capacity while at the same time operating for at least eighty-five percent (85 percent) of the time during the past twenty-four (24) month period; (3) The equipment is regarded as being reliable and not subject to excessive maintenance, operational problems, or requires major re-designs; (4) The facility has processed a minimum of five hundred (500) TPD of municipal solid waste while operating in accordance with all environmental permits.

- Certification that the ash slag and residue by products from the proposed facility have met all environmental requirements for either marketing or landfill disposal including passage of the [Toxicity Characteristic Leaching Procedure (TCLP)] test and classification as non-hazardous materials, or, if deemed hazardous certification from the final disposal site that materials have been properly disposed of and how it would be disposed of for this project."

1.4.2 Summary of Alternative Evaluation

Each of the technology and non-technology alternatives is compared either to criteria that the City has published or to general criteria that came out of this evaluation. This section summarizes the results of the comparison of the alternatives to the Project, which is the construction and operation of H–POWER Unit #3.

The following two tables summarize the comparison of the alternatives to the Project. In *Table 1, Comparison of Compliance of Alternative Technologies to City's Criteria*, the alternative technologies are compared to the City's criteria for alternatives, which it has published in its Notice to Bidders released on January 22, 2008. Only one technology, EfW, satisfies all of the criteria. One other, Gasification/pyrolysis, satisfies one of the criteria, but none of the others. A criterion was indicated as "ND" if the technology vendor did not satisfy the threshold criteria of having an operating facility for two years processing 500 TPD of MSW. "ND" was not determinable.

Table 1, Comparison of Compliance of Alternative Technologies to City's Criteria

Technology	Criterion and Note #						
	1	2	3	4	5	6	7
	One Facility Operating for 2 Years	500 TPD	85% Capacity	85% of time	Products Marketed	Compliance	Residue
EfW	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Anaerobic Digestion	No	No	ND	ND	ND	ND	ND
Aerobic Digestion	No	Possibly	ND	ND	ND	ND	ND
Hydrolysis	No	No	ND	ND	ND	ND	ND
Plasma Arc	No	No	ND	ND	ND	ND	ND
Gasification/Pyrolysis	Yes	No	ND	ND	ND	ND	ND

ND — not determinable

Notes:

1 The vendor has at least one facility that has been operating for two or more years processing MSW and has also met criteria 2 though 7.
2 The technology processes 500 TPD of MSW or more
3 The technology operates at 85 percent of the rated capacity.
4 The technology operates 85 percent of the time, that is has 85 percent availability.
5 Products produced are marketed. The products can range from electricity, steam, a gaseous fuel, and MSW compost.
6 The technology has operated in compliance with all environmental regulations.

7 The residue and by-products meet environmental requirements for marketing or landfilling.

In *Table 2, Comparison of Other Alternatives*, the other four non-technology based alternatives are compared to the Project based on the greenhouse gas emissions and need for imported oil. These alternatives were the only ones compared in this table because none of the technology alternatives met the City's criteria except EfW, which is the Project for the purposes of this analysis. None of the alternatives in ***Error! Reference source not found.*** results in an improvement in either greenhouse gas emissions or importation of oil.

Table 2, Comparison of Other Alternatives

Alternative	Criterion and Note #	
	1	2
	GHG	Imported Oil
No Project	Negative	Negative
Delayed Project	Negative	Negative
Enhanced Recycling	ND	Negative
Transshipment	Negative	Negative

Notes:

1 GHG refers to whether the greenhouse gas emissions would be increased (detrimental or negative effect) or decreased (beneficial or positive effect) with the alternative as compared to the Project.

2 Imported oil refers to whether the need to import oil for energy production would be increased (detrimental or negative effect) or decreased (beneficial or positive effect) with the alternative as compared to the Project.

Enhanced recycling is indicated as a "ND" for greenhouse gas emissions because the calculation depends on the truck trips and the GHG benefits from recycling the materials, and this information is not known.

1.4.3 Energy from Waste

There are two general approaches to EFW - mass burn and RDF. In a RDF plant (the existing H-POWER facility is an RDF plant) MSW is processed through shredders and screens, through which dirt, glass, and other recyclable and non-burnable materials are sorted out. The remaining material is incinerated, resulting in the creation of ash, residue, and steam used to generate electricity. Metals are separated in the pre-combustion processing and from the ash post-combustion and are recycled.

Mass burn plants combust MSW without pre-processing. Waste is introduced into the furnace after being unloaded from the collection vehicle. The waste combustion creates steam, which is used to make electricity. By-products are ash and residual waste. Metals are separated from the ash and are recycled.

The project host and technology vendor are responsible for the disposal of ash and residual waste.

H-POWER extracts ferrous metals from the waste using magnets and non-ferrous metals from the ash using an eddy current separator. Approximately 18,600 tons of ferrous metals and 2,100 tons of non-ferrous metals were recycled in FY 2006. The sale of ferrous and non-ferrous metals generated approximately $1.5 million in that fiscal year.[3]

Additionally, H-POWER reduces the island's dependence on imported oil. One ton of trash produces saleable energy equivalent to 60 gallons of oil.

1.4.4 Other Jurisdictions Using Waste to Energy

EFW is a proven technology with facilities found throughout the United States and in many areas of the world. Covanta, the operator of H–POWER, owns and/or operates plants in Alabama, California, Connecticut, Florida, Indiana, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, Oregon, Pennsylvania, and Virginia. EFW plants have been operating for more than 75 years in some areas of the world.[4]

1.4.5 Consistency with City Requirements

EFW is consistent with the C&C requirements.

1.5 Non-Thermal Technologies

For the purpose of this report, non-thermal processes are defined as those that primarily produce a solid material, such as MSW compost, which is then marketed. Non-thermal technologies included in this analysis are digestion and hydrolysis.

1.5.1 Anaerobic Digestion

Anaerobic digestion is the decomposition of MSW without the introduction of oxygen. End by-products tend to be liquid, gas, and solid materials. The organic fractions of MSW are converted into

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3Department of Environmental Services. http://www.opala.org/solid_waste/archive/How_our_City_manages_our_waste.html#hpower. 24 July 2008.

4 Covanta Holding. http://www.covantaholding.com/. 21 July 2008.

single-celled proteins, which can be used for compost and fertilizers. Due to the length of time anaerobic digestion takes, a significant amount of land is required to process the amount of MSW the C&C requires of an alternative technology.

1.5.1.1 Other Jurisdictions Using Anaerobic Digestion

Currently the only ArrowBio facility in operation is at the Hiriya transfer station. ArrowBio plans to build a 500 TPD plant in Mexico.[5] A 90,000 TPY facility that is part of Australia's Macarthur Resource Recovery Park at the Jack's Gully landfill site opened its doors on July 4, 2008.[6 7]

1.5.1.2 Consistency with City Requirements

The anaerobic digestion facilities do not meet the City's requirements:

- The existing facilities either process less than the City's minimum waste stream (the existing ArrowBio facility 210 TPD of MSW, 290 TPD less than what the C&C requires) or they process source-separated organics.[8] ArrowBio could use multiple units to meet the City requirement.
- The facility design for the ArrowBio is the first full size facility.
- There is no proven market for the MSW compost product.

1.5.2 Aerobic Digestion

Aerobic digestion is the decomposition of MSW with the introduction of air. Examples of aerobic digestion include Converted Organics (formerly Mining Organics)[9], Real Earth Technologies, and Herhof Environmental's MBT Process. Due to the lack of readily available information about both Converted Organics and Real Earth Technologies, a generic explanation of Herhof Environmental's MBT Process is included in Appendix X. Different companies use different approaches and

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5 Oaktech Environmental. http://www.oaktech-environmental.com/news.htm, 18 July 2008.

6 WSN Environmental Solutions. http://wasteservice.nsw.gov.au/dir138/publish.nsf/Content/news_mediarealease_macarthur_jul07#. 18 July 2008.

7 Marshall, A.T. and Morris, J.M., "A Watery Solution," Chartered Institute of Waste Management Journal, August 2006.

8 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.

9 Mining Organics merged with/bought out by Converted Organics in February 2006. http://www.orgaworld.com/indexgb.html. 21 July 2008.

equipment, but produce similar products.

1.5.2.1 Other Jurisdictions Using Aerobic Digestion

Composting of kitchen, food, and green waste scraps is well established in Europe. Germany has more than 500 biochemical treatment facilities processing more than eight million TPY of food and green wastes; the majority of those facilities are aerobic compost facilities. However, these facilities are not processing MSW.[10] Vancouver, Canada has a 30 TPD demonstration plant by Herhof in operation processing separated food and other organic wastes.[11] There are currently seven commercial MSW Herhof plants in operation in Germany, Belgium, and Italy, with one proposed for the United Kingdom that will use the solid fuel produced by the MBT Process in a combustion plant. In 2009, Herhof plans to open a 160,000 TPY MSW facility in Larnaka, Cyprus and a 40,000 TPY CI&I facility in Athens, Greece.

1.5.2.2 Consistency with City Requirements

None of the Herhof Environmental plants have been in operation more than two years processing more than 500 TPD of MSW. However, Herhof Environmental states their MBT Process is capable of processing up to approximately 1,095 TPD.[12]

1.5.3 Hydrolysis

Hydrolysis is a chemical reaction in which water and another substance react, forming two or more new substances. With the hydrolysis of MSW, the reaction is between water and the cellulose fraction of the wastes to produce sugars. To obtain the cellulose fraction of the MSW, glass, metals, and other inorganic materials must first be removed.

Several types of hydrolysis technologies exist. The description by BlueFire Ethanol, Inc. (formerly Arkenol Fuels) is provided in Appendix X as an example for discussion. Another technology is the Masada Oxynol process.

1.5.3.1 Other Jurisdictions Using Hydrolysis

There are no hydrolysis facilities currently in operation that process MSW as feedstock and none are

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10 Oaktech Environmental, http://www.oaktech-environmental.com/, 11 March 2008.

11 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.

12 Herhof Environmental. http:// www.herhof.com/en/. 21 July 2008.

the size the City requires.[13]

1.5.3.2 Consistency with City Requirements

Hydrolysis is inconsistent with the C&C requirements because there has not yet been a successful facility at the size required by the City operating on MSW.

1.6 Thermal Technologies

Thermal or combustion technologies produce a significant amount of heat which can be turned into energy. During the processes, both organic and non-organic materials are combusted while the non-combustible materials can be recycled either before or after combustion. Common thermal technologies are gasification, plasma arc, hydrolysis, pyrolysis, and incineration. Examples of thermal technologies include:

- Covanta Energy — the City's H-POWER facility.
- Rigel Resource Recovery — Westinghouse Plasma Arc Gasification.
- Dynecology — Gasification with Briquetting of Refuse Derived Fuel (RFD)/Coal/Sewage Sludge.
- International Environmental Solutions (IES)—Advanced Pyrolysis Systems
- EBARA Corporation — Fluidized Bed Gasification with Ash Vitrification.
- GEM America — GEM Thermal Cracking Technology (Gasification).
- Global Energy Solutions — Thermal Converter Technology (Gasification and Vitrification).
- Interstate Waste Technologies — Thermoselect Gasification.
- Pan American Resources — Destructive Distillation Lantz Converter.
- Pratt Industries/VISY Paper (RDF).
- Comprehensive Resources, Recovery, & Reuse, Inc. (RDF).
- Takuma Mass Burn Renaissance System.

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13 Interstate Waste Technologies, http://www.iwtonline.com/. 21 July 2008.

- Resource Recycling, L.L.C. (Mass Burn).

H-POWER technology is discussed in its own section since it is a proven technology that is currently in use by the C&C.

1.6.1 Plasma Arc

This technology uses large carbon rods in a sealed vessel to generate a high temperature arc that converts the materials in the vessel into plasma (ionized gas). Heat generated by the arc melts the inorganic fractions into a running slag (that can appear like glass) and vaporizes the organic fractions, which become a synthetic fuel gas. The glass can be disposed in a landfill or may be used for beneficial purposes, such as for replacement of imported sand for sand blasting. The synthetic gas is cleaned and burned to produce power.

1.6.1.1 Other Jurisdictions Using Plasma Arc

Currently, there are two operating plasma arc facilities that process MSW. The longest running one and the only one that is not a demonstration plant is the Eco Valley Utashinai facility located in Utashinai, Japan. The facility processed more than 270 TPD of MSW and 130 TPD of automobile shredder residue and generated approximately 4,400 kWh of salable energy in fiscal year 2005.[14]

The City of St. Lucie, Florida has been in negotiations for a plasma arc facility. The Georgia-based company, Geoplasma, has agreed to build and operate the facility and claims at full capacity, the facility will process 2,000 TPD of MSW and 1,000 TPD of MSW mined from a landfill while producing 120 MW of electricity.[15]

Geoplasma has agreed to build and operate the facility, estimating that within the next 15 to 18 years the facility will have disposed of all the current waste in the landfill. Ron Roberts, the Assistant Solid Waste Director in St. Lucie, estimates the plant will be finished within 25 to 30 months.[16]

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14 Shigehiro, Michiaki, General Manager of Eco Valley Utashinai.

15 Sladky, Lynne. "Florida county plans to vaporize landfill trash." USA Today. September 9, 2006 and Margasak, Gabriel. "Trash zapper in St. Lucie County gets shot in arm from Crist", TCPalm, 10 November 2007.

16 Miller, Dan. "State-of-the-art plant makes trash vanish into thin air." County News Online. National Association of Counties, Washington, D.C., 2 October 2006.

A second plasma plant operating on MSW started operation in late January 2008 in Ottawa, Canada. It is a demonstration project that is designed to processes 85 TPD. The information about the plant was obtained from news sources[17] , which stated:

> "A demonstration waste-to-energy plant in Ottawa has finally turned its first load of trash into power…
>
> … The $27 million plant uses a process called plasma gasification to decompose waste under high heat and low oxygen into a gas mixture called syngas, and a glass-like material that can be turned into asphalt or concrete….
>
> Once the plant is running at full capacity, it is to divert 85 tonnes of waste a day from the city's landfills while generating enough electricity to run the facility and power 3,600 homes….
>
> Plasco hopes its demonstration plant in Ottawa will persuade other cities to buy the technology….
>
> Construction of the plant started in September 2006. It was to run as a two-year pilot project."

The PLASCO plant was partially funded by the Canadian government.

> "This brings to over C$90 million the equity invested in PlascoEnergy since August 2005. The Company had nominal debt and a modest cash position prior to this issue, and is well funded for development of commercial facilities next year," said Rod Bryden, PlascoEnergy President and CEO. "Commitment of funding from Sustainable Development Technology Canada ('SDTC') to the Ottawa demonstration project was a key factor in bringing the PlascoEnergy technology to reality and to attracting private capital that will fund its future commercial use around the world. SDTC has committed a non-repayable contribution of C$9.5 million," he said.[18]

In June 2008 the City of Ottawa and Plasco Energy agreed to a letter of intent for the company to

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17 Information from http://www.cbc.ca/technology/story/2008/02/07/ot-plasco-080207.html, 24 July 2008.

18 Information from PLASCO new release dated December 12, 2007, http://www.plascoenergygroup.com/?News/23/2007-12-03:First_Reserve_leads_PlascoEnergy_equity_funding, 22 July 2008. Information about the expanded plant accessed on October 30, 2008 at http://www.zerowasteottawa.com/en/.

build a 400 tonne per day commercial-scale plant in Ottawa.

1.6.1.2 Consistency with City Requirements

Currently, plasma arc technology does not meet the C&C requirements. The Eco Valley Utashinai facility processes 270 TPD of MSW, 230 TPD short of the C&C requirements. The Ottawa facility, at 85 metric TPD and with less than two years operation, is also short of the C&C requirements. In addition, as shown in ***Error! Reference source not found.*** and expressed in the company's online literature, the Ottawa facility is intended to be a demonstration plant with the full scale facility to be constructed

These facilities are the only ones operating on MSW.

Plasma arc does not meet the City's requirements.

1.6.2 Gasification/Pyrolysis

Gasification is the process of reducing MSW to a synthesis gas. Pyrolysis is similar to gasification and often considered a type of gasification technology. The by-products of gasification are syngas and vitrified material (slag) and pyrolysis by-products are solid carbon and liquid fuel. Pyrolysis generally takes place during the first steps of gasification. Examples of gasification technologies are listed below. Some of these companies may no longer be providing the service.

- Dynecology—Gasification with Briquetting of Refuse Derived Fuel (RDF)/Coal/Sewage Sludge.
- International Environmental Solutions (IES)—Advanced Pyrolysis Systems
- EBARA Corporation—Fluidized Bed Gasification with Ash Vitrification.
- GEM America—GEM Thermal Cracking Technology (Gasification).
- Global Energy Solutions—Thermal Converter Technology (Gasification and Vitrification).
- Interstate Waste Technologies—Thermoselect Gasification.
- Pan American resources—Destructive Distillation Lantz Converter

1.6.2.1 Other Jurisdictions Using this Technology

Global Energy Solutions has 14 facilities in operation in Japan, Asia, and Europe. Two facilities operating in Japan process solely MSW.

Since the start-up of the Aomori, Japan plant in 2000, EBARA has since opened nine TwinRec gasification facilities in Japan and one in Kuala Lumpur, Malaysia. None of these plants process the amount of waste required by the City, but the plant in Kawaguchi City is close.

Interstate Waste Technologies has the following facilities:[19]

- Fondotoce, Italy, operated the demonstration Thermoselect facility for six years, with commercialization commencing in 1994, from 1992-1998. The plant was decommissioned in 1999.

- Karlsruhe, Germany, operated a Thermoselect facility from 1999 until 2004, when it was closed due to "general business strategy decisions." The facility processed 225,000 TPY of waste from surrounding towns and rural districts.

- Currently, seven Thermoselect facilities are operating in Japan. Three of the facilities operate on MSW. Commercialization of the Matsu facility began in 2003 and currently processes 140 TPD. The Nagasaki and Tokushima facilities commenced operations in 2005, with the Nagasaki facility processing 300 TPD and the Tokushima facility processing 120 TPD of MSW.

1.6.2.2 Consistency with City Requirements

Global Energy Solutions' Thermal Converter technology might be consistent with the C&C requirements; there is no information readily available regarding how long either of the two MSW facilities in Japan have been in operation. This residual by-product requires a market that is not proven on Oahu.

Interstate Waste Management's Thermoselect technology is inconsistent with the C&C requirements. Although there are seven Thermoselect facilities in Japan, only three operate on MSW, none at the size the City requires (the Matsu facility processes 140 TPD, the Nagasaki processes 300 TPD, and the Tokushima facility processes 120 TPD.) All those listed here have been in operation for more than two years. The market for the metal pellets and vitrified granulate by-products would have to developed on Oahu.

EBARA has a plant that processes 462 TPD that has been operating for 6 years. It might be an alternative if the cost is reasonable. In a tour of the facility in early July 2008, a question was asked about the cost and the response indicated that they do not discuss cost, but also do not propose in many areas of the US because the market does not support the project cost. [20]

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19 http://www.iwtonline.com/docs/Thermoselect_process_description.pdf, 21 July 2008.

20 Personal communication with Paul Philleo, Chief of the Sacramento County Department of Waste Management and Recycling.

1.7 Expanded Recycling

Expanding current recycling infrastructure within the C&C would not eliminate the need for expanding H–POWER; however, expanded programs would decrease the amount of materials sent for disposal. The recycling programs cannot handle all the materials in the MSW. As a result, expanded recycling is not a viable alternative to expansion of H–POWER.

The expanded recycling could include expansion of the number of sites that accept materials from the HI5 beverage container program, addition of more sites to the school drop-off program, increasing the frequency of curbside collection of residential green waste, and adding a program to collect other recyclables from residences at the curb.

The City conducted a pilot three-bin curbside program with once-per-week solid waste collection and once-per-week recycling collection, alternating between recycling and green waste. The residents in the pilot locations, Mililani and Hawaii Kai, were generally successful at separating their recyclables and green waste from the solid waste bins and reducing their overall weekly disposal. Most neighborhoods still have twice-per-week solid waste collection and bi-weekly green waste collection, but the three-bin service was extended to other communities on a rolling basis beginning in November 2008. The program is set to be offered island-wide by May 2010. [21]

If the expanded recycling program achieves the higher level of penetration evaluated, it is expected to divert 35,000 tons of recyclables and 60,000 tons of green waste from the landfill, far short of the 300,000 tons to be handled by H–POWER Unit #3.

1.7.1 Consistency with City Requirements

Expanded recycling is consistent with the City's plans, but cannot provide the same diversion from landfilling as H–POWER Unit #3.

1.8 Transshipment Off-Island

The transshipment of waste involves securely containing the MSW, shipping it to the mainland and disposing of it at a mainland landfill. On August 23, 2006, the US Animal and Plant Health Inspection Services (APHIS) announced its decision to allow the transshipment of MSW to the continental United States from Hawaii.[22] Transshipment will be allowed only under certain circumstances. Wastes by federal regulation that would be restricted from transshipment are, hard-to-handle wastes, such as white goods, sewage sludge, auto fluff, and precluded materials such as

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21 City and County of Honolulu, Curbside Recycling Pilot Program Evaluation, June 2008.

22 Federal Register volume 71, number 163, published 23 August 2006.

green and agricultural wastes (more than three percent of the bale weight). The announcement is attached as Attachment A.

On January 22, 2008 the City provided a notice to bidders that it would entertain proposals for transshipping waste to the mainland for disposal as an interim measure for several years before the proposed Expansion is completed. The C&C has received bids from three transshipment firms: the cost was $99.83 per ton from Hawaiian Waste Systems, $184.47 per ton from Simcoe Environmental Services Inc., and $204.21 per ton from Off-Island Transfer.[23] The companies proposed sending Oahu's waste to Washington State to the Roosevelt Landfill or to a landfill in Idaho. If the C&C were to begin transshipping Oahu's waste, the vendors would have to comply with requirements for the handling and storage established by the federal government in the Compliance Orders, with state regulations for handling and processing the MSW, and with local land use permitting requirements. One of the potential transshipment vendors has approved Compliance Orders for the Hawaii and mainland operations and a permit for the transfer station to shrink wrap and transfer the waste. The C&C would also need to look at the effects of transshipment on H-POWER. With the shipment of Oahu's waste off-island, waste disposed in H-POWER may be reduced and revenue from the energy sold would diminish.

The City's review of the transshipment proposals was delayed due to a protest filed against Hawaiian Waste Systems. The other two bidders challenge the bid of Hawaiian Waste Systems, whose bid was half the cost of their bids.[24] A statutorily-mandated stay on the award of the bid is in effect while the City reviews the protest.

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23 Laurie Au. "City Reviews Bids to Ship Oahu Trash." Star Bulletin on the Web Vol. 13, Issue 171. 19 June 2008. (23 July 2008) http://starbulletin.com/2008/06/19/news/story08.html.

24 Peter Boylan. "Firm Claims City Pressured on Bids to Ship Trash." Honolulu Advertiser on the Web 11 July 2008. (23 July 2008) http://www.honoluluadvertiser.com/apps/pbcs.dll/article?AID=/20080711/NEWS04/807110350/1008/LOCALNEWSFRONT.

1.8.1 Other Jurisdictions Using Transshipment

Shipment of MSW using shrink-wrap has been used in New Jersey and other areas of the US. It has been used in Europe for as long as 10 years. The Roosevelt Landfill in Washington receives MSW, not only from Washington State, but also from Oregon, Canada, Idaho, and Alaska.[25] Canada has transshipped its MSW to Michigan landfills for many years, while New York is in the process of transshipping its MSW to North Carolina. Most of these operations do not use the shrink-wrap technology.

APHIS determined, with its acceptance of transshipment of MSW stateside from Hawaii, that transshipment could occur from both Oahu and the island of Hawaii once contracts and compliance agreements have been set up in Hawaii.

1.8.2 Consistency with City Requirements

The C&C guidelines regarding the transshipment of MSW off-island are listed in section 5.7.1, which were summarized from the Notice to Bidders released on January 22, 2008.

Not all waste can be shipped off-island. Items such as flocked Christmas trees, sewage sludge, auto fluff, out of date medicines, and other hard-to-handle wastes cannot be shipped without special arrangements to dispose of these materials. The shipping alternative only accepts materials from a specific waste stream and does not eliminate the need for a landfill.

1.9 Sites

This section discusses the project site. The site could be a new location (a Greenfield site), not currently used as a waste processing plant. The project location could be in Campbell Industrial Park. Since the space and access needs for an EFW plant site are similar to a landfill, the sites located as replacements for the Waimanalo Gulch Sanitary Landfill could be considered as potential sites for this expansion.

The environmental, operational, and infrastructure considerations would be the same, whether the potential site were in Campbell Industrial Park or in another area of the island. Comparing a new site to use of the proposed location on the H–POWER property highlights important advantages in using the current H–POWER property rather than a new site.

25 Washington State Department of Ecology, Solid Waste and Financial Assistance Program, "Solid Waste in Washington State Fifteenth Annual Status Report", December 2006.

1.10 Preferred Alternative

Several of the alternative technologies, the continued use of the Waimanalo Gulch landfill, and the transshipment alternative show promise to offer the C&C an alternative option to the expansion of H-POWER at the project site.

A viable alternative must meet several considerations:

- It needs to provide for the health and safety of Honolulu residents and visitors by properly managing the waste produced on the island.

- Because of the complexity of the siting requirements in Hawaii, the high degree of public interest and input into any siting process, the environmental clearances needed, and the permitting process, a significant amount of time (some say up to 10 years for a new landfill site or new alternative technology) may be needed for an alternative to become operational.

Expanding the H-POWER facility with technology proven over the long-term shows the most promise in reducing the amount of waste sent to the landfill while producing electricity. Expansion of H-POWER at the existing project site is the Preferred Alternative.

1.10.1 Expansion of H-POWER at the Project Site

EfW, such as H-POWER, is a technology of choice due to the direct benefits of energy production and reduction in disposal. Approximately 90 percent of the residential garbage and 77 percent of the commercial waste collected on Oahu is disposed at the H-POWER facility and is turned into energy that powers approximately 45,000 homes.[26] Incinerating 90 percent of the garbage that goes through the H-POWER facility means only one-tenth, by volume, remains to be landfilled. Expanding the H-POWER facility would be the most beneficial to the C&C in reducing the amount of waste sent to the landfill.

1.10.2 Landfill Disposal at Waimanalo Gulch Landfill

The Waimanalo Gulch Sanitary Landfill is the only alternative currently available to dispose of MSW and H–POWER ash and residue. The Waimanalo Gulch Sanitary Landfill has capacity to handle MSW for at least 15 years. The site is providing that service today.

However, reducing landfill disposal is one of the goals of the project. Continued use of the Waimanalo Gulch Sanitary Landfill does not accomplish that goal.

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26 City and County of Honolulu Department of Environmental Services. Solid Waste Integrated Management Plan. Updated: November 2007. Table 63a, Table 63b and Table 2-7.

1.10.3 Transshipment

Transshipment of waste transfers the responsibility for stewardship of the land to the mainland landfill that disposes of the transshipped waste. However, transshipment does offer the C&C a short term alternative for reducing the material being sent to the Waimanalo Gulch Sanitary Landfill for disposal

While transshipment offers an alternative for some of the MSW, there are parts of the waste stream that cannot be shipped due to federal restrictions; some items cannot be accepted due to the process used, and financial and solid waste management considerations that may limit transshipment to a select portion of the waste stream. The expansion of H-POWER offers long term benefits of energy production and reduction in disposal not offered by transshipment.

In addition to the other disadvantages of transshipment, that activity produces much more greenhouse gas emissions than taking the waste to H–POWER. H–POWER results in a reduction in island-wide greenhouse gas emissions (or negative emissions) of 38,883 metric tons per year of CO_2 equivalent compared to a positive generation from transshipment of 44,978.

2 Introduction

2.1 Project Description

The H-POWER expansion (Unit #3 or the Expansion) will be part of a municipal solid waste (MSW) processing facility located at Campbell Industrial Park that substantially reduces the amount of material needing disposal, recycles materials, and produces clean energy. After the expansion, the facility will consist of:

- A new mass burn waterwall MSW combustor that will process 900 tons per day (TPD) as received and produce about three percent of the electricity used on the island.

- An existing refuse derived fuel (RDF) plant that processes approximately 1,700 TPD of MSW into a processed fuel. The two plants convert the fuel into steam to produce energy. The existing plant produces five percent of the electricity used on the island.

The expanded facility will provide increased benefits to the residents and visitors of the City & County of Honolulu (City or C&C). The plant will reduce the volume of waste disposed at a landfill by 90 percent and the disposal weight by 75 percent (that is only 10 percent of the incoming volume and 25 percent of the incoming weight will be sent to the landfill for disposal).

Metals are recycled from the RDF plant and will be recycled from the new unit. Oversized objects such as white goods (refrigerators and ranges) will be recovered from the refuse pit and recycled. Ferrous metals in the ash will be removed with a magnetic drum. Non-ferrous metals will be removed with an eddy current separator and recycled.

Energy is produced by both plants to offset the use of imported oil and coal. The energy produced by the waste burning power plants significantly reduces greenhouse gas emissions compared to the use of oil and coal to produce power. As of 2004 show there are 89 EfW plants operating in the US and a total of 570 plants operating in the rest of the world[27].

The remainder of this appendix discusses the evaluation of the alternatives to the proposed project. Those alternatives consist of other technologies for processing MSW and an alternative disposal site located on the mainland.

The criteria/requirements the City used to evaluate the alternative technologies and the transshipment alternatives are provided. Those criteria were developed for a Request for Proposal the City issued for alternative technology approaches to disposal of waste in the City's Waimanalo Gulch Sanitary Landfill.

2.2 City Requirements

2.2.1 Technology

The requirements for alternative technologies are identified in the City's Invitation for Bid issued to vendors of technology alternatives to landfilling on October 2, 2006. The requirements are detailed in Section 4.1 of this document and are summarized below. This Alternatives Analysis also uses these requirements since they are the minimum a vendor was required to meet for its technology to be considered by the C&C in 2006.

- "There is at least one operational facility that has been processing 900 tons per day (TPD) of municipal solid waste (MSW) for the past two years, and the vendor has been substantially involved in its design and operations."

- The facility has been fully operational and has met all performance and environmental compliance requirements 85 percent of the time during the two years of operation.

- The facility would substantially represent the system proposed for Honolulu without major modification or equipment changes, other than those needed for the scale up or scale down.

- The product produced at the facility has been marketed and resulted in the beneficial reuse of processed materials and/or production of energy.

- The vendor must demonstrate that it has power purchase contracts ongoing to be able to claim an ability to contract for sale of electric power to a utility.

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27 Integrated Waste Services Association. http://www.wte.org/worldwide/. 7 January 2009.

- The proposed facility shall be commercially available such that:

  (1) The design is proven and the proposed facility is not the first of its kind;

  (2) The equipment has operated successfully at a minimum of 85 percent of rated capacity for at least 85 percent of the time during the past two years;

  (3) The equipment is regarded as being reliable and is not subject to excessive maintenance or operational problems and does not require major re-designs; and

  (4) The facility has processed a minimum of 900 TPD of MSW while operating in accordance with all environmental permits.

- Certification that the ash, slag and residue by-products from the proposed facility have met all environmental requirements for either marketing or landfill disposal."

2.2.2 Transshipment

Transshipment is the packaging of Oahu's waste for shipment to a disposal site located off-island. The transshipment requirements were established in the City's January 22, 2008, bid documents. If the C&C were to begin transshipping Oahu's waste, requirements for the handling and storage may need to be modified if the Compliance Orders established by the federal government with one of the proposers is determined to be inadequate.

The C&C would also need to look at the effects of transshipment on the current H-POWER facility over the long term. With the shipment of Oahu's waste off-island over a period of longer than three years, waste disposed in H-POWER may be reduced, the amount of energy produced for HECO would be reduced, and revenue from the energy sold would diminish. Also, the MSW needed to fuel the new boiler could be inadequate in the future if waste were transshipped to an off-island landfill.

2.3 Background

2.3.1 Sources of Waste to H-POWER

This section discusses the amounts and composition (the percentage of paper, plastic and other materials in the waste) that was taken to H–POWER and the landfill in 2006 to show what the Expansion, or an alternative, would need to be able to process.

Table 3, Total Disposal (2006) shows the total recycled or reused tonnage and the total waste tonnage received at each facility for 2006.

Materials that are unsuitable for combustion are removed during the RDF preparation process. The unacceptable materials, known as RDF processing residue, are then sent to the landfill for disposal. The combustion process also produces an ash by-product which is disposed of at the landfill. From July 1, 2005 to June 31, 2006, H-POWER produced 79,443 tons of RDF processing residue and

88,380 tons of ash.

The PVT landfill is a privately owned and operated site that accepts construction and demolition debris. The unpermitted sites are illegal dumping locations.

Table 3, Total Disposal (2006)[28]

Management	Tons
Recycled or Reused	628,373
H POWER	602,520
Waimanalo Gulch Landfill	337,667
PVT Landfill (estimated)	200,000
Unpermitted Sites (estimated)	25,000
Total	**1,793,560**

The total waste shown for the Waimanalo Gulch Landfill includes the waste disposed at the site and the RDF processing residue and ash taken to the site from the two existing units of H–POWER.

Table 4, Waste Generation Projections shows the projected waste generation rate per capita and the projected tons generated per year. The waste generation was projected using a two percent growth rate from 2007 to 2013. After 2013 the growth rate was kept constant since the generation rate would be recalculated as part of the 2012 plan update. The amount of waste generation (the sum of diversion and disposal) after 2013 used the per capita generation rate with the state's projected population growth to estimate future generation.

28 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

Table 4, Waste Generation Projections[29]

Fiscal Year	De Facto Population	Generation Rate (Tons/Capita/Year)	Generation Quantities (TPY)
2006	960,940	1.87	1,793,560
2007	969,530	1.88	1,821,730
2008	978,720	1.90	1,859,180
2009	988,010	1.92	1,897,220
2010	997,380	1.94	1,935,810
2011	1,006,850	1.96	1,975,030
2012	1,016,550	1.98	2,015,100
2013	1,026,500	2.00	2,056,120
2014	1,036,550	2.02	2,097,760
2015	1,046,700	2.02	2,118,300
2016	1,056,950	2.02	2,139,050
2017	1,066,760	2.02	2,158,900
2018	1,076,120	2.02	2,177,840
2019	1,085,560	2.02	2,196,950
2020	1,095,080	2.02	2,216,210
2021	1,104,680	2.02	2,235,640
2022	1,114,130	2.02	2,254,770
2023	1,123,420	2.02	2,273,570
2024	1,132,790	2.02	2,292,530
2025	1,142,240	2.02	2,311,650
2026	1,151,770	2.02	2,330,940
2027	1,161,090	2.02	2,349,800
2028	1,170,190	2.02	2,368,220
2029	1,179,370	2.02	2,386,800
2030	1,188,610	2.02	2,405,500

Table 5, Annual Waste by Generator Type (2006) shows the amount of waste from each sector which is hauled to the Waimanalo Gulch Landfill and to H-POWER. Approximately 49 percent of the waste going into H–POWER is from residential sources and about 51 percent is commercial waste. Ninety percent of the residential waste goes to H–POWER.

29 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

Convenience Centers are sites where residents can drop materials for recycling or disposal. Most of that material is not suitable for processing at H–POWER so is disposed.

Table 5, Annual Waste by Generator Type (2006)[30]

Generator Type	Waste Representative of Each Composition Type (Tons)		
	H-POWER	Waimanalo Gulch Landfill	Overall
Residential	371,649	40,367	412,016
Commercial	384,389	114,300	498,689
Convenience Center	283	29,199	29,482
Total	**756,321**	**183,866**	**940,187**

Table 6, Waste Composition Summary by Solid Waste Facility (2006) shows the percent composition of materials received at the Waimanalo Gulch Landfill and H-POWER. The material identified as "HHW" is household hazardous wastes, which are items such as kitchen cleanser and other small amounts of cleaning materials disposed by householders.

Table 6, Waste Composition Summary by Solid Waste Facility (2006)[31]

Material	H-POWER		Waimanalo Gulch Landfill		Overall Aggregate	
	Mean %	Annual Weight (tons)	Mean %	Annual Weight (tons)	Mean %	Annual Weight (tons)
Total Paper	36.70%	277,570	4.30%	7,864	30.20%	284,082
Total Plastics	14.00%	105,749	4.60%	8,463	12.10%	113,821
Total Metals	3.50%	26,517	10.10%	18,654	4.80%	45,448
Total Glass	2.00%	15,201	0.50%	950	1.70%	16,089
Total Other Inorganics	2.70%	20,322	4.90%	8,957	3.10%	29,370
Total Other Waste	3.80%	28,424	33.90%	62,267	9.80%	91,946
Total Green Waste	10.10%	76,048	3.40%	6,270	8.70%	82,041
Total Wood	3.00%	22,363	10.70%	19,589	4.50%	42,273
Total Other Organics	24.10%	181,937	27.60%	50,788	24.80%	232,874
Total HHW	0.30%	2,190	0.00%	64	0.20%	2,243
Total	**100.00%**	**756,321**	**100.00%**	**183,866**	**100.00%**	**940,187**

30 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

31 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

Table 7, Waste Composition by Generator Type (2006) shows the percent composition of materials generated from three collection sectors: residential, commercial and the convenience centers. The residential waste is collected by City collection crews. Commercial waste is from commercial haulers that collect from businesses, tourist serving industry, and other sources on the island. Convenience Center waste is from City-operated drop-off collection facilities.

The composition of the waste indicated in ***Error! Reference source not found.*** does not include the H–POWER RDF processing residue and ash received at the landfill because it is not part of the MSW stream. ***Error! Reference source not found.*** reflects the composition of the MSW coming to the site.

Table 7, Waste Composition by Generator Type (2006)[32]

Material	Residential		Commercial		Convenience Center	
	Mean %	Annual Weight (tons)	Mean %	Annual Weight (tons)	Mean %	Annual Weight (tons)
Total Paper	31.90%	131,285	32.30%	161,257	5.20%	1,546
Total Plastics	11.60%	47,889	14.10%	70,372	5.70%	1,677
Total Metals	4.80%	19,977	3.30%	16,615	18.50%	5,462
Total Glass	2.00%	8,173	1.30%	6,572	0.80%	245
Total Other Inorganics	1.20%	4,984	1.70%	8,608	7.20%	2,124
Total Other Waste	4.60%	18,789	11.40%	56,991	21.60%	6,376
Total Green Waste	17.00%	69,913	2.40%	12,152	10.90%	3,201
Total Wood	4.80%	19,938	4.20%	21,011	24.60%	7,248
Total Other Organics	22.00%	90,721	28.60%	142,670	5.40%	1,604
Total HHW	0.10%	346	0.50%	2,441	0.00%	0
Total	**100%**	**412,016**	**100%**	**498,689**	**100%**	**29,482**

Table 8, Waste Composition by Activity (2005-2006) shows the waste tonnage by end use activity and material type. This table also reflects the composition of the waste stream and does not include such materials as RDF processing residue and ash from H–POWER as those materials are not part of the MSW stream. In addition, ***Error! Reference source not found.*** shows the tonnage of material directed to H–POWER. H–POWER actually processed 602,520 tons, well over the contracted capacity. The total waste attributed to H–POWER included 153,810 tons of material could have been sent to H–POWER if it were not already at capacity so that tonnage had to be sent to the

32 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

Waimanalo Gulch Landfill.

Table 8, Waste Composition by Activity (2005-2006)[33]

Material	Diverted for Material Recycling[1]	Diverted for Energy[2]	Disposed	Generated	Percent of Total Waste
Paper	73,555	277,570	7,864	358,989	23%
Plastic	3,753	105,749	8,463	117,965	8%
Metals	159,470	26,517	18,654	204,641	13%
Glass	19,313	15,201	950	35,464	2%
Green Waste	79,500	76,048	6,270	161,818	10%
Food Waste	32,447	118,175	2,075	152,697	10%
Wood Waste	8,229	22,363	19,589	50,181	3%
E-Scrap	478	11,322	7,393	19,193	1%
C&D Debris	193,829	20,322	8,957	223,108	14%
Tires	8,719	1,515	33	10,267	1%
Auto Batteries	4,761	319	62	5,142	0%
Auto Fluff	0	0	29,786	29,786	2%
Chemicals/Oils	15,374	2,190	64	17,628	1%
Misc. Organics	0	32,726	1978	34,704	2%
Sludge	10,270	0	40818	51,088	3%
Other	18,675	46,304	30910	95,889	6%
Total	**628,373**	**756,321**	**183,866**	**1,568,560**	**100%**

[1]Source: Department of Environmental Services for Calendar Year 2005.
[2]Source: Department of Environmental Services for Fiscal Year 2005.

2.3.2 Waste Composition

The composition of the disposed waste is based on hand-sorting randomly selected samples of the waste from garbage trucks. In 2006, the C&C studied the composition of the waste at H-POWER, the Waimanalo Gulch Sanitary Landfill, and the Keehi Transfer Station. The sampling and analysis followed standard protocols. Sampling took place at the Landfill on September 11–14, 2006, at Keehi Transfer Station on September 15–16, 2006, and at H-POWER on September 18–21, 2006. [34]

Table 9, Aggregate Overall Waste Characterization Results (2006) shows the composition of Oahu's waste from H-POWER and the Waimanalo Gulch Sanitary Landfill combined.

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33 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

34 R.W. Beck. City and County of Honolulu Waste Characterization Study, April 2007.

Table 9, Aggregate Overall Waste Characterization Results (2006)[35]

Material	Mean	+/-	Mean (tons)	+/- (tons)
Total Paper	**30.2%**	**1.8%**	**284,082**	**17,040**
OCC (Recyclable)/Kraft	5.2%	1.1%	49,166	10,747
Newspaper	4.3%	1.1%	40,757	10,589
High-Grade Paper	2.6%	0.9%	24,420	7,993
Low-Grade Paper	5.1%	0.9%	48,151	8,012
Other Compostable Paper	11.7%	1.8%	110,142	16,582
Other Paper	1.2%	0.2%	11,446	1,896
Total Plastics	**12.1%**	**1.3%**	**113,821**	**11,808**
PET Bottles/Containers (Deposit)	0.3%	0.1%	2,843	578
PET Bottles/Containers (Non-Deposit)	0.3%	0.1%	2,449	646
HDPE Bottles/Containers	1.0%	0.3%	9,128	2,562
Other Bottles/Containers	1.1%	0.2%	10,142	1,818
Mixed Rigid Plastics	1.1%	0.4%	10,479	3,431
Plastic Film/Wrap	5.1%	0.7%	47,989	6,654
Polystyrene	0.8%	0.1%	7,056	1,371
Other Plastics	2.5%	0.4%	23,734	4,156
Total Metals	**4.8%**	**0.8%**	**45,448**	**7,151**
Aluminum Cans (Deposit)	0.3%	0.1%	2,626	632
Aluminum Cans (Non-Deposit)	0.3%	0.1%	2,630	1,351
Tin Cans	0.6%	0.2%	5,830	1,467
Other Ferrous	1.5%	0.4%	14,103	4,160
Other Non-Ferrous	0.4%	0.1%	4,148	1,020
Mixed Metals/Other Metals	1.7%	0.5%	16,111	4,660
Total Glass	**1.7%**	**0.4%**	**16,089**	**4,039**
HI5 Glass Bottles/Containers	0.4%	0.2%	4,158	1,589
Other Glass	1.3%	0.3%	11,930	3,102
Total Other Inorganics	**3.1%**	**1.2%**	**29,370**	**11,020**
Gypsum Board	0.3%	0.1%	2,760	1,280
Asphalt Roofing	0.5%	0.3%	4,261	2,609
Asphalt Paving	0.0%	0.0%	38	27
Concrete	0.3%	0.2%	3,078	1,535
Sand/Soil/Rock/Dirt	1.3%	0.8%	12,525	7,811
Ceramics	0.4%	0.2%	4,214	1,772
Miscellaneous Inorganics	0.3%	0.2%	2,496	1,445
Total Other Waste	**9.8%**	**1.6%**	**91,946**	**15,278**
Batteries	0.0%	0.0%	381	156
Furniture	3.4%	1.0%	31,555	9,795
Appliances	1.1%	0.7%	10,728	6,734
E-Waste	2.0%	0.7%	18,820	6,161
Auto Fluff*	3.2%	NA	30,462	NA
Total Green Waste	**8.7%**	**2.8%**	**82,041**	**26,182**
Total Wood	**4.5%**	**2.3%**	**42,273**	**21,884**
Untreated Wood	1.4%	0.5%	13,017	5,004
Treated Wood	2.1%	0.6%	19,428	5,371
Pallets	0.3%	0.1%	2,644	1,248
Stumps	0.8%	0.4%	7,185	3,473
Total Other Organics	**24.8%**	**2.1%**	**232,874**	**19,621**
Food	12.7%	1.9%	119,645	17,575
Textiles	3.1%	1.0%	28,726	9,136
Carpet	0.7%	0.3%	6,650	2,454
Tires	0.2%	0.1%	1,540	1,090
Miscellaneous Organics	3.7%	0.8%	34,569	7,578
Sludge	4.4%	NA	41,744	NA
Total HHW	**0.2%**	**0.1%**	**2,234**	**1,399**
Pesticides/Herbicides	0.0%	0.0%	0	0
Paints/Adhesives/Solvents	0.0%	0.0%	256	172
Household Cleaners	0.0%	0.0%	0	0
Automotive Products	0.2%	0.1%	1,711	1,221
Other HHW	0.0%	0.0%	277	147
TOTAL	**100.00%**		**940,187**	

35 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

Table 10, H-POWER Waste Characterization Results (2006) shows the composition of waste being disposed at H-POWER. About half of the waste going into H–POWER is from residential sources and about half is commercial waste.

The results in *Table 10, H-POWER Waste Characterization Results (2006)* are adjusted to account for the waste tonnage that was redirected from H-POWER to the Landfill. Waste from H–POWER is diverted to the Landfill when the plant is unable to accept waste due to capacity limitations.

Table 10, H-POWER Waste Characterization Results (2006)[36]

Material	Mean	+/-	Mean (tons)	+/- (tons)
Total Paper	**36.7%**	**2.3%**	**221,125**	**5,086**
OCC (Recyclable)/Kraft	6.1%	1.4%	36,754	515
Newspaper	5.4%	1.4%	32,536	456
High-Grade Paper	3.2%	1.1%	19,281	212
Low-Grade Paper	6.1%	1.1%	36,754	404
Other Compostable Paper	14.5%	2.2%	87,365	1,922
Other Paper	1.4%	0.2%	8,435	17
Total Plastics	**14.0%**	**1.5%**	**84,353**	**1,265**
PET Bottles/Containers (Deposit)	0.4%	0.1%	2,410	2
PET Bottles/Containers (Non-Deposit)	0.3%	0.1%	1,808	2
HDPE Bottles/Containers	1.2%	0.3%	7,230	22
Other Bottles/Containers	1.3%	0.2%	7,833	16
Mixed Rigid Plastics	1.0%	0.4%	6,025	24
Plastic Film/Wrap	6.2%	0.9%	37,356	336
Polystyrene	0.9%	0.2%	5,423	11
Other Plastics	2.7%	0.5%	16,268	81
Total Metals	**3.5%**	**0.7%**	**21,088**	**148**
Aluminum Cans (Deposit)	0.3%	0.1%	1,808	2
Aluminum Cans (Non-Deposit)	0.3%	0.2%	1,808	4
Tin Cans	0.8%	0.2%	4,820	10
Other Ferrous	0.7%	0.4%	4,218	17
Other Non-Ferrous	0.5%	0.1%	3,013	3
Mixed Metals/Other Metals	0.9%	0.4%	5,423	22
Total Glass	**2.0%**	**0.5%**	**12,050**	**60**
HI5 Glass Bottles/Containers	0.5%	0.3%	2,711	8
Other Glass	1.5%	0.4%	9,038	36
Total Other Inorganics	**2.7%**	**1.4%**	**16,268**	**228**
Gypsum Board	0.2%	0.1%	1,205	1
Asphalt Roofing	0.0%	0.0%	0	0
Asphalt Paving	0.0%	0.0%	0	0
Concrete	0.3%	0.2%	1,808	4
Sand/Soil/Rock/Dirt	1.7%	1.1%	10,243	113
Ceramics	0.3%	0.2%	1,808	4
Miscellaneous Inorganics	0.3%	0.2%	1,808	4
Total Other Waste	**3.8%**	**1.8%**	**22,896**	**412**
Batteries	0.0%	0.0%	0	0
Furniture	1.0%	0.7%	6,025	42
Appliances	1.2%	0.9%	7,230	65
E-Waste	1.5%	0.7%	9,038	63
Auto Fluff	0.0%	0.0%	0	0
Total Green Waste	**10.1%**	**3.5%**	**60,855**	**2,130**
Total Wood	**3.0%**	**1.3%**	**18,076**	**235**
Untreated Wood	1.2%	0.6%	7,230	43
Treated Wood	1.1%	0.5%	6,628	33
Pallets	0.2%	0.1%	1,205	1
Stumps	0.5%	0.4%	3,013	12
Total Other Organics	**24.1%**	**2.6%**	**145,207**	**3,775**
Food	15.6%	2.4%	93,993	2,256
Textiles	3.4%	1.2%	20,486	246
Carpet	0.5%	0.2%	3,013	6
Tires	0.2%	1.0%	1,205	12
Miscellaneous Organics	4.3%	1.0%	25,908	259
Sludge	0.0%	0.0%	0	0
Total HHW	**0.3%**	**0.2%**	**1,808**	**4**
Pesticides/Herbicides	0.0%	0.0%	0	0
Paints/Adhesives/Solvents	0.0%	0.0%	0	0
Household Cleaners	0.0%	0.0%	0	0
Automotive Products	0.2%	0.2%	1,205	2
Other HHW	0.0%	0.0%	0	0
TOTAL	**100.00%**		**602,520**	

36 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

2.3.3 City Recycling Programs

The current recycling infrastructure consists of community recycling bins, recycling support for schools, HI5 redemption sites, and a new three-bin curbside collection program. The overall goal is to reduce the amount of waste requiring disposal.

The community recycling bin program is supported by participating schools. Students, family members, community members, and the school employees drop-off their recyclable materials in 40 cubic-yard recycling roll-off bins, divided into sections for mixed containers and paper. Each host school receives revenues for the recycled materials collected in its bin(s). Since the program began in 1990, more than $1,000,000 has been paid to the participating schools.

Schools are also receiving additional support through assistance programs, in which the C&C offers 96-gallon wheeled toters labeled for aluminum, glass, plastic, and newspaper. Fundraising materials, such as banners, graphics, lists of recycling companies, collection services, and redemption centers are also provided to help advertise a recycling event. The schools use these events as fundraisers. Currently, there are 75 to 80 schools and 35 non-profit organizations participating in this program. A new contract that began in March 2008 will add 40 additional sites for multi-material recycling.

The C&C also provides recycling through a contract that provides 10 HI5 (redemption value container recycling) event bins. These 40 cubic-yard bins are used for recycling at special school or community events. The City's contractor removes the bin after the event, and the school or community group receives the redemption value from the materials in the HI5 containers.

Another recycling effort is to increase the HI5 redemption sites in the C&C. The HI5 redemption sites are privately-operated for residents to drop-off their recyclable cans, plastic, aluminum, and glass HI5 containers for a 5 cent cash refund per item. There are currently 59 HI5 redemption sites located in Oahu. [37]

Currently the City offers curbside, bi-weekly green waste collection to its residents. Approximately 20,000 tons of green waste is collected annually from residences. The collected green waste is turned into mulch and offered to residents at no cost.[38]

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37 Department of Environmental Services, www.opala.org, July 17, 2008.
http://hawaii.gov/health/environmental/waste/sw/sw/hi5/support/oahucenters.pdf.

38 City and County of Honolulu, Curbside Recycling Pilot Program Evaluation, June 2008.

The City conducted a pilot three-bin curbside program with once-per-week solid waste collection and once-per-week recycling collection, alternating between recycling and green waste each week. The residents in the pilot locations, Mililani and Hawaii Kai, were generally successful at separating their recyclables and green waste from the solid waste bins and reducing their overall weekly disposal. Most neighborhoods still have twice-per-week solid waste collection and once-per-week green waste collection, but the three-bin service was extended to other communities on a rolling basis beginning in November 2008. The program is set to be offered island-wide by May 2010. The new curbside collection program is expected to reach a recovery rate from 56 percent to 70 percent and increase the amount of recyclables recovered annually from 1,200 tons per year to between 27,000 tons per year and 35,000 tons per year. The green waste recovery rate is also expected to be between 56 percent and 70 percent and increase green waste tonnage from 20,000 tons per year to 48,000 tons per year.[39]

2.3.4 Disposal

The disposal facilities used by the C&C are discussed in this section. This discussion was taken from the October 2008 draft SWIMP update.[40]

2.3.4.1 H-POWER

The City has a waste supply contract with the facility operator to deliver 561,600 tons of solid waste per year to H-POWER. The majority of residential and commercial MSW collected on the island is delivered here. In FY 2006, 602,520 tons of waste was converted to energy at H-POWER. The plant has regularly been able to process more than the contracted capacity.

In FY 2006, H-POWER sent 88,380 tons of ash and 79,443 tons of RDF processing residue to the Landfill. In FY 2006, the Landfill received on average 930 tons per day of MSW and 460 tons per day of ash and RDF processing residue. [41]

The City has an agreement with Hawaiian Electric Company (HECO) to purchase the electricity generated at H-POWER. Over 320 million kilowatt hours of electricity were generated in FY 2006. The sale of this electricity generated nearly $35 million in revenues.

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39 City and County of Honolulu, Curbside Recycling Pilot Program Evaluation, June 2008.

40 City and County of Honolulu Draft Integrated Solid Waste Management Plan Update, October 2008.

41 City and County of Honolulu, Draft Integrated Solid Waste Management Plan Update, October 2008.

H-POWER extracts ferrous metals from the waste using magnets and non-ferrous metals from the ash using an eddy current separator. Approximately 18,600 tons of ferrous metals and 2,100 tons of non-ferrous metals were recycled in FY 2006. The sale of ferrous and non-ferrous metal generated approximately $1.5 million in that fiscal year.

2.3.4.2 Waimanalo Gulch Sanitary Landfill

The Landfill is located in Kapolei on the leeward side of Oahu in Waimanalo Gulch, Kahe Valley. The Landfill property is 200 plus acres. About half of the property is permitted for landfilling and support operations. It is the intent of the City that the Landfill accept two types of MSW:

1. Noncombustible MSW and

2. Ash and RDF processing residue from H-POWER.

In FY 2006, the Landfill received 337,667 tons of MSW. The permit renewal issued by the State in April 2003, limits the peak daily disposal rate to 3,300 TPD tons per day of MSW and 800 tons per day of ash and RDF processing residue.

2.3.4.3 C&D

Construction and demolition waste and petroleum contaminated soils are disposed in a private landfill, PVT, located in Nanakuli. It is estimated that about 200,000 tons per year are disposed at this site.

3 Alternatives Considered

The alternatives to H-POWER expansion considered were:

- No project,
- Delayed project,
- Transshipment of waste to a mainland landfill, and
- Alternative technologies.

The *No Project* alternative would result in not building the expansion. The *Delayed Project* alternative would delay the decision on the expansion and cause the same impacts as the *No Project* alternative until the expansion was in operation. It would also likely increase the cost of the expansion. Transshipment is a short term alternative that would have some MSW shipped from Oahu to a landfill in Washington, Oregon, or Idaho. Alternative technologies could reduce the amount of material requiring disposal and generate electricity or another beneficial reuse product. The four alternatives are discussed in more detail in the following sections.

4 No Project and Delayed Project Alternatives

4.1 No Project

Under this alternative, Unit #3 of H–POWER would not be constructed. The existing plant would continue to operate providing energy recovery, recycling and disposal reduction. These benefits would not be increased by the construction of the expansion. Several actions would result:

- The Waimanalo Gulch Sanitary Landfill would continue to receive about 900 TPD of MSW that would have been reduced to 225 TPD through operation of the expansion. Truck traffic to the landfill would have been reduced by the expansion. Assuming an average load of six tons per truck delivering waste to H–POWER (that value is an average based on the load carried by collection trucks and transfer trucks delivering waste to H–POWER), the traffic to the landfill would be reduced by 50,000 vehicles per year. The additional trucks bringing ash from H–POWER Unit #3 to the landfill is estimated to be 11,250 per year, resulting in a net reduction in trucks to the landfill of 38,750 per year. The result would be a reduction in the life of the landfill. Since the landfill is in the process of being re-permitted, it is difficult to estimate the impact on the life of the landfill.

- The loss of energy produced by the expansion would decrease the amount of energy produced from this renewable fuel, which is from five to eight percent of the island needs. Under the No Project alternative, that energy benefit would not be realized and more oil would be imported to offset the lost power. Based on the estimated equivalent amount of energy in a ton of waste compared to a barrel of oil, an additional 429,000 barrels of oil would be needed per year (1,175 barrels per day) would be needed if H–POWER Unit #3 were not built.

- Continued production of greenhouse gas emissions from landfilling, which would be reduced by H–POWER Unit #3.

The landfill already exists, is in an expansion mode, and is a long-term resource to be conserved for the City's use. There are opportunities resulting from its permitted status, but constraints in expending the resource before necessary.

The use of the Waimanalo Gulch Sanitary Landfill rather than expanding H–POWER offers an opportunity in that the site can be used immediately without the permitting and construction needed for the H–POWER expansion, assuming the current landfill expansion is permitted.

There are several disadvantages to the use of the Waimanalo Gulch Sanitary Landfill rather than expanding H–POWER, including:

- The landfill has a finite capacity and disposing of MSW in it rather than converting the MSW into energy in H–POWER Unit #3 is wasting land resources and the energy generation resources in the MSW.

- There are energy generation and oil fuel conservation benefits using H–POWER rather than importing oil to produce the electricity needed on the island.

The use of H–POWER reduces disposal thereby reducing traffic to the landfill, which relieves traffic on Farrington Highway. The traffic to H–POWER will be in an industrial area that has been designed for the amount of heavy truck traffic expected.

4.2 Delayed Project

This alternative would have the project benefits realized, but at a later time. The results would include all of the impacts of the No Project Alternative during the period of delay and:

- The energy penalty due to the loss of generation from the expansion would occur, but would be reversed when the expansion was built.
- The project cost would likely increase if for no other reason than inflation.

The environmental benefits and positive energy impacts of the expansion are not realized with the *No Project* alternative and are postponed with the *Delayed Project* alternative. There are likely increases in cost of the *Delayed Project* alternative. Taken together the negative impacts of not building the project or delaying it are greater than building the project.

5 Technology Alternatives

This section of the Alternatives Analysis discusses the alternative technology approaches that were considered in lieu of an additional boiler at the H-POWER facility. Alternative technologies are possible rather than an H-POWER expansion, but the environmental and economic performance of Energy-From-Waste (EfW) is well documented through long-term operation, which is not the case with alternative technologies.

Prior to the evaluation of alternative technologies, there are several factors that need to be identified as they are important to the discussion. The City has used proven alternative methods for waste disposal:

- Prior to the H-POWER facility (in operation since 1988), the City operated several incinerators to the landfill to reduce the volume of material needing disposal. The City has used combustion technology as a disposal alternative for many years.

- Currently, the City has contacted a private vendor to operate a sludge drying/pelletizing facility at the Sand Island Waste Water Treatment Plant. The dryer converts sludge material previously disposed at the Waimanalo Gulch Sanitary Landfill into a fertilizer amendment product. The pelletizer is an alternative to landfill disposal.

These examples share several characteristics:

- All were operated elsewhere for many years using waste material similar to that produced on Oahu and in amounts in excess of the capacity needed for Honolulu.

- The risk of operational problems was minimized because of the history of operations and the availability of firms to design, build, and operate the plants that had long term operating results.

- The environmental impacts of the technologies were well understood and all had long histories of operating in compliance with regulations.

- The total cost of the technology was well understood.

The City has continued its search for additional alternatives. Other areas of the United States and other countries are evaluating disposal alternatives and have observed progress. Some of the results of those evaluations are used in this section to identify the advantages and disadvantages of the alternatives and compare them to the City's criteria, which are also listed in this section.

There are several alternative technologies operating in Europe and Japan. Those areas share characteristics that encourage the development of alternatives, but those characteristics are not necessarily applicable to the Island of Oahu. The following four items illustrate some of the similarities and differences.

- High disposal fees, some areas of Europe charge over $200 per ton for disposal compared to the $92 per ton in Honolulu.
- The price paid for electricity produced by the plant is much higher than Honolulu.
- Often there are government subsidies to support the cost of the technology. No subsidies are provided in Honolulu.
- The environmental controls are strict, just as they are here.

The alternatives fall into several categories:

- Alternative Technology — Thermal. These processes use heat to reduce the waste to energy or a fuel that can be used to produce energy and may produce recyclables. EfW, pyrolysis, and gasification are examples of thermal processes.
- Alternative Technology — Non-thermal. These processes produce a material, such as compost, that is sold and may also have an energy output. Digestion and hydrolysis are two examples of non-thermal technologies.
- Alternative Disposal Location — Transshipment to the Mainland. This alternative would have the waste material shrink wrapped at a facility in Honolulu, barged to the mainland, and disposed at a landfill there.
- Alternative Technology — Enhanced Recycling. Rather than burning the waste in a combustor, such as H–POWER, this alternative would institute additional recycling programs to remove the materials from the waste stream. The City has characterized the H–POWER plant as "recycling to energy" as it reuses the energy value of the waste as electricity.

All of these alternatives have the potential for reducing the need for an expansion of H-POWER.

5.1 City Requirements for Alternative Technologies

The consideration of alternative technologies has been ongoing in the C&C for many years. Those efforts have included implementation of new recycling programs, implementation of bans on disposing certain recyclable materials in the landfill, issuance of a Request for Proposals for Alternative Technologies and issuance of a Notice to Bidders for tenders from vendors desiring to transship waste to the Mainland.

In its June 20, 2007 *Competitive Sealed Proposal for Alternative Technology* the C&C identified the following six minimum requirements (not applicable to the Alternative Disposal Location or for

Alternative Technology — Enhanced Recycling): [42]

- "There exists at least one (1) operational facility processing municipal solid waste that over the past two (2) years has been operating at a rate of at least five hundred (500) TPD in which the Offeror or its design and operational members have been substantially involved. Names, addresses, and phone numbers of persons that can be contacted at the facility or at the agency responsible for the facility shall be provided.

- Such facility has been operated successfully for the past two (2) years and has been fully operational eighty five percent (85 percent) of this time while meeting all performance and environmental compliance requirements.

- The facility without major modification or equipment changes, other than for the acceptable application of good engineering practice for scale up or scale down, would substantially represent the system proposed for Honolulu.

- The product produced at the facility has for the past two (2) years been marketed and resulted in the beneficial reuse of energy. The Offeror shall provide descriptions and documentation of the beneficial reuse such as, operating reports, weight records, names of purchasers, revenues from sales, etc. in sufficient detail to demonstrate fulfillment of this requirement. For example, producing steam for steam sale is not as complex as producing steam for generating electric power. For an Offeror to be able to claim an ability to contract for electric power to a utility, the Offeror must demonstrate that it has power purchase contracts on going and that the utility or energy customer, to which the power is to be sold, provides evidence in writing that it shall enter into a power purchase contract based on its understanding of the proposed facility's ability to produce such power. If energy sales at existing facilities are not comparable to those proposed, anticipated revenues shall not be included in the Offeror's Price Proposal. Research and development projects or similar efforts that have not resulted in a contracted marketed product with actual sales are not acceptable and shall not be included as Revenue in the Offeror's Price Proposal. For the Options proposed, the selected Offerors shall participate with the City in the development and maintenance of the Power Purchase Agreement (PPA) between the City and the Utility similar to the PPA included as Appendix D of the Contract Documents. In order to assure a good understanding of the Hawaiian Electric Co., Inc. service requirements, the Offeror shall complete and submit Sections 1 and 2 of Attachment 'A' as part of its Proposal. In addition, the selected Contractor shall be required to enter into an Interconnection Requirements Study Agreement as provided for in Attachment 'B'. Attachment 'C' Sample Information on Performance Requirements is provided as information for the bidders. The

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42 City and County of Honolulu, Notice to Bidders, Project to Construct and Operate Alternative Energy Facility and/or H–POWER Facility. Competitive Sealed Proposals for Alternative Technology (CSP) NO. 037, 16 January 2007.

specific values for these performance parameters would be finalized in the course of the PPA negotiations. It is understood that the selected Contractor shall be responsible for the payment of all cost required for the development of and adherence to conditions of the Power Purchase Agreement and those of Attachments 'A', 'B' and 'C' of this Notice to Bidders and for the payment of all penalties for non performance due to Contractors fault associated with these Contract Documents.

- The proposed Facility shall be commercially available such that: (1) The design is proven and the proposed facility is not the first of its kind; (2) The equipment proposed has operated successfully at least eighty-five percent (85 percent) of rated capacity while at the same time operating for at least eighty-five percent (85 percent) of the time during the past twenty-four (24) month period; (3) The equipment is regarded as being reliable and not subject to excessive maintenance, operational problems, or requires major re-designs; (4) The facility has processed a minimum of five hundred (500) TPD of municipal solid waste while operating in accordance with all environmental permits.

- Certification that the ash slag and residue by products from the proposed facility have met all environmental requirements for either marketing or landfill disposal including passage of the [Toxicity Characteristic Leaching Procedure (TCLP)] test and classification as non-hazardous materials, or, if deemed hazardous certification from the final disposal site that materials have been properly disposed of and how it would be disposed of for this project."

In its RFP, the C&C encouraged both thermal and non-thermal technologies. With thermal technologies the by-product is steam or electricity which can be sold. The by-products of non-thermal technologies are materials that require development of a market (i.e., building material, or compost). Technologies that produce a product that must be sold into a market (other than an energy market) would be more difficult in Honolulu than in other locations where such facilities may have operated. For example, a market does not currently exist for an alternative technology that produces an MSW compost product. The reason is that the market for MSW compost is restricted on the mainland and has faced controversy in Honolulu.[43] The proponent of a technology that produces a solid MSW fuel would need to find a fuel user and there are only two solid fuel users, H-POWER and the AES coal fired power plant. The current H-POWER facility is operating at capacity. To handle an MSW fuel at AES would likely require a revision to its permits and a lengthy and expensive effort to modify its process to accept that fuel, provided AES wished to pursue it.

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43 Leone, Diana. *Waianae Compost Plan Hits Turbulence*. Star Bulletin. 17 August 2006.

5.2 Energy From Waste

5.2.1 How It Works

There are two general approaches to EfW - mass burn and RDF. In a RDF plant (the existing H-POWER facility is an RDF plant) MSW is processed through shredders and screens, through which dirt, glass, and other recyclable and non-burnable materials are sorted out. The remaining material is incinerated, resulting in the creation of ash, RDF processing residue, and steam used to generate electricity. Metals are separated in the pre-combustion processing and from the ash post-combustion and are recycled.

Mass burn plants combust MSW without pre-processing. Waste is introduced into the furnace after being unloaded from the collection vehicle. The waste combustion creates steam, which is used to make electricity. By-products are ash and residual waste. Metals are separated from the ash and are recycled.

The project host and technology vendor are responsible for the disposal of ash and residual waste.

Because of metals removal during RDF processing and metals removal from the bottom ash, a significant percentage of the ferrous and nonferrous metal entering the current H–POWER facility is recovered for recycling. Approximately 18,000 TPY of ferrous metals (tin cans) and 2,500 TPY of non-ferrous metals (aluminum cans) are recovered.[44]

Additionally, H-POWER reduces the island's dependence on imported oil. One ton of trash produces saleable energy equivalent to 60 gallons of oil.

5.2.2 Jurisdictions Using This Technology

EfW is a proven technology with facilities found throughout the United States and in many areas of the world. Covanta, the operator of H–POWER, owns and/or operates plants in Alabama, California, Connecticut, Florida, Indiana, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, Oregon, Pennsylvania, and Virginia. EfW plants have been operating for more than 75 years in some areas of the world.[45]

5.2.3 Physical, Regulatory, and Environmental Requirements

The physical, regulatory, and environmental requirements of a third boiler at H-POWER are well

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44 Department of Environmental Services. http://www.opala.org/solid_waste/archive/How_our_City_manages_our_waste.html#hpower. 24 July 2008.

45 Covanta Holding. http://www.covantaholding.com/. 21 July 2008.

understood since the C&C already has one of these plants in operation. Land is available on the H–POWER site for the expansion.

5.2.4 Potential Issues

EfW requires a landfill for the disposal of ash and residual wastes. The market for the electricity is already contracted for with the current facility. The technology is well understood from environmental, operational, financial, and technical perspectives.

5.2.5 Consistency With City Requirements

EfW is consistent with the C&C requirements.

5.3 Non-thermal

For the purpose of this report, non-thermal processes are defined as those that primarily produce a solid material, such as MSW compost, which is then marketed. Non-thermal technologies included in this analysis are digestion and hydrolysis.

5.3.1 Anaerobic Digestion

Anaerobic digestion is the decomposition of MSW without the introduction of oxygen. End by-products tend to be liquid, gas, and solid materials. The organic fractions of MSW are converted into biogas and residual materials, which can be used for compost and fertilizers. Due to the length of time anaerobic digestion takes, a significant amount of land is required to process the amount of MSW the C&C requires of an alternative technology.

Examples of anaerobic technologies include:

- ArrowBio
- Orgaworld
- Organic Waste Systems' DRANCO Dry Anaerobic Digestion

The discussions in this section are based on information about the ArrowBio process. ArrowBio uses naturally occurring microbes to break down the organic faction of MSW. Others would have different approaches and equipment, but produce similar products.

Currently, Orgaworld has two operating facilities, each with a capacity of 96 TPD. One Organic Waste Systems' facility in Victoria, Spain processes 120,000 TPY (328 metric TPD assuming 365 days/year) while other Organic Waste Systems' facilities process up to 137 TPD.[46] Both are less than the C&C minimum requirements, and the Orgaworld and Organic Waste Systems are not discussed further. ArrowBio has a 200 TPD plant in operation.

5.3.1.1 How It Works

Using a separation-dissolving tank, organic and inorganic materials are separated based on buoyancy. Heavier inorganic materials, such as metal and glass, sink to the bottom of the tank and are taken for further separation and then are recycled or disposed. Plastics, which remain floating, are separated pneumatically, while the remaining organic fraction is shredded and more water is introduced to further the biodegrading process. The remaining organic material is treated in acetogenic and methanogenic reactors producing an MSW-based fertilizer and biogas. The biogas, made up of approximately 75 percent methane, can be sold as clean, green energy for use in transportation and power facilities, or used internally to power the facility. The technology vendor is responsible for the disposal of these residues.

The demonstration facility, located in Hadera, Israel, processed more than 30 TPD of MSW and operated from 1996 to 1999. The facility was designed to process 11 TPD of MSW.

One full scale ArrowBio facility located at the Hiriya transfer station in Tel Aviv, Israel has been in operation since 2002. The facility processes approximately 210 TPD of MSW and generates biogas sufficient to produce three MW of electricity.[47]

5.3.1.2 Other Jurisdictions Using This Technology

Currently the only ArrowBio facility in operation is at the Hiriya transfer station. ArrowBio plans to build a 500 TPD plant in Mexico [48]. A 90,000 TPY facility that is part of Australia's Macarthur Resource Recovery Park at the Jack's Gully landfill site opened its doors on July 4, 2008.[49] [50]

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46 Organic Waste Systems' DRANCO Dry Anaerobic Digestion. http://www.ows.be/pages/index.php?menu=85&submenu=125&choose_lang=EN, 18 July 2008.

47 Arrow Ecology. http://www.arrowecology.com/ . 21 July 2008.

48 Oaktech Environmental. http://www.oaktech-environmental.com/news.htm, 18 July 2008.

49 WSN Environnemental Solutions. 'Macarthur Resource Recovery Park Opens" WSN.com. http://www.wsn.com.au/dir138/wsn.nsf/Content/News_Macarthur+Resource+Recovery+Park+Opens 05 December 2008

50 Marshall, A.T. and Morris, J.M., "A Watery Solution," Chartered Institute of Waste Management Journal, August 2006.

5.3.1.3 Physical, Regulatory, and Environmental Requirements

The ArrowBio facility at the Hiriya transfer station has one 210 TPD module and requires approximately two acres of land, with an additional one-half to one acre for long-term storage of materials. If it were sized up to meet the 500 TPD requirement, an estimated six acres would be needed.

This facility would require 0.05 MW of electricity per ton of MSW processed, which is met with the generation from the biogas. Water consumption data is not readily available; however, ArrowBio claims the consumption is low due to moisture in the MSW. Additional water is required for the separation/dissolving tank.

While ArrowBio claims no negative environmental impacts, the gas the plant produces is burned in an internal combustion engine that would have emissions with air impacts. The company literature states that there is no significant odor potential as the MSW is immediately placed into the separation-dissolving tank. The treatment takes place in enclosed tanks, also reducing potential odors. Water used throughout the process is reused in the separation-dissolving tank, which results in low water consumption. A small amount of wastewater is generated from the process, but is expected to be suitable for release into the sanitary sewer system.

The company provided no information regarding economic benefits associated with the technology.[51]

5.3.1.4 Potential Issues

- There may be size-up issues unless several units of the same size as the existing facility are used.
- A market would need to be developed for the MSW compost, which may be difficult. MSW compost is not currently marketed on Oahu and it may be challenging and time consuming to develop the market and obtain the necessary governmental permits.
- A market would be needed for biogas or it would need to be used to generate electricity and sold to HECO.

5.3.1.5 Consistency With City Requirements

The anaerobic digestion facilities do not meet the City's requirements:

- The existing facilities either process less than the City's minimum waste stream (the existing

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51 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.

ArrowBio facility 210 TPD of MSW, 290 TPD less than what the C&C requires) or they process source-separated organics.[52] ArrowBio could use multiple units to meet the City requirement.

- The facility design for the ArrowBio is the first fullsize facility.
- There is no proven market for the MSW compost product

5.3.2 Aerobic digestion

Aerobic digestion is the decomposition of MSW with the introduction of air. Examples of aerobic digestion include Converted Organics (formerly Mining Organics)[53], Real Earth Technologies, and Herhof Environmental's MBT Process. Due to the lack of readily available information about both Converted Organics and Real Earth Technologies, a generic explanation of Herhof Environmental's MBT Process is included. Different companies use different approaches and equipment, but produce similar products.

5.3.2.1 How It Works

The aerobic digestion process can be either wet or dry. Dry aerobic digestion is similar to in-vessel aerobic composting.[54] Inorganic materials, such as glass, metals, and plastics are removed from the MSW for recycling. The remaining material is shredded, mixed, and put into a vessel with a controlled amount of air and heat. Liquid is removed thereby reducing the volume. The mixture continues to be aerated, mixed, and depending on the reactor used, heated.[55]

Company literature states that wet aerobic digestion removes inorganic materials, such as glass, metals, and plastics, and pulps the organic materials from the MSW. The slurry is then mixed, aerated, and heated. Heating dries some of the organic material, reducing the total volume. Microbes are then introduced, which reduce the slurry to solid and liquid soil amendments for use in fertilizers.[56] The technology vendor is responsible for the marketing these materials.

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52 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.

53 Mining Organics merged with/bought out by Converted Organics in February 2006.. 21 July 2008.

54 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.

55 Kumar, Surendra, Shashi and Salman Zafar. "Composting Technology." *MSW Management, The Journal for Municipal Solid Waste Professionals*. May/June 2006.

56 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.

5.3.2.2 Other Jurisdictions Using This Technology

Composting of kitchen, food, and green waste scraps is well established in Europe. Germany has more than 500 biochemical treatment facilities processing more than eight million TPY of food and green wastes; the majority of those facilities are aerobic compost facilities. However, these facilities are not processing MSW.[57] Vancouver, Canada has a 30 TPD demonstration plant by Herhof in operation processing separated food and other organic wastes.[58] There are currently seven commercial MSW Herhof plants in operation in Germany, Belgium, and Italy, with one proposed for the United Kingdom that would use the solid fuel produced by the MBT Process in a combustion plant. In 2009, Herhof plans to open a 160,000 TPY MSW facility in Larnaka, Cyprus and a 40,000 TPY CI&I facility in Athens, Greece.

5.3.2.3 Physical, Regulatory, and Environmental Requirements

These requirements are unknown as there are currently no aerobic facilities that meet the requirements of the C&C.

5.3.2.4 Potential Issues

The process results in a compost that would have to be sold, and no markets have been demonstrated in Honolulu. Even with a solid fuel by-product, Honolulu does not have an existing, market for the fuel.

5.3.2.5 Consistency With City Requirements

None of the Herhof Environmental plants have been operation more than two years processing more than 500 TPD of MSW. However, Herhof Environmental states their MBT Process is capable of processing up to approximately 1,095 TPD.[59]

5.3.3 Hydrolysis

Hydrolysis is a chemical reaction in which water and another substance react, forming two or more new substances. With the hydrolysis of MSW, the reaction is between water and the cellulose fraction of the wastes to produce sugars. To obtain the cellulose fraction of the MSW, glass, metals, and other inorganic materials must first be removed.

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57 Oaktech Environmental, http://www.oaktech-environmental.com/ , 11 March 2008.

58 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.

59 Herhof Environmental. http://www.herhof.com/en/. 21 July 2008.

Several types of hydrolysis technologies exist. The description by BlueFire Ethanol, Inc. (formerly Arkenol Fuels) is provided as an example for discussion. Another technology is the Masada Oxynol process.

5.3.3.1 How It Works

BlueFire Ethanol, also named Concentrated Acid Hydrolysis, uses the source-separated fraction of MSW. The process first sorts out recyclable materials. The remaining material is ground for further processing. Sulfuric acid decrystallizes the material and breaks the organic fraction into its component sugars (cellulose and hemicellulose). The material is then hydrolyzed; the chemical bonds are broken, producing hexose and pentose sugars required for commercial fermentation. Insoluble materials are filtered for processing for other uses. The entire process runs on biomass, including agricultural residues, crops grown specifically for use as biomass, paper, wood, and green waste.[60]

The pilot facility for BlueFire Ethanol located in Orange, California, processed one TPD of MSW. This facility operated for five years beginning in 1992.[61] BlueFire Ethanol recently began the prefabrication process for its first ethanol biorefinery in Lancaster, CA. The Lancaster facility would use post-sorted cellulosic wastes diverted from landfills in Southern California to produce fuel-grade ethanol. The company was awarded $40 million from the U.S. Department of Energy (DOE) for construction of a second plant also in Southern California, and has been invited to submit a formal application for a DOE loan guarantee to assist in the financing of its ethanol production facilities.[62]

The only commercialized BlueFire Ethanol facility is in Izumi, Japan. It has been in operation since 2002, using waste wood chips as feedstock.[63]

5.3.3.2 Other Jurisdictions Using This Technology

There are no hydrolysis facilities currently in operation that process MSW as feedstock and none are the size the City requires.[64]

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60 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, September 16, 2004.

61 Arkenol Fuels. http://www.arkenol.com/. 21 July 2008

62 BlueFire Ethanol. http://www.bluefireethanol.com/pr/52/. 21 July 2008

63 California Integrated Waste Management Board, Session Summary: Emerging Technology Forum, Brief summary of presentations by Rick Diederich prepared by CIWMB staff, 17–18 April 2006.

64 Interstate Waste Technologies, http://www.iwtonline.com/ . 21 July 2008.

5.3.3.3 Physical, Regulatory, and Environmental Requirements

A Masada facility that could process about 600 TPD is expected to require 10-acres. The environmental impacts include emissions from the process, waste water discharges, and other impacts. The facility would need to satisfy the State's regulatory and environmental process for MSW processing plants.

5.3.3.4 Potential Issues

The use of MSW as feedstock has not successfully been demonstrated except at a pilot facility scale, although Masada is developing commercial facilities with projects in Orange, New York and the Dominican Republic.[65] [66]

According to the President and CEO of Arkenol, a market for the ethanol produced is expected to exist, but will need to be proven. The President and CEO of Arkenol addressed a meeting on alternative technologies and stated that an uncertain market for ethanol is believed to be one of the reasons a California Arkenol Fuel project failed.[67]

5.3.3.5 Consistency With City Requirements

Hydrolysis is inconsistent with the C&C requirements because there has not yet been a successful facility at the size required by the City operating on MSW.

5.4 Thermal

Thermal or combustion technologies produce a significant amount of heat which can be turned into energy. During the processes, both organic and non-organic materials are combusted while the non-combustible materials can be recycled either before or after combustion. Common thermal technologies are EfW, gasification, plasma arc, and pyrolysis. Examples of thermal technologies include the following. Some of these companies may no longer be providing the service.

- Covanta Energy — the City's H-POWER facility.
- Rigel Resource Recovery — Westinghouse Plasma Arc Gasification.

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65 Masada Oxynol, http://www.masada.com/. 21 July 2008.

66 *Evaluation of New and Emerging Solid Waste Management Technologies,* New York City Economic Development Corporation and New York City Department of Sanitation, 16 September 2004.

67 California Integrated Waste Management Board, Session Summary: Emerging Technology Forum, Brief summary of presentations by Rick Diederich prepared by CIWMB staff, 17–18 April 2006.

- Dynecology — Gasification with Briquetting of Refuse Derived Fuel (RFD)/Coal/Sewage Sludge.
- EBARA Corporation — Fluidized Bed Gasification with Ash Vitrification.
- GEM America — GEM Thermal Cracking Technology (Gasification).
- Global Energy Solutions — Thermal Converter Technology (Gasification and Vitrification).
- Interstate Waste Technologies — Thermoselect Gasification.
- Pan American Resources — Destructive Distillation Lantz Converter.
- Pratt Industries/VISY Paper (RDF).
- Comprehensive Resources, Recovery, & Reuse, Inc. (RDF).
- Takuma Mass Burn Renaissance System.
- Resource Recycling, L.L.C. (Mass Burn).

H-POWER technology is discussed in its own section since it is a proven technology that is currently in use by the C&C.

5.4.1 Plasma Arc

This technology uses large carbon rods in a sealed vessel to generate a high temperature arc that converts the materials in the vessel into plasma (ionized gas). Heat generated by the arc melts the inorganic fractions into a running slag (that can appear like glass) and vaporizes the organic fractions, which become a synthetic fuel gas. The glass can be disposed in a landfill or may be used for beneficial purposes, such as for replacement of imported sand for sand blasting. The synthetic gas is cleaned and burned to produce power.

There are several vendors of plasma systems, including Westinghouse and other project developers. A four TPD plasma system historically operated near the H–POWER plant to process medical waste, but this facility has ceased operations.

The City Council Public Works and Economic Development Committee heard from plasma system representatives during its review of potential landfill sites.[68] The representatives that addressed the

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68 Memorandum from Councilmember Rod Tam to Concerned Citizens of Oahu transmitting the report titled

Committee were identified in the report as:

> "… the following companies with the plasma gasification technology have made presentations or submitted materials to the Committee on Public Works and Economic Development ...:
>
> (1) JDI/Geoplasma, LLC;
>
> (2) Environmental Solutions Corporation representing the Solena Group;
>
> (3) EnviroDyne;
>
> (4) Startech Environmental Corporation;
>
> (5) Scientific Utilization, Inc. /Waste To Energy; and
>
> (6) Phoenix Consulting Group International, LLC, for Biomass Conversion Technology, LLC".

5.4.1.1 How It Works

Plasma arc technology gasifies MSW with high pressure air and an electric arc that produces very high temperatures (up to 4,532 ^{o} F).[69] These temperatures virtually vaporize the waste into its elemental components, creating syngas, which can then be used to generate electricity.

5.4.1.2 Other Jurisdictions Using This Technology

Currently, there are two operating plasma arc facilities that process MSW. The longest running one and the only one that is not a demonstration plant is the Eco Valley Utashinai facility located in Utashinai, Japan. The facility processed more than 270 TPD of MSW and 130 TPD of automobile shredder residue and generated approximately 4,400 kWh of salable energy in fiscal year 2005.[70]

The City of St. Lucie, Florida has been in negotiations for a plasma arc facility for over 4 years.[71]

"Committee on Public Works and Economic Development's Summary Report on its Landfill Site Selection Process." 16 November 2004.

69 Altar NRG. http://www.alternrg.ca/gasification/plasma_gas.html. 22 August 2008.

70 Shigehiro, Michiaki, General Manager of Eco Valley Utashinai.

71 Miller, Dan. "State-of-the-Art Plant Makes Trash Vanish Into Thin Air" County News Online. National Association of Counties, Washington, D.C., 2 October 2006. http://www.naco.org/CountyNewsTemplate.cfm?template=/ContentManagement/ContentDisplay.cfm&ContentID=2

The Georgia-based company, Geoplasma, has agreed to build and operate the facility and claims at full capacity, the facility would process 2,000 TPD of MSW and 1,000 TPD of MSW mined from a landfill while producing 120 MW of electricity.[72]

Geoplasma has agreed to build and operate the facility, estimating that within the next 15 to 18 years the facility will have disposed of all the current waste in the landfill. Ron Roberts, the Assistant Solid Waste Director in St. Lucie, estimates the plant will be finished by 2008 or early 2009. The scope of the project downsized. An article in the local newspaper reports a change to 200 TPD and more stringent local emissions limitations.[73]

A second plasma plant operating on MSW started operation in late January 2008 in Ottawa, Canada. It is a demonstration project that is designed to processes 85 TPD. *Table 11, Plasco Trail Road - Average Daily Quantity of MW Processed shows* the average TPD of waste processed monthly at the Plasco Trail Road Gasification Process Demonstration Project in Ottawa, Canada.

Table 11, Plasco Trail Road - Average Daily Quantity of MW Processed [74]

Time Period	TPD
January 24, 2008 to February 29, 2008	2
March 1, 2008 to March 31, 2008	1
April 1 2008 to April 30 2008	9
May 1, 2008 to May 31, 2008	6
June 1, 2008 to June 30, 2008	20
July 1, 2008 to July 31, 2008	22
August 1, 2008 to August 31, 2008	0
September 1, 2008 to September 30, 2008	2

1442. 27 October 2008.

72 Sladky, Lynne. "Florida county plans to vaporize landfill trash." USA Today. 9 September 2006 and Margasak, Gabriel. "Trash zapper in St. Lucie County gets shot in arm from Crist", TCPalm, 10 November 2007.

73 Miller, Dan. "State-of-the-art plant makes trash vanish into thin air." County News Online. National Association of Counties, Washington, D.C., 2 October 2006 and "Will reality zap fantasy?" Palm Beach Post online at http://www.palmbeachpost.com/search/content/opinion/epaper/2008/10/05/a16a_swartzcol_1005.html Accessed on 5 December 2008..

74 Decommissioning Consulting Services Limited. Monthly Engineer's Report Plasco Trail Road Gasification Process Demonstration Project. September 2008.

The information about the demonstration project was obtained from news sources[75], which stated:

> "A demonstration waste-to-energy plant in Ottawa has finally turned its first load of trash into power…
>
> … The $27 million plant uses a process called plasma gasification to decompose waste under high heat and low oxygen into a gas mixture called syngas, and a glass-like material that can be turned into asphalt or concrete….
>
> Once the plant is running at full capacity, it is to divert 85 tonnes of waste a day from the city's landfills while generating enough electricity to run the facility and power 3,600 homes….
>
> Plasco hopes its demonstration plant in Ottawa would persuade other cities to buy the technology….
>
> Construction of the plant started in September 2006. It was to run as a two-year pilot project."

The PLASCO plant was partially funded by the Canadian government.

> "This brings to over C$90 million the equity invested in PlascoEnergy since August 2005. The Company had nominal debt and a modest cash position prior to this issue, and is well funded for development of commercial facilities next year," said Rod Bryden, PlascoEnergy President and CEO. "Commitment of funding from Sustainable Development Technology Canada ('SDTC') to the Ottawa demonstration project was a key factor in bringing the PlascoEnergy technology to reality and to attracting private capital that would fund its future commercial use around the world. SDTC has committed a non-repayable contribution of C$9.5 million," he said.[76]

5.4.1.3 Physical, Regulatory, and Environmental Requirements

The Eco-Valley Utashinai facility is the only one of its kind that has been operating processing MSW for more than one year. If a similar facility were built on Oahu, it would have to meet the same requirements of both State and Federal regulations as any new alternative technology.

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75 Information from http://www.cbc.ca/technology/story/2008/02/07/ot-plasco-080207.html, 24 July 2008.

76 Information from PLASCO new release dated December 12, 2007, http://www.plascoenergygroup.com/?News/23/2007-12-03:First_Reserve_leads_PlascoEnergy_equity_funding, 22 July 2008

5.4.1.4 Potential Issues

The experience with plasma operating on MSW has been limited to one full-scale plant and one demonstration plant. The full scale plant has operated on a combination of MSW and auto shredder waste. In addition, according to visitors to the plant, the MSW burned is not mixed waste as is handled by H–POWER, but is primarily paper and plastic.

The operating results for the Utashinai facility from 2005 show that the plant is operating at less than rated capacity and not producing power in excess of its needs. *Table 12, Actual Treatment Record in 2005 (Fiscal Year)* was provided by the plant operator to the City staff and shows the operational record for one year.

Table 12, Actual Treatment Record in 2005 (Fiscal Year)[77]

Month	Waste Processed (Tons)		Slag (Tons)	Electric Power (MWh)			Operating Days
	MSW	ASR*		Generated	Consumed	Sold	Line1+Line2
Apr	1,447	238	314	305	1,659	0	25+10
May	2,406	443	372	1,172	2,098	25	25+27
June	2,063	913	651	1,063	2,059	19	22+30
July	2,625	743	450	1,053	2,317	0	31+31
Aug	1,527	881	443	637	1,862	0	21+21
Sept	2,302	895	469	840	2,202	0	30+24
Oct	1,773	671	453	548	1,963	0	22+19
Nov	3,364	896	676	1,360	2,397	0	30+30
Dec	1,164	387	308	297	1,388	0	20+1
Jan	2,207	737	451	613	1,881	0	14+22
Feb	1,612	788	345	356	1,510	0	0+28
Mar	1,247	741	278	341	1,522	0	0+19
Total	23,737	8,333	5,210	8,585	22,858	44	240+262

* ASR refers to Automobile Shredder Residue.

Error! Reference source not found., summarizes the percentage of capacity the plant processed and the percentage of energy the plant used that it produced. This table assumes the plant was available to operate 85 percent of the time (the other 15 percent it was being maintained). It shows that after three years in operation, the Utashanai plant is not operating at capacity or generating sufficient energy to run the plant. On an annual average for their fiscal 2005, the plant processed 38.3 percent of the capacity to accept MSW. The Utashinai facility produced 37.6 percent of the energy needed to operate the plant.

77 Nomura, Akira. Hitachi Metals. Actual Treatment Record for Utashinai Eco Valley. 2005. Correspondence to Wilma Namumnart. 10 August 2006.

Table 13, Operating Information[78]

Month	Capacity (TPD)*	MSW Processed (Tons)	Production (%)	Slag (Tons)	Residue (%)	Electricity Consumed/Generated (%)
Apr	5,100	1,447	28%	314	22%	18%
May	5,270	2,406	46%	372	15%	56%
June	5,100	2,063	40%	651	32%	52%
July	5,270	2,625	50%	450	17%	45%
Aug	5,270	1,527	29%	443	29%	34%
Sept	5,100	2,302	45%	469	20%	38%
Oct	5,270	1,773	34%	453	26%	28%
Nov	5,100	3,364	66%	676	20%	57%
Dec	5,270	1,164	22%	308	26%	21%
Jan	5,270	2,207	42%	451	20%	33%
Feb	4,760	1,612	34%	345	21%	24%
Mar	5,270	1,247	24%	278	22%	22%
Total	62,050	23,737	38.3%	5,210	22%	37.6%

*Assumes capacity of 200 TPD MSW and ASW at 85 percent availability.

5.4.1.5 Consistency With City Requirements

Currently, plasma arc technology does not meet the C&C requirements. The Eco-Valley Utashinai facility processes 270 TPD of MSW, 230 TPD short of the C&C requirements. The Ottawa facility, at 85 metric TPD and with less than two years operation, is also short of the C&C requirements. In addition, as shown in ***Error! Reference source not found.*** and expressed in the company's online literature, is intended to be a demonstration plant with the full scale facility to be constructed.

These facilities are the only ones operating on MSW, and only the Plasco Trail Road facility in Ottawa operated solely on MSW.

Plasma arc does not meet the City's requirements.

5.4.2 Gasification/Pyrolysis

Gasification is the process of reducing MSW to a synthesis gas. Pyrolysis is similar to gasification and often considered a type of gasification technology. The by-products of gasification are syngas and vitrified material (slag) and pyrolysis by-products are solid carbon and liquid fuel. Pyrolysis generally takes place during the first steps of gasification. Examples of gasification technologies are

78 Nomura, Akira. Hitachi Metals. Actual Treatment Record for Utashinai Eco Valley. 2005. Correspondence to Wilma Namumnart. 10 August 2006.

as follows. Some of these companies may no longer be providing the service.

- Dynecology—Gasification with Briquetting of Refuse Derived Fuel (RDF)/Coal/Sewage Sludge.
- International Environmental Solutions (IES)—Advanced Pyrolysis Systems
- EBARA Corporation—Fluidized Bed Gasification with Ash Vitrification.
- GEM America—GEM Thermal Cracking Technology (Gasification).
- Global Energy Solutions—Thermal Converter Technology (Gasification and Vitrification).
- Interstate Waste Technologies—Thermoselect Gasification.
- Pan American resources—Destructive Distillation Lantz Converter.

5.4.2.1 How It Works

Dynecology's Gasification with Briquetting of RDF/Coal/Sewage Sludge technology processes MSW into RDF and then blends RDF and dewatered sewage sludge together with coal making briquettes. The briquettes are then introduced to the gasifier, or high-pressure, fixed-bed reactors. The inorganic fraction melts and is removed from the bottom of the chamber as slag and the synthesis gas is removed from the top. Dynecology has no facilities currently operating on MSW.

The International Environmental Solutions (IES) pilot Advanced Pyrolysis Gasification Systems (AP Systems) plant in Romoland, CA uses zero-oxygen fuel input technology to convert MSW into syngas. Many types of waste can be processed using the AP System including MSW, biomass, industrial waste, tires and hazardous waste. AP Systems uses very high heat to decompose organic wastes into synthetic gases and a carbon residue. The gases are then cleaned and combusted to produce steam, which can then be converted to electricity. While the gasification process may not produce emissions, there are emissions from the use of the syngas, and those emissions need to meet regulatory agency requirements The pilot plant in Romoland, CA has been approved by federal, state, and local agencies, including the California South Coast Air Quality Management District, for air quality, and complies with all environmental regulations and guidelines above their standards.

GEM America's GEM Thermal Cracking technology processes unsorted MSW. Recyclable materials, such as metals, glass, and cardboard are separated and the remaining materials are shredded, dried, and granulated. The MSW is then gasified and converted into synthesis gas. The synthesis gas can be used to generate electricity. GEM America has no commercial facilities currently in operation, but has two demonstration plants processing 73 TPD that have been in operation since 2000.

EBARA Corporation's Fluidized Bed Gasification with Ash Vitrification technology introduces shredded MSW into a fluidized bed reactor vessel. Gasification takes place in the reactor at atmospheric pressure. Temperatures range between 1,022–1,166° F, reducing the MSW to ash. The ash and synthesis gas enter into a second chamber where the materials are heated again at higher temperatures (2,372–2,642° F). Fine particles are collected on the walls and become molten slag collected at the bottom of the chamber and cooled to form a vitrified granulate. The synthesis gas is used to produce energy. The largest EBARA plant is its Kawaguchi City reference plant which processes 462 TPD of MSW.

With Global Energy Solutions' Thermal Converter technology (Gasification and Vitrification), unsorted MSW is introduced into the gasification reactor. Preheated air (660–840° F) is then introduced and the MSW is passed to a conversion chamber heated between 2,200–2,500° F and then to a second conversion chamber heated between 3,000–3,100° F. This secondary chamber cleans the gases and vitrifies the residue using a bed of molten material. The synthesis gas produced is used in a boiler to produce steam or to generate electricity.

Interstate Waste Technologies uses a waste treatment process called Thermoselect Gasification. The system compacts unsorted MSW thereby removing most of the air and evenly distributing the moisture content. The compacted waste is then pushed through a high temperature chamber where the inorganic waste turns molten and the organic waste converts into gas. The organic gases enter a lower temperature chamber and are shock cooled to avoid the formation of dioxins or furans. The gases are then shuttled through scrubbers to remove sulfur, heavy metals and other toxins. The resulting synthesis gas can be used for energy production or as a base material for chemical synthesis. The molten inorganic waste is also shock cooled and results in reusable mineral substances and metals. The water condensed during the different phases of the gas treatment is fed into the water treatment chambers where it undergoes a multiple-stage treatment. The processed water is then used for cooling purposes.[79]

5.4.2.2 Other Jurisdictions Using This Technology

Global Energy Solutions has 14 facilities in operation in Japan, Asia, and Europe. Two facilities operating in Japan process solely MSW.

Since the start-up of the Aomori, Japan plant in 2000, EBARA has since opened nine TwinRec gasification facilities in Japan and one in Kuala Lumpur, Malaysia. None of these plants process the amount of waste required by the City, but the plant in Kawaguchi City is close at 420 TPD.

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79 http://www.iwtonline.com/docs/Thermoselect_process_description.pdf, 21 July 2008.

Interstate Waste Technologies has the following facilities:[80]

- Fondotoce, Italy, operated the demonstration Thermoselect facility for six years, with commercialization commencing in 1994, from 1992-1998. The plant was decommissioned in 1999.

- Karlsruhe, Germany, operated a Thermoselect facility from 1999 until 2004, when it was closed due to "general business strategy decisions." The facility processed 225,000 TPY of waste from surrounding towns and rural districts.

- Currently, seven Thermoselect facilities are operating in Japan. Three of the facilities operate on MSW. Commercialization of the Matsu facility began in 2003 and currently processes 140 TPD. The Nagasaki and Tokushima facilities commenced operations in 2005, with the Nagasaki facility processing 300 TPD and the Tokushima facility processing 120 TPD of MSW.

5.4.2.3 Physical, Regulatory, and Environmental Requirements

Global Energy Solutions states that their Thermal Converter technology exceeds all known emission standards worldwide and that there are no odors due to their storage of MSW inside a building. Global Energy Solutions also states that their technology requires less land than traditional incinerators; however, no documentation of land requirements was found.

The synthesis gas produced is sufficient to power the Thermoselect facility.

Water consumption is 560 gallons/ton of MSW. Wastewater is treated and reused.[81]

EBARA's TwinRec process can treat a variety of waste. Only bulky wastes need to be cut to pieces smaller than 300 mm.[82] For example, car shredder residue can be fed through the gasifier without any additional preparation. The gasifier is a proprietary internally circulating fluidized bed with compact dimensions. The relatively low gasification temperature in the fluidized bed leads to easily controllable process conditions.[83]

5.4.2.4 Potential Issues

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80 http://www.iwtonline.com/docs/Thermoselect_process_description.pdf , 21 July 2008.

81 Thermoselect. http://www.iwtonline.com/docs/Thermoselect_process_description.pdf. March 12, 2008.

82 Selinger, A., Ch. Steiner and K. Shin. "TwinRec Gasification and Ash Melting Technology – Now also Established for Municipal Waste" 2 July 2003.

83 EBARA Environmental Engineering Company. http://www.ebara.ch/_en_/twinrec.php?n=1. 22 August 2008.

- Global Energy Solutions' Thermal Converter technology vitrified residual by-product requires a market.

- Interstate Waste Management's Thermoselect technology requires a market for the metal pellet and vitrified granulate by-products.

5.4.2.5 Consistency With City Requirements

Global Energy Solutions' Thermal Converter technology might be consistent with the C&C requirements; there is no information readily available regarding how long either of the two MSW facilities in Japan has been in operation. This residual by-product requires a market that is not proven on Oahu.

Interstate Waste Management's Thermoselect technology is inconsistent with the C&C requirements. Although there are seven Thermoselect facilities in Japan, only three operate on MSW, none at the size the City requires (the Matsu facility processes 140 TPD, the Nagasaki processes 300 TPD, and the Tokushima facility processes 120 TPD.) All those listed here have been in operation for more than two years. The market for the metal pellets and vitrified granulate by-products would have to developed on Oahu.

EBARA has a plant that processes 462 TPD that has been operating for 6 years. It might be an alternative if the cost was reasonable. In a tour of the facility in early July 2008, a question was asked about the cost and the response indicated that they do not discuss cost, but also do not propose in many areas of the US because the market does not support the project cost. [84]

5.5 Expanded Recycling

5.5.1 Current city recycling amounts

Current recycling infrastructure consists of community recycling bins, recycling support for schools, HI5 redemption sites, and a three-bin curbside collection program. The City also offers bi-weekly curbside green waste collection to its residents. Approximately 20,000 tons of green waste is collected annually from residences. The City expects green waste recycling to increase to 60,000 tons annually with the new bin system. The collected green waste is turned into mulch and offered to residents at no cost.[85] The overall goal of these programs is to reduce the amount of waste disposed.

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84 Personal communication with Paul Philleo, Chief of the Sacramento County Department of Waste Management and Recycling.

85 Department of Environmental Services www.opala.org, 22 July 2008.

5.5.2 Expanded programs

Expanding current recycling infrastructure within the City would not eliminate the need for expanding H–POWER; however, expanded programs would decrease the amount of materials sent for disposal. The recycling programs cannot handle all the materials in the MSW. As a result, expanded recycling is not a viable alternative to Expansion of H–POWER.

The expanded recycling could include expansion of the number of sites that accept materials from the HI5 beverage container program, addition of more sites to the school drop-off program, increasing the frequency of curbside collection of residential green waste, and adding a program to collect other recyclables from residences at the curb.

The City conducted a pilot three-bin curbside program with once-per-week solid waste collection and once-per-week recycling collection, alternating between recycling and green waste. The residents in the pilot locations, Mililani and Hawaii Kai, were generally successful at separating their recyclables and green waste from the solid waste bins and reducing their overall weekly disposal. Most neighborhoods still have twice-per-week solid waste collection and bi-weekly green waste collection, but the three-bin service was extended to other communities on a rolling basis beginning in November 2008. The program is set to be offered island-wide by May 2010. [86]

If the expanded recycling program achieves the higher level of penetration evaluated, it is expected to divert 35,000 tons of recyclables and 60,000 tons of green waste from the landfill. According to the City's Integrated Solid Waste Management Plan,[28] even considering Enhanced Recycling and assuming that 300,000 tons of MSW will be recycled into electric power by H–POWER Unit #3, there will still be over 100,000 tons per year of waste requiring landfilling. Thus, Enhanced Recycling is not a viable alternative to the Proposed Expansion Project.

5.5.3 Consistency With City Requirements

Expanded recycling is consistent with the City's plans, but cannot provide the same diversion from landfilling as H–POWER Unit #3. As noted above, even with Enhanced Recycling, there is a need to landfill more than 400,000 tons of MSW per year into the future unless H-POWER is expanded by the addition of Unit #3.

5.5.4 City Study on Recycling Alternative

The City has recently compared the environmental and economic impacts of materials recycling of wastepaper to produce new products and energy recycling of wastepaper to produce electricity at Honolulu's existing H-POWER facility. In 2007, the City contracted with R. W. Beck, Inc. (R.W.

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86 City and County of Honolulu, Curbside Recycling Pilot Program Evaluation, June 2008.

Beck, 2007) to prepare this limited comparison. The report does not consider energy recovery of waste paper from the proposed Expansion unit at H-POWER. The study considers the existing units at H-POWER. It assumes the disposal and collection of waste paper with mixed MSW, the processing of mixed MSW (containing waste paper) to prepare RDF, and the combustion of RDF to produce electricity in the existing Units 1 and 2 at H-POWER. The report is discussed here to provide general insight into the Expanded Recycling Alternative to the proposed Expansion.

According to the R.W. Beck report (2007)[87]:

> "The study analyzes selected impacts associated with managing 73,555 tons of wastepaper as was recycled in Honolulu during 2005." [R.W. Beck (2007)]
>
> "To provide a balanced analysis, the scenarios were analyzed in two distinct ways:
>
> - First, a variety of environmental and economic impacts accruing on the Island of Oahu were estimated directly; and
> - Second, global life-cycle energy and greenhouse gas impacts accruing both on- and off-Island were estimated using the Waste Reduction Model (WARM), developed by the U.S. Environmental Protection Agency (EPA)." [R.W. Beck (2007)]

The conclusions of the R.W. Beck (2007) report are presented below:

> "If only on-island impacts are considered, energy recycling (i.e., H-POWER) provides greater energy and greenhouse gas benefits compared to materials recycling. However, if off-island impacts and on-island impacts are considered, materials recycling has greater benefits. The off-island energy and greenhouse gas benefits associated with substituting recycled paper for wood pulp to manufacture paper products are greater than the on-island H-POWER benefits." [R.W. Beck (2007)]
>
> "Managing wastepaper using both materials recycling (i.e., remanufacture into paper products) and energy recycling (i.e., H-POWER) yield environmental benefits. Both approaches reduce environmental impacts that would have occurred had the materials not been recycled for materials or energy recovery. Specifically:
>
> - Generating electricity from the combustion of wastepaper at the H-POWER facility provides energy benefits by offsetting the need to generate electricity through combustion of fuel oil. This type of power generation benefits Honolulu

87 R.W. Beck. 2007. Final Report: Comparison of Select Materials and Energy Recycling Scenarios and Transmittal Memorandum from Robert Craggs to Frank Doyle et al. entitled "Final Report: Comparison of Select Materials and Energy Recycling Scenarios."

directly by reducing fuel costs and air emissions associated with burning fuel oil; and

- Materials recycling of wastepaper yields energy benefits because it provides alternative raw material to paper manufacturers, thereby reducing the need for logging and production of "virgin" pulp products. In contrast to the energy benefits of H-POWER, materials recycling energy benefits accrue off-island, where wood pulp and paper products are produced." [R.W. Beck (2007)]

"Materials recycling creates more on-island jobs than energy recycling (i.e., H-POWER). However, H-POWER generates greater overall economic value for the Honolulu economy, resulting in a larger increase in business activity from providing products and services to HPOWER." [R.W. Beck (2007)]

5.6 Transshipment Off-Island

The transshipment of waste involves securely containing the MSW, shipping it to the mainland and disposing of it at a mainland landfill. On August 23, 2006, the US Animal and Plant Health Inspection Services (APHIS) announced its decision to allow the transshipment of MSW to the continental United States from Hawaii.[88] Transshipment would be allowed only under certain circumstances. Wastes by federal regulation that would be restricted from transshipment are, hard-to-handle wastes, such as white goods, sewage sludge, auto fluff, and precluded materials such as green and agricultural wastes (more than three percent of the bale weight). The announcement is attached as Attachment A.

On January 22, 2008 the City provided a notice to bidders that it would entertain proposals for transshipping waste to the mainland for disposal as an interim measure for several years before the proposed Expansion is completed. The C&C has received bids from three transshipment firms: the cost was $99.83 per ton from Hawaiian Waste Systems, $184.47 per ton from Simcoe Environmental Services Inc., and $204.21 per ton from Off-Island Transfer.[89] The companies proposed sending Oahu's waste to Washington State to the Roosevelt Landfill or to a landfill in Idaho. If the C&C were to begin transshipping Oahu's waste, the vendors would have to comply with requirements for the handling and storage established by the federal government in the Compliance Orders, with state regulations for handling and processing the MSW, and with local land use permitting requirements. One of the potential transshipment vendors has approved Compliance Orders for the Hawaii and mainland operations and a permit for the transfer station to shrink wrap

88 Federal Register volume 71, number 163, published 23 August 2006.

89 Laurie Au. "City Reviews Bids to Ship Oahu Trash." Star Bulletin on the Web Vol. 13, Issue 171. 19 June 2008. (23 July 2008) http://starbulletin.com/2008/06/19/news/story08.html.

and transfer the waste. The C&C would also need to look at the effects of transshipment on H-POWER over the long term. With the long term shipment of Oahu's waste off-island, waste disposed in H-POWER may be reduced and revenue from the energy sold would diminish.

The City's review of the transshipment proposals was delayed due to a protest filed against Hawaiian Waste Systems. The other two bidders challenge Hawaiian Waste Systems, whose bid was half the cost of their proposals.[90] A statutorily-mandated stay on the award of the bid is in effect while the City reviews the protest.

5.6.1 City Requirements for Transshipment

In the January 22, 2008 notice to bidders, the C&C established requirements for the transshipment of MSW:

(1) Permits, compliance letters, certifications, environmental assessments, and other documents, related to services needed to carry out the contract, must be current for the transshipment contractor.

(2) The proposed methods and measures to fulfill each requirement of the contract must be identified.

(3) A site plan displaying existing facilities, equipment, traffic conditions, and a description of operations must be provided.

(4) A back-up plan for equipment maintenance, failure, or other disruption, to minimize landfill disposal must be provided.

(5) A back-up plan for barge-loading obstruction or other disruptions of exporting operations to minimize landfill disposal must be provided.

(6) A copy of facility agreements between the bidder and facility, barging, or disposal operators must be provided if the bidder is not the director/operator of each.

(7) The bidder must provide a property easement for the placement of a City-owned scale, scale house, and associated equipment.

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90 Peter Boylan. "Firm Claims City Pressured on Bids to Ship Trash." Honolulu Advertiser on the Web 11 July 2008. (23 July 2008) http://www.honoluluadvertiser.com/apps/pbcs.dll/article?AID=/20080711/NEWS04/807110350/1008/LOCALNEWSFRONT.

5.6.2 How It Works

The three interested transshipment firms have submitted applications to the State for modifications to the transfer stations that are currently permitted to handle MSW. Modifications include adding the equipment needed to transship MSW to the Roosevelt Landfill in Washington State or a landfill in Idaho.

The transshipment vendors would shrink-wrap the waste to avoid shipment of pests and control nuisance impacts. The approach is described in the risk assessment prepared by APHIS for its regulatory action.[91]

The process for handling the waste in Honolulu is specified in the final Compliance Agreement between the USDA and Hawaii Waste Systems, LLC (HWS). The procedures for handling the waste and transporting it to the landfill for disposal are detailed[92] as follows:

> "…Garbage and Regulated (domestic) Garbage collected by refuse trucks shall be delivered to the HWS facility at HWS Transfer Station …Trucks of agricultural waste shall not be accepted. Waste materials, containers, and bins associated with Foreign Garbage are strictly prohibited and shall not be accepted. The ground surface of the all areas for handling the Garbage and Regulated (domestic) Garbage should be level, solid, and impervious surface of asphalt or cement.
>
> The waste transfer station will receive only household and commercial waste acceptable for disposal at Roosevelt Regional Landfill. Collection trucks will deliver waste picked up from existing collection routes.
>
> Each load of waste received at the facility will be weighed and the date, time, company, driver name, truck number (i.e., company fleet number), weight (loaded), weight (empty), and origin of load, will be recorded. Records will be kept for a minimum of three years."

91 *The Risk of Introduction of Pests to the Continental United States via Plastic-Baled Municipal Solid Waste from Hawaii,* United States Department of Agriculture, Animal and Plant Health Inspection Service, March 2006.

92 Final Compliance Agreement between Hawaiian Waste Systems, LLC, and the United States Department of Agriculture relating to the Regulated Article "Garbage and Regulated (domestic) Garbage from Honolulu, Hawaii." 19 January 2007. Pages 4-7.

5.6.3 Other Jurisdictions Using Transshipment

Shipment of MSW using shrink-wrap has been used in New Jersey and other areas of the US. It has been used in Europe for as long as 10 years. The Roosevelt Landfill in Washington receives MSW, not only from Washington State, but also from Oregon, Canada, Idaho, and Alaska.[93] Canada has transshipped its MSW to Michigan landfills for many years, while New York is in the process of transshipping its MSW to North Carolina. Most of these operations do not use the shrink-wrap technology.

APHIS determined, with its acceptance of transshipment of MSW stateside from Hawaii, that transshipment could occur from both Oahu and the island of Hawaii once contracts and compliance agreements have been set up in Hawaii.

5.6.4 Physical, Regulatory, and Environmental Requirements

The limitations on shipping waste from Hawaii to the mainland are established in federal regulations[94] with approval of the specific requirements promulgated in the Federal Register.[95]

Garbage subject to these regulations (Regulated Garbage) is defined as waste on—or removed from—a transport that has been in any non-U.S. or Canadian port within the past two years. The garbage is also regulated if that transport has either directly or indirectly moved in the past year between the United States and its territories and non-U.S. territories.

Any garbage commingled with regulated garbage is considered Regulated Garbage and would have to be shrink-wrapped and handled according to the Compliance Agreement.

The primary regulator of transshipment is the U.S. federal government through APHIS.

Regarding flow control of the waste, it has been determined that if the City controls the scale house, it can direct the flow of the waste to the disposal location. The January 22, 2008 Notice to Bidders requires that the successful bidder provide an easement at their site for the City's scale house and supporting equipment.

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93 Washington State Department of Ecology, Solid Waste and Financial Assistance Program, "Solid Waste in Washington State Fifteenth Annual Status Report", December 2006.

94 7CFR 330.400 and 9CFR 94.5.

95 Federal Register volume 71, number 163, published 23 August 2006.

5.6.5 Compliance Agreement

Before any waste can be transshipped, all parties involved with the export must enter into a Compliance Agreement with the USDA. All parties must comply with conditions within the Compliance Agreement, as well as, all provisions in 7CFR 330.400–403 and 9CFR 94.5.

5.6.6 Transshipment Regulations

The requirements for shipping the waste are in the Compliance Agreement and in other federal rules and regulations relating to transportation of materials by barge.

5.6.6.1 Receptacles

MSW transported from Hawaii to the mainland must be stored in specified receptacles. If the MSW is to be sent by watercraft, the receptacles must be contained within the guard rails of that watercraft. Receptacles must be tight, leak-proof, and covered while being transported.[96] Removal of receptacles must be under the direction and supervision of an inspector from APHIS and taken to an approved facility.

The shrink-wrap technology used to contain the MSW before it is transshipped uses plastic film wrapping material. The wrapping material is to be impermeable and made of low density polyethylene at least 16 micrometers in thickness. It is to be coated on one side with a non-hardening mastic/adhesive. Bales are mechanically wrapped to achieve airtight seals. The film anoxiates the wrapped MSW to kill the insects and pests entrained in the bale. In a 10-month study, DEKRA Umwelt, an international service provider, determined that the filmed bale environment is made up of 1 percent oxygen and more than 50 percent methane; that within 24 hours, any insects captured during baling of the MSW died from lack of oxygen. The film contracts once it is wound around the MSW. This ensures that during transshipment and disposal no materials or insects are leaked.[97]

5.6.6.2 Disposal

Disposal of MSW must take place at an approved facility. The Roosevelt Landfill has a permit issued pursuant to the federal Subtitle D regulations and would be considered an approved facility.

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96 7CFR 330.400 and 9CFR 94.5.

97 *The Risk of Introduction of Pests to the Continental United States via Plastic-Baled Municipal Solid Waste from Hawaii,* United States Department of Agriculture, Animal and Plant Health Inspection Service, March 2006.

5.6.7 Potential Issues

A shipping strike would create potential problems for Oahu should it occur during transshipment of MSW to the continental United States. The plastic film used to bale the MSW in preparation for transshipment is required by the USDA Compliance Order to be re-wrapped if the bale will not be in the landfill within 75 days.[98] The film has a life of at least 100 days when exposed to sunshine in tropical environments such as that found on Oahu.[99] Assuming a transit time of 14 to 21 days, even a short strike would threaten to cause the shipper to exceed the 75 day time limit from wrapping to disposal as required by the USDA. Oahu would not be able to transship its MSW during a shipping strike. If the strike was lengthy, the shipper would have to landfill the waste to avoid health and safety impacts.

According to the Chief Executive Officer of HWS,[100] the bales can be stacked two high. The space they have at the port facility will allow for storage of 30,000 tons of MSW. Assuming that the company handles 300,000 TPY, they can store about five weeks of shrink-wrapped MSW. In addition, the agreement for barge services allows management of the barge company to operate the equipment needed to transship the waste in a strike due to the health and safety aspects of transporting the waste.

Another issue with transshipment off-island is that green and agricultural wastes, as well as household hazardous wastes, are not permitted to be shipped commingled with the MSW. Incidental amounts, less than three percent of the total amount of MSW shipped, are permitted. Therefore, the source of waste that is transshipped must separate green and agricultural wastes from the MSW.

Assuming that a bale weighs 3.5 tons[101] the total weight in the bale is 7,000 pounds. The limitation of three percent or less of yard wastes[102] allows for 210 pounds of yard waste in the bale. While it is a small percentage of the bale, that amount of green waste should be observed in the inspection prior to baling.

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98 Final Compliance Agreement between Hawaiian Waste Systems, LLC, and the United States Department of Agriculture relating to the Regulated Article "Garbage and Regulated (domestic) Garbage from Honolulu, Hawaii." 19 January 2007. Pages 4-7.

99 *The Risk of Introduction of Pests to the Continental United States via Plastic-Baled Municipal Solid Waste from Hawaii,* United States Department of Agriculture, Animal and Plant Health Inspection Service, March 2006.

100 Meeting on 14 December 2006, with Jim Hodge and Mark White held in Sacramento, California.

101 Meeting on 14 December 2006, with Jim Hodge and Mark White held in Sacramento, California.

102 Federal Register volume 71, number 163, published 23 August 2006.

Transshipping Honolulu's MSW makes the C&C dependent upon an outside source rather than maintaining self-sufficiency managing its own refuse. For a state that in recent months has continued to voice its desire for independence, transshipment could be a step backwards.

If the entire 300,000 TPY projected to be handled by H–POWER Unit #3 were instead transshipped, it is likely that there would be insufficient fuel for the new unit. If that were the case, the loss of energy production would result in other oil based generation replacing the H–POWER generation, increasing greenhouse gas emissions by 83,861 metric tons of CO_2 per year and increasing (rather than reducing) the island's dependence on foreign oil by an additional 429,000 barrels of oil per year.

Relying on outside sources for the transshipment of MSW leaves Honolulu vulnerable to shipping strikes and with less negotiating power. The municipality would lose control of cost and possibly lose a source for disposal.

5.6.8 Impact on City Solid Waste Management System

From an environmental perspective, the impact of transshipment through the HWS system would be consistent with the impact of on-island disposal, but higher than the impacts of H–POWER Unit #3. It would be consistent with disposal in the Waimanalo Gulch Sanitary Landfill in that:

- The transfer, baling, shrink-wrap, and loading would be done at a permitted transfer station.
- The material would be contained within a system that has received approval from the federal government based on the system's ability to prevent the unexpected discharge of waste or plant pests.

It would have greater impacts than H–POWER Unit #3 in that:

- Greenhouse gas emissions would be greater (see discussion in section 5.6.10)
- The use of higher levels of imported oil for power production would continue.

From the perspective of how transshipment would impact the City's current system for financing the solid waste collection and disposal activities, the conclusion is not so clear. If transshipment removed 300,000 tons, the tip fee and energy revenues from energy production and disposal of that waste would be lost to the City. That revenue helps support the collection system, so the City would have to find other sources of funds to offset the lost revenue.

The additional cost of transshipment compared to the current disposal system is indicated by the bid prices of the three potential vendors compared to the current City disposal fee. The three vendors bid $99.83, $184.47, and $204.21 per ton compared to the current disposal cost of $92 per ton. The two higher priced bidders are protesting the price quoted by the lower priced bidder. [103]

The CEO of HWS has provided a summary of their company's suggestions on how to integrate their transshipment program into the City's solid waste management system. The e-mail summarizing his suggestions is in Attachment B.

5.6.9 Consistency With City Requirements

The C&C guidelines regarding the transshipment of MSW off-island are listed in section 5.6.1, which were summarized from the Notice to Bidders released on January 22, 2008.

Not all waste can be shipped off-island. Items such as flocked Christmas trees, sewage sludge, auto fluff, out of date medicines, and other hard-to-handle wastes cannot be shipped without special arrangements to dispose of these materials. The shipping alternative only accepts materials from a specific waste stream and does not eliminate the need for a landfill.

5.6.10 Global Warming Considerations

The increasing concern about global warming and climate change caused an evaluation of the greenhouse gas emissions from transshipment. An analysis was conducted (See Attachment C for details) of the emissions of greenhouse gases (GHG) from transshipment and landfilling compared to recovering its energy content at H–POWER. The analysis used shipment of 300,000 TPY to match the waste processing capacity of H–POWER Unit #3. We acknowledge that the City has requested proposals to transship a different amount of waste, and used the 300,000 TPY to enable direct comparison of the impacts of the transshipment alternative to the impacts of H–POWER Unit #3.

The results of the evaluation are summarized in *Table 14, Comparison of GHG Emissions from Transshipment to On-island Disposal* which shows the emissions in thousands of metric tons of CO_2 equivalent per year. The negative emissions shown in the table means the facility reduces rather than increases global CO_2. The emissions from H–POWER and the Waimanalo Gulch Sanitary Landfill are negative because of the following factors:

- The power generated by H–POWER more than offsets the GHG emissions from H–POWER due to the reduction in emissions from burning either coal or oil to produce that same amount of energy in other power plants on the island.

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103 Laurie Au. "City Reviews Bids to Ship Oahu Trash." Star Bulletin on the Web Vol. 13, Issue 171. 19 June 2008. (23 July 2008) http://starbulletin.com/2008/06/19/news/story08.html.

- The emissions from the Waimanalo Gulch Sanitary Landfill are negative because the LFG is flared and the EPA's Waste Reduction (WARM) model, used to track and report GHG emission reductions, reflects sequestration of materials in the landfill.

The emissions from the Roosevelt Sanitary Landfill are positive, reflecting the emissions from transportation of the waste. The positive emissions are partly, but not entirely, offset by the power generation from the landfill gas power plant and sequestration of materials in the landfill.

Table 14, Comparison of GHG Emissions from Transshipment to On-island Disposal[104 105]

Disposal Location	Emissions (MTCO2e per year)
H–POWER Unit #3	(38,883)
Waimanalo Gulch Sanitary Landfil	(29,377)
Roosevelt	44,978

* MTCO$_2$e is defined as metric tons of carbon dioxide equivalent.

The parameters used in the WARM model are listed in *Table 15, Parameters Used in the WARM Model.* These are the variables used to input to the model to calculate emissions.

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104 Attachment C, Evaluation of CO_2 Emissions from Disposal of Waste at Waimanalo Gulch Sanitary Landfill, H–POWER, and Washington State.

105 The emissions shown in Table 14 are greater than the emissions estimate included in the Waimanalo Gulch Sanitary Landfill EIS because the current analysis was done for transshipment of 300,000 TPY (the other analysis was for 100,000 TPY) of waste to match the proposed waste handling capacity of H–POWER Unit #3. In addition, the emissions estimated here for H–POWER Unit #3 were based on the WARM model for consistency with the method of estimating emissions for the two landfills. The estimate for H–POWER in the Waimanalo Gulch EIS was based on the blended emissions reported for all Covanta facilities in California, including wood burning power plants and landfill gas fired power plants, as that was the best data available at that time. The version of the WARM model used here was released in August 2008, after completion of the draft EIS for Waimanalo Gulch. The estimates in the Waimanalo Gulch document were made using an earlier version of the WARM model.

Table 15, Parameters Used in the WARM Model[106]

Input Assumption	Roosevelt	Waimanalo Gulch	H–POWER Unit #3
Distance traveled *	3,261	5.0	4.8
LFG energy recovery	Yes		N/A
LFG flare		Yes	N/A
LFG collection efficiency	79%	90%	N/A
TPY of mixed MSW	300,000	300,000	300,000

* Total miles from Barbers Point to the port in Portland and to the Roosevelt Sanitary Landfill.

The WARM model uses national factors as the basis for calculation for many of the emissions. The use of national factors does not reflect the local situation, but that approach was used consistently for all three projects. For example, the credit allowed for offsetting local power generation uses a CO_2 emission factor that includes a mix of oil, coal, gas, and hydro power (the fossil fuels are high CO_2 emitting fuels), and most of the power generated in the area where the Roosevelt Sanitary Landfill sells its power comes from hydro sources (a low to no CO_2 emission source). Since this component of the calculation cannot be changed, the amount of emissions shown associated with the Roosevelt Sanitary Landfill are less than the actual CO_2 emissions.

106 Attachment C, Evaluation of CO_2 Emissions from Disposal of Waste at Waimanalo Gulch Sanitary Landfill, H–POWER, and Washington State.

6 Sites

This section discusses the project site. The site could be a new location (a Greenfield site), not currently used as a waste processing plant. The project location could be in Campbell Industrial Park. Since the space and access needs for a EfW plant site are similar to a landfill, the sites located as replacements for the Waimanalo Gulch Sanitary Landfill could be considered as potential sites for this expansion.

The environmental, operational, and infrastructure considerations would be the same, whether the potential site were in Campbell Industrial Park or in another area of the island. Comparing a new site to use of the proposed location on the H–POWER property highlights important advantages in using the current H–POWER property rather than a new site.

6.1 Environmental Considerations

The environmental considerations with respect to using the H–POWER site have been mitigated or the mitigations are part of the project plans for the expansion.

Environmental mitigations for another site would need to be established after extensive and detailed study and the impacts on the surrounding community are evaluated.

If the expansion were located at a new site in the Campbell Industrial Park, the environmental impacts and considerations for the surrounding tenants would be less than at a site in another area of the island. However, the mitigation measures needed could exceed those needed at the current H–POWER site.

6.2 Infrastructure

The Expansion requires facilities for receiving and weighing the waste fuel, storing the fuel until used for power production, and for transferring the power to the HECO grid. The plant will also need a myriad of additional systems and facilities.

The infrastructure requirements can be met at the current H–POWER site with either the existing facilities or minor additions to those facilities (as described elsewhere in the EIS).

At a Greenfield site or another Campbell Industrial Park location, the infrastructure would need to be constructed entirely for the expansion, adding to the environmental impacts and cost of the expansion.

6.3 Conclusion

Even a site located in Campbell Industrial Park would require the addition of the electric power interconnect facilities and addition of the support facilities that already exist at the current H–POWER site. The use of a site located outside the Campbell Industrial Park would require all of the changes of a site in Campbell and result in environmental, aesthetic, and social impacts not present at Campbell Industrial Park.

The environmental impact of those requirements makes sites other than the H–POWER site infeasible.

7 Preferred Alternative

Several of the alternative technologies, the continued use of the Waimanalo Gulch landfill and the transshipment alternative show promise to offer the C&C an alternative option to the expansion of H-POWER at the project site.

A viable alternative must meet several considerations:

- It needs to provide for the health and safety of Honolulu residents and visitors by properly managing the waste produced on the island.

- Because of the complexity of the siting requirements in Hawaii, the high degree of public interest and input into any siting process, the environmental clearance needed, and the permitting process, a significant amount of time (some say up to 10 years for a new landfill site or new alternative technology) may be needed for an alternative to become operational.

Expanding the H-POWER facility with technology proven over the long-term shows the most promise in reducing the amount of waste sent to the landfill while producing electricity. Expansion of H-POWER at the existing project site is the Preferred Alternative.

7.1 Expansion of H-POWER at the Project Site

EfW, such as H-POWER, is a technology of choice due to the direct benefits of energy production and reduction in disposal. Approximately 90 percent of the residential garbage and 77 percent of the commercial waste collected on Oahu is disposed at the H-POWER facility and is converted into energy that powers approximately 45,000 homes.[107] Combusting 90 percent of the garbage that goes through the H-POWER facility means that only one-tenth, by volume, remains to be landfilled. Expanding the H-POWER facility would be the most beneficial to the C&C in reducing the amount of waste sent to the landfill.

7.2 Landfill disposal at Waimanalo Gulch Landfill

The Waimanalo Gulch Sanitary Landfill is the only alternative currently available to dispose of MSW and H–POWER ash and RDF processing residue. The Waimanalo Gulch Sanitary Landfill has the capacity to handle MSW for at least 15 years. The site is providing that service today.

However, reducing landfill disposal is one of the goals of the project. Continued use of the

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107 City and County of Honolulu Department of Environmental Services. Solid Waste Integrated Management Plan. Updated: November 2007. Table 63a, Table 63b and Table 2-7.

Waimanalo Gulch Sanitary Landfill does not accomplish that goal.

7.3 Transshipment

Transshipment of waste transfers the responsibility for stewardship of the land to the mainland landfill that disposes of the transshipped waste. However, transshipment does offer the C&C a short term alternative for reducing the material being sent to the Waimanalo Gulch Sanitary Landfill for disposal

While transshipment offers an alternative for some of the MSW, there are parts of the waste stream that cannot be shipped due to federal restrictions; some items cannot be accepted due to the process used and financial and solid waste management considerations that may limit transshipment to a select portion of the waste stream. The expansion of H-POWER offers long term benefits of energy production and reduction in disposal that are not offered by the transshipment alternative.

In addition to the other disadvantages of transshipment, that activity produces much higher greenhouse gas emissions than taking the waste to H–POWER or to the Waimanalo Gulch Sanitary Landfill. H–POWER results in a reduction in island-wide greenhouse gas emissions (or negative emissions) of -38,883 metric tons per year of CO_2 equivalent compared to a positive generation from transshipment of 44,987 metric tons per year of CO_2 equivalent per year.

Attachment A — August 22, 2006 USDA Decision Regarding Transshipment

Rules and Regulations

Federal Register

Vol. 71, No. 163

Wednesday, August 23, 2006

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

7 CFR Part 330

9 CFR Part 94

[Docket No. 05–002–4]

RIN 0579–AC12

Interstate Movement of Garbage From Hawaii; Municipal Solid Waste

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: We are amending the regulations pertaining to certain garbage to provide for the interstate movement of garbage from Hawaii subject to measures designed to protect against the dissemination of plant pests into noninfested areas of the continental United States. We are amending these regulations upon request in order to provide the State of Hawaii with additional waste disposal options, and after determining that the action is highly unlikely to result in the introduction and dissemination of plant or animal pests or diseases into the continental United States from Hawaii. We are also making other amendments to the garbage regulations to clarify their intent and make them easier to understand.

DATES: *Effective Date:* September 22, 2006.

FOR FURTHER INFORMATION CONTACT: Ms. Shannon Hamm, Assistant Deputy Administrator, Policy and Program Development, APHIS, 4700 River Road Unit 20, Riverdale, MD 20737–1231; (301) 734–4957.

SUPPLEMENTARY INFORMATION:

Background

Under 7 CFR 330.400 and 9 CFR 94.5 (referred to elsewhere in this document as the regulations), the Animal and Plant Health Inspection Service (APHIS) regulates the importation and interstate movement of garbage that may pose a risk of introducing or disseminating animal or plant pests or diseases that are new to or not widely distributed within the United States. Not all movements of waste material are regulated by APHIS;[1] only movements of waste that meets APHIS's definition of "garbage" are regulated, and even then, only under certain circumstances. Under the regulations, the term "garbage" is defined as "all waste material derived in whole or in part from fruits, vegetables, meats, or other plant or animal (including poultry) material, and other refuse of any character whatsoever that has been associated with any such material on board any means of conveyance, and including food scraps, table refuse, galley refuse, food wrappers or packaging materials, and other waste material from stores, food preparation areas, passengers' or crews' quarters, dining rooms, or any other areas on means of conveyance." Garbage also means "meals and other food that were available for consumption by passengers and crew on an aircraft but were not consumed."

Waste material that meets the definition of garbage is regulated by APHIS if it is removed from a means of conveyance that:

- Within the last 2 years, has been in any port outside the United States or Canada; or
- Within the last year, has moved from Hawaii or a U.S. territory to another U.S. State.[2]

However, garbage onboard a conveyance that meets one of the two conditions above may be exempted from regulation if the conveyance is cleared of all regulated garbage, and after cleaning and disinfection, an inspector certifies that the conveyance contains no garbage that poses a risk of pest introduction into the United States. Garbage from Canada is also exempted from regulation.

The regulations were established to address the risk posed by garbage that originates on or is onboard conveyances that have been located in areas where exotic animal or plant pests or diseases are present. Such garbage includes waste generated during the course of commercial and private air travel and commercial or private transit of goods or persons by sea. The regulations were not intended to address risks posed by movements of municipal solid waste (MSW).

Due to a limited availability of landfill space in Hawaii, business interests and public officials are exploring other options for disposal of the State's waste. These persons have requested that APHIS allow the interstate movement of MSW from Hawaii. We believe the regulations require amendment to provide for the movement of garbage generated in Hawaii.

Pest Risk Assessment

As part of our evaluation of the request by business interests and public officials in Hawaii, we prepared a draft pest risk assessment (PRA), titled "The Risk of Introduction of Pests to the Continental United States via Plastic-Baled Municipal Solid Waste from Hawaii " (March 2006) to evaluate the interstate movement of garbage from Hawaii to the mainland of the United States. The objective of the PRA was to evaluate whether a baling technology that would bundle, wrap, and seal the MSW into airtight bales will effectively mitigate potential plant pest risks associated with MSW from Hawaii. The PRA focused on the planned use of the baling technology because airtight enclosure from creation to burial will mitigate the risks of establishment by any plant pests. The PRA addressed the following three issues:

- The ability of the baling technology to provide a strong, airtight barrier;
- The examination of the occurrence of ruptures or punctures; and
- The examination of general pathway procedures to reduce pest incidence in the bales and the chances of escape in the event of accidental ruptures or punctures.

In addition, the PRA provides qualitative risk ratings for different pest types based on the likelihood of introduction. Only those pathway

[1] The operation of landfills and incinerators and the intrastate and interstate movement of garbage are regulated predominantly by State and local governments. The U.S. Environmental Protection Agency (EPA) regulates the interstate movement of hazardous wastes. See EPA's Web site for additional information: *http://www.epa.gov/epaoswer/osw/index.htm.*

[2] "State" is defined as any of the 50 States and any U.S. territory or possession.

processes likely to be common to all company proposals to transport baled Hawaiian waste were considered. We will prepare separate assessments for other company proposals which will address factors such as the destination landfill, type of transportation to be used on the mainland, and pest species that may pose particular threats.

The PRA concluded that transporting MSW from Hawaii to the continental United States in airtight bales poses a low risk of pest introduction and dissemination because the baling technology mitigates the risk from all types of plant pests. In addition, the other pathway procedures should adequately protect against accidental ruptures or punctures in bales during the handling and transport process. Pest mitigation processes such as the baling technology itself or features of the proposed pathway, including the waste type, and how bales are staged, handled, transported, and buried, are added safeguards that we conclude will prevent the introduction and dissemination of exotic pests. As a complement to the baling technology, the PRA recommends proper staging of bales and certification that they are mollusk-free to mitigate against contaminating pests. As long as those processes and the procedures proposed by the companies (including diversion of yard and agricultural waste, prompt shipment, monitoring and inspection of bales, and thorough cleanup of any ruptures that do occur) are followed, establishment of Hawaiian plant pests via this pathway is highly unlikely.

On April 19, 2006, we published in the **Federal Register** (71 FR 20030–20041, Docket No. 05–002–2) a proposal [3] to amend the regulations in "Subpart—Garbage" (7 CFR 330.100 through 330.400) and 9 CFR 94.5 pertaining to certain garbage to provide for the interstate movement of garbage from Hawaii subject to measures designed to protect against the dissemination of plant pests into noninfested areas of the continental United States.

We solicited comments on the proposed rule for 30 days ending on May 19, 2006. We received five comments by that date, including a request to extend the comment period. In a document published in the **Federal Register** on May 31, 2006 (Docket No. APHIS–2005–0047, 71 FR 30834), we reopened and extended the deadline for comments until June 5, 2006. We received an additional seven comments by that date. The comments came from several municipalities in Hawaii, waste companies, congressional representatives, the State of California, a tribal representative, and members of the general public. Of the 12 comments, 8 fully supported the proposal. The remaining commenters raised several issues, which are discussed below.

Bale Technology

Comment: APHIS must test the bale technology to ensure that the plastic bales will not breach. In addition, APHIS should use its own experts to validate the research data provided by the technology vendors and their consultants regarding the safety of bale technology.

Response: As cited in the PRA, independent researchers have tested the baling technology in a variety of situations and firmly established its utility and effectiveness at creating airtight bales of MSW. Because these studies have been peer reviewed, APHIS believes that it is not necessary to repeat the testing performed in the underlying research.

Pest Risk Assessment

Comment: APHIS should revisit its PRA to clarify the roles played by compaction and shredding because whole fruit containing fruit fly or other insect eggs or larvae will not be affected by the anoxic conditions of the bales.

Response: While insect eggs and larvae, including those of fruit flies and other agricultural pests, could theoretically survive in whole fruit under short-term anoxic conditions, whole fruit would not be present in the bales due to the processing, i.e., pulverizing or shredding followed by compaction, of the MSW prior to being baled. As described in the PRA, bale densities are expected to be in excess of 800 kg/m^3, so compaction will likely kill most insects, including fruit flies, regardless of stage, and may also neutralize some weed seeds and nematodes. Moreover, bales that remain airtight from creation until burial completely mitigate the risk from all plant pests because the pests and pest propagules cannot escape. That mitigation is universal, i.e., it does not depend on pest type or taxonomy, and probably applies equally to both current and future pests that establish in Hawaii.

Comment: How will APHIS ensure that noxious weeds would not be included in the bales of MSW?

Response: As we discussed in the PRA, the exclusion of most yard and agricultural waste from the baling process will greatly reduce the likelihood that seeds of regulated pest plants will be present in the baled MSW. In addition, very few regulated species are likely to have viable seeds in the bales, either because they mostly reproduce vegetatively, or because they are not found in yards and gardens in residential areas in Hawaii. Species of concern to particular mainland States will be further evaluated in site-specific PRAs to identify any exceptions and assess their potential risks.

Environmental Impacts

Comment: APHIS should research the consequences of any spill of baled MSW during transport.

Response: APHIS conducted several evaluations, including a PRA and an EA to determine the consequences of any spill involving bales containing MSW during transport from Hawaii to the mainland United States. We have determined that there is a very low likelihood that plant pests or noxious weeds would be introduced and disseminated into the mainland United States as a result of this action. As described in the PRA, there is a series of mitigations that would take place including limiting waste materials that would exist in the bales and ensuring proper staging, handling, transport, and burial of these bales. There will also be specific contingency plans for emergency response to potential spills outlined in compliance agreements with specific sites. In addition, short of a barge capsizing (which would be considered catastrophic events and would be cause to initiate emergency consultation), there is essentially no risk of impact on aquatic life from the transport of baled MSW from Hawaii to the mainland United States. Situations where there is potential for impacts occur wherever bales are moved from one staging area or mode of transportation to another. These transfer points include: The facility in Honolulu where bales are initially loaded onto the barges; the unloading facility on the mainland where bales are unloaded from the barges and loaded onto trucks; and the final destination where bales are unloaded from trucks and placed into the landfill. In some scenarios there could be intermediate steps requiring the handling of bales, e.g., an ocean-going barge may offload its bales onto smaller-sized barges to navigate a river; an ocean-going barge may offload its bales onto railcars; and railcars would then need to transfer their bales onto

[3] To view the proposed rule and the comments we received, go to *http://www.regulations.gov*, click on the "Advanced Search" tab, and select "Docket Search." In the Docket ID field, enter APHIS–2005–0047, then click on "Submit." Clicking on the Docket ID link in the search results page will produce a list of all documents in the docket.

trucks for the final leg of the trip to the landfill.

At each of the bale transfer points identified above, there is a small potential for dropping a bale into the water or, more likely, compromising the integrity of one or more bales of MSW which could result in spillage of the contents on the ground or into the water. In most cases the spilled MSW would be retrieved and the bale repackaged. If this were to happen over water, it would be more difficult to retrieve the spilled MSW, particularly if the integrity of the bale was breached. Any spill, in the event of a broken bale, would be handled in accordance with a spill cleanup plan, attached to each compliance agreement, that provides guidance on what detergents and disinfectants to use, how to safely use them, and how to avoid aquatic contamination.

Comment: Shipping MSW to the mainland from Hawaii should only be done if alternative disposal options are not available.

Response: Municipal jurisdictions within the State of Hawaii will be responsible for determining which disposal option to pursue. APHIS will be responsible for ensuring that if the disposal option includes the movement of MSW from Hawaii to the mainland United States, it occurs in accordance with conditions provided in our regulations and compliance agreements.

Comment: Sending barges with MSW through the Columbia and Snake Rivers would negatively impact the number of fish in the area.

Response: We do not believe that there will be a significant increase in barge traffic in this region due to this action. We will have the opportunity to quantify this assertion when we conduct a site specific PRA and EA for the Columbia River Basin. In addition, APHIS does not regulate barge traffic. Under our authority we ensure that safeguards are in place to prevent the introduction and dissemination of plant pests, noxious weeds, and animal diseases.

APHIS did conduct a biological assessment for this action to determine impacts on listed species of fish and wildlife. We found that there are two types of risks that must be considered in such a situation. One is a physical disruption of the environment caused by the broken bales and the physical retrieval of their strewn contents. Compromised bales or spilled MSW that is on land can be retrieved relatively easily. MSW that is spilled into waterways will be more difficult to retrieve, and some may not be retrievable, resulting in an incremental degradation of the natural aquatic environment. Since hazardous wastes are not permitted, any negative impacts will be restricted to physical ones and no chemical pollution is likely to result from the MSW itself.

The second type of risk that could result from breaking bales and the spilling of MSW could be from detergents and disinfectants that may be used during a cleanup of any spilled MSW that may occur on land. Detergents and disinfectants would not be effective in aquatic situations, and therefore, would not be used if spills were in or over water. If such tools were used during a cleanup effort, care must be taken to prevent them from entering waterways. Their use would be in accordance with a spill cleanup plan, attached to each compliance agreement, that provides guidance on what detergents and disinfectants to use, how to safely use them, and how to avoid aquatic contamination.

As mentioned above, APHIS will develop a site-specific pest risk assessment and environmental assessment which will examine any risks associated with transporting MSW into specific regions. The public will have an opportunity to comment on those documents before they are finalized.

Comment: Has APHIS conducted any studies on the potential to introduce new plant and animal pathogens to the Columbia Basin Region?

Response: This final rule provides a general framework which will allow for the interstate movement of MSW from Hawaii under certain conditions. One condition of that movement will be that shipments will be moved under provisions outlined in a compliance agreement. A compliance agreement will be developed for each individual site on the mainland of the United States into which these shipments would be moved. For each compliance agreement, APHIS will develop a site-specific pest risk assessment and environmental assessment to examine the risks associated with transporting MSW into the specific region, including into the Columbia Basin region.

Requested Change to the Regulations

Comment: APHIS should add the staging requirement and certification of snail free shipments language found in the PRA to the regulatory text.

Response: The regulations state that garbage must be processed, packaged, safeguarded, and disposed of using a methodology that the Administrator has determined is adequate to prevent the introduction and dissemination of plant pests into noninfested areas of the United States. In addition, specific provisions will be outlined in individual compliance agreements for site-specific shipments. These provisions would be consistent with those in § 318.13–8, which pertain to inspection of articles and persons moved from Hawaii. We believe that the current provisions in the regulations, combined with site-specific compliance agreements, are sufficient to prevent the introduction and dissemination of snails and other hitchhikers.

Tribal Consultation

Comment: APHIS did not consult with Indian Tribes as directed under Executive Order (EO) 13175 and requested government-to-government consultation.

Response: We were petitioned to amend our regulations by the operators of several landfills located in the area of the Columbia River Basin who expressed an interest in receiving MSW from Hawaii. Therefore, our initial contacts were limited to tribes located within that area. To comply with EO 13175, APHIS contacted the tribal chairs of each of the 13 tribes generally considered as Columbia River Basin Tribes (Burn Paiute Tribe, Coeur d'Alene Tribe, Colville Tribe, Kalispel Tribe, Kootenai Tribe, Nez Perce Tribe, Salish Kootenai Tribes, Shoshone Bannock Tribes, Shoshone Paiute Tribe, Spokane Tribe, Umatilla Indian Reservation, Warm Springs Reservation, and Yakama Indian Nation) in early November 2005. Each of these tribes has ties to the land and resources in and near the Columbia River and its drainage. APHIS believes that if there were any effects on tribes resulting from this rule, these are the tribes most likely to be affected. Each tribe was provided information on our proposed rule, environmental assessment, and pest risk analysis and offered an opportunity to request consultation.

At about the same time, APHIS contacted tribal organizations to determine which additional tribes may be affected and should be contacted. The tribal organizations contacted were the Affiliated Tribes of Northwest Indians (ATNI), the National Congress of American Indians, the National Tribal Environmental Council, and the Intertribal Agriculture Council. In addition, APHIS contacted the Columbia Basin Fish and Wildlife Authority.

In mid-February 2006, an Agency official provided a presentation about the proposed rule at the Winter Conference of the ATNI, and invited requests for tribal consultation. ATNI represents over 55 tribes in the Pacific

Northwest. In early March 2006, the Agency sent reminders to tribal chairs stating that APHIS would consider requests for consultation until March 20, 2006. Although we received both oral and written comments from tribes and tribal members, we received no requests for consultation.

In mid-April 2006, upon publication of the proposed rule, copies of the proposed rule, environmental assessment, and pest risk analysis were mailed to the tribal chairs of each of the above-listed tribes and also to the listed tribal organizations. APHIS encouraged tribes and tribal organizations to submit comments. Based on our actions as described above, we believe that we have complied with EO 13175 for the purposes of this rulemaking. We will follow this final rule with risk and environmental assessments as well as compliance agreements with specific waste management sites located on the mainland of the United States that have expressed interest in receiving MSW from Hawaii. At the time that we make the site-specific assessments available to the public, we will also invite potentially affected tribal governments to engage in consultations with APHIS.

Change Regarding Agricultural and Yard Waste

In the proposed rule, the regulations in 7 CFR 330.402(a)(2) and 9 CFR 94.5(d)(1)(ii) provided that "The interstate movement of agricultural wastes and yard waste from Hawaii to the continental United States is prohibited." After further consideration, we have concluded that this provision, which implies a zero tolerance for agricultural or yard waste, is unrealistic. Despite the presence of yard waste recycling programs in Hawaii and the efforts of waste management companies to separate various types of waste, the presence of an incidental amount of agricultural or yard waste in baled MSW is, in practical terms, unavoidable. This situation was taken into account in the PRA, which recognized that there will likely be some minimal volume of agricultural and yard waste entering the pathway despite efforts to exclude that waste. Therefore, we have modified 7 CFR 330.402(a)(2) and 9 CFR 94.5(d)(1)(ii) in this final rule to read: "The interstate movement from Hawaii to the continental United States of agricultural wastes and yard waste (other than incidental amounts (less than 3 percent) that may be present in municipal solid waste despite reasonable efforts to maintain source separation) is prohibited." [4] We believe this change will establish a more practical standard with respect to agricultural and yard waste while continuing to prohibit the interstate movement of dedicated shipments or large quantities of such waste.

Therefore, for the reasons given in the proposed rule and in this document, we are adopting the proposed rule as a final rule, with the change discussed in this document.

Executive Order 12866 and Regulatory Flexibility Act

This rule has been reviewed under Executive Order 12866. The rule has been determined to be not significant for the purposes of Executive Order 12866 and, therefore, has not been reviewed by the Office of Management and Budget.

We are amending the regulations pertaining to certain garbage to provide for the interstate movement of garbage from Hawaii subject to measures designed to protect against the dissemination of plant pests into noninfested areas of the continental United States. We are amending these regulations upon request in order to provide the State of Hawaii with additional waste disposal options, and after determining that the action will not result in the introduction of plant or animal pests or diseases into the continental United States from Hawaii.

For the purposes of this analysis, we have determined that the Island of Oahu (where Honolulu is located) is expected to be the source of most, if not all, of any MSW that is moved to the continental United States under the regulations. Oahu has only one municipal landfill (Waimanalo Gulch), and there is no alternative landfill on the island at the present time.

Oahu generates approximately 1.6 million tons of MSW per year. That figure is expected to rise an additional 20,000 tons and remain at that level for the next 10 years. Of the current total, 500,000 tons are recycled, 600,000 tons are burned for electricity, and 500,000 tons are landfilled. Of the 500,000 tons that are landfilled, 200,000 tons go to a privately operated construction and demolition landfill and 300,000 tons go to Waimanalo Gulch municipal landfill. Waimanalo Gulch landfill is owned by the City of Honolulu and managed by a private company.

The Island of Hawaii (where Hilo is located) is another potential source of MSW that would move to the continental United States if the proposal is adopted. The island's only two landfills are located approximately 75 miles apart, and one (South Hilo Sanitary Landfill) may be nearing capacity. To date, one waste management service company has proposed to bale and move at least some of the island's MSW to a landfill in Washington State. Approximately 200 tons of garbage per day is landfilled at the South Hilo facility.[5]

This rule will allow for the garbage to be compacted into bales, and then wrapped in plastic for transport to the mainland (the baling and wrapping would take place in the State of Hawaii). Estimates of the annual volume of MSW that would be shipped from Oahu to the continental United States range from 100,000 tons to 350,000 tons.[6]

Need for Rule and Alternatives Considered

These are being amended upon request to provide public officials in Hawaii another option for disposal of the State's waste. The only other regulatory alternative is to leave the regulations unchanged, but that alternative would unnecessarily limit Hawaiian officials' disposal options.

Small Entity Impact

The Regulatory Flexibility Act (RFA) requires that agencies consider the economic impact of rules on small entities, *i.e.*, small businesses, organizations, and governmental jurisdictions. The changes to the regulations will allow for the movement of MSW from Hawaii to the continental United States.

These changes will not have a significant economic impact on a substantial number of small entities, because few entities, large or small, are likely to be affected. Only a handful of businesses are potentially affected by the rule—*e.g.*, the company or companies that would secure the contract to move the waste from Hawaii, the barge line or lines that would physically move the waste to the mainland, the trucking company/railroad on the mainland that would physically move the waste to the interior landfill locations, and perhaps a few companies on Hawaii that would be forced to discontinue participation (or play a reduced role) in the State's waste

[4] Based on the mean percentage of yard waste at the Waimanalo Gulch landfill, Oahu (6.0 percent ± 3.4 percent) and on Hawaii (5.4 percent), if companies are only 50 percent effective with additional screening and removal of visible yard waste in transfer stations or on bale processing lines, the fraction of yard waste in baled Hawaiian MSW should be reduced to 3 percent or less.

[5] Source: News accounts in the *Honolulu Star-Bulletin*.

[6] Source: News accounts in the *Honolulu Star-Bulletin* and APHIS staff. Similar estimates for the Island of Hawaii are not available.

disposal process once shipments to the mainland began. Those businesses that will participate in the movement of the waste to the mainland could be expected to benefit, since they will generate additional revenue and, presumably, profits from the increased business activity. Conversely, those businesses that will either no longer participate or will play a reduced role in Hawaii's waste disposal process could be expected to suffer lost revenue.

The revenues generated by the private company that manages the Waimanalo Gulch landfill, for example, are presumably tied to the volume of waste that is landfilled there. If waste is diverted from Waimanalo Gulch to the mainland, that company's revenues are likely to be reduced. The City of Honolulu and the County of Hawaii are also potentially affected by the proposed changes.

The preceding discussion assumes that the rule will not have significant environmentally related economic consequences for small entities. There are several reasons. First, the environmental assessment in this document concludes that the movement of MSW from Hawaii to the continental United States (using the plastic-baled methodology) will not have a significant impact on the environment. Second, site-specific environmental assessments will also be prepared as requests for compliance agreements are made. The site-specific assessments, which will be made available for public comment, will allow APHIS to address any environmental issues that may arise based on precise destination and handling protocols for the proposed movements, which are now unknown.

Although the size of virtually all of the businesses potentially affected by the rule is unknown, it is reasonable to assume that at least some could be small. This assumption is based on composite data for providers of the same and similar services in the United States. As an example, North American Industry Classification System (NAICS) category 562 ("Waste Management and Remediation Services") consists of establishments engaged in the collection, treatment, and disposal of waste materials. Under the U.S. Small Business Administration's (SBA) size standards, the small entity threshold for establishments that fall into most of the activity subcategories under NAICS 562 is annual receipts of $10.5 million. For all 18,405 U.S. establishments in NAICS 562 in 2002, average per-establishment receipts that year were $2.8 million, an indication that most waste management service companies are small entities.[7] Annual receipt data for three of the four firms that have proposed to move Hawaii's waste to the mainland are not available. Although annual receipt data for the fourth company are also not available, that company is considered large by virtue of it being a subsidiary of a publicly owned firm with receipts (operating revenues) of over $13 billion in 1999.[8] The private company that currently manages the Waimanalo Gulch landfill is also a subsidiary of that publicly owned firm.

As another example, there were 677 U.S. entities in NAICS category 483113 in 2002. NAICS 483113 consists of entities primarily engaged in providing deep sea transportation of cargo to and from domestic ports. For all 677 entities, average per-entity employment that year was 36, well below the SBA's small entity threshold of 500 employees for entities in that NAICS category.[9]

Under the RFA, the term "small governmental jurisdiction" generally means cities, counties, townships, etc., with a population of less than 50,000. The City of Honolulu, which owns the Waimanalo Gulch landfill, does not qualify as a small entity because its population exceeds 50,000. The County of Hawaii, where Hilo is located, also has a population that exceeds 50,000.

The changes to the regulations will not, as noted previously, have a significant economic impact on a substantial number of small entities, because few entities, large or small, are likely to be affected. The size of virtually all of the businesses potentially affected by the changes to the regulations is unknown, but it is reasonable to assume that at least some could be small.

Under these circumstances, the Administrator of the Animal and Plant Health Inspection Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

Executive Order 12372

This program/activity is listed in the Catalog of Federal Domestic Assistance under No. 10.025 and is subject to Executive Order 12372, which requires intergovernmental consultation with State and local officials. (See 7 CFR part 3015, subpart V.)

Executive Order 12988

This final rule has been reviewed under Executive Order 12988, Civil Justice Reform. This rule: (1) Preempts all State and local laws and regulations that are inconsistent with this rule; (2) has no retroactive effect; and (3) does not require administrative proceedings before parties may file suit in court challenging this rule.

National Environmental Policy Act

An environmental assessment and finding of no significant impact have been prepared for this final rule. The environmental assessment provides a basis for the conclusion that the importation of MSW from Hawaii to the mainland United States will not have a significant impact on the quality of the human environment. Based on the finding of no significant impact, the Administrator of the Animal and Plant Health Inspection Service has determined that an environmental impact statement need not be prepared.

The environmental assessment and finding of no significant impact were prepared in accordance with: (1) The National Environmental Policy Act of 1969 (NEPA), as amended (42 U.S.C. 4321 *et seq.*), (2) regulations of the Council on Environmental Quality for implementing the procedural provisions of NEPA (40 CFR parts 1500–1508), (3) USDA regulations implementing NEPA (7 CFR part 1b), and (4) APHIS' NEPA Implementing Procedures (7 CFR part 372).

The environmental assessment and finding of no significant impact may be viewed on the Regulations.gov Web site.[10] Copies of the environmental assessment and finding of no significant impact are also available for public inspection at USDA, room 1141, South Building, 14th Street and Independence Avenue, SW., Washington, DC, between 8 a.m. and 4:30 p.m., Monday through Friday, except holidays. Persons wishing to inspect copies are requested to call ahead on (202) 690–2817 to facilitate entry into the reading room. In addition, copies may be obtained by writing to the individual listed under FOR FURTHER INFORMATION CONTACT.

Paperwork Reduction Act

In accordance with the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*), the information collection or recordkeeping requirements included in this rule have been approved by the Office of Management and Budget

[7] Source: U.S. Census Bureau (2002 Economic Census) and SBA.

[8] Source: Various Internet sites.

[9] Source: U.S. Census Bureau (2002 Economic Census) and SBA.

[10] Go to *http://www.regulations.gov*, click on the "Advanced Search" tab and select "Docket Search." In the Docket ID field, enter APHIS–2005–0047, click on "Submit," then click on the Docket ID link in the search results page. The environmental assessment and finding of no significant impact will appear in the resulting list of documents.

(OMB) under OMB control number 0579–0292.

E-Government Act Compliance

The Animal and Plant Health Inspection Service is committed to compliance with the E-Government Act to promote the use of the Internet and other information technologies, to provide increased opportunities for citizen access to Government information and services, and for other purposes. For information pertinent to E-Government Act compliance related to this rule, please contact Mrs. Celeste Sickles, APHIS' Information Collection Coordinator, at (301) 734–7477.

List of Subjects

7 CFR Part 330

Customs duties and inspection, Imports, Plant diseases and pests, Quarantine, Reporting and recordkeeping requirements, Transportation.

9 CFR Part 94

Animal diseases, Imports, Livestock, Meat and meat products, Milk, Poultry and poultry products, Reporting and recordkeeping requirements.

■ Accordingly, we are amending 7 CFR part 330 and 9 CFR part 94 as follows:

Title 7—[Amended]

PART 330—FEDERAL PLANT PEST REGULATIONS; GENERAL; PLANT PESTS; SOIL, STONE, AND QUARRY PRODUCTS; GARBAGE

■ 1. The authority citation for part 330 continues to read as follows:

Authority: 7 U.S.C. 450, 7701–7772, 7781–7786, and 8301–8317; 21 U.S.C. 136 and 136a; 31 U.S.C. 9701; 7 CFR 2.22, 2.80, and 371.3.

■ 2. In § 330.100, a definition for *State* is added and the definition for *United States* is revised to read as follows:

§ 330.100 Definitions.

* * * * *

State. Any of the several States of the United States, the Commonwealth of the Northern Mariana Islands, the Commonwealth of Puerto Rico, the District of Columbia, Guam, the Virgin Islands of the United States, or any other territory or possession of the United States.

* * * * *

United States. All of the States.

* * * * *

■ 3. Subpart—Garbage, § 330.400, is revised to read as follows:

Subpart—Garbage

Sec.

Subpart—Garbage

§ 330.400 Regulation of certain garbage.

(a) *Certain interstate movements and imports*—(1) *Interstate movements of garbage from Hawaii and U.S. territories and possessions to other States.* Hawaii, Puerto Rico, American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, Guam, the U.S. Virgin Islands, Republic of the Marshall Islands, and the Republic of Palau are hereby quarantined, and the movement of garbage therefrom to any other State is hereby prohibited except as provided in this subpart in order to prevent the introduction and spread of exotic plant pests and diseases.

(2) *Imports of garbage.* In order to protect against the introduction of exotic animal and plant pests and diseases, the importation of garbage from all foreign countries except Canada is prohibited except as provided in § 330.401(b).

(b) *Definitions—Agricultural waste.* Byproducts generated by the rearing of animals and the production and harvest of crops or trees. Animal waste, a large component of agricultural waste, includes waste (*e.g.*, feed waste, bedding and litter, and feedlot and paddock runoff) from livestock, dairy, and other animal-related agricultural and farming practices.

Approved facility. A facility approved by the Administrator, Animal and Plant Health Inspection Service, upon his determination that it has equipment and uses procedures that are adequate to prevent the dissemination of plant pests and livestock or poultry diseases, and that it is certified by an appropriate Government official as currently complying with the applicable laws for environmental protection.

Approved sewage system. A sewage system approved by the Administrator, Animal and Plant Health Inspection Service, upon his determination that the system is designed and operated in such a way as to preclude the discharge of sewage effluents onto land surfaces or into lagoons or other stationary waters, and otherwise is adequate to prevent the dissemination of plant pests and livestock or poultry diseases, and that is certified by an appropriate Government official as currently complying with the applicable laws for environmental protection.

Carrier. The principal operator of a means of conveyance.

Garbage. All waste material that is derived in whole or in part from fruits, vegetables, meats, or other plant or animal (including poultry) material, and other refuse of any character whatsoever that has been associated with any such material.

Incineration. To reduce garbage to ash by burning.

Interstate. From one State into or through any other State.

Sterilization. Cooking garbage at an internal temperature of 212 °F for 30 minutes.

Stores. The food, supplies, and other provisions carried for the day-to-day operation of a conveyance and the care and feeding of its operators.

Yard waste. Solid waste composed predominantly of grass clippings, leaves, twigs, branches, and other garden refuse.

§ 330.401 Garbage generated onboard a conveyance.

(a) *Applicability.* This section applies to garbage generated onboard any means of conveyance during international or interstate movements as provided in this section and includes food scraps, table refuse, galley refuse, food wrappers or packaging materials, and other waste material from stores, food preparation areas, passengers' or crews' quarters, dining rooms, or any other areas on the means of conveyance. This section also applies to meals and other food that were available for consumption by passengers and crew on an aircraft but were not consumed.

(1) Not all garbage generated onboard a means of conveyance is regulated for the purposes of this section. Garbage regulated for the purposes of this section is defined as "regulated garbage" in paragraphs (b) and (c) of this section.

(2) Garbage that is commingled with regulated garbage is also regulated garbage.

(b) *Garbage regulated because of movements outside the United States or Canada.* For purposes of this section, garbage on or removed from a means of conveyance is regulated garbage, if, when the garbage is on or removed from the means of conveyance, the means of conveyance has been in any port outside the United States and Canada within the previous 2-year period. There are, however, two exceptions to this provision. These exceptions are as follows:

(1) *Exception 1: Aircraft.* Garbage on or removed from an aircraft is exempt from requirements under paragraph (d) of this section if the following

conditions are met when the garbage is on or removed from the aircraft:

(i) The aircraft had previously been cleared of all garbage and of all meats and meat products, whatever the country of origin, except meats that are shelf-stable; all fresh and condensed milk and cream from countries designated in 9 CFR 94.1 as those in which foot-and-mouth disease exists; all fresh fruits and vegetables; and all eggs; and the items previously cleared from the aircraft as prescribed by this paragraph have been disposed of according to the procedures for disposing of regulated garbage, as specified in paragraphs (d)(2) and (d)(3) of this section.

(ii) After the garbage and stores referred to in paragraph (b)(1)(i) of this section were removed, the aircraft has not been in a non-Canadian foreign port.

(2) *Exception 2: Other conveyances.* Garbage on or removed in the United States from a means of conveyance other than an aircraft is exempt from requirements under paragraph (d) of this section if the following conditions are met when the garbage is on or removed from the means of conveyance:

(i) The means of conveyance is accompanied by a certificate from an inspector stating the following:

(A) That the means of conveyance had previously been cleared of all garbage and of all meats and meat products, whatever the country of origin, except meats that are shelf-stable; all fresh and condensed milk and cream from countries designated in 9 CFR 94.1 as those in which foot-and-mouth disease exists; all fresh fruits and vegetables; and all eggs; and the items previously cleared from the means of conveyance as prescribed by this paragraph have been disposed of according to the procedures for disposing of regulated garbage, as specified in paragraphs (d)(2) and (d)(3) of this section.

(B) That the means of conveyance had then been cleaned and disinfected in the presence of the inspector; and

(ii) Since being cleaned and disinfected, the means of conveyance has not been in a non-Canadian foreign port.

(c) *Garbage regulated because of certain movements to or from Hawaii, territories, or possessions.* For purposes of this section, garbage on or removed from a means of conveyance is regulated garbage, if at the time the garbage is on or removed from the means of conveyance, the means of conveyance has moved during the previous 1-year period, either directly or indirectly, to the continental United States from any territory or possession or from Hawaii, to any territory or possession from any other territory or possession or from Hawaii, or to Hawaii from any territory or possession. There are, however, two exceptions to this provision. These exceptions are as follows:

(1) *Exception 1: Aircraft.* Garbage on or removed from an aircraft is exempt from requirements under paragraph (d) of this section if the following two conditions are met when the garbage is on or removed from the aircraft:

(i) The aircraft had been previously cleared of all garbage and all fresh fruits and vegetables, and the items previously cleared from the aircraft as prescribed by this paragraph have been disposed of according to the procedures for disposing of regulated garbage, as specified in paragraphs (d)(2) and (d)(3) of this section.

(ii) After the garbage and stores referred to in paragraph (c)(1)(i) of this section were removed, the aircraft has not moved to the continental United States from any territory or possession or from Hawaii; to any territory or possession from any other territory or possession or from Hawaii; or to Hawaii from any territory or possession.

(2) *Exception 2: Other conveyances.* Garbage on or removed from a means of conveyance other than an aircraft is exempt from requirements under paragraph (d) of this section if the following two conditions are met when the garbage is on or removed from the means of conveyance:

(i) The means of conveyance is accompanied by a certificate from an inspector stating that the means of conveyance had been cleared of all garbage and all fresh fruits and vegetables; and the items previously cleared from the means of conveyance as prescribed by this paragraph have been disposed of according to the procedures for disposing of regulated garbage, as specified in paragraphs (d)(2) and (d)(3) of this section.

(ii) After being cleared of the garbage and stores referred to in paragraph (c)(2)(i) of this section, the means of conveyance has not moved to the continental United States from any territory or possession or from Hawaii; to any territory or possession from any other territory or possession or from Hawaii; or to Hawaii from any territory or possession.

(d) *Restrictions on regulated garbage.* (1) Regulated garbage may not be disposed of, placed on, or removed from a means of conveyance except in accordance with this section.

(2) Regulated garbage is subject to general surveillance for compliance with this section by inspectors and to disposal measures authorized by the Plant Protection Act and the Animal Health Protection Act to prevent the introduction and dissemination of pests and diseases of plants and livestock.

(3) All regulated garbage must be contained in tight, covered, leak-proof receptacles during storage on board a means of conveyance while in the territorial waters, or while otherwise within the territory of the United States. All such receptacles shall be contained inside the guard rail if on a watercraft. Such regulated garbage shall not be unloaded from such means of conveyance in the United States unless such regulated garbage is removed in tight, covered, leak-proof receptacles under the direction of an inspector to an approved facility for incineration, sterilization, or grinding into an approved sewage system, under direct supervision by such an inspector, or such regulated garbage is removed for other handling in such manner and under such supervision as may, upon request in specific cases, be approved by the Administrator as adequate to prevent the introduction and dissemination of plant pests and animal diseases and sufficient to ensure compliance with applicable laws for environmental protection. *Provided that,* a cruise ship may dispose of regulated garbage in landfills at Alaskan ports only, if and only if the cruise ship does not have prohibited or restricted meat or animal products on board at the time it enters Alaskan waters for the cruise season, and only if the cruise ship, except for incidental travel through international waters necessary to navigate safely between ports, remains in Canadian and U.S. waters off the west coast of North America, and calls only at continental U.S. and Canadian ports during the entire cruise season.

(i) Application for approval of a facility or sewage system may be made in writing by the authorized representative of any carrier or by the official having jurisdiction over the port or place of arrival of the means of conveyance to the Administrator, Animal and Plant Health Inspection Service, U.S. Department of Agriculture, Washington, DC 20250. The application must be endorsed by the operator of the facility or sewage system.

(ii) Approval will be granted if the Administrator determines that the requirements set forth in this section are met. Approval may be denied or withdrawn at any time, if the Administrator determines that such requirements are not met, after notice of the proposed denial or withdrawal of the approval and the reasons therefor, and an opportunity to demonstrate or achieve compliance with such requirements, has been afforded to the operator of the facility or sewage system and to the applicant for approval. However, approval may also be withdrawn without such prior procedure in any case in which the public health, interest, or safety requires immediate action, and in such case, the operator of the facility or sewage system and the applicant for approval shall promptly thereafter be given notice of the withdrawal and the reasons therefor and an opportunity to show cause why the approval should be reinstated.

(e) The Plant Protection and Quarantine Programs and Veterinary Services, Animal, and Plant Health Inspection Service, will cooperate with other Federal, State, and local agencies responsible for enforcing other statutes and regulations governing disposal of the regulated garbage to the end that such disposal shall be adequate to prevent the dissemination of plant pests and livestock or poultry diseases and comply with applicable laws for environmental protection. The inspectors, in maintaining surveillance over regulated garbage movements and disposal, shall coordinate their activities with the activities of representatives of the Environmental Protection Agency and other Federal, State, and local agencies also having jurisdiction over such regulated garbage

§ 330.402 Garbage generated in Hawaii.

(a) *Applicability.* This section applies to garbage generated in households, commercial establishments, institutions, and businesses prior to interstate movement from Hawaii, and includes used paper, discarded cans and bottles, and food scraps. Such garbage includes, and is commonly known as, municipal solid waste.

(1) Industrial process wastes, mining wastes, sewage sludge, incinerator ash, or other wastes from Hawaii that the Administrator determines do not pose risks of introducing animal or plant pests or diseases into the continental United States are not regulated under this section.

(2) The interstate movement from Hawaii to the continental United States of agricultural wastes and yard waste (other than incidental amounts (less than 3 percent) that may be present in municipal solid waste despite reasonable efforts to maintain source separation) is prohibited.

(3) Garbage generated onboard any means of conveyance during interstate movement from Hawaii is regulated under § 330.401.

(b) *Restrictions on interstate movement of garbage.* The interstate movement of garbage generated in Hawaii to the continental United States is regulated as provided in this section.

(1) The garbage must be processed, packaged, safeguarded, and disposed of using a methodology that the Administrator has determined is adequate to prevent the introduction or dissemination of plant pests into noninfested areas of the United States.

(2) The garbage must be moved under a compliance agreement in accordance with § 330.403. APHIS will only enter into a compliance agreement when the Administrator is satisfied that the Agency has first satisfied all its obligations under the National Environmental Policy Act and all applicable Federal and State statutes to fully assess the impacts associated with the movement of garbage under the compliance agreement.

(3) All such garbage moved interstate from Hawaii to any of the continental United States must be moved in compliance with all applicable laws for environmental protection.

§ 330.403 Compliance agreement and cancellation.

(a) Any person engaged in the business of handling or disposing of garbage in accordance with this subpart must first enter into a compliance agreement with the Animal and Plant Health Inspection Service (APHIS). Compliance agreement forms (PPQ Form 519) are available without charge from local USDA/APHIS/Plant Protection and Quarantine offices, which are listed in telephone directories.

(b) A person who enters into a compliance agreement, and employees or agents of that person, must comply with the following conditions and any supplemental conditions which are listed in the compliance agreement, as deemed by the Administrator to be necessary to prevent the dissemination into or within the United States of plant pests and livestock or poultry diseases:

(1) Comply with all applicable provisions of this subpart;

(2) Allow inspectors access to all records maintained by the person regarding handling or disposal of garbage, and to all areas where handling or disposal of garbage occurs;

(3)(i) If the garbage is regulated under § 330.401, remove garbage from a means of conveyance only in tight, covered, leak-proof receptacles;

(ii) If the garbage is regulated under § 330.402, transport garbage interstate in packaging approved by the Administrator;

(4) Move the garbage only to a facility approved by the Administrator; and

(5) At the approved facility, dispose of the garbage in a manner approved by the Administrator and described in the compliance agreement.

(c) Approval for a compliance agreement may be denied at any time if the Administrator determines that the applicant has not met or is unable to meet the requirements set forth in this subpart. Prior to denying any application for a compliance agreement, APHIS will provide notice to the applicant thereof, and will provide the applicant with an opportunity to demonstrate or achieve compliance with requirements.

(d) Any compliance agreement may be canceled, either orally or in writing, by an inspector whenever the inspector finds that the person who has entered into the compliance agreement has failed to comply with this subpart. If the cancellation is oral, the cancellation and the reasons for the cancellation will be confirmed in writing as promptly as circumstances allow. Any person whose compliance agreement has been canceled may appeal the decision, in writing, within 10 days after receiving written notification of the cancellation. The appeal must state all of the facts and reasons upon which the person relies to show that the compliance agreement was wrongfully canceled. As promptly as circumstances allow, the Administrator will grant or deny the appeal, in writing, stating the reasons for the decision. A hearing will be held to resolve any conflict as to any material fact. Rules of practice concerning a hearing will be adopted by the Administrator. This administrative remedy must be exhausted before a person can file suit in court challenging the cancellation of a compliance agreement.

(e) Where a compliance agreement is denied or canceled, the person who entered into or applied for the compliance agreement may be prohibited, at the discretion of the Administrator, from handling or disposing of regulated garbage.

(Approved by the Office of Management and Budget under control numbers 0579–0015, 0579–0054, and 0579–0292)

Title 9—[AMENDED]

PART 94—RINDERPEST, FOOT-AND-MOUTH DISEASE, FOWL PEST (FOWL PLAGUE), EXOTIC NEWCASTLE DISEASE, AFRICAN SWINE FEVER, CLASSICAL SWINE FEVER, AND BOVINE SPONGIFORM ENCEPHALOPATHY: PROHIBITED AND RESTRICTED IMPORTATIONS

■ 4. The authority citation for part 94 continues to read as follows:

Authority: 7 U.S.C. 450, 7701–7772, 7781–7786, and 8301–8317; 21 U.S.C. 136 and 136a; 31 U.S.C. 9701; 7 CFR 2.22, 2.80, and 371.4.

■ 5. In § 94.0, a definition for *State* is added and the definition for *United States* is revised to read as follows:

§ 94.0 Definitions.

* * * * *

State. Any of the several States of the United States, the Commonwealth of the Northern Mariana Islands, the Commonwealth of Puerto Rico, the District of Columbia, Guam, the Virgin Islands of the United States, or any other territory or possession of the United States.

* * * * *

United States. All of the States.

* * * * *

■ 6. Section 94.5 is revised to read as follows:

§ 94.5 Regulation of certain garbage.

(a) *General restrictions*—(1) *Interstate movements of garbage from Hawaii and U.S. territories and possessions to the continental United States.* Hawaii, Puerto Rico, American Samoa, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia, Guam, the U.S. Virgin Islands, Republic of the Marshall Islands, and the Republic of Palau are hereby quarantined, and the movement of garbage therefrom to any other State is hereby prohibited except as provided in this section in order to prevent the introduction and spread of exotic plant pests and diseases.

(2) *Imports of garbage.* In order to protect against the introduction of exotic animal and plant pests, the importation of garbage from all foreign countries except Canada is prohibited except as provided in paragraph (c)(2) of this section.

(b) *Definitions—Agricultural waste.* Byproducts generated by the rearing of animals and the production and harvest of crops or trees. Animal waste, a large component of agricultural waste, includes waste (*e.g.*, feed waste, bedding and litter, and feedlot and paddock runoff) from livestock, dairy, and other animal-related agricultural and farming practices.

Approved facility. A facility approved by the Administrator, Animal and Plant Health Inspection Service, upon his determination that it has equipment and uses procedures that are adequate to prevent the dissemination of plant pests and livestock or poultry diseases, and that it is certified by an appropriate Government official as currently complying with the applicable laws for environmental protection.

Approved sewage system. A sewage system approved by the Administrator, Animal and Plant Health Inspection Service, upon his determination that the system is designed and operated in such a way as to preclude the discharge of sewage effluents onto land surfaces or into lagoons or other stationary waters, and otherwise is adequate to prevent the dissemination of plant pests and livestock or poultry diseases, and that is certified by an appropriate Government official as currently complying with the applicable laws for environmental protection.

Carrier. The principal operator of a means of conveyance.

Continental United States. The 49 States located on the continent of North America and the District of Columbia.

Garbage. All waste material that is derived in whole or in part from fruits, vegetables, meats, or other plant or animal (including poultry) material, and other refuse of any character whatsoever that has been associated with any such material.

Incineration. To reduce garbage to ash by burning.

Inspector. A properly identified employee of the U.S. Department of Agriculture or other person authorized by the Department to enforce the provisions of applicable statutes, quarantines, and regulations.

Interstate. From one State into or through any other State.

Person. Any individual, corporation, company, association, firm, partnership, society, or joint stock company.

Shelf-stable. The condition achieved in a product, by application of heat, alone or in combination with other ingredients and/or other treatments, of being rendered free of microorganisms capable of growing in the product under nonrefrigerated conditions (over 50 °F or 10 °C).

Sterilization. Cooking garbage at an internal temperature of 212 °F for 30 minutes.

Stores. The food, supplies, and other provisions carried for the day-to-day operation of a conveyance and the care and feeding of its operators.

Yard waste. Solid waste composed predominantly of grass clippings, leaves, twigs, branches, and other garden refuse.

(c) *Garbage generated onboard a conveyance*—(1) *Applicability.* This section applies to garbage generated onboard any means of conveyance during international or interstate movements as provided in this section and includes food scraps, table refuse, galley refuse, food wrappers or packaging materials, and other waste material from stores, food preparation areas, passengers' or crews' quarters, dining rooms, or any other areas on the means of conveyance. This section also applies to meals and other food that were available for consumption by passengers and crew on an aircraft but were not consumed.

(i) Not all garbage generated onboard a means of conveyance is regulated for the purposes of this section. Garbage regulated for the purposes of this section is defined as "regulated garbage" in paragraphs (c)(2) and (c)(3) of this section.

(ii) Garbage that is commingled with regulated garbage is also regulated garbage.

(2) *Garbage regulated because of movements outside the United States or Canada.* For purposes of this section, garbage on or removed from a means of conveyance is regulated garbage, if, when the garbage is on or removed from the means of conveyance, the means of conveyance has been in any port outside the United States and Canada within the previous 2-year period. There are, however, two exceptions to this provision. These exceptions are as follows:

(i) *Exception 1: Aircraft.* Garbage on or removed from an aircraft is exempt from requirements under paragraph (c)(4) of this section if the following conditions are met when the garbage is on or removed from the aircraft:

(A) The aircraft had previously been cleared of all garbage and of all meats and meat products, whatever the country of origin, except meats that are shelf-stable; all fresh and condensed milk and cream from countries designated in § 94.1 as those in which foot-and-mouth disease exists; all fresh fruits and vegetables; and all eggs; and the items previously cleared from the aircraft as prescribed by this paragraph have been disposed of according to the procedures for disposing of regulated garbage, as specified in paragraphs (c)(4)(ii) and (c)(4)(iii) of this section.

(B) After the garbage and stores referred to in paragraph (c)(2)(i)(A) of this section were removed, the aircraft has not been in a non-Canadian foreign port.

(ii) *Exception 2: Other conveyances.* Garbage on or removed in the United States from a means of conveyance other than an aircraft is exempt from requirements under paragraph (c)(4) of this section if the following conditions are met when the garbage is on or removed from the means of conveyance:

(A) The means of conveyance is accompanied by a certificate from an inspector stating the following:

(*1*) That the means of conveyance had previously been cleared of all garbage and of all meats and meat products, whatever the country of origin, except meats that are shelf-stable; all fresh and condensed milk and cream from countries designated in § 94.1 as those in which foot-and-mouth disease exists; all fresh fruits and vegetables; and all eggs; and the items previously cleared from the means of conveyance as prescribed by this paragraph have been disposed of according to the procedures for disposing of regulated garbage, as specified in paragraphs (c)(4)(ii) and (c)(4)(iii) of this section.

(*2*) That the means of conveyance had then been cleaned and disinfected in the presence of the inspector; and

(B) Since being cleaned and disinfected, the means of conveyance has not been in a non-Canadian foreign port.

(3) *Garbage regulated because of certain movements to or from Hawaii, territories, or possessions.* For purposes of this section, garbage on or removed from a means of conveyance is regulated garbage, if at the time the garbage is on or removed from the means of conveyance, the means of conveyance has moved during the previous 1-year period, either directly or indirectly, to the continental United States from any territory or possession or from Hawaii, to any territory or possession from any other territory or possession or from Hawaii, or to Hawaii from any territory or possession. There are, however, two exceptions to this provision. These exceptions are as follows:

(i) *Exception 1: Aircraft.* Garbage on or removed from an aircraft is exempt from requirements under paragraph (c)(4) of this section if the following two conditions are met when the garbage is on or removed from the aircraft:

(A) The aircraft had been previously cleared of all garbage and all fresh fruits and vegetables, and the items previously cleared from the aircraft as prescribed by this paragraph have been disposed of according to the procedures for disposing of regulated garbage, as specified in paragraphs (c)(4)(ii) and (c)(4)(iii) of this section.

(B) After the garbage and stores referred to in paragraph (c)(3)(i)(A) of this section were removed, the aircraft has not moved to the continental United States from any territory or possession or from Hawaii, to any territory or possession from any other territory or possession or from Hawaii, or to Hawaii from any territory or possession.

(ii) *Exception 2: Other conveyances.* Garbage on or removed from a means of conveyance other than an aircraft is exempt from requirements under paragraph (c)(4) of this section if the following two conditions are met when the garbage is on or removed from the means of conveyance:

(A) The means of conveyance is accompanied by a certificate from an inspector stating that the means of conveyance had been cleared of all garbage and all fresh fruits and vegetables, and the items previously cleared from the means of conveyance as prescribed by this paragraph have been disposed of according to the procedures for disposing of regulated garbage, as specified in paragraphs (c)(4)(ii) and (c)(4)(iii) of this section.

(B) After being cleared of the garbage and stores referred to in paragraph (c)(3)(ii)(A) of this section, the means of conveyance has not moved to the continental United States from any territory or possession or from Hawaii; to any territory or possession from any other territory or possession or from Hawaii; or to Hawaii from any territory or possession.

(4) *Restrictions on regulated garbage.* (i) Regulated garbage may not be disposed of, placed on, or removed from a means of conveyance except in accordance with this section.

(ii) Regulated garbage is subject to general surveillance for compliance with this section by inspectors and to disposal measures authorized by the Plant Protection Act and the Animal Health Protection Act to prevent the introduction and dissemination of pests and diseases of plants and livestock.

(iii) All regulated garbage must be contained in tight, covered, leak-proof receptacles during storage on board a means of conveyance while in the territorial waters, or while otherwise within the territory of the United States. All such receptacles shall be contained inside the guard rail if on a watercraft. Such regulated garbage shall not be unloaded from such means of conveyance in the United States unless such regulated garbage is removed in tight, covered, leak-proof receptacles under the direction of an inspector to an approved facility for incineration, sterilization, or grinding into an approved sewage system, under direct supervision by such an inspector, or such regulated garbage is removed for other handling in such manner and under such supervision as may, upon request in specific cases, be approved by the Administrator as adequate to prevent the introduction and dissemination of plant pests and animal diseases and sufficient to ensure compliance with applicable laws for environmental protection. *Provided that,* a cruise ship may dispose of regulated garbage in landfills at Alaskan ports only, if and only if the cruise ship does not have prohibited or restricted meat or animal products on board at the time it enters Alaskan waters for the cruise season, and only if the cruise ship, except for incidental travel through international waters necessary to navigate safely between ports, remains in Canadian and U.S. waters off the west coast of North America, and calls only at continental U.S. and Canadian ports during the entire cruise season.

(A) Application for approval of a facility or sewage system may be made in writing by the authorized representative of any carrier or by the official having jurisdiction over the port or place of arrival of the means of conveyance to the Administrator, Animal and Plant Health Inspection Service, U.S. Department of Agriculture, Washington, DC 20250. The application must be endorsed by the operator of the facility or sewage system.

(B) Approval will be granted if the Administrator determines that the requirements set forth in this section are met. Approval may be denied or withdrawn at any time, if the Administrator determines that such requirements are not met, after notice of the proposed denial or withdrawal of the approval and the reasons therefor, and an opportunity to demonstrate or achieve compliance with such requirements, has been afforded to the operator of the facility or sewage system and to the applicant for approval. However, approval may also be withdrawn without such prior procedure in any case in which the public health, interest, or safety requires immediate action, and in such case, the operator of the facility or sewage system and the applicant for approval shall promptly thereafter be given notice of the withdrawal and the reasons therefore and an opportunity to show cause why the approval should be reinstated.

(iv) The Plant Protection and Quarantine Programs and Veterinary Services, Animal, and Plant Health Inspection Service, will cooperate with other Federal, State, and local agencies responsible for enforcing other statutes and regulations governing disposal of the regulated garbage to the end that such disposal shall be adequate to prevent the dissemination of plant pests and livestock or poultry diseases and comply with applicable laws for environmental protection. The inspectors, in maintaining surveillance over regulated garbage movements and disposal, shall coordinate their activities with the activities of representatives of the U.S. Environmental Protection Agency and other Federal, State, and local agencies also having jurisdiction over such regulated garbage.

(d) *Garbage generated in Hawaii*—(1) *Applicability.* This section applies to garbage generated in households, commercial establishments, institutions, and businesses prior to interstate movement from Hawaii, and includes used paper, discarded cans and bottles, and food scraps. Such garbage includes, and is commonly known as, municipal solid waste.

(i) Industrial process wastes, mining wastes, sewage sludge, incinerator ash, or other wastes from Hawaii that the Administrator determines do not pose risks of introducing animal or plant pests or diseases into the continental United States are not regulated under this section.

(ii) The interstate movement from Hawaii to the continental United States of agricultural wastes and yard waste (other than incidental amounts (less than 3 percent) that may be present in municipal solid waste despite reasonable efforts to maintain source separation) is prohibited.

(iii) Garbage generated onboard any means of conveyance during interstate movement from Hawaii is regulated under paragraph (c) of this section.

(2) *Restrictions on interstate movement of garbage.* The interstate movement of garbage generated in Hawaii to the continental United States is regulated as provided in this section.

(i) The garbage must be processed, packaged, safeguarded, and disposed of using a methodology that the Administrator has determined is adequate to prevent the introduction and dissemination of plant pests into noninfested areas of the United States.

(ii) The garbage must be moved under a compliance agreement in accordance with paragraph (e) of this section. APHIS will only enter into a compliance agreement when the Administrator is satisfied that the Agency has first satisfied all its obligations under the National Environmental Policy Act and all applicable Federal and State statutes to fully assess the impacts associated with the movement of garbage under the compliance agreement.

(iii) All such garbage moved interstate from Hawaii to any of the continental United States must be moved in compliance with all applicable laws for environmental protection.

(e) *Compliance agreement and cancellation*—(1) Any person engaged in the business of handling or disposing of garbage in accordance with this section must first enter into a compliance agreement with the Animal and Plant Health Inspection Service (APHIS). Compliance agreement forms (PPQ Form 519) are available without charge from local USDA/APHIS/Plant Protection and Quarantine offices, which are listed in telephone directories.

(2) A person who enters into a compliance agreement, and employees or agents of that person, must comply with the following conditions and any supplemental conditions which are listed in the compliance agreement, as deemed by the Administrator to be necessary to prevent the introduction and dissemination into or within the United States of plant pests and livestock or poultry diseases:

(i) Comply with all applicable provisions of this section;

(ii) Allow inspectors access to all records maintained by the person regarding handling or disposal of garbage, and to all areas where handling or disposal of garbage occurs;

(iii)(A) If the garbage is regulated under paragraph (c) of this section, remove garbage from a means of conveyance only in tight, covered, leak-proof receptacles;

(B) If the garbage is regulated under paragraph (d) of this section, transport garbage interstate in sealed, leak-proof packaging approved by the Administrator;

(iv) Move the garbage only to a facility approved by the Administrator; and

(v) At the approved facility, dispose of the garbage in a manner approved by the Administrator and described in the compliance agreement.

(3) Approval for a compliance agreement may be denied at any time if the Administrator determines that the applicant has not met or is unable to meet the requirements set forth in this section. Prior to denying any application for a compliance agreement, APHIS will provide notice to the applicant thereof, and will provide the applicant with an opportunity to demonstrate or achieve compliance with requirements.

(4) Any compliance agreement may be canceled, either orally or in writing, by an inspector whenever the inspector finds that the person who has entered into the compliance agreement has failed to comply with this section. If the cancellation is oral, the cancellation and the reasons for the cancellation will be confirmed in writing as promptly as circumstances allow. Any person whose compliance agreement has been canceled may appeal the decision, in writing, within 10 days after receiving written notification of the cancellation. The appeal must state all of the facts and reasons upon which the person relies to show that the compliance agreement was wrongfully canceled. As promptly as circumstances allow, the Administrator will grant or deny the appeal, in writing, stating the reasons for the decision. A hearing will be held to resolve any conflict as to any material fact. Rules of practice concerning a hearing will be adopted by the Administrator. This administrative remedy must be exhausted before a person can file suit in court challenging the cancellation of a compliance agreement.

(5) Where a compliance agreement is denied or canceled, the person who entered into or applied for the compliance agreement may be prohibited, at the discretion of the Administrator, from handling or disposing of regulated garbage.

(Approved by the Office of Management and Budget under control numbers 0579–0015, 0579–0054, and 0579–0292)

Done in Washington, DC, this 17th day of August 2006.

Kevin Shea,

Acting Administrator, Animal and Plant Health Inspection Service.

[FR Doc. E6–13968 Filed 8–22–06; 8:45 am]
BILLING CODE 3410–34–P

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

7 CFR Part 352

[Docket No. 00–086–2]

Untreated Oranges, Tangerines, and Grapefruit From Mexico Transiting the United States to Foreign Countries

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Final rule.

SUMMARY: We are amending the regulations to allow untreated oranges, tangerines, and grapefruit from Mexico to be moved overland by truck or rail to Corpus Christi and Houston, TX, for export to another country by water. We

Attachment B — E-mail from Jim Hodges Regarding Transshipment of Honolulu MSW

E-mail sent 12/14/2006 at 3:21 pm from Jim Hodges to Mark White, Subject: Summary

Mark,

In summary of our conversation, a potential interim disposal alternative for the City of Honolulu is our export model to Roosevelt Landfill in Washington State with the following core/essential stipulations:

- HWS would be willing to limit our export to 100,000 – 150,000 tons per year
- the cost would be approximately $80/ton escalated annually by 80 percent of the CPI
- a five-year minimum commitment at the above stated volumes
- HWS would cooperate with the City on integrating our facility into the City's solid waste system. The mechanism for this integration would have to be determined with the City and HWS, but certainly could result in the City's managing the gate at HWS' processing facility

We feel that this could be, at the very least, an excellent interim measure for the City's solid waste system. Let me know if there is additional information that you need or further questions about anything we have discussed.

Thanks, Jim

Attachment C — Evaluation of CO_2 Emissions from Disposal of Waste at Waimanalo Gulch Sanitary Landfill, H–POWER, and Washington State

Evaluation of CO_2 Emissions from Disposal of Waste at the Proposed H–POWER Unit #3 at the Waimanalo Gulch Sanitary Landfill and at the Roosevelt Landfill in Washington State

Pacific Waste
CONSULTING GROUP

December 2008

Evaluation of CO_2 Emissions from Disposal of Waste at the Proposed H–POWER Unit #3 at the Waimanalo Gulch Sanitary Landfill and the Roosevelt Landfill in Washington State

December 2008

Prepared by:

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Sacramento, CA 95826

Prepared for:

AMEC Earth & Environmental

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1 Introduction

This report is an evaluation of the greenhouse gas (GHG) emissions resulting from disposing of 300,000 tons per year (TPY) of municipal solid waste (MSW) at H–POWER Unit #3, which is currently under environmental review, the Waimanalo Gulch Sanitary Landfill (Waimanalo Gulch), or at the Roosevelt Sanitary Landfill (Roosevelt) in Washington State. The specific disposal locations evaluated are:

1. Roosevelt Landfill at 500 Roosevelt Grade Road, Roosevelt, Washington.

2. Waimanalo Gulch landfill at Waimanalo Gulch, Kahe Valley, Hawaii.

3. H–POWER Unit #3 Combustor at 91-174 Hanua Street, Kapolei, Hawaii. H–POWER Unit #3 is proposed to be located on the same site as the existing H–POWER plant.

The City and County of Honolulu (City or C&C) has received bids from three firms in response to its January 2008 Request for Proposal for transshipment of MSW to a mainland landfill for disposal. The information about the Hawaiian Waste Systems LLC (HWS) program was used for this analysis because more is known about it than the others. GHG emissions resulting from the other two proposals are expected to be similar though not the same as emissions from the HWS proposal because they may use different locations for the transfer stations and for the disposal site.

HWS would use a transfer station on Oahu to bale the waste after which it would be shipped to the Roosevelt Landfill in Washington State. The transfer to Roosevelt would begin at the HWS Transfer Station at 91-165 Kalaeloa Boulevard, Kapolei, Hawaii. Data in documents filed by HWS were used in this analysis.

The emissions were estimated using the U.S. Environmental Protection Agency (EPA) WARM model (Version 9, August 2008), which estimates emissions for various waste management practices including landfilling and incineration.

This summary is based on data provided in readily available published sources or by direct contact with representatives of firms that provide the services used. The summary is not intended, nor is it appropriate to use, as an assessment of emissions that will satisfy the requirements for a verifiable GHG emissions inventory or other regulatory requirements.

There are six primary GHGs. This review is concerned only with CO_2.

2 Calculation Envelope

The envelope for evaluating emissions at each of the three disposal locations starts at a base point, the intersection of H-1 and Kalaeloa Boulevard. From the base point waste can be taken to H–POWER, Waimanalo Gulch, or to the HWS Transfer Station for transshipment to Roosevelt.

The path for calculating the emissions was:

- Transporting the waste from the base point to the HWS Transfer Station, processing it there, transporting it to Roosevelt, and disposing it at Roosevelt.
- Transporting the waste from the base point to Waimanalo Gulch and landfill disposal.
- Transporting the waste from the base point to H–POWER and energy recovery.

The emissions associated with collecting and transporting the waste to the base point would have occurred regardless of the disposal point and are not included in this evaluation.

3 Emissions Calculations

This section discusses the information used in the WARM model to estimate the emissions from the two landfills and from H–POWER Unit #3. The model uses national factors for

- The CO_2 emission factor that calculates the reduction in CO_2e emissions from generation either from a landfill gas fired generator (as operates at Roosevelt) or energy recovery in a combustor;
- Sequestration of materials in the landfill that prevents CO_2e emissions or lengthens the time before onset of emissions; and
- The CO_2 emission factor that calculates the CO_2 emissions from transportation of municipal solid waste.

The WARM model requires several parameters to calculate the CO_2 emissions. Those parameters are listed in *Table 1, WARM Model Parameters*. The distance shown for Roosevelt includes the transportation from the intersection of H-1 and Kalaeloa Boulevard to the transfer station in Campbell Industrial Park and then to the Roosevelt landfill. The distance traveled in barging the waste was the one-way distance since the barges could back-haul materials to Honolulu, and the CO_2 emissions from the back-haul could logically be associated with the company transporting the materials to Honolulu rather than being associated with any proposed MSW transshipment project. The distances shown for H–POWER and the Waimanalo Gulch Sanitary Landfill are round trip distances from the intersection of H-1 and Kalaeloa Boulevard to the facility.

The emission factors used are summarized in *Table 1, WARM Model Parameters*. The EPA WARM model is used to calculate the net emissions from a landfill, and reflects sequestration of anthropogenic materials, the type of landfill gas controls, and offsetting emissions from sale of power to the local utility.

Table 1, WARM Model Parameters

Input Assumption	Roosevelt	Waimanalo Gulch	H–POWER Unit #3
Distance traveled *	3,261	5.0	4.8
LFG energy recovery	Yes		NA
LFG flare		Yes	NA
LFG collection efficiency	79%	90%	NA
TPY of mixed MSW	300,000	300,000	300,000

4 Summary of Results

Transshipping and disposing of waste at Roosevelt were estimated to produce more emissions than disposal and energy recovery at H–POWER Unit #3 or disposal in the Waimanalo Gulch Sanitary Landfill. *Table 2, Total Emissions from the Alternatives* shows the estimated total emissions for each alternative.

The estimated positive CO_2 emissions from Roosevelt result because of the transportation emissions. The estimated positive Roosevelt emissions would have been greater if not reduced in the WARM model by sequestration and reduction in utility emissions from power sales.

Table 2, Total Emissions from the Alternatives

Disposal Location	Emissions (MTCO2e per year)
H–POWER Unit #3	(38,883)
Waimanalo Gulch Sanitary Landfil	(29,377)
Roosevelt	44,978

$MTCO_2e$ is metric tons of CO_2 equivalent.

The estimated CO_2 emissions from transshipment to Roosevelt for disposal are higher than either of the two on-island alternatives. Even so, the reduction in CO_2 emissions due to the benefit from the electric power generation at Roosevelt is overstated. The WARM model uses a national emission factor (which is not stated in the model or model documentation) to calculate the reduction in utility emissions of CO_2. An example of the effect of the difference can be seen from the different emission factors provided by the California Climate Action Registry for Oahu and the Northwest. The factor for Oahu (reflecting generation with oil, coal, and MSW) is 1,728 pounds of CO_2 per MWh of electricity produced. The factor for the U.S. Northwest (reflecting near zero emission hydro generation) is 921 pounds of CO_2 per MWh of electricity produced, about half of the Oahu emission factor. If the correct factor could be used in the WARM model for Roosevelt, the credit for reducing emissions would be reduced, increasing the estimated CO_2 emissions from the transshipment alternative.

Appendix G – EISPN

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PREPARATION NOTICE
H-POWER EXPANSION PROJECT
KAPOLEI, OAHU, HAWAII
TMK #(1)9-1-026-030

Submitted to:

Department of Environmental Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, Hawaii 96813

Submitted by:

The City and County of Honolulu, Hawaii

Prepared by:

Covanta Honolulu Resource Recovery Venture
and
AMEC Earth & Environmental

July, 2008

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EXECUTIVE SUMMARY

Proposed Action: The Proposed Action is the H-POWER Expansion Project, hereafter referred to as the "Expansion", which consists of the addition to the existing H-POWER Facility ("Facility") of a 900 ton per day ("TPD") mass burn waterwall municipal waste combustor (MWC) unit, its associated air pollution control equipment, and all the equipment required to tie the addition into the existing Facility, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu.

Applicant/Proposing Agency: The applicant for the proposed H-POWER Expansion is the City and County of Honolulu, Hawaii (the "City").

Accepting Agency: The accepting agency is the Department of Environmental Services, City and County of Honolulu.

Agencies Consulted in Making the Assessment: The City and County of Honolulu determined that an EIS would be prepared to fully evaluate the potential environmental effects of the Expansion and to provide documentation for community and agency review. The City has requested the operator of H-POWER, Covanta Honolulu Resource Recovery Venture (CHRRV) to initiate the EIS process. CHRRV has in turn contracted with AMEC Earth & Environmental (AMEC) as an environmental consultant to assist in the EIS process. The City, CHRRV and AMEC have conducted Agency consultations. Agency consultations conducted in advance of the publication of the EIS Preparation Notice in *The Environmental Notice* are listed in Table B – Agencies Consulted (see page 25).

General Description of the Proposed Action's Technical, Economic, Social and Environmental Characteristics; Time Frame; Funding Source:

Technical Characteristics

As shown in Figure 1-1, the Expansion consists of the addition to the Facility of a 900 TPD mass burn waterwall MWC unit, its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER Facility. It includes modifications and additions to the existing waste feed system and ash handling and other utility systems necessary for the new equipment. A new turbine generator, in addition to the existing 58 MW turbine generator, will be installed. The new unit (Unit 3) will consist of a mass burn waterwall municipal waste combustor unit, fuel feeding system, state-of-the-art reverse reciprocating grate, integrated furnace/boiler, and the most advanced air pollution control system used on these plants in this country. The air pollution control system consists of a dry scrubber, fabric filter baghouse, carbon injection system, selective non-catalytic reduction system in combination with Covanta's proprietary control technology called very low NOx system (VLN®), and associated ash and residue systems. The new unit is expected to generate about 234 tons (wet weight) of ash per day. To provide for adequate cooling water, the proposed project would require increasing the caprock water supply permit limit from 2.26 million gallons per day (MGPD) to 3.34 MGPD and the caprock water injection permit limit from 1.2 MGPD to 1.82 MGPD. H-POWER's cooling tower basin will be expanded by the addition of three new cooling towers.

Economic Characteristics

The Expansion is anticipated to be an economic stimulus in multiple ways:

- H-POWER currently employs 145 island residents and has a $10 million annual payroll. The Expansion is anticipated to result in 300 construction jobs and several additional operational positions.
- H-POWER utilizes local vendors whenever possible to purchase goods, services and equipment. Each year H-POWER spends more than 8.5 million locally on equipment and services from Hawaii vendors, further boosting the local economy. The Expansion is anticipated to result in significant local spending during the construction period.
- The existing H-POWER Facility is a proven and cost effective solution for the management of municipal solid waste (MSW) on the Island of O‘ahu. The Expansion will ensure that the growing demand to manage MSW on the O‘ahu is addressed. The construction of the Expansion will not interfere with the operation of the existing Facility.
- H-POWER has been recycling waste into energy since it started operation. It produces about 5 percent of the power used on the Island avoiding the need to import expensive oil, providing a significant reduction in greenhouse gas emissions, and reducing the need for landfilling on the Island.

Social Characteristics

The H-POWER facility has been operational for 18 years and its reliable service to the City was demonstrated by the recent celebration of the processing of its 11,000,000th ton of solid waste on March 15, 2008. It is anticipated that H-POWER, with development planned at the existing industrial site, would continue to provide reliable service to the City and would continue its existing role as an important community partner, with participation in local organizations such as:

- Sponsorship of the Kapolei Rotary Club;
- Sponsorship of the Kapolei Family Fun Run to benefit literacy programs;
- Sponsorship of the Waianae Comprehensive Health Care Fun Run;
- Participation in Hawaii Food Bank’s annual food drive;
- Sponsorship of statewide science fair and school career days and other youth and school programs and initiatives;
- Membership and service on the Board of Directors for the Campbell Local Emergency Action Network (CLEAN) interfacing with the neighboring communities on safety, environmental, public education, and emergency action needs and response; and
- Provision of over 100 tours and exhibits annually for the community, schools, elected officials, and civic organizations.

Additionally, the Facility has received recognition for its exemplary operation and safety record:

- Recipient of coveted U.S. EPA environmental excellence award. - H-POWER is the first and only U.S. EPA National Environmental Performance Track site in Hawaii. As such, H-POWER has met all criteria and demonstrated excellence in environmental performance management systems and training, continuous improvement, and community outreach.
- Recipient of U.S. OSHA Safety award. COVANTA - H-POWER is one of only five companies in Hawaii to receive the U.S. OSHA Voluntary Protection Program (HVPP) for excellence in Safety.

Environmental Characteristics

The Expansion will increase its waste disposal capacity, increase the energy and recyclable metals recovered annually, and further reduce the need for landfilling of MSW in Honolulu. The environmental characteristics of the Expansion will fully comply with federal, state, and local permits (see Table A) and programs designed for the protection and stewardship of Hawaii's environmental resources. Furthermore, the City has, by virtue of this EIS Preparation Notice, deemed that a full assessment of the potential environmental consequences of the Expansion be prepared for community review and comment. This will include an assessment of the existing natural and human environment, including potential impacts and mitigative measures, as well as an assessment of the project's conformance to federal, state, and local planning polices, and a sustainability analysis. In addition the EIS will document potential irreversible and irretrievable commitments of resources and will identify potential unresolved issues.

Time Frame

The proposed Expansion will undergo environmental permitting and, if fully approved, commencement of construction is anticipated in the second half of 2009. The construction period is expected to last 30 months with an additional three months for Start-up. Commercial operation of the proposed Expansion is anticipated in 2012.

Summary Description of the Affected Environment, including suitable and adequate regional, location and site maps such as Flood Insurance Rate Maps, Floodway Boundary Maps, or United States Geological Survey (USGS) topographic maps: The H-POWER Expansion is proposed to occur on the existing H-POWER Facility parcel. That site consists of 24.635 acres (1,073,100 s. ft.) of industrially zoned and developed property situated within the Campbell Industrial Park at Barbers Point. The parcel's Tax Map Key number is #1(9)-1-026-030. Figure 2-1 depicts the site location on a USGS topographic map and shows the major roadways in the vicinity of the existing H-POWER Facility. Figures 2-2 and 2-3 are aerial photographs showing the existing industrial nature of the site and surroundings. Figure 2-4 is a site plan overlaid onto an aerial photograph. Maps depicting additional site and regional resources will be provided in the EIS.

Impacts to Cultural Practices and Resources, Past and Current: The City recognizes that a key component of the EIS to be developed will be a review of cultural practices and resources, past and current. Pacific Consulting Services, Inc. of Honolulu has been selected to conduct reviews of historic, archaeological and cultural resources to ensure that potential impacts to such resources are fully identified and evaluated.

Identification and Summary of Impacts and Proposed Mitigation Measures: The EIS to be developed will include identification of the project's potential effects to:

- Geology and Soils
- Surface Water and Groundwater Resources/Hydrology
- Biological Resources
- Archaeological, Historic and Cultural Resources
- Roadways and Traffic
- Noise
- Air Quality
- Visual Resources
- Socioeconomics
- Infrastructure
- Solid Waste
- Energy
- Human Health

For each of the above topics, the identification of potential impacts and proposed mitigation measures will include an assessment of both short term (construction impacts) and long-term effects.

Alternatives Considered: The alternatives considered will include eight technology alternatives, two siting alternatives, and two required alternatives (No Project and Delayed Project), as noted below:

Technology Alternatives

- The Project — Mass Burn Energy-from-Waste
- Other Combustion — Refuse Derived Fuel Energy-from-Waste
- Non-Combustion — Thermal Technology
- Non-Combustion — Non-Thermal Technology
- Landfilling at Waimanalo Gulch Sanitary Landfill
- Landfilling at Another On-Island Site
- Landfilling Off-Island

- Expanded Recycling

Siting Alternatives

- The current H–POWER Site
- A Greenfield Site

Required Alternatives

- No Project
- Delayed Project

Discussion of Findings and Reasons Supporting the Agency Anticipated Determination: The City has deemed that an EIS be prepared to fully address the project. Submission of this EIS Preparation Notice is to provide the opportunity for community involvement as part of the EIS process.

List of all Required Permits and Approvals (State, federal, county): Table A, Potential Permits (see page 24), identifies the required permits and approvals (federal, state, and county).

Written Comments and Responses to the Comments under the Early Consultation Provisions: Table B, Agencies Consulted (see page 25), provides a list of agencies contacted.

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1.0 PROJECT OVERVIEW

The primary function of the existing Facility is to provide disposal of municipal solid waste (MSW). The plant, comprised of an MSW processing plant which produces Refuse Derived Fuel (RDF) and two 854 ton per day municipal combustors, processes 610,000 tons of MSW per year[1], reducing the volume of refuse that goes to the landfill by 90%. Additionally, H-POWER annually recovers 20,000 tons of metals, such as aluminum and steel from the waste stream. H-POWER, a City & County of Honolulu facility, combusts the RDF to produce steam that drives a turbine generator. The electricity generated by this waste-to-energy plant is distributed to customers by Hawaiian Electric Company ("HECO").

1.1 Proposed Action

The Expansion consists of the addition to the Facility of a 900 TPD mass burn waterwall MWC unit, its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER Facility. It includes modifications and additions to the existing waste feed system and ash handling and other utility systems necessary for the new equipment. A new turbine generator, in addition to the existing 58 MW turbine generator, will be installed. The new unit (Unit 3) will consist of a mass burn waterwall municipal waste combustor unit, fuel feeding system, state-of-the-art reverse reciprocating grate, integrated furnace/boiler, and the most advanced air pollution control system used on these plants in this country. The air pollution control system consists of a dry scrubber, fabric filter baghouse, carbon injection system, selective non-catalytic reduction system in combination with Covanta's proprietary control technology called very low NOx system (VLN®), and associated ash and residue systems. The new unit is expected to generate about 234 tons (wet weight) of ash per day. To provide for adequate cooling water, the proposed project would increase the caprock water supply permit limit from 2.26 million gallons per day (MGPD) to 3.34 MGPD and the caprock water injection permit limit from 1.2 MGPD to 1.82 MGPD. H-POWER's cooling tower basin will be expanded by the addition of three new cooling towers.

Figure 1-1 depicts the Site Plan that shows the footprint of the modifications to the H-POWER Facility associated with the Expansion.

The Expansion will increase the facility's waste disposal capacity, increase the energy and recyclable metals recovered annually, and further reduce the need for landfilling of municipal solid waste in Honolulu. The environmental characteristics of the Expansion will fully comply with federal, state, and local permits and programs designed for the protection and stewardship of Hawaii's environmental resources.

1.2 Background and Historical Perspective

Prior to 1977, the City and State had conducted, commissioned or sponsored a number of studies over an approximately 12 year period in order to find a solution to what was then a growing solid waste problem. At that time, approximately 80 percent of O'ahu's refuse was disposed of at City operated landfills and space at these landfills was rapidly being used up. In 1977, analysis of possible waste disposal solutions was conducted by MITRE Corporation. That analysis evaluated development of a solid waste resource recovery system (1983 Revised EIS)

[1] Based on a 10-year average.

to address the solid waste issue. The City subsequently embarked on a program to implement the recommendations contained in MITRE's final report. In the summer of 1978, the City issued a Request for Proposals (RFP) for what was then referred to as H-POWER – the Honolulu Program Of Waste Energy Recovery. In 1982, documents went out on which two bidders were asked to submit bid prices. It was hoped that a contract would be awarded by the end of December 1983 and to enter full-scale operation by January 1987. After a series of submittals and reviews, including environmental considerations by the City and residents, a final decision was eventually reached, and in May of 1990 the H-POWER facility went into commercial operation at its current location in the Campbell Industrial Park.

The H-POWER facility has been operational now for over 18 years, and its reliable service to the City continues. It is anticipated that H-POWER, with the proposed development planned at the existing industrial site, would expand upon its reliable service to the City and in so doing continue its long history of providing cost effective solid waste solutions as well as a critical source of renewable energy to the City and County of Honolulu and the Island of Oahu. H-POWER generates five (5%) percent of Oahu's electricity from a renewable resource, helping Oahu achieve its goal of becoming more energy self-sufficient by reducing dependence on imported fuel. It is anticipated that, after the expansion, H-POWER will generate eight (8%) percent of Oahu's electricity from a renewable resource.

1.3 Purpose of the Preparation Notice

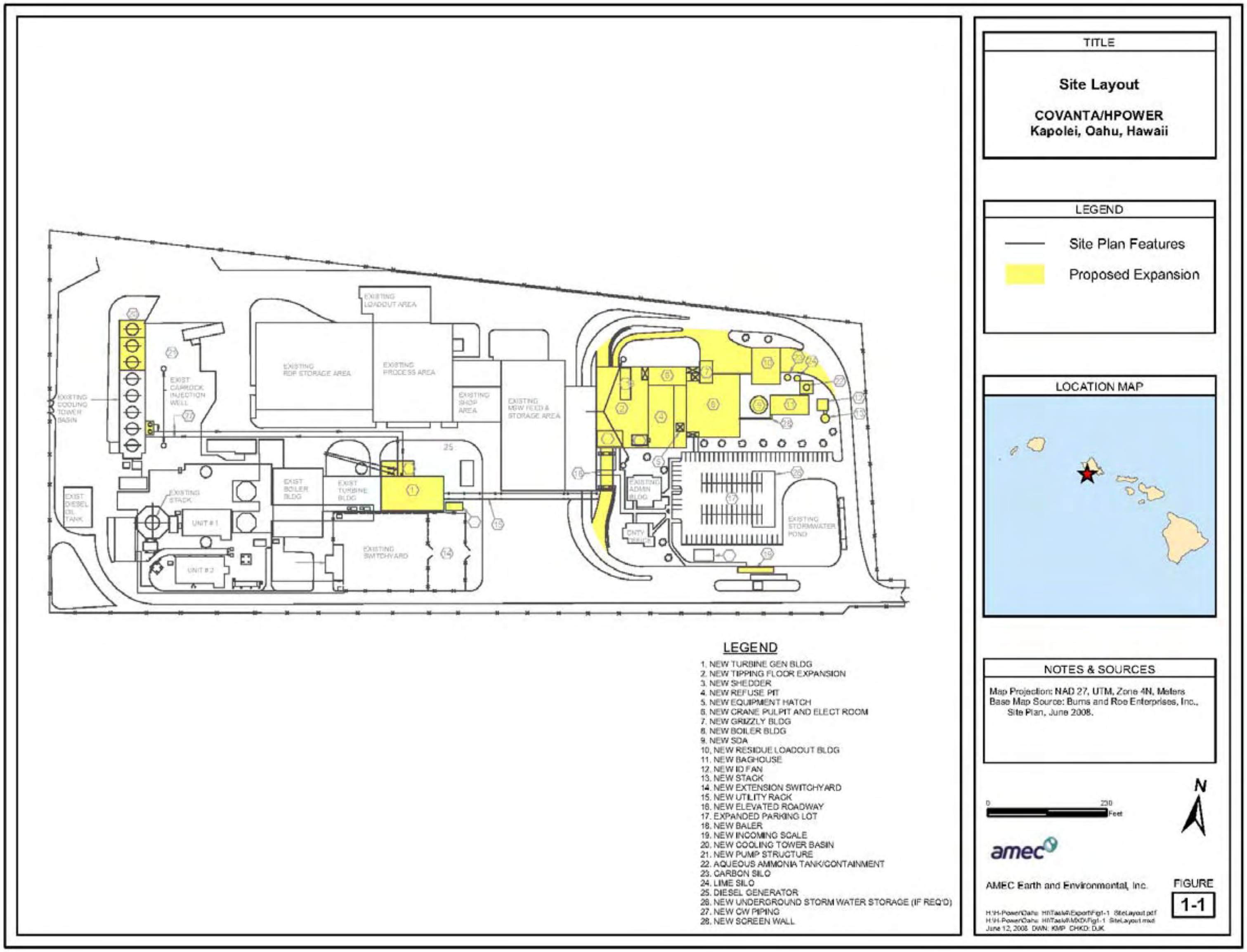
This Preparation Notice has been prepared by CHRRV, the City and County of Honolulu, and their environmental consultants and subcontractors in order to satisfy the requirements of Hawaii Revised Statutes (HRS) Chapter 343. The use of County lands and funds is the primary reason that the City and County of Honolulu has determined that an EIS be prepared. This Preparation Notice is the initial step in that process.

The purpose of this Preparation Notice is to inform interested parties of the proposed project and to seek public input on subject areas that should be addressed in the forthcoming Draft EIS. The EIS will address mitigation measures to prevent or reduce the project's potential effects and will present alternative methods, modes or designs of the proposed action. A key component of the overall process is public participation. As such, CHRRV and the City and County of Honolulu consulted with and continue to consult with numerous state and federal agencies in formulating plans for addressing the County's solid waste disposal needs (see Table B). These efforts are summarized in Section 7.

1.4 Purpose and Need for the Project

The H-POWER Expansion is designed to offer increased efficiency and capacity at the existing H-POWER Facility in Kapolei, Hawaii. The Project is being developed to expand a competitively priced, environmentally sound and proven waste disposal technology on Oahu, thereby extending the life of the existing Waimanalo Gulch Sanitary Landfill and potentially minimizing the capacity needs of landfills yet to be developed.

Figure 1-1. Site Plan



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2.0 PROJECT DESCRIPTION

Unprocessed municipal refuse would be delivered to the facility as it is currently, by standard packer trucks and/or transfer vehicles. Some of the refuse will be converted into Refuse Derived Fuel (RDF) that will be loaded onto conveyors for delivery to the metering bin of the existing steam generators. Some of the waste will be conveyed by a proposed, new waste loading system to the state-of-the-art reverse reciprocating grate of the proposed, new mass burn waterwall MWC unit. Above the grate and integrated with the waterwall furnace is the new steam boiler, designed specifically for mass burn combustion. The proposed design offers highly efficient heat recovery and prolonged operation with a minimum of maintenance. The air pollution control system consists of a dry scrubber, fabric filter baghouse, carbon injection system, and selective non-catalytic reduction system in combination with Covanta's proprietary control technology called very low NOx system (VLN®). Steam generated in the boiler will be delivered to a proposed new turbine generator to produce electricity for in-plant needs and for sale to Hawaiian Electric Company (HECO). The proposed mass burn combustion unit will have new, dedicated ash and residue handing systems to handle the about 234 tons (wet weight) of ash expected to be generated per day from the proposed new unit. It is anticipated that an increase of ash as well as metals recycling will result due to the proposed increase in facility throughput from an average of 610,000 tons per year to 910,000 tons per year. To provide for adequate cooling water, the proposed project would require increasing the caprock water supply permit limit from 2.26 million gallons per day (MGPD) to 3.34 MGPD and the caprock water injection permit limit from 1.2 MGPD to 1.82 MGPD. H-POWER's cooling tower basin will be expanded by the addition of three new cooling towers.

A detailed description of the key elements of the Expansion will be provided within the EIS.

2.1 Project Location and Site Characteristics

The existing H-POWER site consists of 24.635 acres (1,073,100 sq. ft.) of industrially zoned and developed property situated within the Campbell Industrial Park at Barbers Point. The parcel's Tax Map Key number is #1(9)-1-026-030. Figure 2-1 depicts the site location on a topographic map and shows the major roadways in the vicinity of the existing H-POWER facility.

As depicted in Figure 2-1, the site is situated within the industrial area of Barbers Point within the Campbell Industrial Park. Figures 2-2 and 2-3 are aerial photographs showing the site and surrounding areas. Figure 2-4 is a figure showing the Site Plan overlaid onto an aerial photograph showing that the Expansion does not significantly change the industrial character of the Campbell Industrial Park.

2.2 Construction Activities

Initial construction activities will include mobilization, clearing, and site preparation (consisting primarily of identification and repair of surface cavities) followed by leveling the site and placement of footings and foundations prior to full construction.

During mobilization, ground disturbance during clearing, site preparation and grading shall be held to the minimum area necessary to accommodate movement of heavy equipment and materials required for construction. This will minimize storm-generated run-off from disturbed areas of the site. Staging, stockpile and parking areas for workers shall be prepared as necessary with appropriate storm water discharge pollution prevention features and fugitive dust suppression. Temporary staging areas and construction parking may include the use of adjacent off-site parcels. The proposed staging areas are depicted in Figures 2-2 and 2-4.

A complete discussion of potential impacts and recommended mitigation measures for construction related impacts including noise, parking and traffic, equipment storage and laydown areas, as well as the potential positive aspects such as employment and revenues from local spending will be provided in the forthcoming Draft EIS.

Upon completion of construction activities, the site will be landscaped similarly to pre-project conditions. An evaluation of potential landscape improvements, including lighting and fencing requirements, will be prepared as part of the Draft EIS.

2.3 Project Schedule

The proposed Expansion will undergo environmental permitting and, if fully approved, commencement of construction is anticipated in the second half of 2009. The construction period is expected to last 30 months with an additional three months for Start-up. Commercial operation of the proposed Expansion is anticipated in 2012.

Figure 2-1. Locus Map

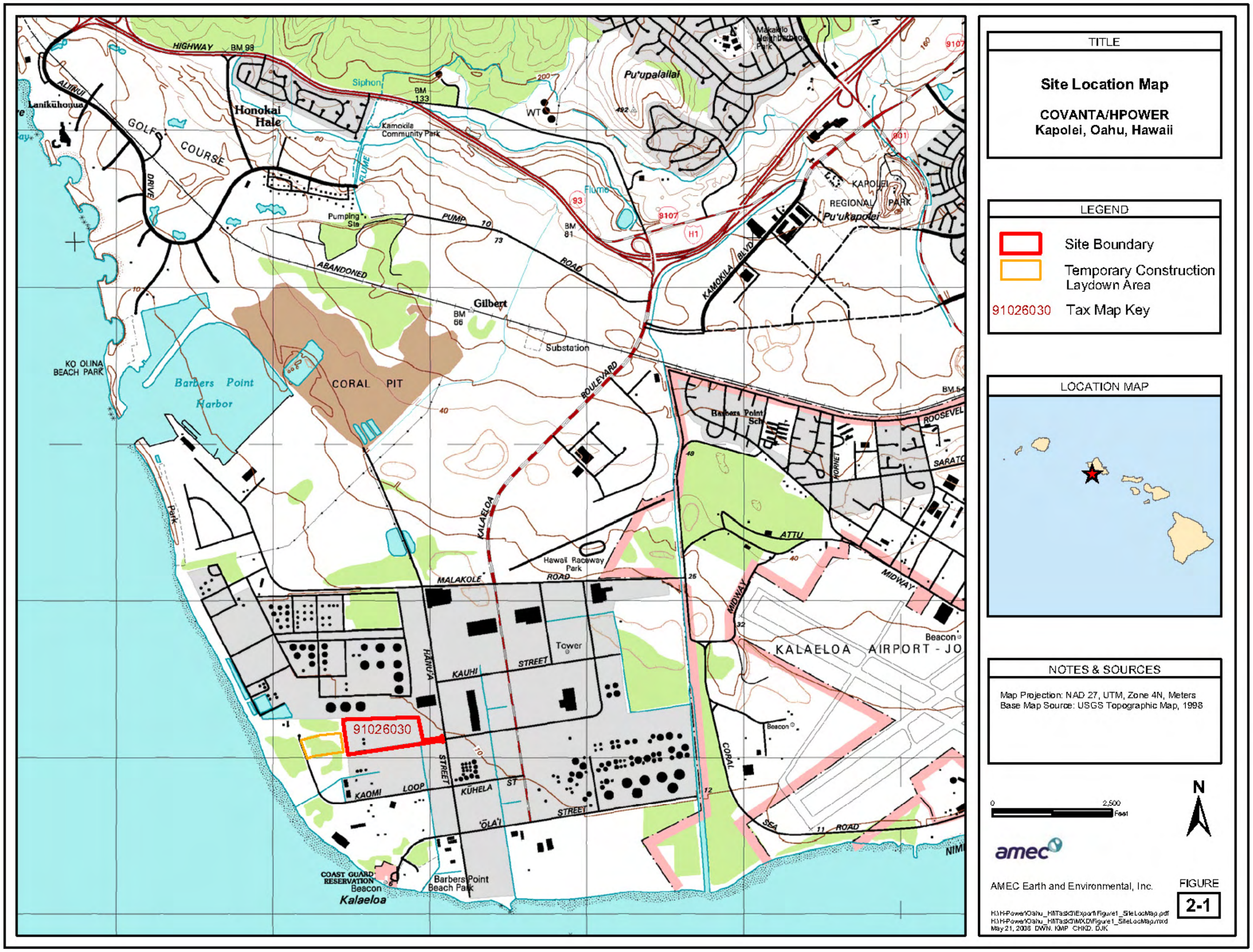

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Figure 2-2. Aerial Photograph #1

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Figure 2-3. Aerial Photograph #2

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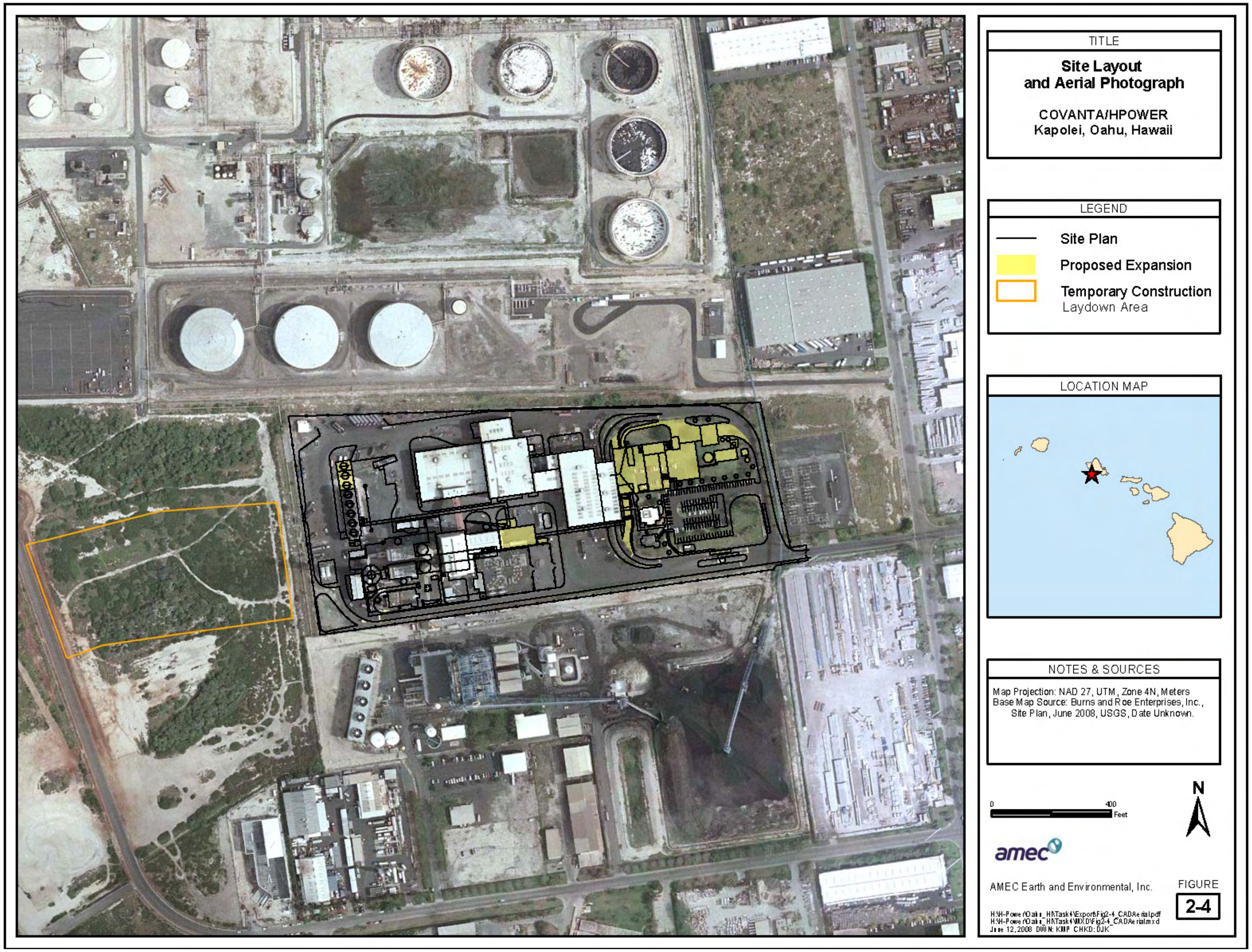
Figure 2-4. Site Plan Overlaid onto Aerial Photo



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3.0 NATURAL ENVIRONMENT

This chapter discusses the natural environment in the area of the proposed project. Where additional investigations are anticipated to support preparation of the Draft EIS and to identify potential impacts, these proposed studies are noted.

3.1 Topography, Climate, and Rainfall

According to the 1986 Final Geotechnical Report (C.E. Maguire, 1986) prepared prior to the construction of H-POWER, the topography of the site was generally flat, ranging from +7 to +16 MSL and averaging approximately +12 to +13 MSL in the area of the major structures. During site preparation and grading prior to construction of the H-POWER facility some elevation changes were made at the site. Updated topographic survey drawings of current conditions at the H-POWER site will be provided within the Draft EIS.

According to the 1983 EIS (Belt, 1983) and the 1986 Final Geotechnical Report, the H-POWER site is approximately 1800 feet from the shoreline and within an area classified as Zone D according to the 1980 U.S. Department of Housing and Urban Development Flood Insurance Rate Maps (FIRM). Only a narrow strip of shoreline (off-site), approximately 200-400 feet in width is classified A4 according to the 1980 FIRM and therefore subject to tsunami inundation up to elevation +8 to +9 (100-year event).

The National Weather Service (NWS) operates a meteorological station at the Honolulu International Airport, approximately 12 miles east of Campbell Industrial Park. Amongst other measurements, the Honolulu NWS station records daily precipitation amounts and temperature. The average rainfall recorded at the Honolulu NWS station for the period of 1999 to 2003 ranged from 7.1 inches per year to 12.2 inches per year. The average rainfall for these years was 10.6 inches. The average rainfall recorded at the Honolulu NWS station over the 30-year period from 1971-2000 was 18.29 inches. The mean monthly temperature recorded at the NWS station between 1999-2003 ranged from 76.9 degrees Fahrenheit to 78.5 degrees Fahrenheit, with an average of 77.8 degrees Fahrenheit. This compares well with the average monthly temperature recorded at the Honolulu NWS station between the 30-year period from 1961-1990, which was 77.2 degrees Fahrenheit. Additional detail regarding climate and rainfall will be compiled and presented within the Draft EIS.

3.2 Geology and Soils

According to both the 1983 EIS (Belt, 1983) and the 1986 Final Geotechnical Report prepared prior to the construction of H-POWER, Barber's Point and the Campbell Industrial Park are contained within the western portion of O'ahu's 'Ewa plain. This area is an emerged coral-algae reef formed during the Pleistocene period when the ocean level was at a higher elevation. The Ewa plain extends from sea level at the coastline to an approximate elevation of 100 MSL about 3 to 5 miles inland. The local coastal plain is quite flat, with the 20-foot contour being more than a mile inland. The 'Ewa plain is made up of interbedded coral reef formations, marine sediments, and alluvium. The basement complex consists of basaltic lavas from the Waianae series. Both the coral reef formations and the basaltic lavas have generally high porosity and permeability; the marine sediments and alluvial deposits have much lower permeability. Because of this, they inhibit the movement of water. A relatively thick layer of these poorly permeable materials separates the basalt from the strata above and is commonly referred to as "caprock". Based on the site's distance from the Waianae Mountains and estimates that the average dip of lavas in the Waianae volcanic series is five degrees, these coastal plain formations are believed to have a thickness of 600 to 800 feet in the vicinity of the project site.

Sinkholes formed by dissolution of the limestone are abundant in the area. However, those that previously occurred at the H-POWER site have been wholly or partially filled as a result of rough grading conducted in the early 1960s and more comprehensive grading and foundation preparation work during construction of the H-POWER facility.

The extremely shallow calcareous soil mantle present on the site prior to development of H-POWER was classified by the U.S. Soil Conservation Service (SCS) of the U.S. Dept. of Agriculture (1972) as Coral Outcrop and was not suitable for agricultural use. The site has since undergone extensive grading and filling due to construction of the H-POWER facility.

Prior to development of the Expansion project a comprehensive geotechnical engineering analysis will be performed to update the available geotechnical and soils information and to support the design of appropriate foundation and structural support for the Expansion. This information will be documented in the Draft EIS, and CHRRV will develop appropriate construction and mitigation procedures on the basis of the results of these investigations and consultations.

3.3 Groundwater, Surface Water and Hydrology

The groundwater table prior to construction of H-POWER ranged from 2 to 15 feet below the existing ground surface and was tidally influenced. The H-POWER facility currently uses groundwater wells to supply cooling water for use at the facility and discharges that water via injection wells.

Prior to development of the Expansion project an analysis of current groundwater and surface water conditions will be performed to update the available hydrological information and potential impacts to surface drainage or groundwater will be evaluated. This information will be documented in the Draft EIS and CHRRV will develop appropriate construction and mitigation procedures on the basis of the results of these analyses.

3.4 Biological Resources

CHRRV is in the process of consulting with both Federal and State agencies to determine if there are species of concern that occur either on the site or in the vicinity of the site so that appropriate avoidance or mitigation measures can be developed. Consultations will include, but are not limited to, the United States Department of the Interior, Fish and Wildlife Service (USFW), the Hawaii Natural Heritage Program, and the Board of Land and Natural Resources.

CHRRV will conduct a site survey prior to preparation of the Draft EIS and will develop appropriate construction mitigation procedures on the basis of the results of the site survey as well as on the basis of consultations, if needed.

4.0 HUMAN ENVIRONMENT

This chapter discusses the potential environmental consequences of the proposed action with respect to the human environment that require assessment during the Draft EIS. Where additional investigations are anticipated to support preparation of the Draft EIS and to identify potential impacts, these proposed studies are noted.

4.1 Archaeological, Historical, and Cultural Resources

As noted within the 1983 Revised Environmental Impact Statement, the Barber's Point area and the 'Ewa Plain in general have been the subject of relatively intense archeological interest and study. An initial archaeological reconnaissance survey and literature search conducted at that time sought to identify and locate surface archaeological material as well as sinkholes large enough to examine for archaeological and paleontological material. That 1983 study confirmed that the parcel had been significantly disturbed by bulldozing, dumping of trash, and the probable logging of kiawe wood for charcoal manufacturing. At that time, the site appeared to contain limited material of significance and the proposed H-POWER project's impacts on those resources were judged minor.

Currently, the H-POWER site is an industrial site with ancillary facilities such as switchyards and storage zones, parking and manicured lawns that has undergone extensive previous disturbance during construction of these facilities. Though intact archeological, historical or cultural impacts at the site would seem unlikely given the prior disturbance and industrial nature of the property, CHRRV is aware of identified resources proximate to the site. CHRRV will consult with the State Historic Preservation Department (SHPD) and other culturally or historically knowledgeable parties to determine if there are issues or resources of concern. Should such areas/resources be identified CHRRV will develop appropriate avoidance or mitigation measures.

Pacific Consulting Services, Inc. of Honolulu, a local firm specializing in archeological, historical and cultural resource investigations, has been employed to conduct research and develop recommendations on the basis of their findings. This information will be documented in the EIS, and CHRRV will develop appropriate mitigation procedures on the basis of the results of these investigations and consultations.

4.2 Roadways and Traffic

Based on recent facility operating logs, the H-POWER facility receives an average of 610,000 tons of MSW per year. Trucks hauling waste to the facility exit Interstate Highway 1 (H-1), exit 1, at Kalaeloa Boulevard (State Route 95) and access the H-POWER facility from Komohana Street at its intersection with Hanua Street. It is anticipated that with the Expansion of H-POWER an additional 300,000 tons of MSW will be processed annually, resulting in additional waste being brought to H-POWER rather than landfilled. It is recognized that there will be resultant traffic increases, both in incoming waste trucks and outgoing ash and metals recovery trucks, affecting the H-POWER access roads of Kalealoa, Komohana, and the intersection of Komohana and Hanua. However, a resultant decrease in westbound waste trucks to Waimanalo Gulch Sanitary Landfill will also be expected as waste is diverted to H-POWER. Though ash would still be transported from H-POWER westbound on Farrington

Highway (State Route 93), the quantity of ash is significantly smaller than the quantity of waste since waste to ash conversion results in an approximately 90% reduction in material volume. This results in a net decrease in truck traffic from the on-ramp at H-1 westbound (transitions to Farrington Hwy) to the Waimanalo Landfill.

AMEC Earth & Environmental experts in traffic analyses will be employed to conduct research and develop recommendations to minimize potential traffic impacts. This information will be documented in the Draft EIS, and CHRRV will develop appropriate mitigation procedures on the basis of the results of this study.

4.3 Noise

The H-POWER facility is an existing industrial facility located in Campbell Industrial Park and is compatible with neighboring industrial uses, including AES Hawaii, Inc. and HECO. As shown previously on Figure 2-2 and 2-3, Aerial Photographs, the area surrounding the H-POWER site is developed and is industrial in nature. The H-POWER facility is currently a source of noise, as are the industrial neighbors proximate to H-POWER. No significant change in noise levels either at or proximate to the site are anticipated to result from the Expansion. It is anticipated that temporary construction-related increases will occur.

AMEC Earth & Environmental experts in noise analysis and mitigation will be employed to conduct research and develop recommendations to minimize potential noise impacts. This information will be documented in the EIS, and CHRRV will develop appropriate mitigation procedures on the basis of the results of the study.

4.4 Air Quality

The original 1970 Clean Air Act authorized the Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to limit levels of critical health-based pollutants in the air. These pollutants, referred to as criteria air pollutants, include: Sulfur Dioxide (SO_2) Nitrogen Oxides (NOx), Ozone (linked to emissions of Volatile Organic Compounds (VOCs)), Carbon Monoxide (CO), Lead (Pb), and Particulate Matter (PM/PM-10). Geographic areas that meet the NAAQS for a given pollutant are classified as attainment areas and those that do not are classified as non-attainment. The H-POWER facility is situated on the Island of O‘ahu, a region classified as attainment for all of the criteria pollutants under the NAAQS and therefore considered to have air quality that is protective of public health.

H-POWER, as is the case for other industrial facilities, must meet a variety of air pollutant control requirements for current operations, consistent with the Facility’s existing air operating permit. With the Expansion a modification to the facility’s existing air operating permit must be made that addresses the proposed changes in emissions and evaluates the potential impact to existing air quality in the region. CHRRV will not be allowed to operate the expanded facility unless compliance with air quality requirements has been demonstrated to both the satisfaction of the State of Hawaii and the Federal EPA. A comprehensive discussion of applicable emission standards and the results of ambient air quality analyses and mitigation measures will be provided within the EIS.

4.5 Visual Resources

The H-POWER facility is an existing industrial facility located in Campbell Industrial Park and is compatible with neighboring industrial properties, including AES Hawaii, Inc. and HECO. As shown previously on Figures 2-2 and 2-3, Aerial Photographs, the area surrounding the H-POWER site is developed and is industrial in nature. The proposed action includes the construction of a new facility stack for the proposed, new Mass Burn combustion unit. This new stack will be constructed in the front area of the H-POWER facility as noted on Figure 1-1. To address potential concerns regarding the change of appearance that are anticipated, CHRRV prepared a photographic simulation of the modified facility. Figure 4-1 shows the facility post-Expansion. As can be seen from the simulation, the H-POWER Expansion will minimize visibility impacts by the use of compatible construction materials.

4.6 Socioeconomics

The proposed H-POWER Expansion is anticipated to be an economic stimulus in multiple ways:

- H-POWER currently employs 145 island residents and has a $10 million annual payroll. The Expansion is anticipated to result in 300 construction jobs and several additional operational positions.
- CHRRV utilizes local vendors whenever possible to purchase goods, services and equipment. Each year CHRRV spends more than $8.5 million locally on equipment and services from Hawaii vendors, further boosting the local economy. The Expansion is anticipated to result in significant local spending during the construction period.
- The existing H-POWER Facility is a proven and cost effective solution for the management of municipal solid waste (MSW) on the island of O‘ahu. The Expansion will ensure that the growing demand to manage MSW on the O‘ahu is addressed. The construction of the Expansion will not interfere with the operation of the existing Facility.
- H-POWER has been recycling waste into energy since it started operation. It produces about 5 percent of the power used on the island avoiding the need to import expensive oil and providing a significant reduction in greenhouse gas emissions.

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Figure 4-1. Photo-Simulation (Expansion)

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4.7 Infrastructure

The existing H-POWER facility relies on a variety of associated infrastructure to support safe and environmentally responsible waste-to-energy operations. The infrastructure necessary to support such operations includes:

- Water Supply Facilities (both industrial and sanitary)
- Wastewater Facilities
- Stormwater Drainage Facilities
- Storage/Ancillary Facilities

The potential changes, modifications and/or enhancements to the supporting infrastructure of the H-POWER facility will be identified and potential impacts evaluated. This information will be documented in the EIS, and CHRRV will develop appropriate mitigation procedures where impacts are identified.

4.8 Solid Waste

The Expansion is designed to offer increased efficiency and capacity at the existing H-POWER Facility in Kapolei, Hawaii. The Project is being developed to expand a competitively priced, environmentally sound and proven waste disposal technology on O‘ahu, thereby extending the life of the existing Waimanalo Gulch Sanitary Landfill and potentially minimizing the capacity needs of landfills yet to be developed.

The Expansion will increase its waste disposal capacity, increasing throughput of MSW by approximately 300,000 tons per year and increasing the quantity of recyclable metals recovered annually. Expansion of the facility will further reduce the need for landfilling of municipal solid waste in Honolulu, a potentially significant benefit that will be evaluated in depth within the forthcoming EIS.

4.9 Energy

The H-POWER facility has been operational now for over 18 years and its reliable service to the City continues. It is anticipated that H-POWER, with the Expansion planned at the existing industrial site, would enhance its reliable service to the City and in so doing continue its long history of providing cost effective solid waste solutions as well as a critical source of renewable energy to the City and County of Honolulu and the Island of Oahu. H-POWER generates five (5%) percent of Oahu’s electricity from a renewable resource, helping Oahu achieve its goal of becoming more energy self-sufficient by reducing dependence on imported fuel. It is anticipated that, after the expansion, H-POWER will generate eight (8%) percent of Oahu’s electricity from a renewable resource.

CHRRV will evaluate potential impacts to energy resources due to development of the Expansion and will document this information in the EIS.

4.10 Human Health

To ensure that current operations at the H-POWER facility were not adversely affecting human health, the City initiated a risk assessment project in 2002. Human health risks from the H-POWER stack emissions were evaluated in a Screening Level Multipathway Human Health Risk Assessment using emissions data from stack monitoring reports from 1990-2002. Constituents evaluated included arsenic, beryllium, chromium, lead, mercury, nickel and dioxins and furans. The risk assessment used state-of-the-art methodologies that are consistent with the U.S. Environmental Protection Agency's (EPA's) *Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities* (updated 2005). Receptors within 20 km of the facility were evaluated assuming exposures from multiple pathways, such as inhalation, incidental ingestion of soil while working or playing outdoors; ingestion of produce, consumption of food products (beef, dairy, pork, poultry, and eggs), and consumption of fish. Estimated risks were less than U.S. EPA's and Hawaii Department of Health's regulatory level of concern for such facilities, which is a noncarcinogenic hazard index of 1 and an estimated lifetime excess cancer risk of 1 in 1,000,000 to 1 in 10,000. Estimated cancer risks from the H-POWER stack emissions for all people who could be exposed to the emissions were less than 1 in 1,000,000.

When the City first started planning to expand the H-POWER facility, it wanted to ensure that such a project would not compromise human health. Accordingly, the risk assessment was updated to estimate the hypothetical risks that would result should a third boiler be added. The addition of this third boiler would increase the total operating hours. However, should a third boiler be added to the facility, the pollution control technologies associated with new boiler design would result in lower emission rates than those associated with the existing boilers. Despite the increased hours of operation, the estimated risks were still less than a noncarcinogenic hazard index of 1 and an estimated lifetime excess cancer risk of 1 in 1,000,000.

In the Draft EIS, this Screening Level Multipathway Human Health Risk Assessment will be updated to include information about the operating conditions associated with the Proposed Action and the on-going Clean Air Act retrofits for the air pollution control systems for each of the two existing RDF combustors.

5.0 CONFORMANCE TO FEDERAL, STATE, AND CITY PLANNING POLICIES

State and County land use plans, policies, and controls are established to guide development in a manner that enhances the overall environment of Hawaii, and to ensure that long-term social, environmental, and land use needs of the people of Hawaii are met. The use of the site for the Expansion will be designed to be consistent with State and County land use plans and policies which will be evaluated as part of the Environmental Review process and summarized within the Draft EIS. Reviews will include, but not be limited to, the Hawaii State Plan, State Land Use Law, City and County of Honolulu Land Use Designations and Controls and State and County Solid Waste and Energy Plans.

6.0 NECESSARY PERMITS AND APPROVALS

Table A, Potential Permits, identifies the permits and approvals that may be required (federal, state, and county).

Table A. Potential Permits

Approval/Permit	Approving Agency/Authority
Covered Source/PSD Air Permit	U.S. EPA and Department of Health (DOH)
Air Navigation Clearance	Federal Aviation Administration (FAA)
Conditional Use Permit for Construction Activities pursuant to Pubic Health Regulations	DOH
Designated Groundwater Control and Use Permit (for well sources of cooling water)	Dept. of Land & Natural Resources
Water Connection Permit	City Board of Water Supply
Well Permit	City Board of Water Supply
National Pollution Discharge Elimination System (NPDES) permit	DOH
Certificate of Compliance and Solid Waste Management Permit	DOH
Coastal Zone Management Program Consistency Review and Certification	Office of Planning
Grading Permit and Drainage Plan Approval	Dept. of Planning and Permitting
Building Permit	Dept. of Planning and Permitting
Construction Dewatering Permit	Dept. of Environmental Services

7.0 AGENCIES, ORGANIZATIONS, AND INTERESTED PARTIES CONSULTED

CHRRV and the City and County of Honolulu have consulted with and continue to consult with state and federal agencies in formulating plans for addressing the County's solid waste disposal needs. Agency consultations conducted in advance of the publication of the EIS Preparation Notice in *The Environmental Notice* are listed in Table B – Agencies Consulted.

Table B. Agencies Consulted (Pre-Assessment Consultations)*

Contact Name	Organization	Meeting/Contact Dates
FEDERAL AGENCIES		
	U.S. EPA Region 9	June 3, 2008 Carol Bohnenkamp Anita Lee
	U.S. National Park Service Air Resources Division	June 23, 2008 Don Shepherd
STATE AGENCIES		
	Hawaii Department of Health Clean Air Branch	May 1, 2008 Nolan Hirai
	Hawaii Department of Health Solid Waste Branch	May 1, 2008 Lene Ichinotsubo Janice Fujimoto

*Consultations conducted by City/County representatives, H-POWER and/or H-POWER subcontractors.

REFERENCES

Belt Collins & Associates, Honolulu, Hawaii – 1983 REVISED Environmental Impact Statement for the Proposed Solid Waste Processing Resource Recovery Facility.

C.E. Maguire, Inc., Providence, Rhode Island – January, 1986, Final Geotechnical Report for the Proposed Honolulu Resource Recovery Venture, Campbell Industrial Park Site, Honolulu, Hawaii.

U.S.G.S. (1998) Topographic Quadrangle (scanned)

U.S.G.S. (undated) Aerial Photograph

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Appendix H – DEIS Comment Letters and Responses

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Shad Kane

August 11, 2008

Covanta Honolulu Resource Recovery Venture
91-174 Hanua Street
Kapolei, HI 96707

Attention: S. Samuel Joshi

Dear Mr. Joshi,

Thank you for the opportunity to comment. This is not just an issue of mitigating the effects of the proposed expansion of the H-POWER Energy-from-Waste Facility but also the City's compliance with its mandated responsibilities as indicated in the covenants and MOA attached to the deed in the City's purchase of the 23 acre property.

The property to the proposed expansion is a raised fossil reef characterized by large coralline outcrops and sinkholes which are formed by dissolution of the limestone as fresh water passes through its porous structure. Almost no true soils are found. Small amounts of organic matter accumulate in cracks and crevasses in the coral but most of the vegetation grows out of seemingly solid coral.

The subject property is a 23-acre parcel on the makai side of the existing H-POWER facility. It was purchased by the City in October of 2002 to serve as the site of the City's planned Alternative Technology Park. When purchased it had 2 fenced in enclosures in the middle of the parcel. In October of 2003 the City fenced in the entire parcel and placed a gate fronting Kaomi Loop. These 2 enclosed plant sanctuaries have the last remaining natural plant populations of the Endangered Species the Achyranthes Splendens Rotunda surviving in their natural habitat. The entire 23-acre parcel had been cleared and grubbed by the previous landowner with the exception of the areas within the plant sanctuaries. Attached to the deed of purchase were covenants defined in a Mitigation Plan for the Achyranthes Splendens Rotunda. It is these plant sanctuaries that I raise concerns regarding the proposed expansion.

The common name of this plant is the Ewa Hinahina. Its scientific name is the Achyranthes splendens var.rotundata. It is of the Amarantaceae (Kulu`i family). The Achyranthes is a low coastal shrub growing to an average height of 3 feet. It is an extremely salt and drought tolerant plant. It has silvery leaves and spiky flowers. Its silvery leaves have what seem to be traces of silvery hair that may be used to collect water on humid days. It does extremely well growing in close proximity to open sinkholes. I have

92-1309 Uahanai Street, Kapolei, Hawai'i 96707 808-672-4765 H 808-429-7175 C kiha@hawaii.rr.com

noticed beads of water on its leaves on hot humid days. I have also noticed a distinct rise in the humidity as one approaches healthy plants growing in close proximity to sinkholes. The Achyranthes Splenden Rotunda grows very well from seeds and cuttings. It is on the Federal list of endangered plants and thus requires the proper permits to be grown commercially. Such permits can be acquired from the State of Hawaii's Department of Forestry and Wildlife.

Hawaii Revised Statutes Chapter 195D is the State law regarding the treatment and conservation of the endangered species plants such as the Achyranthes Splenden Rotunda. It was drafted in cooperation with the federal Endangered Species Act of 1973 which provides federal protection for plants listed as endangered on the U. S. Endangered Species Plant List.

The Endangered Species Act, which was first passed in 1973, is a federal statute designated to protect plant and animal resources from adverse effects due to developmental projects, and requires consultation with wildlife authorities before committing resources to certain types of projects. **THE ACT PROVIDES FOR THE DESIGNATION AND PROTECTION OF INVERTEBRATES, WILDLIFE, FISH, AND PLANT SPECIES THAT ARE IN DANGER OF BECOMING EXTINCT THROUGHOUT ALL OR A SIGNIFICANT PORTION OF THEIR RANGE AND CONSERVES THE ECOSYSTEM ON WHICH SUCH SPECIES DEPEND**. The Act also makes it illegal for any individual to kill, collect, remove, harass, import, or export an endangered or threatened species without a permit from the Secretary of the Department of the Interior.

The proposed expansion of the H-POWER Energy-from-Waste Facility will adversely affect the endangered Achyranthes Splendon and requires consultation. The proposed expansion however is needed in the interest of solving Hawaii's waste problems and reducing the amount of trash going to landfills. As important, is the survival of this endangered species. It depends on the integrity of the geology of the region. This plant depends on the water that passes beneath it in the porous coral limestone. Any excavation or discharges into the coral substrata will adversely affect these federally protected plants.

Negligence will also adversely affect the survival of these protected plants. With the purchase of this 23 acre property the City was informed and acknowledged the existence of these plant sanctuaries and their responsibilities in the required care and maintenance of the sanctuaries.

I submitted a report to the City on November 24, 2004 referred to as the "Preliminary Report to the H-POWER Achyranthes Splendon Rotunda Habitat Conservation Plan". Attached to this report is the Mitigation Plan agreed upon by the City in the purchase of this property. The last page of this report are the recommendations to the City in an effort to fulfill their mandate:

RECOMMENDATIONS

It is critically important that the deteriorating condition of both plant sanctuaries including the C. Brewer site be stabilized. Following is a list of recommendations that need to be followed:

1. Hire contractor to remove alien vegetation by cutting. Most kiawe trees need to be removed completely with the exception of a few trees that would provide some shade. These few trees will be marked after consultation with the State of Hawaii Botanist and U. S. Fish and Wildlife. No heavy equipment. Hand removal per Mitigation Plan.

2. Hire contractor to remove debris and coral stones from sinkholes per Mitigation Plan. The open sinkholes is important to the survival of the Achyranthes Splenden Rotunda. It has been determined and documented that those parent plants growing in close proximity to sinkholes are doing better than those adjacent to sinkholes filled in with trash and coral stones. These plants survive the long hot seasons from the condensation and humidity within the moist sinkholes.

3. Hire contractor to cut back alien shrubs 5' back from fences per Mitigation Plan. Clear a 5' path on both sides of the fence line.

4. Mulch or remove all green waste.

5. Shad Kane to be notified and present when contractor is on site to monitor cleanup effort.

The last maintenance, care and thinning of invasive species from the sanctuary was done in 2004 as part of the preliminary report. Since 2004 a substantial number of the federally protected Achyranthes Splendon Rotunda in the H-POWER plant sanctuary has been lost due to neglect.

As part of the Mitigation Plan for the Proposed Expansion of the H-POWER Energy-from-Waste Facility I highly suggest that these recommendations as part of the 2004 report be integrated into your plan and Environmental Impact Statement.

Mahalo a me Aloha nō,

Shad Kane
Cultural Consultant

cc: Vickie Caraway, State Botanist
Division of Forestry and Wildlife

James Kwon, Botanist
U. S. Fish and Wildlife

Frank Doyle, Chief of Refuse
City and County of Honolulu
Environmental Services Department

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. Shad Kane
92-1309 Uahanai Street
Kapolei, Hawaii 96707

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Kane,

Thank you for your letter dated August 11, 2008, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *It is critically important that the deteriorating condition of both plant sanctuaries including the C. Brewer site be stabilized. Following is a list of recommendations that need to be followed:*

1. Hire contractor to remove alien vegetation by cutting. Most kiawe trees need to be removed completely with the exception of a few trees that would provide some shade. These few trees will be marked after consultation with the State of Hawaii Botanist and U. S. Fish and Wildlife. No heavy equipment. Hand removal per Mitigation Plan.
2. Hire contractor to remove debris and coral stones from sinkholes per Mitigation Plan. The open sinkholes is important to the survival of the Achyranthes Splenden Rotunda. It has been determined and documented that those parent plants growing in close proximity to sinkholes are doing better than those adjacent to sinkholes filled in with trash and coral stones. These plants survive the long hot seasons from the condensation and humidity within the moist sinkholes.
3. Hire contractor to cut back alien shrubs 5' back from fences per Mitigation Plan_ Clear a 5' path on both sides of the fence line.
4. Mulch or remove all green waste.
5. Shad Kane to be notified and present when contractor is on site to monitor cleanup effort.

Response 1: The City and County of Honolulu have taken steps to address your recommendations and are in the process of procuring services to stabilize the conditions at both plant sanctuaries and at the C. Brewer site. Specifically, the City has prepared a bid package to secure a contractor to perform the above-listed activities. The City is also requesting that you be present to monitor the cleanup effort.

Comment 2: *As part of the Mitigation Plan for the Proposed Expansion of the H-POWER Energy-from-Waste Facility I highly suggest that these recommendations as part of the 2004 report be integrated into your plan and Environmental Impact Statement.*

Response 2: The Final EIS will note your recommendations and the City's plans to protect the plant sanctuaries. Additionally, your comment letter and our subsequent response will be incorporated into the Final EIS.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR
ABBEY SETH MAYER
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DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

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Fax: (808) 587-2824

Ref. No. P-12319

November 17, 2008

Russell Okoji, Ph.D.
AMEC Earth & Environmental
Airport Industrial Center
3375 Koapaka Street, Suite F251
Honolulu, Hawaii 96819

Dear Dr. Okoji:

Subject: Hawaii Coastal Zone Management (CZM) Program Federal Consistency Requirements for the HPOWER Facility Expansion, Kapolei, Oahu, Hawaii

This responds to your letter dated November 5, 2008, requesting a determination whether a CZM federal consistency review is required for the expansion of the HPOWER facility, involving the addition of a third combustor unit. According to the information you provided, the project does not involve a federal agency activity, does not require a federal license or permit that is subject to consistency review by the Hawaii CZM Program, and will not be receiving any federal funds from sources that require CZM review. On this basis, we confirm that a CZM federal consistency review is not required for this project.

This determination is not an endorsement of the project nor does it convey approval with any other regulations administered by any State or County agency. Thank you for your cooperation in complying with Hawaii's CZM Program. If you have any questions, please call John Nakagawa of our CZM Program at 587-2878.

Sincerely,

Abbey Seth Mayer
Director

c: Department of Planning and Permitting, City and County of Honolulu

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Covanta Honolulu Resource Recovery Venture
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40 Lane Road
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Telephone: 973-882-2771
Facsimile: 973-485-7438

COVANTA
ENERGY

5/6/2009

Ms. Abbey Seth Mayer
Director
Department of Business, Economic Development & Tourism
Office of Planning
P.O. Box 2359
Honolulu, HI 96804

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Ms. Mayer,

Thank you for your letter dated November 17, 2008, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review.

We understand the Department of Business, Economic Development & Tourism confirms that the proposed Expansion does not require a Coastal Zone Management federal consistency review. Should you have any questions in the future, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843

February 5, 2009

TO: STEPHEN LANGHAM
DEPARTMENT OF ENVIRONMENTAL SERVICES
REFUSE DIVISION, H-POWER

FROM: KEITH S. SHIDA, PROGRAM ADMINISTRATOR
CUSTOMER CARE DIVISION K. Shida

SUBJECT: LETTER DATED JANUARY 27, 2009 REGARDING THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED EXPANSION OF THE H-POWER ENERGY-FROM-WASTE FACILITY
TMK: 9-1-026:030

Thank you for the opportunity to comment on the proposed expansion and improvements at the H-Power site.

The comments in our letter dated August 12, 2008, which is included in the document, are still applicable.

If you have any questions, please contact Robert Chun at 748-5443.

cc: Mr. Timothy Steinberger, Department of Environmental Services
Dr. Russell Okoji, AMEC Earth & Environmental, Inc.
Office of Environmental Quality Control
S. Samuel Joshi, Covanta Energy Corporation

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BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843

August 12, 2008

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AUG 14 2008
CHRRV

Mr. S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Honolulu Resource Recovery Venture
91-174 Hanua Street
Kapolei, Hawaii 96707

Dear Mr. Joshi:

Subject: Your Letter Dated August 5, 2008 Regarding Environmental Impact Statement for the Proposed Expansion of the H-POWER Energy-from-Waste Facility, TMK: 9-1-26:30

Thank you for the opportunity to comment on the proposed expansion improvements at the H-POWER site.

The existing water system is presently adequate to accommodate the proposed improvements. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

The project is subject to Board of Water Supply Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the building permit.

The on-site fire protection requirement should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Robert Chun at 748-5443.

Very truly yours,

K. Shida

KEITH S. SHIDA
Program Administrator
Customer Care Division

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. Keith S. Shida
Program Administrator
Customer Care Division
Board of Water Supply
City and County of Honolulu
630 South Beretania Street
Honolulu, Hawaii 96843

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Shida,

Thank you for your letters dated August 12, 2008 and February 5, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *The existing water system is presently adequate to accommodate the proposed improvements. However, please be advised that this information is based upon current data and, therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of your building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.*

Response 1: Comment noted.

Comment 2: *When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.*

Response 2: Comment noted.

Comment 3: *The project is subject to Board of Water Supply Cross-Connection Control and Backflow Prevention requirements prior to the issuance of the building permit.*

Response 3: Comment noted. Building plans will comply with Board of Water Supply Cross-Connection Control and Backflow Prevention requirements.

Comment 4: *The on-site fire protection requirement should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.*

Response 4: The Honolulu Fire Department has been consulted as part of the environmental review process. Comments received from the Honolulu Fire Department will be addressed.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

LINDA LINGLE
GOVERNOR

RUSS K. SAITO
COMPTROLLER

BARBARA A. ANNIS
DEPUTY COMPTROLLER

(P)1044.9

STATE OF HAWAII
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES
P.O. BOX 119, HONOLULU, HAWAII 96810

FEB - 5 2009

Mr. Stephen Langham, P.E.
Department of Environmental Services
City and County of Honolulu
Refuse Division, H-POWER
91-174 Hanua Street
Kapolei, Hawaii 96707

Dear Mr. Langham:

Subject: H-Power Expansion Project
Draft Environmental Impact Statement (DEIS)
TMK [1] 9-1-026:030, 033, 034

Thank you for your DEIS dated January, 2009. This project does not directly affect the Department of Accounting and General Services' projects or existing facilities, and we have no comments to offer at this time.

If you have any questions, please have your staff call Mr. Bruce Bennett of the Planning Branch at 586-0491.

Sincerely,

ERNEST Y. W. LAU
Public Works Administrator

BB:mo
c: Ms. Katherine Kealoha, DOH-OEQC
Mr. Eric S. Takamura, Director, CCH Department of Environmental Services
~~Dr.~~ Russell Okoji, AMEC Earth & Environmental, Inc.

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Ernest Y.W. Lau
Public Works Administrator
State of Hawaii
Department of Accounting and General Services
P.O. Box 119
Honolulu, Hawaii 96810

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Lau:

Thank you for your letter dated February 5, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review.

We understand that you find the proposed Expansion to have no direct effect on Department of Accounting and General Services' projects or existing facilities, and that you have no comments to offer at this time. Should you have any questions in the future, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

KAPOLEI HALE • 1000 ULUOHIA STREET, SUITE 309 • KAPOLEI, HAWAII 96707
TELEPHONE: (808) 768-3003 • FAX: (808) 768-7053 • INTERNET: www.honolulu.gov

MUFI HANNEMANN
MAYOR

LESTER K.C. CHANG
DIRECTOR

GAIL Y. HARAGUCHI
DEPUTY DIRECTOR

February 5, 2009

TO: TIMOTHY E. STEINBERGER, ACTING DIRECTOR
DEPARTMENT OF ENVIRONMENTAL SERVICES

FROM: LESTER K. C. CHANG, DIRECTOR
DEPARTMENT OF PARKS AND RECREATION

SUBJECT: DRAFT ENVIRONMENTAL IMPACT STATEMENT
PROPOSED 3RD BOILER EXPANSION OF H-POWER ENERGY-FROM-WASTE FACILITY, KAPOLEI, HAWAII

Thank you for the opportunity to review and comment on the subject Draft Environmental Impact Statement.

The Department of Parks and Recreation has no comment as the proposed project will not impact the programs or facilities of the department. You may remove us as a consulted party to the balance of the EIS process.

Should you have any questions please contact Mr. John Reid, Planner, at 768-3017.

Sincerely,

LESTER K. C. CHANG
Director

LKCC:jr
(297158)

cc: Stephen Langham, Department of Environmental Services
Dr. Russell Okoji, AMEC Earth & Environmental, Inc
S. Samuel Joshi PE, Covanta Energy Corporation
Office of Environmental Quality Control

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Lester K.C. Chang
Director
City and County of Honolulu
Department of Parks and Recreation
1000 Uluohia Street, Suite 309
Kapolei, Hawaii 96707

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Chang:

Thank you for your letter dated February 5, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review.

We understand the Department of Parks and Recreation finds that the proposed Expansion will not impact the programs or facilities of the department, and that you have no comments to offer at this time. Should you have any questions in the future, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96613
Phone: (808) 768-8480 • Fax: (808) 768-4567
Web site: www.honolulu.gov

MUFI HANNEMANN
MAYOR

RUSSELL H. TAKARA, P.E.
ACTING DIRECTOR

COLLINS D. LAM, P E
DEPUTY DIRECTOR

February 12, 2009

Mr. S. Samuel Joshi, P.E., QEP
Manager, Environmental Engineering
Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004

Dear Mr. Joshi:

Subject: Draft Environmental Impact Statement
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Thank you for giving us the opportunity to review the above Draft Environmental Impact Statement.

The Department of Design and Construction has no comments to offer at this time.

Very truly yours,

Collins D. Lam

Russell H. Takara, P.E.
Acting Director

RHT:lt (297132)

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Russell H. Takara, P.E.
Acting Director
City and County of Honolulu
Department of Design and Construction
650 South King Street, 11th Floor
Honolulu, Hawaii 96813

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Takara:

Thank you for your letter dated February 12, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review.

We understand the Department of Design and Construction has no comments to offer at this time. Should you have any questions in the future, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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POLICE DEPARTMENT

CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET · HONOLULU, HAWAII 96813
TELEPHONE: (808) 529-3111 · INTERNET: www.honolulupd.org

MUFI HANNEMANN
MAYOR

BOISSE P. CORREA
CHIEF

PAUL D. PUTZULU
KARL A. GODSEY
DEPUTY CHIEFS

OUR REFERENCE BS-DK

February 13, 2009

Mr. S. Samuel Joshi, P.E., Q.E.P.
Manager, Environmental Engineering
Covanta Energy Corporation
40 Lane Road
Fairfield, New Jersey 07004

Dear Mr. Joshi:

This is in response to your letter of January 27, 2009, requesting comments on a Draft Environmental Impact Statement for the H-Power Expansion project in Kapolei.

This project should have no significant impact on the facilities or operations of the Honolulu Police Department.

If there are any questions, please call Major Michael Moses of District 8 at 692-4253 or Mr. Brandon Stone of the Executive Bureau at 529-3644.

Sincerely,

BOISSE P. CORREA
Chief of Police

By [signature]
DEBORA A. TANDAL
Assistant Chief of Police
Support Services Bureau

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Boisse P. Correa
Chief of Police
Police Department
City and County of Honolulu
801 South Beretania Street
Honolulu, Hawaii 98813

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Chief Correa:

Thank you for your letter dated February 13, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review.

We understand that the Honolulu Police Department finds the proposed Expansion to have no significant impact on the facilities or operations of the department. Should you have any questions in the future, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT
P.O. BOX 621
HONOLULU, HAWAII 96809

February 19, 2009

REF: H-Power Expansion.DEIS

Environmental Services, Refuse Division, H-POWER
91-174 Hanua Street
Kapolei, Hawaii 96707
Attn: Mr. Stephen Langham

Dear Mr. Langham:

SUBJECT: Draft Environmental Impact Statement
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

FILE NO.: NA
TMK NO.: 9-1-026:030

Thank you for the opportunity to review the subject document. The Commission on Water Resource Management (CWRM) is the agency responsible for administering the State Water Code (Code). Under the Code, all waters of the State are held in trust for the benefit of the citizens of the State, therefore, all water use is subject to legally protected water rights. CWRM strongly promotes the efficient use of Hawaii's water resources through conservation measures and appropriate resource management. For more information, please refer to the State Water Code, Chapter 174C, Hawaii Revised Statutes, and Hawaii Administrative Rules, Chapters 13-167 to 13-171. These documents are available via the Internet at *http://www.hawaii.gov/dlnr/cwrm*.

Our comments related to water resources are checked off below.

☐ 1. We recommend coordination with the county to incorporate this project into the county's Water Use and Development Plan. Please contact the respective Planning Department and/or Department of Water Supply for further information.

☐ 2. We recommend coordination with the Engineering Division of the State Department of Land and Natural Resources to incorporate this project into the State Water Projects Plan.

☐ 3. We recommend coordination with the Hawaii Department of Agriculture (HDOA) to incorporate the reclassification of agricultural zoned land and the redistribution of agricultural resources into the State's Agricultural Water Use and Development Plan (AWUDP). Please contact the HDOA for more information.

☐ 4. We recommend that water efficient fixtures be installed and water efficient practices implemented throughout the development to reduce the increased demand on the area's freshwater resources. Reducing the water usage of a home or building may earn credit towards Leadership in Energy and Environmental Design (LEED) certification. More information on LEED certification is available at http://www.usgbc.org/leed. A listing of fixtures certified by the EPA as having high water efficiency can be found at http://www.epa.gov/watersense/pp/index.htm.

☒ 5. We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events. Stormwater management BMPs may earn credit toward LEED certification. More information on stormwater BMPs can be found at http://hawaii.gov/dbedt/czm/initiative/lid.php.

☒ 6. We recommend the use of alternative water sources, wherever practicable.

☒ 7. There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.

Permits required by CWRM:
Additional information and forms are available at *www.hawaii.gov/dlnr/cwrm/forms.htm*.

☐ 8. The proposed water supply source for the project is located in a designated water management area, and a Water Use Permit is required prior to use of water.

☐ 9. A Well Construction Permit(s) is (are) required before the commencement of any well construction work.

☐ 10. A Pump Installation Permit(s) is (are) required before ground water is developed as a source of supply for the project.

☐ 11. There is (are) well(s) located on or adjacent to this project. If wells are not planned to be used and will be affected by any new construction, they must be properly abandoned and sealed. A permit for well abandonment must be obtained.

☐ 12. Ground-water withdrawals from this project may affect streamflows, which may require an instream flow standard amendment.

☐ 13. A Stream Channel Alteration Permit(s) is (are) required before any alteration can be made to the bed and/or banks of a stream channel.

☐ 14. A Stream Diversion Works Permit(s) is (are) required before any stream diversion works is constructed or altered.

☐ 15. A Petition to Amend the Interim Instream Flow Standard is required for any new or expanded diversion(s) of surface water.

☐ 16. The planned source of water for this project has not been identified in this report. Therefore, we cannot determine what permits or petitions are required from our office, or whether there are potential impacts to water resources.

☒ OTHER:
We would like to update the information on pages 4-46 and 4-53 of the report regarding the proposed modification of the water use permit for the two onsite withdrawal wells (Well Nos. 1806-09 & 10). On December 17, 2008, CWRM approved the water use permit modification application to allow up to 3.34 mgd (based on a twelve-month moving average) to be withdrawn from the two wells for industrial use at the H-Power facility. The modified permit still contains the provision that the CWRM may revoke the permit if an alternative source of water becomes available.

There appears to be a typographical error in the first sentence of Section 7-2-4 (page 7-4) in the citation of the State Water Code – should it be "Chapter HRS 174C"?

If there are any questions, please contact Lenore Ohye at 587-0216.

Sincerely,

Ken C. Kawahara

KEN C. KAWAHARA, P.E.
Deputy Director

LO:sd

cc: Office of Environmental Quality Control
City and County of Honolulu, Department of Environmental Services
✓AMEC Earth & Environmental, Inc.

Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Ken C. Kawahara, P.E.
Deputy Director
State of Hawaii
Department of Land and Natural Resources
Commission on Water Resources Management
P.O. Box 621
Honolulu, Hawaii 96809

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Kawahara:

Thank you for your letter dated February 19, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments, which are numbered in accordance with your comment check list.

Comment 5: *We recommend the use of best management practices (BMP) for stormwater management to minimize the impact of the project to the existing area's hydrology while maintaining on-site infiltration and preventing polluted runoff from storm events.*

Response 5: BMPs will be the main resource to ensure the prevention of storm water pollutants entering storm water systems and state waters. Covanta Honolulu Resource Recovery Venture is also in the process of complying with all NPDES general permit coverages, which include the facility's Storm Water Pollution Control Plan and Storm Water Monitoring Plan and a site-specific Construction Storm Water Pollution Control Plan. These plans outline all BMPs and maintenance/monitoring programs that will be put into place to ensure effectiveness and achievement of expected performance standards.

Comment 6: *We recommend the use of alternative water sources, wherever practical.*

Response 6: Alternative water sources were discussed during application of the water use permit through DLNR. If alternative water resources become available, CHRRV will work with the CWRM to re-evaluate the potential for alternative water sources.

Comment 7: *There may be the potential for ground or surface water degradation/contamination and recommend that approvals for this project be conditioned upon a review by the State Department of Health and the developer's acceptance of any resulting requirements related to water quality.*

Response 7: The State Department of Health will be involved with this project throughout the review process. Permits from the Department of Health's Clean Air Branch, Clean Water Branch, Safe Drinking Water Branch, and Solid and Hazardous Waste Branch will all be completed prior to any construction activities. The Department of Heath was also provided with the opportunity to comment on all sections of the DEIS.

Comment 17: *We would like to update the information on pages 4-46 and 4-53 of the report regarding the proposed modification of the water use permit for the two onsite withdrawal wells (Well Nos. 1806-09 & 10). On December 17, 2008, CWRM approved the water use permit modification application to allow up to 3.34 mgd (based on a twelve-month moving average) to be withdrawn from the two wells for industrial use at the H-Power facility. The modified permit still contains the provision that the CWRM may revoke the permit if an alternative source of water becomes available.*

There appears to be a typographical error in the first sentence of Section 7-2-4 (page 7-4) in the citation of the State Water Code - should it be "Chapter HRS 174C"?

Response 17: We will update and correct typographical errors as noted in this comment.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 523-4730 • Internet: www.honolulu.gov

MUFI HANNEMANN
MAYOR

WAYNE Y. YOSHIOKA
ACTING DIRECTOR

SHARON ANN THOM
DEPUTY DIRECTOR

TP1/09-297239R

February 23, 2009

Mr. Stephen Langham
Environmental Services, Refuse Division,
H-POWER
91-174 Hanua Street
Kapolei, Hawaii 96707

Dear Mr. Langham:

Subject: Draft Environmental Impact Statement (DEIS); Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

This is in response to your letter of January 27, 2009, requesting our review of the DEIS for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility. We offer the following comments:

1. In the Final EIS, the ownership of the roadways should be identified.

2. Figure 5.2-1 should include the latest roadways in the area.

Should you have any questions on the matter, please contact Mr. Brian Suzuki at 768-8349.

Very truly yours,

WAYNE Y. YOSHIOKA
Acting Director

cc: Tim E. Steinberger, P.E., Acting Director
Department of Environmental Services

√Dr. Russell Okoji
AMEC Earth & Environmental, Inc.

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Wayne Y. Yoshioka
Acting Director
Department of Transportation Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, Hawaii 96813

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Yoshioka:

Thank you for your letter dated February 23, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *In the Final EIS, the ownership of the roadways should be identified.*

Response 1: In the Final EIS, additional information will be added regarding ownership of the roads on Figure 5.2-1 – H-POWER Site and Surrounding Roadway System.

Comment 2: *Figure 5.2-1 should include the latest roadways in the area.*

Response 2: Figure 5.2-1 – H-POWER Site and Surrounding Roadway System includes all major roadways included in the traffic study. It will be updated in the Final EIS to include the latest roadways in the area.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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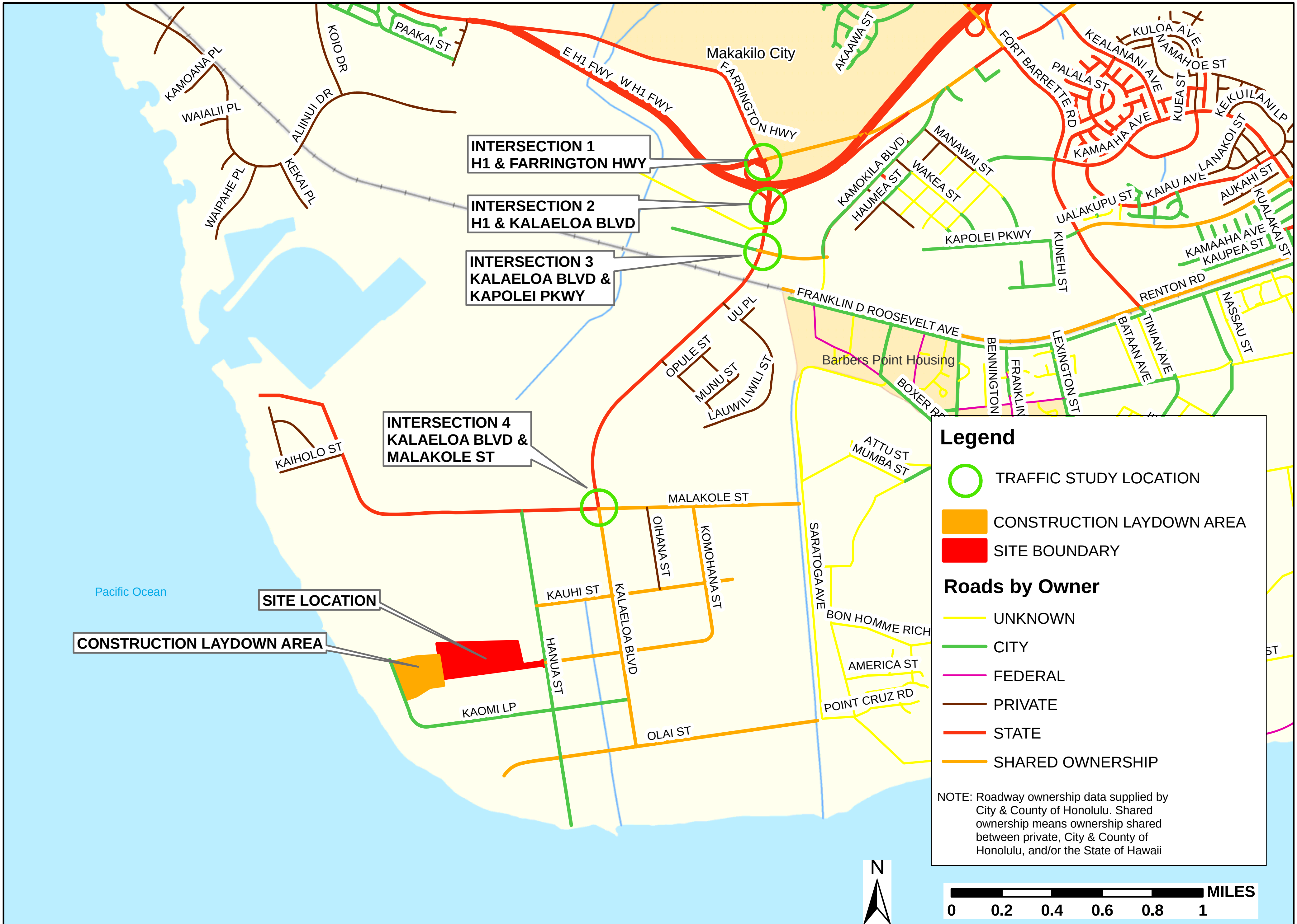

H-POWER SITE AND SURROUNDING ROADWAY SYSTEM

FIGURE 5.2-1

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LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

February 26, 2009

Environmental Services, Refuse Division, H-Power
91-174 Hanua Street
Kapolei, Hawaii 96707

Attention: Mr. Stephen Langham

Ladies and Gentlemen:

Subject: Draft Environmental Impact Statement for H-Power Expansion Project

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comment.

Other than the comments from Engineering Division, the Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Charlene E. Unoki

for Morris M. Atta
Administrator

Cc: OEQC
Dept of Environmental Services
AMEC Earth & Environmental, Inc.

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

January 30, 2009

MEMORANDUM

TO: **DLNR Agencies:**
_x_ Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
_x_ Engineering Division
__Div. of Forestry & Wildlife
__Div. of State Parks
__Commission on Water Resource Management
_Office of Conservation & Coastal Lands
_x_ Land Division –Keith/Gavin

FROM: for Morris M. Atta [signature]
SUBJECT: Draft environmental impact statement for H-Power Expansion Project
LOCATION: Ewa, Oahu, TMK: (1) 9-1-26:30, 33, 34
APPLICANT: Department of Environmental Services

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by February 25, 2009.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(X) Comments are attached.

Signed: [signature]
Date: 2/4/09

-DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/MorrisAtta
Ref.:DEISHPowerExpansion
Oahu.659

COMMENTS

( ) We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone ___.

(X) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone D. The Flood Insurance Program does not have any regulations for developments within Flood Zone D.

( ) Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is ___.

( ) Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- ( ) Mr. Robert Sumitomo at (808) 768-8097 or Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.
- ( ) Mr. Kelly Gomes at (808) 961-8327 (Hilo) or Mr. Kiran Emler at (808) 327-3530 (Kona) of the County of Hawaii, Department of Public Works.
- ( ) Mr. Francis Cerizo at (808) 270-7771 of the County of Maui, Department of Planning.
- ( ) Mr. Mario Antonio at (808) 241-6620 of the County of Kauai, Department of Public Works.

( ) The applicant should include water demands and infrastructure required to meet project needs. Please note that projects within State lands requiring water service from the Honolulu Board of Water Supply system will be required to pay a resource development charge, in addition to Water Facilities Charges for transmission and daily storage.

( ) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.

( ) Additional Comments: ______________________________

( ) Other: ______________________________

Should you have any questions, please call Ms. Suzie Agraan of the Planning Branch at 587-0258.

Signed: Eric T. Hirano
ERIC T. HIRANO, CHIEF ENGINEER

Date: 2/4/09

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Morris M. Atta
Administrator
State of Hawaii
Department of Land and Natural Resources
Land Division
Post Office Box 621
Honolulu, Hawaii 96809

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Atta:

Thank you for your letter dated February 26, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to comments received from the Engineering Division of the Department of Land and Natural Resources.

Comment 1: *Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone D. The Flood Insurance Program does not have any regulations for developments within Flood Zone D.*

Response 1: This will be clarified in the Final EIS. Section 4.3.3.2 of the EIS will be updated to include information that the project site is located in Flood Zone D.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

March 3, 2009

Environmental Services, Refuse Division, H-Power
91-174 Hanua Street
Kapolei, Hawaii 96707

Attention: Mr. Stephen Langham

Ladies and Gentlemen:

Subject: Draft Environmental Impact Statement for H-Power Expansion Project

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR), Land Division distributed or made available a copy of your report pertaining to the subject matter to Division of Aquatic Resources for their review and comment.

The Department of Land and Natural Resources has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Charlene E. Unoki

for Morris M. Atta
Administrator

Cc: OEQC
Dept of Environmental Services
AMEC Earth & Environmental, Inc.

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

January 30, 2009

MEMORANDUM

TO: **DLNR Agencies:**
x Div. of Aquatic Resources
__Div. of Boating & Ocean Recreation
x Engineering Division
__Div. of Forestry & Wildlife
__Div. of State Parks
__Commission on Water Resource Management
_Office of Conservation & Coastal Lands
x Land Division –Keith/Gavin

FROM: for Morris M. Atta
SUBJECT: Draft environmental impact statement for H-Power Expansion Project
LOCATION: Ewa, Oahu, TMK: (1) 9-1-26:30, 33, 34
APPLICANT: Department of Environmental Services

Transmitted for your review and comment on the above referenced document. We would appreciate your comments on this document. Please submit any comments by February 25, 2009.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact my office at 587-0433. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(X) Comments are attached.

Signed:
Date: 3/2/09

STATE OF HAWAII
Department of Land and Natural Resources
DIVISION OF AQUATIC RESOURCES

MEMORANDUM

TO: Dan A. Polhemus, Administrator
FROM: Glenn R. Higashi, Aquatic Biologist GRH
SUBJECT: Draft Environmental Impact Statement for H-Power Expansion Project
Comments Morris M. Atta
Requested By: Land Division
Date of Request: 1/30/09 Date Received: 1/30/09

Summary of Project

Title: **Draft Environmental Impact Statement for H-Power Expansion Project**
Project By: **Department of Environmental Services**
City and County of Honolulu
Location: **Ewa, Oahu TMK: (1) 9-1-26:30, 33, 34**

Brief Description:

The City and County of Honolulu (City) and Covanta Honolulu Resource Recovery Venture (CHRRV) are proposing an Expansion of the existing Honolulu Program of Waste Energy Recovery facility (H-POWER or the Facility) located at James Campbell Industrial Park (JCIP) in Kapolei. H-POWER has been in operation for over 18 years, providing a reliable, cost effective solid waste solution and source of renewable electric power to the City and County of Honolulu. Over that time period, H-POWER has converted over 10 million tons of refuse into over 5,000 million kilowatt-hours of electric power and saved the importation of over 10 million barrels of oil.

The proposed Expansion consists of the addition to the Facility of a third combustor unit. The new unit will be a 900 ton per day (TPD) Mass Burn waterwall municipal waste combustor (MWC), its associated air pollution control equipment, and all the equipment required to tie the addition into the existing H-POWER facility. It includes modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment, and a new turbine generator which will provide an additional source of renewable energy to the City and County of Honolulu. The Expansion does not include any changes to the two existing Refuse Derived Fuel (RDF) combustors.

The Expansion is needed to address the solid waste disposal needs of the island of Oahu by increasing the disposal capacity from 610,000 tons to 910,000 tons of Municipal Solid Waste (MSW) per year. As a result the additional waste disposal capacity, the City will benefit from increased energy production and recovered metals recycling and reductions in the land filling of municipal solid waste in Honolulu. While the Expansion and increased recycling will not eliminate the need for landfill disposal of MSW, it will extend the life of the Waimanalo Gulch Sanitary Landfill and reduce the capacity needs of landfill yet to be developed.

The H-POWER Expansion is proposed to occur on the existing H-POWER parcel TMK: 9-1-026:030 which consists of 24,635 acres of industrially zoned and developed property situated within the JCIP in Kapolei along the southwest coast on Oahu. There are no perennial or intermittent streams, tidal channels, or springs located on or within close proximity of the H-POWER Expansion site.

Comments:

Based on the DEIS, populations of the native Hawaiian red shrimp (ʻōpaeʻula), *Halocaridinia rubra,* have been observed in sinkholes in the plant preservation enclosures of parcels 33 and 34 of this proposed project. The sinkholes along this coastline are known to support populations of this Hawaiian red shrimp. The Division therefore, strongly recommends that measures be taken to minimize impact to the aquatic habitat of this species, especially if the underground injection wells for the non-contact coolant water are in close proximity to this habitat.

Other than that, the proposed H-POWER Expansion is not expected to have any significant impact on the aquatic resource values in this area. However, mitigative measures should be implemented during the construction of the facility to minimize the potential for erosion, siltation and pollution of the aquatic environment along the coast.

Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Morris M. Atta
Administrator
State of Hawaii
Department of Land and Natural Resources
Land Division
Post Office Box 621
Honolulu, Hawaii 96809

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Atta:

Thank you for your letter dated March 3, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to comments received from the Aquatic Resources Division of the Department of Land and Natural Resources.

Comment 1: *Based on the DEIS, populations of the native Hawaiian red shrimp (‘ōpae‘ula), Halocaridinia rubra, have been observed in sinkholes in the plant preservation enclosures of parcels 33 and 34 of this proposed project. The sinkholes along this coastline are known to support populations of this Hawaiian red shrimp. The Division therefore, strongly recommends that measures be taken to minimize impact to the aquatic habitat of this species, especially if the underground injection wells for the non-contact coolant water are in close proximity to this habitat.*

Response 1: The native Hawaiian red shrimp noted in the DEIS, if present, would be in the sinkholes within the plant enclosures on the construction laydown parcels. These areas will not be affected by the injection wells located on the facility. The injection wells inject water drawn from the same aquifer system and have been in operation for almost 20 years. The plant preservation enclosures on the laydown parcels will also be adequately protected from all aboveground operations by a fence and an additional buffer zone to be put in place during all construction activities.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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HONOLULU FIRE DEPARTMENT

CITY AND COUNTY OF HONOLULU

636 South Street
Honolulu, Hawaii 96813-5007
Phone: 808-723-7139 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd

MUFI HANNEMANN
MAYOR

KENNETH G. SILVA
FIRE CHIEF

ALVIN K. TOMITA
DEPUTY FIRE CHIEF

March 3, 2009

Mr. S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation
40 Lane Road
Fairfield, New Jersey 07004

Dear Mr. Joshi:

Subject: Draft Environmental Impact Statement
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility
Kapolei, Hawaii

In response to your letter dated January 27, 2009, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) reviewed the material provided and requires that the following be complied with:

1. Provide a fire apparatus access road for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45 720 mm) from a fire apparatus access road as measured by an approved route around the exterior of the building or facility. (1997 Uniform Fire Code, Section 902.2.1.)

2. Provide a water supply, approved by the county, capable of supplying the required fire flow for fire protection to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed or moved into or within the county.

   On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. (1997 Uniform Fire Code, Section 903.2, as amended.)

3. Submit civil drawings to the HFD for review and approval.

Should you have any questions, please call Battalion Chief Socrates Bratakos of our Fire Prevention Bureau at 808-723-7151.

Sincerely,

KENNETH G. SILVA
Fire Chief

KGS/SY:bh

Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Kenneth G. Silva
Fire Chief
Honolulu Fire Department
City and County of Honolulu
636 South Street
Honolulu, Hawaii 96813-5007

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Silva:

Thank you for your letter dated March 3, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *Provide a fire apparatus access road for every facility, building, or portion of a building hereafter constructed or moved into or within the jurisdiction when any portion of the facility or any portion of an exterior wall of the first story of the building is located more than 150 feet (45720 mm) from a fire apparatus access road as measured by an approved route around the exterior of the building or facility. (1997 Uniform Fire Code, Section 902.2.1.)*

Response 1: Final facility designs will comply with applicable sections of the Uniform Fire Code. We will submit plans and drawings as part of the Building Permit application for approval by the Department of Planning and Permitting.

Comment 2: *Provide a water supply, approved by the county, capable of supplying the required fire flow for fire protection to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed or moved into or within the county.*

On-site fire hydrants and mains capable of supplying the required fire flow shall be provided when any portion of the facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building. (1997 Uniform Fire Code, Section 903.2, as amended.)

Response 2: Final facility designs will comply with applicable sections of the Uniform Fire Code. We will submit plans and drawings as part of the Building Permit application for approval by the Department of Planning and Permitting.

Comment 3: *Submit civil drawings to the HFD for review and approval.*

Response 3: As part of the application for a Building Permit submitted to the Department of Planning and Permitting, a copy of the applicable civil drawings will be sent to the HFD for review and approval.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

Mr. Timothy E. Steinberger
Acting Director, Department of Environmental Services
Kapolei Hale
1000 Uluohia Street, Suite 312
Kapolei, HI 96707

RECEIVED
H-POWER

2009 MAR 12 P 1:21

Re: Draft EIS, Proposed Third Boiler, H-POWER

March 3, 2009

Dear Sir;

It is not apparent that you have adequately accessed the proposed action's impact on the City's recently rolled out recycling initiative. More study is warranted.

Sincerely;

K. Yonaha

Kazue Yonaha
4999 Kahala Ave, #251
Honolulu, HI 96707

Cc: Stephen Langham
Dr. Russell Okoji, AMEC
S. Samuel Joshi, Covanta Energy
Office of Environmental Quality Control

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

Ms. Kazue Yonaha
4999 Kahala Ave, #251
Honolulu, HI 96707

May 6, 2009

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Ms. Yonaha:

Thank you for your letter dated March 3, 2009, concerning the Draft Environmental Impact Statement (DEIS) for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *It is not apparent that you have adequately accessed the proposed action's impact on the City's recently rolled out recycling initiative. More study is warranted.*

Response 1: As described in the DEIS, the facility will be a crucial part of the City's recycling plan. The Expansion will be a City-owned facility, and it is designed to help meet the City and State's recycling goals. Metals recycling will be increased using the latest technology for the separation of ferrous and non-ferrous material. Energy-from-waste recycling will be increased from 319,000 mWh (average over the last 5 years) to 520,000 mWh, an annual increase of 201,000 mWh. This additional electric power generation will decrease the need to purchase approximately 550,000 barrels of residual fuel oil each year. The Expansion will help Hawaii meet the State's goals for increased production of renewable energy.

In addition, as you are aware, the City has an ongoing curbside recycling initiative. The City prepared a Materials Separation Plan (MSP) in accordance with the U.S. Clean Air Act (40 CFR §60.57(b)). A MSP is required by the U.S. Environmental Protection Agency and the Hawaii Department of Health to ensure that new Energy-from-Waste facilities are sized appropriately for the amount of municipal solid waste generated in a service area after all appropriate source reduction and recycling measures have been implemented. The MSP explicitly took into account the rate of curbside and other recycling reported by the City in 2008 and also took into account the City's plans to increase its recycling collection by 24,600 tons per year of recyclables and 28,000 tons per year of green waste through island-wide expansion of the pilot program by May 2010.

A recent report (April 2009) in the City's *Wasteline* on-line magazine, states that the City's residential curbside recycling program continues to be expanded as assumed in the July 2008 MSP. Specifically, the City recently stated that in May 2009 an additional 40,000 homes in the following communities will be included in the program: Pearl City, Aiea, Halawa Heights, Waipio Gentry, Wahiawa, Whitmore, Waipio Estates, Launani Valley, Kaneohe, and Waimanalo. With this expansion, a total of 100,000 homes will be included in the program. The H-POWER expansion is designed to ensure that the combustible waste remaining after the City separates and recycles residential municipal solid waste as currently planned can be recycled for *energy recovery*. Waste-to-Energy recycling keeps combustible refuse out of the City's landfills and provides numerous economic and environmental benefits to the Island of O'ahu by producing renewable electricity and avoiding or offsetting the use of imported fossil fuels.

Before discussing this issue further, I would like to assure you that the proposal to construct a third unit at the H-POWER facility is not in any way dependent for fuel on the use of waste paper or plastic that is currently being recycled through the residential curbside recycling program or is planned to be so recycled in the future as the program is expanded to additional communities. In fact, the opposite is true. As noted in the DEIS and in the MSP, the project explicitly assumes that this residential curbside recycling program will continue and expand in the future. Even as the recycling program expands, the City anticipates a growth in non-recyclable refuse that will either have to be landfilled or recycled into energy at the H-POWER plant. Everyone wants to keep landfilling on O'ahu to an absolute minimum, so the expansion of the H-POWER facility is being proposed to accommodate this *excess* refuse that cannot be recycled into new products and cannot be recycled into energy at H-POWER with the existing two units, because of capacity limitations. Accordingly, the City's long term management of waste is dependent on *both* the recycling of materials and the recycling of waste to energy.

Even though the proposed expansion of H-POWER will not interfere in any way with the City's paper and plastic recycling efforts, your comment states that "more study is warranted." In answer to this comment, the City is discussing performing a study that estimates the effects of materials recycling on the people of O'ahu both economically and environmentally. As economic conditions change around the world, sound decisions about recycling options require sound technical analyses to support them.

For example, the current recession has reduced demand for recycled materials. The Star Bulletin (April 24, 2009) stated: "While it is becoming easier than ever for local residents to recycle, this is a rough time for the recycling companies, which have to find buyers for what is collected. The slump in the global economy means that demand has plummeted for used paper, cardboard, plastic, glass and aluminum." They further quoted Greg Apa, senior vice president of Honolulu Recovery Systems: "'You're at anywhere from 10 to 40 percent of what the price was just six months ago, depending on the commodity,' said Apa, whose company handles the community recycling bins and many commercial accounts."

It is important to note that the economic and environmental impacts of materials recycling, such as the City's residential curbside recycling program for paper and plastic refuse, is dependent on a community's location, even in good economic times.

On the U.S. mainland, many communities are located at close proximity to efficient and environmentally-regulated facilities that process discarded paper and discarded plastic into new products. A complete Lifecycle Analysis (LCA) of recycling in such a location may show net economic and environmental benefits when materials are recycled.

A complete LCS for the Island of O'ahu would consider O'ahu's unique circumstances. On the Island of O'ahu, there are no pulp mills that convert waste paper into new paper products, and there are no manufacturing plants that convert waste plastic into patio chairs, artificial lumber, carpets, or high performance textiles. When one makes a decision about the best course of action for the environment, one needs to take a hard look at whether a practice that makes sense in one location makes sense in another location. Waste paper and plastic collected by the recycling program on O'ahu is shipped a long distance to China for recycling into new paper products and new plastic products in facilities that operate with different environmental emissions profiles than do U.S. facilities. Both increased emissions at foreign facilities and marine transportation emissions need to be considered when evaluating the net benefit to the environment and the people of O'ahu.

In-depth studies, using LCA techniques, have not yet been done for the Island of O'ahu. The City's residential recycling program was established based on assumptions that such a recycling program would benefit the people of O'ahu both economically and environmentally. However, these assumptions were based on LCA studies performed for communities that are very different than the Island of O'ahu. The fact that O'ahu is an island that is thousands of miles away from any recycling facilities surely makes it a special case that is worthy of its own LCA study.

The City has begun the process of defining the scope of an O'ahu-specific LCA analysis to determine if the separate curbside collection, management and shipment to China for materials recycling of one or another type of waste in the O'ahu waste stream is beneficial to the people of O'ahu from a total lifecycle perspective. Clearly, the answer is not known without designing and executing the study. Also, it would not be unexpected that the results might vary for individual materials in the waste stream. For instance, it might be beneficial to the people of O'ahu to collect and ship one type of plastic waste to China and it might be beneficial for another type of plastic to keep it in the mixed waste stream and recycle the energy content at the H-POWER plant.

While the City is considering the necessity and value of performing a LCA study, any such study is not needed for the environmental review process for the H-POWER expansion. As explained in the DEIS, materials recycling is not a viable "alternative" to the proposed expansion of the H-POWER facility. The DEIS and MSP for the proposed expansion already assume that the City's residential curbside recycling program is expanded as planned. In addition, the alternatives analysis in the DEIS considered even a greater degree of recycling and concluded that even under the most aggressive of recycling programs, there will be excess MSW that will require either landfilling or energy recycling at H-POWER. Thus, an LCA study can inform the City's decision making for the future of its recycling program, but it is not necessary for the DEIS for the proposed expansion of H-POWER because the expansion will not have an impact on the City's recycling program, the expansion will be needed regardless of the level of recycling, and the recycling alternatives have been fully addressed.

Thank you again for bringing to our attention the need for more study on the City's recycling initiative. If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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DEPARTMENT OF FACILITY MAINTENANCE

CITY AND COUNTY OF HONOLULU

1000 Uluohia Street, Suite 215, Kapolei, Hawaii 96707
Phone: (808) 768-3343 • Fax: (808) 768-3381
Website: www.honolulu.gov

MUFI HANNEMANN
MAYOR

JEOFFREY S. CUDIAMAT, P.E.
DIRECTOR AND CHIEF ENGINEER

GEORGE "KEOKI" MIYAMOTO
DEPUTY DIRECTOR

IN REPLY REFER TO:
DRM 09-164

March 4, 2009

Mr. Stephen Langham
Environmental Services, H-Power
91-174 Hanua Street
Kapolei, Hawaii 96707

Dear Mr. Langham:

Subject: Draft Environmental Impact Statement (DEIS)
Proposed 3rd Boiler Expansion of H-Power
Energy-from-Waste Facility, Kapolei, Hawaii

Thank you for the opportunity to review and comment on the DEIS dated January 2009 for the proposed expansion of the H-Power facility at Kapolei.

The proposed additional 3rd boiler and other improvements to the facility will be located within the facility property outside City roadways rights-of-ways and will have negligible impact on our Division of Road Maintenance (DRM) facilities and operations.

Should you have any questions, please call Charles Pignataro of the DRM, at 768-3697.

Sincerely,

Jeoffrey Cudiamat

Jeoffrey S. Cudiamat, P.E.
Director and Chief Engineer

c: Department of Environmental Services
AMEC Earth & Environmental, Inc. – Dr. Russell Okoji
Office of Environmental Quality Control

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. Jeoffrey S. Cudiamat, P.E.
Director and Chief Engineer
City and County of Honolulu
Department of Facility Maintenance
1000 Uluohia Street, Suite 215
Kapolei, Hawaii 96707

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Cudiamat:

Thank you for your letter dated March 4, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review.

We understand that the Department of Facility Maintenance finds that the proposed Expansion will occur outside City roadway rights-of-way and will have negligible impact on Division of Road Maintenance facilities and operations. Should you have any questions in the future, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

MUFI HANNEMANN
MAYOR

DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

2009/ELOG-234 (BLB)

March 4, 2009

Mr. S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, New Jersey 07004

Dear Mr. Joshi:

Subject: Draft Environmental Impact Statement
H-Power Third Boiler Expansion Project
91-174 Hanua Street – Campbell Industrial Park
Tax Map Key 9-1-26: 30

This is in response to your request, received January 30, 2009, for comments concerning the Draft Environmental Impact Statement (DEIS) for the subject project.

The project site, as well as the adjoining parcels to be used for construction lay-down (Tax Map Key 9-1-26: 33 and 34), are not located in the Special Management Area (SMA) or the shoreline setback, and will not require an SMA permit or shoreline setback variance.

Please note that the project does not require a modification to Conditional Use Permit (CUP) No. 89/CUP1-17, as stated in Section 3.0, "Required Approvals and Permits," of the DEIS. Since the H-Power facility is now owned and operated by the City, it is thus considered to be a "public use and structure" for purposes of the Land Use Ordinance (LUO); and, as such is a permitted use in all zoning districts. When the CUP had originally been issued, the use was then classified as a "utility installation, Type B," since at that time it had been privately owned and operated.

The project will need to obtain an approved zoning waiver, pursuant to LUO Section 21-2.130(a)(1), for any portion of the project which will exceed the maximum 60-foot zoning height for the site.

Thank you for the opportunity to comment on the DEIS. Please contact Blake La Benz of our staff at 768-8011 for any questions.

Very truly yours,

David K. Tanoue, Director
Department of Planning and Permitting

DKT:fm

cc: Department of Environmental Services
Office of Environmental Quality Control
AMEC Earth & Environmental, Inc.

G:\LandUse\PosseWorkingDirectory\blake\Correspondence\09ELOG-234.doc

Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

May 6, 2009

Mr. David K. Tanoue
Director
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Tanoue:

Thank you for your letter dated March 4, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *The project site, as well as the adjoining parcels to be used for construction lay-down (Tax Map Key 9-1-26: 33 and 34), are not located in the Special Management Area (SMA) or the shoreline setback, and will not require an SMA permit or shoreline setback variance.*

Response 1: Comment noted.

Comment 2: *The project does not require a modification to Conditional Use Permit (CUP) No. 89/CUP1-17, as stated in Section 3.0, "Required Approvals and Permits," of the DEIS. Since the H-Power facility is now owned and operated by the City, it is thus considered to be a "public use and structure" for purposes of the Land Use Ordinance (LUO); and, as such is a permitted use in all zoning districts. When the CUP had originally been issued, the use was then classified as a "utility installation, Type B," since at that time it had been privately owned and operated.*

Response 2: Comment noted

Comment 3: *The project will need to obtain an approved zoning waiver, pursuant to LUO Section 212.130(a) (1), for any portion of the project which will exceed the maximum 60-foot zoning height for the site.*

Response 3: We plan on obtaining a zoning waiver for any portion of the project which will exceed the 60-foot zoning height restriction.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

MUFI HANNEMANN
MAYOR

DAVID K. TANOUE
DIRECTOR

ROBERT M. SUMITOMO
DEPUTY DIRECTOR

2009/ELOG-199 (TH)

March 5, 2009

Mr. Stephen Langham
Department of Environmental Services
Refuse Division, H-POWER
91-174 Hanua Street
Kapolei, Hawaii 96707

Dear Mr. Langham:

Subject: Draft Environmental Impact Statement (DEIS) Proposed 3rd Boiler Expansion of H-POWER Energy-From-Waste Facility, Kapolei, Hawaii, Tax Map Key: 9-1-026:030, 033, 034

We have reviewed the subject DEIS and offer the following comments.

1. The heading for Section 5.6.2.2 (Page 5-95) should be corrected to read "City and County of Honolulu Plans and Policies."

2. The FEIS should include a section after Section 7.3.2 that discusses the project's conformance to the City's Public Infrastructure Map (PIM) in accordance with Chapter 4, Article 8, Revised Ordinances of Honolulu (ROH). In February 2002, the Department of Environmental Services (ENV) submitted an application to the Department of Planning and Permitting (DPP) to add a "Solid Waste Facility" (SW) symbol to the Ewa PIM for the proposed project. The City Council adopted Resolution 02-164, CD1, that added a "SW" symbol to the Ewa PIM that includes the third boiler. The proposed project is shown on the Ewa PIM as PIM # 036, and is referred to as "H-POWER Expansion" according to DPP records. Thus, the proposed project conforms to the Ewa PIM. A copy of Resolution 02-164, CD1, is attached for your information.

3. In addition to Figure 2.2-2, the FEIS should include another illustration that clearly identifies the proposed third boiler and other improvements in relation to existing structures.

4. Section 4.3.3.2 of the DEA states that the H-POWER site and the construction laydown areas are outside identified floodplain areas as shown in Figure 4.3-4. However, the H-POWER site and the construction laydown areas are located in

Flood Zone D, where flood hazards are undetermined, but possible. We recommend that Section 4.3.3.2 be revised to include this information.

5. Our records indicate that the H-POWER site, TMK: 9-1-026:030 is subject to impact fees associated with the Ewa Highway Master Plan via Ordinance 02-52. We recommend that the FEIS disclose how the project will comply with this ordinance regarding transportation improvements for the Ewa region.

Thank you for the opportunity to comment on this matter. Should you have any questions, please contact Tim Hata of our staff at 768-8043.

Very truly yours,

fr David K. Tanoue, Director
Department of Planning and Permitting

DKT:js

Attachment

cc: Mr. Tim Steinberger, Director, Environmental Services
Dr. Russell Okoji, AMEC Earth & Environmental, Inc.

p:/DivFunction/EA-EIS/2009/2009elog199.doc

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

No. 02-164, CD1

RESOLUTION

ADOPTING A REVISION TO THE PUBLIC INFRASTRUCTURE MAP FOR THE EWA DEVELOPMENT PLAN AREA, CAMPBELL INDUSTRIAL PARK, OAHU, HAWAII.

WHEREAS, the Waimanalo Gulch Sanitary Landfill receives approximately 1,400 tons per day of municipal solid waste, ash from the Honolulu Program on Waste Energy Recovery (H-POWER), and other refuse; and

WHEREAS, at this current rate, the Waimanalo Gulch Sanitary Landfill will run out of its permitted capacity by August 2002 unless it is expanded or replaced; and

WHEREAS, the Department of Environmental Services' objective is to reduce the amount of municipal solid waste, ash, and other refuse going to the Waimanalo Gulch Sanitary Landfill by 75 percent; and

WHEREAS, the Department of Environmental Services is planning four major projects to achieve this objective; and

WHEREAS, expanding H-POWER is the quickest project to plan, design and construct; and

WHEREAS, the Department of Environmental Services has requested $6 million to plan and design the expansion of H-POWER; and

WHEREAS, the Ewa Development Plan has been adopted under Ordinance 97-49; and

WHEREAS, the Public Infrastructure Map for the Ewa Development Plan area has been adopted under Resolution 97-325, CD1; and

WHEREAS, a solid waste symbol to depict the proposed expansion of H-POWER as shown on Exhibit A (Location Map) is consistent with the General Plan and the Ewa Development Plan; and therefore;

PH, PLANNING

RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that the Public Infrastructure Map for the Ewa Development Plan be revised to include a solid waste facility symbol for this project; and

BE IT FURTHER RESOLVED, by the Council of the City and County of Honolulu that the solid waste facility symbol shall be deleted from the Public Infrastructure Map by administrative procedure once completion of the facility has been certified in writing by the applicant/agency to the Department of Planning and Permitting and the City Council.

RESOLUTION

BE IT FINALLY RESOLVED that the City Clerk is directed to transmit a certified copy of this resolution to the Director of Planning and Permitting and to the Director of Environmental Services.

INTRODUCED BY:

John DeSoto (BR)

Councilmembers

DATE OF INTRODUCTION:

May 16, 2002

Honolulu, Hawaii

(OCS/060302/mg)

CITY COUNCIL
CITY AND COUNTY OF HONOLULU
HONOLULU, HAWAII

I hereby certify that the foregoing RESOLUTION was adopted by the COUNCIL OF THE CITY AND COUNTY OF HONOLULU on the date and by the vote indicated to the right.

ATTEST:

GENEVIEVE G. WONG
CITY CLERK

for JOHN DeSOTO
CHAIR AND PRESIDING OFFICER

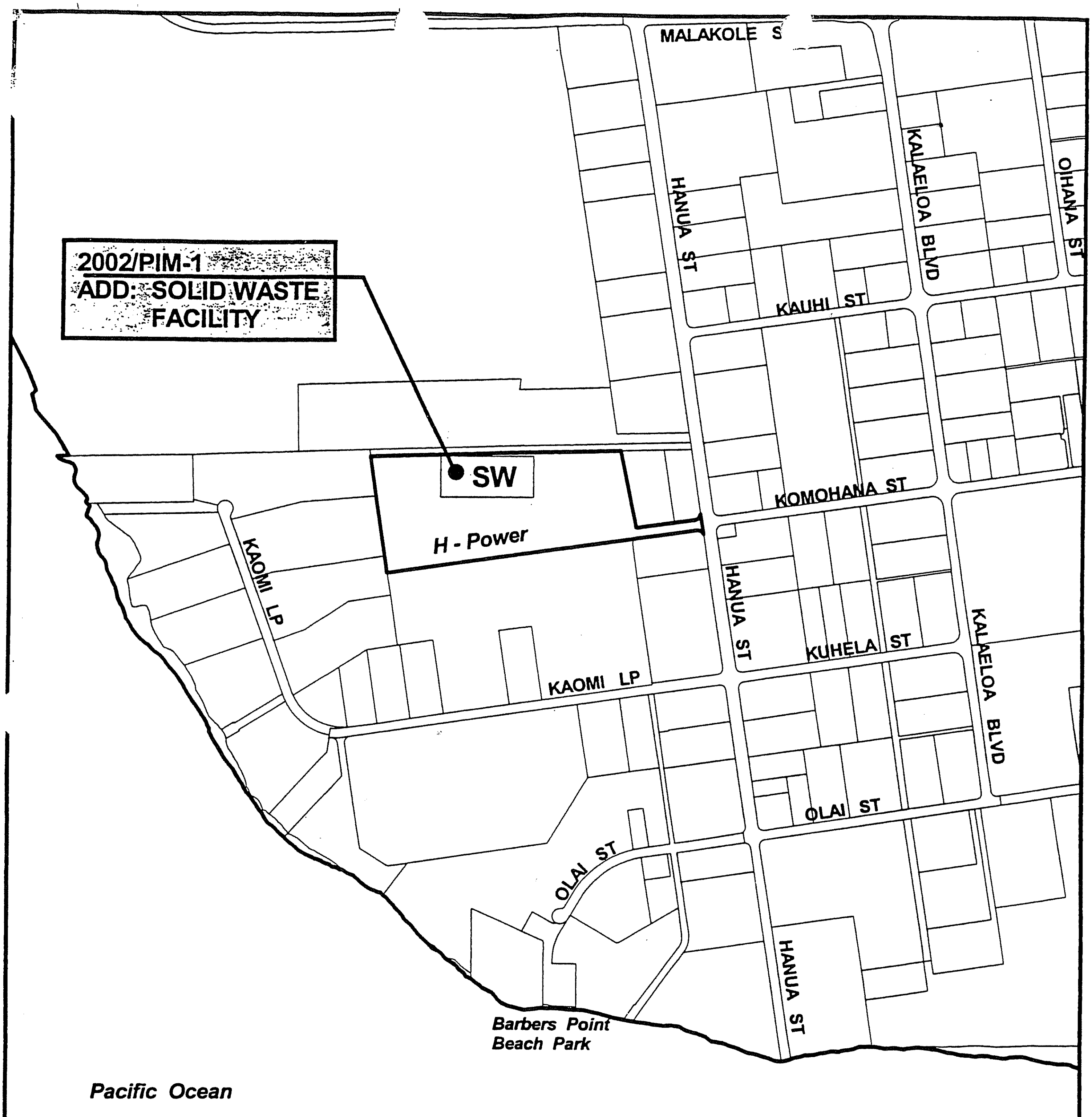
Dated 6/26/02

ADOPTED MEETING HELD			
6/26/02			
	AYE	NO	A/E
BAINUM	X		
BUNDA	X		
CACHOLA	X		
DeSOTO			E
FELIX	X		
HOLMES	X		
KOBAYASHI	X		
OKINO	X		
YOSHIMURA			E
	7	0	2

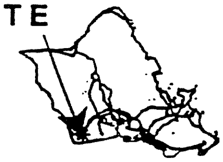
Reference:

Report No. P-283

Resolution No.
02-164
CD1



SITE



Vicinity Map

400 0 400 800 Feet

LOCATION MAP

Campbell Industrial Park, Ewa

TAX MAP KEY: 9-1-026: 30

FOLDER NO.: 2002/PIM-1

Prepared By: DEPARTMENT OF PLANNING AND PERMITTING
City & County of Honolulu

Exhibit A

Date Prepared: 03/22/2002

Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. David K. Tanoue
Director
City and County of Honolulu
Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Tanoue,

Thank you for your letter dated March 5, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1*: The heading for Section 5.6.2.2 (Page 5-95) should be corrected to read "City and County of Honolulu Plans and Policies."*

Response 1: Comment noted. The heading for Section 5.6.2.2 will be corrected in the FEIS to read "City and County of Honolulu Plans and Policies."

Comment 2: *The FEIS should include a section after Section 7.3.2 that discusses the project's conformance to the City's Public Infrastructure Map (PIM) in accordance with Chapter 4, Article 8, Revised Ordinances of Honolulu (ROH). In February 2002, the Department of Environmental Services (ENV) submitted an application to the Department of Planning and Permitting (DPP) to add a "Solid Waste Facility" (SW) symbol to the Ewa PIM for the proposed project. The City Council adopted Resolution 02-164, CD1, that added a "SW" symbol to the Ewa PIM that includes the third boiler. The proposed project is shown on the Ewa PIM as PIM # 036, and is referred to as "H-POWER Expansion" according to DPP records. Thus, the proposed project conforms to the Ewa PIM. A copy of Resolution 02-164, CD1, is attached for your information.*

Response 2: A new section (Section 7.3.3) will be included in the FEIS to discuss the Proposed Expansion's conformance to the City's Public Infrastructure Map (PIM). The new section will read as follows:

7.3.3 Public Infrastructure Map (PIM) for the Ewa Development Plan Area

Resolution 02-164, CD1 calls for "Adopting a Revision To The Public Infrastructure Map For The Ewa Development Plan Area, Campbell Industrial Park, Oahu, Hawaii." This resolution outlines the constraints of current landfill capacity at the Waimanalo Gulch Sanitary Landfill, the Department of Environmental Services' objective to reduce waste disposed of at the landfill by 75% and the H-POWER Expansion's ability to assist the Department of Environmental Services in achieving their goal most expeditiously. As such, the addition of a solid waste symbol to depict H-POWER's proposed expansion was added to the PIM.

Evaluation: The Expansion will reduce the volume of municipal solid waste entering the Waimanalo Gulch Sanitary Landfill thereby extending the life and capacity of the landfill and aiding the Department of Environmental Services in achieving their objective. The project is in conformance to the City's Public Infrastructure Map (PIM) in accordance with Chapter 4, Article 8, Revised Ordinances of Honolulu (ROH)

Comment 3: *In addition to Figure 2.2-2, the FEIS should include another illustration that clearly identifies the proposed third boiler and other improvements in relation to existing structures.*

Response 3: Figure 2.2-2 in the FEIS will be modified to illustrate clearly the new boiler and other improvements by highlighting those areas and labeling them as such on the figure.

Comment 4: *Section 4.3.3.2 of the DEA states that the H-POWER site and the construction laydown areas are outside identified floodplain areas as shown in Figure 4.3-4. However, the H-POWER site and the construction laydown areas are located in Flood Zone D, where flood hazards are undetermined, but possible. We recommend that Section 4.3.3.2 be revised to include this information.*

Response 4: Figure 4.3-4 and text in Section 4.3.3.2 will be revised within the FEIS to reflect that the H-POWER site and construction laydown areas are located in Flood Zone D. Section 4.3-4 will be revised to read:

The H-POWER site and the construction laydown parcels are located within Flood Zone D. Figure 4.3-3, Surface Water Constraints, depicts the mapped Flood Area (DPP, 2004). A review of the most recent Federal Emergency Management Area (FEMA) Flood Insurance Rate Map (FIRM) was also conducted (FEMA 2008). The FIRM maps were not available in hard copy or electronic format. However, no change from the DPP electronic map data was observed in the project area, and DPP confirmed that the H-POWER site and laydown areas are in Flood Zone D. A copy of the 2004 FIRM is provided in Figure 4.3-4. Flood Zone D encompasses all of inland Oahu. The Flood Insurance Program does not have any regulations for developments within Flood Zone D. which is designated for areas where flood hazards are undetermined, but possible. As shown on Figure 4.3-3 and confirmed on the FIRM map, the closest regulated Flood Hazard Area is situated west of Kaomi Loop along the coast and is designated Zone AE which is a flood insurance rate zone that corresponds to the 1-percent annual chance floodplains that are determined in the Flood Insurance Study. Mandatory flood insurance purchase requirements apply to Zone AE.

Comment 5: *Our records indicate that the H-POWER site, TMK: 9-1-026:030 is subject to impact fees associated with the Ewa Highway Master Plan via Ordinance 02-52. We recommend that the FEIS disclose how the project will comply with this ordinance regarding transportation improvements for the Ewa region.*

Response 5: Thank you for bringing Ordinance 02-52 to our attention. We have reviewed the Ordinance and understand that it was passed to assist in paying for roadway improvements in the Ewa region that will be necessary to address the growth in traffic as the region develops. Because the proposed project would cause trucks otherwise bound for the Waimanalo Gulch Sanitary Landfill to be diverted to the H-POWER facility, the proposed project will cause no significant increase in traffic in the overall Ewa region. Accordingly, the City is evaluating if it qualifies for a waiver from this Ordinance.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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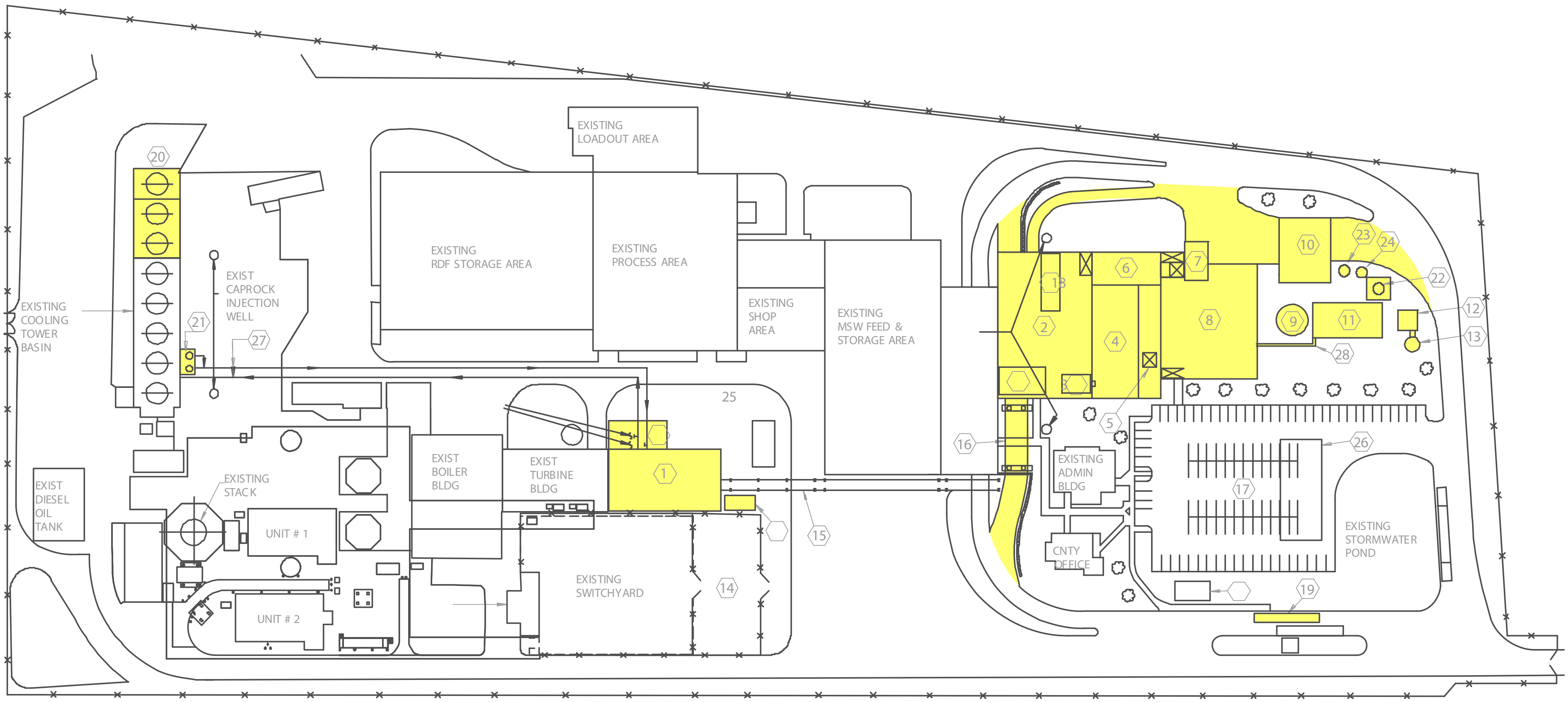

NOTE: Yellow highlight areas represent areas of the proposed expansion

LEGEND

1. NEW TURBINE GEN BLDG
2. NEW TIPPING FLOOR EXPANSION
3. NEW SHEDDER
4. NEW REFUSE PIT
5. NEW EQUIPMENT HATCH
6. NEW CRANE PULPIT AND ELECT ROOM
7. NEW GRIZZLY BLDG
8. NEW BOILER BLDG
9. NEW SDA
10, NEW ASH LOADOUT BLDG
11. NEW BAGHOUSE
12. NEW ID FAN
13. NEW STACK
14. NEW EXTENSION SWITCHYARD
15. NEW UTILITY RACK
16. NEW ELEVATED ROADWAY
17. EXPANDED PARKING LOT
18. NEW BALER
19. NEW INCOMING SCALE
20. NEW COOLING TOWER BASIN
21. NEW COOLING TOWER PUMP STRUCTURE
22. AQUEOUS AMMONIA TANK/CONTAINMENT
23. CARBON SILO
24. LIME SILO
25. DIESEL GENERATOR
26. NEW UNDERGROUND STORM WATER STORAGE (IF REQ'D)
27. NEW CW PIPING
28. NEW SCREEN WALL

N

FEET

0 100 200

APPROXIMATE SCALE

amec

SITE PLAN OF THE PROPOSED EXPANSION

FIGURE 2.2-2

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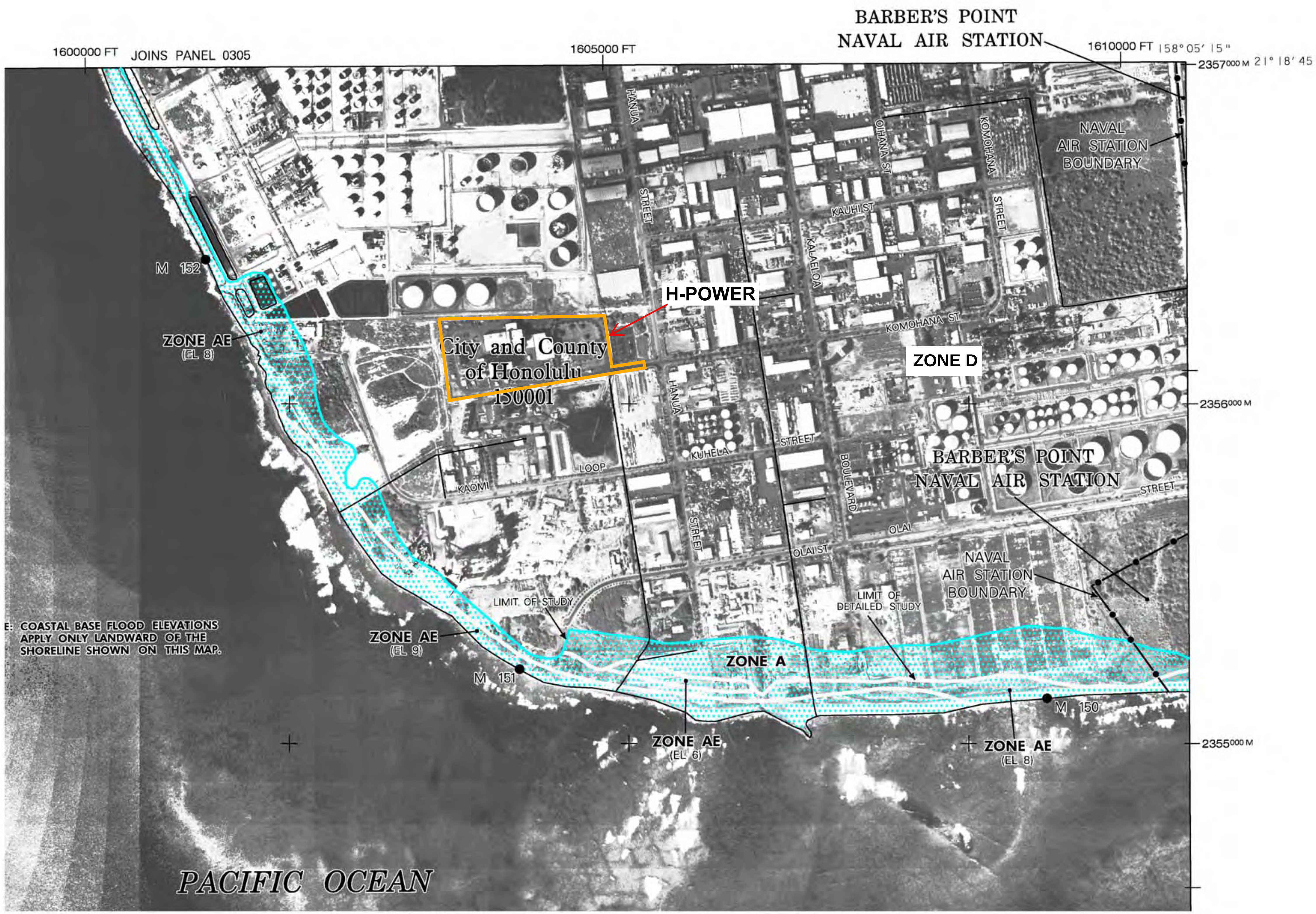

LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- **ZONE A** No Base Flood Elevations determined.
- **ZONE AE** Base Flood Elevations determined.
- **ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- **ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- **ZONE AR** Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- **ZONE A99** Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- **ZONE V** Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
- **ZONE VE** Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

- **ZONE X** Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

- **ZONE X** Areas determined to be outside the 0.2% annual chance floodplain.
- **ZONE D** Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 Base Flood Elevation line and value; elevation in feet*
- (EL 987) Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the National Geodetic Vertical Datum of 1929

- A — A Cross section line
- 23 - - - - - 23 Transect line
- 97° 07' 30", 32° 22' 30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 4276000 M 1000-meter Universal Transverse Mercator grid tick values, zone 4
- 600000 FT 5000-foot grid tick values: Hawaii State Plane coordinate system, zone 3 (FIPSZONE 5103), Transverse Mercator projection
- DX5510 × Bench mark (see explanation in Notes to Users section of this FIRM panel)
- ● M 2 Coastal Mile marker

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE
FLOOD INSURANCE RATE MAP
November 20, 2000

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

September 30, 2004 – to change Special Flood Hazard Areas, to update map format, to reflect revised shoreline and to incorporate previously issued Letters of Map Revision.

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'

500 0 1000 2000 FEET

300 0 300 600 METERS

amec

FLOOD INSURANCE RATE MAP (FIRM) EFFECTIVE 9/30/2004

FIGURE
4.3-4

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Hawaiian Electric Company, Inc. • PO Box 2750 • Honolulu, HI 96840-0001

March 6, 2009

Mr. Stephen Langham
Refuse Division
Environmental Services
H-POWER
91-174 Hanua Street
Kapolei, HI 96707

Re: Proposed Third Boiler Expansion of H-POWER Energy-from-Waste Facility Kapolei, Oahu

Thank you for the opportunity to comment on the DEIS of the above-referenced project. Hawaiian Electric Company, Inc. (HECO) has no objections at this time.

We appreciate your efforts to keep us apprised of the planning process. As the project progresses, please continue to keep us informed. We will be better able to evaluate any effects on our system facilities further along in the project's development. We request that development plans show all affected HECO facilities and address any conflicts between the proposed plans and our existing facilities. Please forward the pre-final development plans to HECO for review.

Should it become necessary to relocate HECO's facilities, please submit a request in writing and we will work with you so that construction of the project may proceed as smoothly as possible. Please note that there may be costs associated with any relocation work, and that such costs may be borne by the requestor. Because any redesign or relocation of our facilities may cause lengthy delays, upon determination that HECO facilities will need to be relocated or built, HECO should be notified immediately in order to minimize any delays or impacts on the project schedule.

Sincerely,

Kirk S. Tomita
Senior Environmental Scientist

cc: Ms. Katherine P. Kealoha (OEQC)
Mr. Timothy Steinberger (Env.Svcs/C&C)

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. Kirk S. Tomita
Senior Environmental Scientist
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, Hawaii 96840-0001

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Tomita,

Thank you for your letter dated March 6, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *We appreciate your efforts to keep us apprised of the planning process. As the project progresses, please continue to keep us informed. We will be better able to evaluate any effects on our system facilities further along in the project's development. We request that development plans show all affected HECO facilities and address any conflicts between the proposed plans and our existing facilities. Please forward the pre-final development plans to HECO for review.*

Response 1: Comment noted. We will continue to keep HECO apprised as the Proposed Expansion project progresses. Development plans will show affected HECO facilities and address any conflicts between the proposed plans and HECO's existing facilities.

Comment 2: *Should it become necessary to relocate HECO's facilities, please submit a request in writing and we will work with you so that construction of the project may proceed as smoothly as possible. Please note that there may be costs associated with any relocation work, and that such costs may be borne by the requestor. Because any redesign or relocation of our facilities may cause lengthy delays, upon determination that HECO facilities will need to be relocated or built, HECO should be notified immediately in order to minimize any delays or impacts on the project schedule.*

Response 2: Comment noted.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD09/1622C

March 6, 2009

Stephen Langham
Environmental Services, Refuse Division, H-POWER
91-174 Hanua Street
Kapolei, HI 96707

RE: Request for comments on the draft environmental impact statement (DEIS), H-POWER expansion project, 'Ewa, O'ahu, TMKs: 1-9-026-030, 033, & 034.

Aloha e Stephen Langham,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated January 27, 2009. OHA has reviewed the project and offers the following comments.

OHA appreciates that construction workers will be trained to suspend construction activities if transient bird species of concern are encountered at or near the site and that a biologist will conduct initial training and provide a short information packet so that workers are familiar with these species. (DEIS, page 4-62) We do, however, ask what will happen after the supervisor, on-call biologist and/or the Pacific Islands Fish and Wildlife Office have been contacted and confirmation made as mentioned in the DEIS.

We also appreciate that there will be no construction activity in the plant preservation areas in Parcels 33 and 34 and a 25-foot buffer zone will be placed around the plant protection areas in Parcels 33 and 34 to further protect these areas from exposure to construction activities. (DEIS, page 4-65) We do ask that the presence of *Achyranthes splendens* var. *rotundata be clarified in this environmental review. OHA asks because page 4-61 of the DIES states that, "* No populations or individuals of *Achyranthes splendens* var. *rotundata* were observed during the November 2004 and August 2008 site reconnaissance surveys." However, page 5-5 of the DIES states, "Following a brief discussion about the burial, Mr. Kane took PCSI into the plant sanctuary on Parcels 33-34, which contains *Achyranthes splenden* var. *rotundata, naio* (*Myoporum sandwicense*) and various other plants." These conflicting reports should be rectified to preserve the integrity of this document.

Further, we ask if these preservation areas are part of a habitat conservation plan or have been designated as critical habitat. We also ask if any incidental take permit consultation under the Endangered Species Act has been initiated.

OHA also urges that the lay down areas not simply be allowed to revegetate but be landscaped with drought tolerant native or indigenous species that are common to the area. Any invasive species should not be considered. Doing so would not only serve as practical water-saving landscaping practices, but also serve to further the traditional Hawaiian concept of mālama ʻāina and create a more Hawaiian sense of place. This would also help to reduce the amount of impervious surfaces in the project area, thereby reducing runoff as well. Tree and landscape planting to shade paved parking areas and provide shade and cooling to building elements and outdoor use areas should also be considered.

We do note that although the project area has been disturbed previously, there is still a high likelihood that cultural deposits will be uncovered. Even in heavily urbanized Honolulu new projects are still unfortunately uncovering such deposits in previously disturbed areas and so we urge more caution be exercised in this sensitive area than the DIES demonstrates. We urge that a cultural monitor be called in for the presence of any cultural deposits or in the event that a subsurface void is discovered as well. We also ask that the 1986 burial discovery and re-internment site be adequately protected and discussed in this document as we inquired about in our January 12, 2005 comment letter for this proposal.

Additionally, OHA asks that, in accordance with Section 6E-46.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules, if the project moves forward, and if any significant cultural deposits or human skeletal remains are encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division shall be contacted. We note that this may be the "applicable regulatory guidelines" mentioned on page ES-6 of the DEIS, however, these important procedures should be openly and clearly presented.

OHA asks for elaboration upon the facility's storm water pollution control plan mentioned on page 4-38. Increased amounts of impervious surfaces will generate increased flow rates, which may have an effect on water quality and to the sensitive sinkhole environments found in the area. This is important because page 4-37 of the DEIS states that, "Waters are also reported to sometimes occur within sinkholes on protected areas of the site, but these areas may also be affected by tidally influenced groundwaters."

We also see that many of the water quality safeguards are best management practices (BMP) dependent. As such, OHA asks how these BMPs will be assessed to ensure that they are achieving the objectives for which they were selected. Maintenance schedules, monitoring for effectiveness and a listing of each BMP, its expected performance and an assessment of whether the controlled value (noise, dust, water quality, etc.) is within targeted limits should be included.

OHA additionally notes that dewatering is mentioned on page 4-54 of the DEIS. OHA points out that if any dewatering is required, a State Department of Health National Pollutant Discharge Elimination System (NPDES) permit under the Clean Water Act, Section 402 is required that includes this application. Further, this permit will also apply if the water table is reached during subsurface excavation and we simply ask if this has been accounted for.

Procedurally, Hawaii Administrative Rules Section 11-55-38 Historic and burial sites review states that for a new project, activity, or site, the applicant submitting to the Department of Health an NPDES permit application shall also demonstrate to the Clean Water Branch that the project, activity, or site has been reviewed by the state historic preservation division (SHPD). A copy of the Notice of Intent from at least 30 days prior to the start of construction activities or NPDES permit application submitted to SHPD can be a way to meet this requirement. We ask if this has been done in order to meet this timeline.

Thank you for the opportunity to comment. If you have further questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

ʻO wau iho nō me ka ʻoiaʻiʻo,

Clyde W. Nāmuʻo
Administrator

C: City and County of Honoluylu
Department of Environmental Services
1000 Uluohia, Suite 308
Kapolei, HI 96707

AMEC Earth & Environmental, Inc
3375 Koapaka Street, Suite F-125
Honolulu, HI 96819

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PHONE (808) 594-1888

FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD08/

September 4, 2008

Stephan Clark
Pacific Consulting Services, Inc.
720 Iwilei Road, Suite 424
Honolulu, Hawai'i 96817

RE: Request for comments on the proposed expansion of the HPOWER facility at Kapolei, Land of Honouliuli, 'Ewa District, O'ahu TMKs: 9-1-026:30, 33, 34 and 35.

Aloha e Stephan Clark,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated August 14, 2008. OHA has reviewed the project and offers the following comments.

Our January 12, 2005 comment letter for the same proposal stated concerns for historic and cultural sites in the area. We specifically asked that the 1986 burial discovery and reinternment site be adequately protected. We further noted that the 'Ewa plain has historically been known to contain sinkholes in which human skeletal remains as well as avi-faunal remains and that these sinkholes can continue to exist in areas that have been graded or heavily cultivated for agricultural uses. There would appear to be a higher than normal probability of unmarked burial sites existing in the project area given the previous find during construction and the possibility of other burials being associated with this burial, either proximally or distally.

According to records at the Bishop Museum pertaining to inventories conducted for compliance with the Native American Graves Protection and Repatriation Act of 1990, burial sites in Honouliuli and in 'Ewa in general have been documented in the past including:

In 1938, human remains representing six individuals from Honouliuli, 'Ewa, O'ahu were collected by Kenneth P. Emory and William A. Lessa and acquired by the Bishop Museum. Museum documentation indicates these remains were in a shallow crypt burial one mile from the coast;

In 1933, human remains representing three individuals form stone pits at ‘Ewa, O’ahu were collected by J.W. Barrington and Edwin H. Bryan;

In 1942, human remains representing two individuals from Kualakai, ‘Ewa Beach, O’ahu were donated to the Bishop Museum;

In 1959, human remains representing seven individuals from ‘Ewa, O’ahu were donated to the Bishop Museum by the Anthropology Club of the University of Hawaii (from Standard Oil Refinery land);

In 1980, human remains representing nine individuals from Honouliuli, O’ahu were collected and donated to the Bishop Museum by Albert, Borthwick and Folk. Donor information indicates these human remains were recovered from coral sinkholes.

In the last decade, unmarked burial sites have been found in the area of St. Francis West, West Loch Estates, Old Fort Weaver Road, Kalaeloa, One‘ula Beach, Campbell Estate, Ko‘Olina and other areas in the vicinity of this project.

Native Hawaiian burial sites have been found just on and under the surface to depths of eight or nine feet depending upon the nature of the terrain. Furthermore, the nature of documented interments in the ‘Ewa area (stone pits, sinkholes, crypts, etc.) could lead to the survival of these sites despite intensive agricultural activities on the surface. OHA notes that the applicant has proposed on-call monitoring by a qualified archeologist as a result of the probable presence of subsurface sites in the project area.

OHA asks if the three plant sanctuaries that contain endangered species have been designated as critical habitat and if they are part of a habitat conservation plan. We are supportive of the idea that these areas should be removed from the proposed construction area and additionally protected by buffer areas.

Thank you for the opportunity to comment and we look forward to further review. If you have additional questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

‘O wau iho nō me ka ‘oia‘i‘o,

Clyde W. Nāmu‘o
Administrator

Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. Clyde W. Namu'o
Administrator
State of Hawaii
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii, 96813

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Namu'o,

Thank you for your letters dated September 4, 2008 and March 6, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

<u>September 4, 2008 Letter</u>
Comment 1: *Request that the 1986 burial discovery and reinternment site be adequately protected*

Response 1: Measures will be taken to insure the site will not be impacted by construction activities. A temporary barrier will be employed during construction activities that will further improve the visibility of the re-interment site. Additionally, workers will be made aware of its location prior to construction.

Comment 2: *Inquired if the three plant sanctuaries that contain endangered species have been designated as critical habitat and if they are part of a habitat conservation plan. These areas should be removed from the proposed construction area and additionally protected by buffer areas.*

Response 2: Fenced plant sanctuaries containing the federally listed endangered species, *Achyranthes splendens* var. *rotundata*, exist on Parcels 33 and 34. These fenced plant sanctuaries are not part of a habitat conservation plan nor have they been designated as critical habitat. According to the U.S. Fish and Wildlife website, no critical habitat designation has been published and no habitat conservation plans have been published for *Achyranthes splendens* var. *rotundata*. Protection of these areas, however, has been included as part of a mitigation plan. The fenced areas are not located in the proposed construction area, and they will be protected by an additional 25 foot buffer zone as noted in the DEIS. We have included, as an attachment to this letter, a figure depicting the H-POWER site and construction laydown areas and the protective measures that will be employed: fence, buffer zone, silt fence, and retention basins.

<u>March 6, 2009 Letter</u>
Comment 1: Page 4-62: W*hat will happen after the supervisor, on-call biologist and/or the Pacific Islands Fish and Wildlife Office have been contacted and confirmation made as mentioned in the DEIS.*

Response 1: Once the supervisor, on-call biologist and/or the Pacific Islands Fish and Wildlife Office is contacted and confirmation made, recommendations by the specialist will be followed.

Comment 2: *DEIS, page 4-65: We do ask that the presence of Achyranthes splendens var. rotundata be clarified in this environmental review. OHA asks because page 4-61 of the DEIS states that, "No populations or individuals of Achyranthes splendens var. rotundata were observed during the November 2004 and August 2008 site reconnaissance surveys." However, page 5-5 of the DEIS states, "Following a brief discussion about the burial, Mr. Kane took PCSI into the plant sanctuary on Parcels 33-34, which contains Achyranthes splenden var. rotundata, naio (Myoporum sandwicense) and various other plants." These conflicting reports should be rectified to preserve the integrity of this document.*

Response 2: The plant sanctuary on Parcels 33-34 was established to protect *Achyranthes splendens* var. *rotundata*. The plant sanctuaries were not accessible for the biological site reconnaissance, and no populations of the protected species could be observed from the perimeter. Although the plant sanctuaries were accessible for the archeological site reconnaissance, only items of archeological significance were noted in the archeologist's report. No *Achyranthes splendens* var. *rotundata* were noted in the report, because a biologist was not present during the archeological site reconnaissance. This will be clarified in document.

Comment 3: *We ask if these preservation areas are part of a habitat conservation plan or have been designated as critical habitat. We also ask if any incidental take permit consultation under the Endangered Species Act has been initiated.*

Response 3: Fenced plant sanctuaries containing the federally listed endangered species, *Achyranthes splendens* var. *rotundata*, exist on Parcels 33 and 34. These fenced plant sanctuaries are not part of a habitat conservation plan nor has the area been designated as critical habitat. According to the U.S. Fish and Wildlife website, no critical habitat designation has been published and no habitat conservation plans have been published for *Achyranthes splendens* var. *rotundata*. While portions of Parcels 33 and 34 will be used for construction lay down purposes, neither the fenced areas nor buffer areas within 25 feet of the fenced areas will be used for construction lay down. Thus, *Achyranthes splendens* var. *rotundata* will not be disturbed and there will be no "incidental taking" of these plants. Because there will be no incidental take, there is no need for an Incidental Take Permit. (See http://ecos.fws.gov/speciesProfile/SpeciesReport.do?spcode=Q24I).

Comment 4: *OHA also urges that the lay down areas not simply be allowed to revegetate but be landscaped with drought tolerant native or indigenous species that are common to the area. Any invasive species should not be considered. Doing so would not only serve as practical water-saving landscaping practices, but also serve to further the traditional Hawaiian concept of mālama'āina and create a more Hawaiian sense of place. This would also help to reduce the amount of impervious surfaces in the project area, thereby reducing runoff as well. Tree and landscape planting to shade paved parking areas and provide shade and cooling to building elements and outdoor use areas should also be considered.*

Response 4: Drought tolerant native or indigenous species that are common to the area will be utilized to revegetate the laydown areas once construction is completed.

Comment 5: *We do note that although the project area has been disturbed previously, there is still a high likelihood that cultural deposits will be uncovered. Even in heavily urbanized Honolulu new projects are still unfortunately uncovering such deposits in previously disturbed areas and so we urge more caution be exercised in this sensitive area than the DEIS demonstrates. We urge that a cultural monitor be called in for the presence of any cultural deposits or in the event that a subsurface void is discovered as well.*

Response 5: A cultural monitor will be on-call should the presence of any cultural deposits or if a subsurface void is discovered.

Comment 6: *We also ask that the 1986 burial discovery and re-internment site be adequately protected and discussed in this document as we inquired about in our January 12, 2005 comment letter for this proposal.*

Response 6: A temporary barrier will be employed during construction activities that will further improve the visibility of the re-interment site. Additionally, workers will be made aware of its location so that construction activities will not impact it.

Comment 7: *OHA asks that, in accordance with Section 6E-46.6, Hawaii Revised Statutes and Chapter 13-300, Hawaii Administrative Rules, if the project moves forward, and if any significant cultural deposits or human skeletal remains are encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division shall be contacted. We note that this may be the "applicable regulatory guidelines" mentioned on page ES-6 of the DEIS, however, these important procedures should be openly and clearly presented.*

Response 7: “Applicable regulatory guidelines” as stated in the DEIS will be clarified to include text indicating should any significant cultural deposits or human skeletal remains be encountered, work shall stop in the immediate vicinity and the State Historic Preservation Division will be contacted.

Comment 8: *OHA asks for elaboration upon the facility's storm water pollution control plan mentioned on page 4-38. Increased amounts of impervious surfaces will generate increased flow rates, which may have an effect on water quality and to the sensitive sinkhole environments found in the area. This is important because page 4-37 of the DEIS states that, "Waters are also reported to sometimes occur within sinkholes on protected areas of the site, but these areas may also be affected by tidally influenced groundwaters.*

Response 8: Additional stormwater retention basins are planned, so the storm water flow is not anticipated to differ from that contained in the facility’s current Storm Water Pollution Control Plan. The Storm Water Pollution Control Plan also contains a Storm Water Monitoring Plan which routinely monitors the water quality exiting the site. The current storm water outfalls on the site are located on the southeastern portion of the property and will not affect the sinkholes located on the parcels to the west of the subject site.

Comment 9: *We also see that many of the water quality safeguards are best management practices (BMP) dependent. As such, OHA asks how these BMPs will be assessed to ensure that they are achieving the objectives for which they were selected. Maintenance schedules, monitoring for effectiveness and a listing of each BMP, its expected performance and an assessment of whether the controlled value (noise, dust, water quality, etc.) is within targeted limits should be included.*

Response 9: The Construction Storm Water Pollution Control Plan will be completed prior to the start of construction and will address the effectiveness of all Best Management Practices. Periodic laboratory analysis of stormwater will be outlined in these plans and visual evidence of sediment escaping from the siltation barriers will be noted and corrective action will be taken, if necessary.

Comment 10: *OHA additionally notes that dewatering is mentioned on page 4-54 of the DEIS. OHA points out that if any dewatering is required, a State Department of Health National Pollutant Discharge Elimination System (NPDES) permit under the Clean Water Act, Section 402 is required that includes this application. Further, this permit will also apply if the water table is reached during subsurface excavation and we simply ask if this has been accounted for.*

Response 10: NPDES General permit coverage is currently being drafted. Form B for Industrial Activity and Form C for Construction Activities are being drafted. If dewatering is necessary, Form G for Construction activity dewatering effluent will be drafted.

Comment 11: *Procedurally, Hawaii Administrative Rules Section 11-55-38 Historic and burial sites review states that for a new project, activity, or site, the applicant submitting to the Department of Health an NPDES permit application shall also demonstrate to the Clean Water Branch that the project, activity, or site has been reviewed by the state historic preservation division (SHPD). A copy of the Notice of Intent* *from at least 30 days prior to the start of construction activities or NPDES permit application submitted to SHPD can be a way to meet this requirement. We ask if this has been done in order to meet this timeline.*

Response 11: A copy of the request to SHPD or letter of determination will be submitted to the Clean Water Branch with the NPDES and NOI.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

Attachment: Figure of Project Site and Construction Laydown Areas with Protective Buffer

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

SIGNATURE EXPIRATION DATE OF THE LICENSE

JAYANT VIR
HAWAII PROFESSIONAL ENGINEER NO. 12547

COVANTA
HONOLULU RESOURCE RECOVERY VENTURE
KAPOLEI, HAWAII

ALTERNATE ENERGY FACILITY/ THIRD BOILER ADDITION
C-00078

FOR
REFUSE DIVISION
CITY AND COUNTY OF HONOLULU

SITE PLAN
LOT #'S 33 & 34

BURNS AND ROE ENTERPRISES, INC.
Engineers and Constructors - Oradell, NJ

Rev No	Revision	Date	Dwn	Chkd	Approved Chief Engr
A	ISSUED FOR REVIEW	4/8/09	NM		
B	ISSUED FOR BID	4/10/09	NM		

Drawing Control				
Purpose	Approved By	Date	Released By	Date
For Information				
For Comment				
For Bid	JV	4/10/09	JD	4/10/09
For Fabrication				
For Construction				

Engineering Review		
Disc	Engr	Date
Mech		
Elec		
Civil		
Arch		
Instr		

Drawn	Designed	Checked
MYL	JV	

Lead Engineer	Date	Scale	Approved for Construction	Work Order	Drawing No	Sh	Rev
J. VIR		1"=60.0'	Chief CIVIL Engineer	2964	C213		B

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FILE COPY

LINDA LINGLE
GOVERNOR
THEODORE E. LIU
DIRECTOR
MARK K. ANDERSON
DEPUTY DIRECTOR

DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

STRATEGIC INDUSTRIES DIVISION
235 South Beretania Street, Leiopapa A Kamehameha Bldg., 5th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-3807
Fax: (808) 586-2536
Web site: www.hawaii.gov/dbedt

March 9, 2009

Environmental Services, Refuse Division, H-POWER
91-174 Hanua Street
Kapolei, HI 96707

Attn: Mr. Stephen Langham

Re: Draft Environmental Impact Statement (DEIS)
H-POWER Expansion Project, Ewa, Oahu
Tax Map Key: 1-9-026-030, -033, -034

In response to your January 27, 2009, notice, thank you for the opportunity to provide comments on the DEIS for the H-POWER Expansion Project, located in the Campbell Industrial Park in Kapolei, Oahu. The proposed Expansion will add a third combustor unit, associated air pollution control equipment, and provide for modifications and additions to existing waste feed, ash handling and related utility systems, as well as a new turbine generator. The new unit will be a 900 ton per day mass burn waterwall municipal waste combustor. The City and County will benefit from additional waste disposal capacity, increased energy production, and recovered metals recycling and reduction. The Expansion is expected to extend the life of the Waimanalo Gulch Sanitary Landfill.

The DEIS says that the proposed expansion's increased energy and reliability are fully consistent with the State's 2000 Energy Plan. In the October 2008 agreement between the State and the Hawaiian Electric Companies, Hawaiian Electric recognizes this 21 MW project as one of the projects that it will encourage in order to bring the maximum number of renewable energy projects on line as soon as possible.

We recognize the project's impact on the economy which is estimated to be 300 temporary construction jobs, 5-8 new permanent operating positions, and annual decrease of 550,000 barrels of fuel oil imported.

It is our understanding that the mass burn combuster will reduce MSW by 90% with 10% remaining in ash. This would alleviate, but not eliminate, the waste stream into the landfill. Assuming that this is the case, then, in the long term Oahu will still need an operable landfill. We are also concerned about the possibility of toxic pollutants into the landfill from the waste stream and would hope that appropriate testing would be part of the waste stream disposal activity.

We would like to call your attention to State energy conservation goals that encourage the efficient use of energy resources and call for project buildings, activities, and site grounds to be designed and/or retrofit with energy saving considerations. The mandate for such consideration is found in Chapter 344, HRS ("State Environmental Policy") and Chapter 226 ("Hawaii State Planning Act"). In particular, we would like to call to your attention HRS 226 18(c) (4) which includes a State objective of promoting all cost-effective energy conservation through adoption of energy-efficient practices and technologies. There may be opportunities for energy efficient lighting and/or daylighting at the facility.

Our website (http://hawaii.gov/dbedt) provides detailed information on the Hawaii Clean Energy Initiative, as well as energy efficiency and renewable energy guidelines, directives and statutes, studies, and reports. Please also do not hesitate to contact me at telephone number (808) 587-3812 for additional information.

Sincerely,

Theodore A. Peck
Administrator

c: OEQC
Dept. of Environmental Services, C&C of Honolulu
AMEC Earth & Environmental

Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. Theodore A. Peck
Administrator
State of Hawaii
Department of Business, Economic Development & Tourism
Strategic Industries Division
P.O. Box 2359
Honolulu, Hawaii 96804

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Peck,

Thank you for your letter dated March 9, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1*: It is our understanding that the mass burn combustor will reduce MSW by 90% with 10% remaining in ash. This would alleviate, but not eliminate, the waste stream into the landfill. Assuming that this is the case, then, in the long term, Oahu will still need an operable landfill. We are also concerned about the possibility of toxic pollutants into the landfill from the waste stream and would hope that appropriate testing would be part of the waste stream disposal activity.*

Response 1: Yes, the mass burn combustor reduces the volume of waste by 90%, resulting in a volume of ash remaining equivalent to 10% of the volume of the received MSW.

Please be assured that appropriate testing will be part of the waste stream disposal activity. The Hawaii State Department of Health is currently reviewing the Solid Waste Management Permit for the Proposed Expansion. Ash management and ash sampling plans are required as part of this permit. Briefly, ash from Unit 3 will consist of bottom ash and conditioned fly ash. From these ash streams, two types of ash will be produced, blended ash and bottom ash only. The blended ash will be made by mixing measured amounts of bottom ash and conditioned fly ash. The blended ash will pass through a sampling station before being loaded into disposal trucks. The excess bottom ash will also pass through a sampling station before being loaded into separate disposal trucks. The sampling plan will address the two ash products. The enclosed figure shows an overview of the ash management plan.

Bottom ash sampling will be conducted after the bottom ash metals removal system (BAMRS) from a transfer conveyor prior to dropping into the bottom ash truck. The sampling location will allow representative sampling without jeopardizing safety. Sampling will consist of representative grab samples collected at predetermined intervals, which will be used to form a representative composite sample.

Blended ash will be sampled in a similar manner so as to allow representative sampling without jeopardizing safety. The blended ash will be sampled from the conveyor leading from the mixing drum to the blended ash truck.

Comment 2: *We would like to call your attention to State energy conservation goals that encourage the efficient use of energy resources and call for project buildings, activities, and site grounds to be designed and/or retrofit with energy saving considerations. The mandate for such consideration is found in Chapter 344, HRS ("State Environmental Policy") and Chapter 226 ("Hawaii State Planning Act"). In particular, we would like to call to your attention HRS 226 18(c) (4) which includes a State objective of promoting all cost-effective energy conservation through adoption of energy-efficient practices and technologies. There may be opportunities for energy efficient lighting and/or daylighting at the facility*

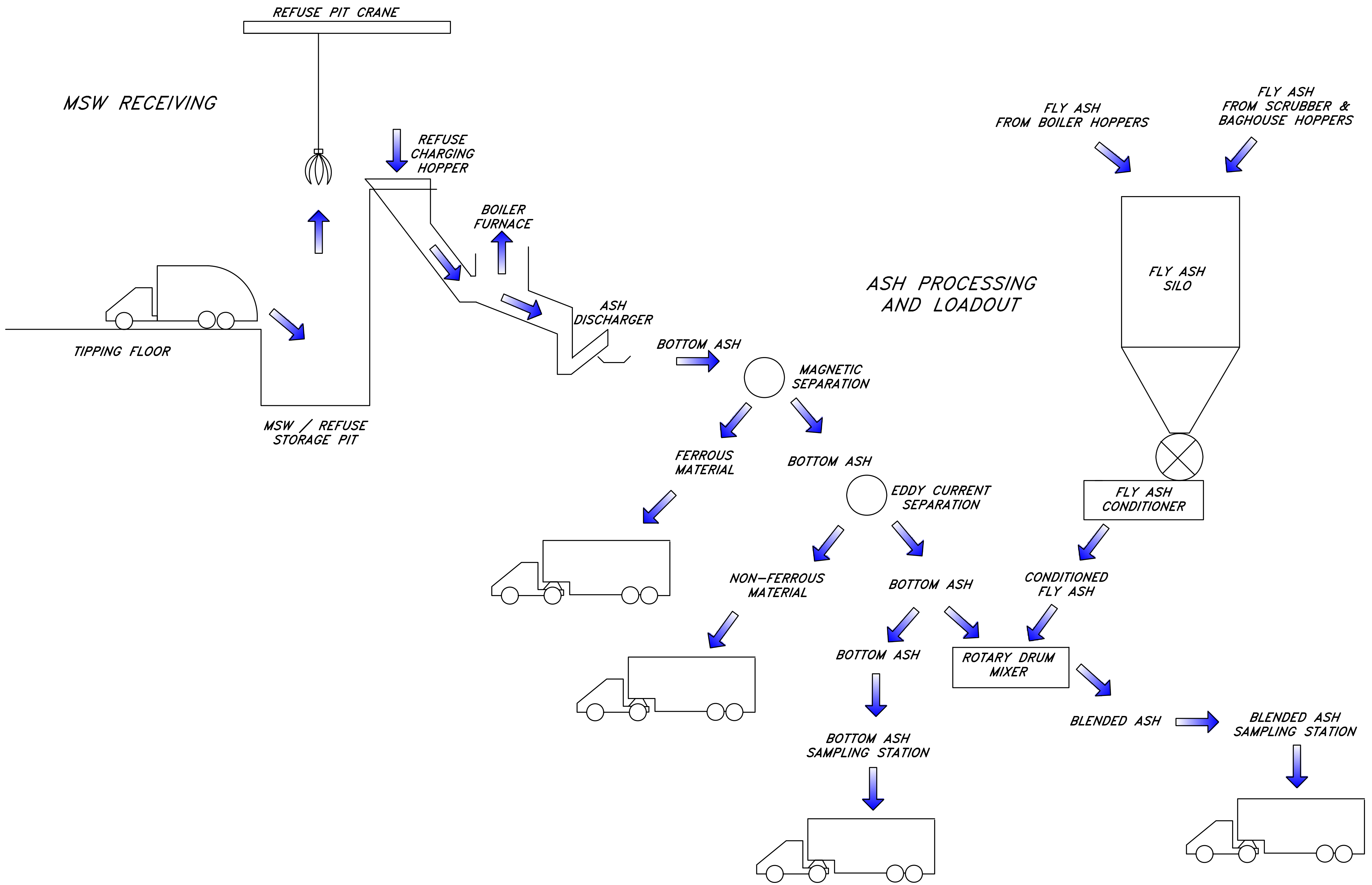
Response 2: The project intends to utilize energy efficient products in the design of the Proposed Expansion.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation



(D) SHT.

HPOWER EXPANSION – 900 TPD MSW

PROCESS FLOW DIAGRAM

COVANTA ENERGY, INC.

COVANTA ENGINEERING SERVICES, INC.
40 LANE ROAD
FAIRFIELD, NEW JERSEY 07007–2615

APPROVED	DATE	DRAWING NO.	SHT. NO.	REV.
TJD	3/4/2009	C00078–F–103		B

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FAX TRANSMITTAL SHEET

ENVIRONMENTAL CENTER
University of Hawaii
2500 Dole Street, Krauss Annex 19, Honolulu, HI 96822
Telephone: (808) 956-7361 Fax: (808) 956-3980

DATE: 3/9/2009

FROM: Peter Rappa
Environmental Review Coordinator

TO: ENV Director (692-5113)

Stephen Langham (768-3487)

Russell Okoji (528-5379)

OEQC (586-4186)

SUBJECT: **REVIEW OF DRAFT EIS**
H-POWER EXPANSION PROJECT
KAPOLEI, OAHU

No. of Pages: including cover sheet: 5

Water Resources Research Center
Environmental Center

UNIVERSITY
of HAWAI'I®
MĀNOA

March 9, 2009
RE: 0788

Mr. Stephen Langham
Department of Environmental Services
Refuse Division, H-POWER
91-174 Hanua Street
Kapolei, HI 96707

Dear Mr. Langham:

Draft Environmental Impact Statement
H-POWER Expansion Project
Kapolei, Oahu

The City and County of Honolulu and Covanta Honolulu Resource Recovery Venture propose the expansion of the existing Honolulu Program of Waste Energy Recovery facility (H-POWER) located in James Campbell Industrial Park in Kapolei. The expansion would involve the addition of a third combustor unit – a 900 ton per day Mass Burn waterwall municipal waste combustor as well as associated air pollution control provisions and equipment to link the addition to the existing facility. The project would also include modifications and additions to the existing waste feed, ash handling and other utility systems necessary for the new equipment and a new turbine generator that will provide an additional source of renewable energy to the City and County of Honolulu. Construction is anticipated to begin on the expansion project in the second half of 2009 with completion planned for the second half of 2012.

This review was conducted with the assistance of Ryan Riddle, Environmental Center.

Background /Historical Perspective (p. 1-2)

We are not sure that residential solid waste can be characterized as a renewable resource as it is in the last sentence of this section. As future products move to a cradle-to–cradle design paradigm whose materials are perpetually circulated in closed loops, there may be an end to the generation of solid waste to burn. We don't expect to see it any time soon, but it is within the realm of the possible.

2500 Dole Street, Krauss Annex 19 Honolulu, Hawai'i 96822
Telephone: (808) 956-7361 Fax: (808) 956-3980
An Equal Opportunity/Affirmative Action Institution

Unit 3 (Expansion Facility) (p. 2-10)

On page 2-10 the DEIS states, "The Expansion proposes that, except when screening of waste is required, MSW will be brought in by trucks and dumped into the refuse storage pit." Under what conditions will screening of waste be required?" How is screening carried out, what is involved?

Figure 2.3-1: Construction Facilities Site Plan (p. 2-23)

The font utilized in Figure 2.3-1 is illegible throughout the diagram especially in Insert A.

H-POWER Site (p. 4-7)

On page 4-7 the DEIS states, "On the basis of preliminary assessments made by potential contractors reviewing the conceptual design, it is anticipated that some soils will be excavated and removed from the site and that some structural fill will be imported to complete preparation of the site prior to slab and footing construction and full construction of the Expansion." How much structural fill is anticipated to be needed? Where will excavated material be taken?

Subsidence and Settlement (p. 4-8)

On page 4-8 the DEIS states, "Though previously cleared and grubbed, this shallow karst topography requires special construction measures to ensure the stability of foundations and to increase the load bearing capacity of the local soils." Can you summarize the special construction practices that are necessary due to the karst topography? It may be necessary to add a brief explanation of what a karst formation is. Not everyone is familiar with the term.

Construction Laydown Area (pp. 4-7 – 4-8)

Who has jurisdiction over the fenced area at the construction laydown site? Are they aware of the proposed project?

Tsunami (p. 4-9)

What would be the impact to the structure if a large tsunami, on the order of the one that struck Hilo, Hawaii in 1960 were to strike the coast along the James Campbell Industrial Park? Are there design standards for tsunami resistant buildings? If there is will these be used in the proposed new power generator?

Table 4.2-5: Results of BACT Determination for New Unit at H-Power (p. 4-23)

What is the distinction between MACT and BACT? This is unclear throughout the text.

H-POWER Surface Waters (pp. 4-34 – 4-37)

The DEIS mentions at the end of this section that the facility personnel are trained in spill prevention countermeasures. To what level are they trained?

In regard to surface waters at the construction laydown site the DEIS states, "Waters are also reported to sometimes occur within sinkholes on protected areas of the site, but these areas may also be affected by tidally influenced groundwaters." To what extent might this be the case?

Baseline Conditions (pp. 4-45 – 4-46)

In the last paragraph of this section there is a discussion of how much water H-Power is permitted to withdraw from its wells. The amount is 2.24 mgd a day. Does H-POWER use all of that water or just a percentage? Will the expanded plant use all of the 3.34 mgd it plans to withdraw via wells?

Operation Impacts & Mitigation (p. 4-53)

The DEIS mentions that the proposed expansion has been designed to minimize water demands and resultant discharges. Does this extend to the technical design of the Expansion? If so, how?

Flora and Invertebrate Fauna (p. 4-61)

In paragraph 4 on page 4-61 the DEIS states that the enclosures within Parcels 33 and 34 shelter the last two naturally occurring populations of Achranthes splendes var. rotundata. What is unique about this site that promotes the growth of Achranthes splendens var. rotundata? Why is it not found in other nearby areas that have similar site characteristics?

Mitigation Recommendations (pp. 5-41 – 5-42)

There are seven mitigation options bulleted in this section. Who would be implementing these measures? Will this fall to the County to implement or will it be the plant's management?

Citations

In several parts of the DEIS, there are citations to references that don't appear in the reference section. On page 4-45, there is a citation to a USGS 1998 report but no reference in the Reference Section on pages 12-1 – 12-3. Likewise, on page 5-6 there are a number of citations to reports including McAllister 1933; Kamakau 1976; Thrum 1907 and Sterling and Summers 1978, that don't appear in the reference section. These citations may be from references in the accompanying appendix report, but they should be in the reference section of the DEIS.

Thank you for the opportunity to review this Draft EIS.

Sincerely,

Peter Rappa
Environmental Review Coordinator

cc: OEQC
Director, ENV
Russell Okoji, AMEC
James Moncur, WRRC
Ryan Riddle

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. Peter Rappa
Environmental Review Coordinator
University of Hawaii
2500 Dole Street, Krauss Annex 19
Honolulu, HI 96822

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Rappa,

Thank you for your letter dated March 9, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1: *We are not sure that residential solid waste can be characterized as a renewable resource as it is in the last sentence of this section [Background/Historical Perspective]. As future products move to a cradle-to-cradle design paradigm whose materials are perpetually circulated in closed loops, there may be an end to the generation of solid waste to burn.*

Response 1: Hawaii's Renewable Portfolio Standards are described in the Hawaii Revised Statutes (HRS), Sections 269-91 through 269-95, "Renewable portfolio standards." As defined in the HRS, "Renewable energy" means energy generated or produced utilizing the following sources:

(1) Wind;
(2) The sun;
(3) Falling water;
(4) Biogas, including landfill and sewage-based digester gas;
(5) Geothermal;
(6) Ocean water, currents and waves;
(7) Biomass, including biomass crops, agricultural and animal residues and wastes, and municipal solid waste;
(8) Biofuels; and
(9) Hydrogen produced from renewable energy sources.

Under Hawaii law, energy from municipal solid waste is defined as renewable energy. We feel it appropriate to characterize residential solid waste as a renewable resource as we live on an island with limited waste disposal alternatives. Our landfills are quickly filling to capacity. Though we are hopeful that in the future we will not have solid waste disposal issues, our current situation calls for the Proposed Expansion.

Comment 2: Unit 3 (Expansion Facility) (p. 2-10): On page 2-10 the DEIS states, "The expansion proposes that, except when screening of waste is required, MSW will be brought in by trucks and dumped into the refuse storage pit." Under what conditions will screening of waste be required?" How is screening carried out, what is involved?

Response 2: Screening of waste, as described in the DEIS, is a visual inspection of waste to determine if it is "acceptable". The FEIS will include the following text that addresses the criteria for what is considered "acceptable".

The following is the definition of Unacceptable Waste:

"Unacceptable Waste" includes large castings, transmissions, rear ends, springs, fenders or other major parts of automobiles, motorcycles, other vehicles or marine vessels, explosives, pathological or biological waste, hazardous chemicals, radioactive materials, large quantities of sulfur-containing materials, large tree branches or trunks, machinery (other than small household appliances), liquid wastes, dirt, concrete, other non-burnable construction materials or debris and regulated hazardous waste of all kinds, including but not limited to, cleaning fluids, crankcase oils, cutting oils, paints, acids and poisons or other materials including those regulated under Federal and State rules and regulations.

The following is the definition of Acceptable Waste:

"Acceptable Waste" shall mean that garbage, trash, rubbish and refuse normally disposed of by and collection from residential, commercial, military, institutional and industrial establishments within the City, provided, however, that the term shall not include wastes in quantities and concentrations which require special handling in their collection and/or processing and disposal such as bulk items, junked automobiles, waste oil and other items of Unacceptable Waste as herein defined. Acceptable Waste may include leaves, twigs, grass and plant cuttings, branches or tree trunks not in excess of five feet long or larger than nine inches in diameter, paper, plastics, ferrous and non-ferrous metals, glass, discarded personal property such as bicycles and baby carriages and other constituents that normally appear in household refuse, and certain wastes which are difficult to process such as leather or automotive and small vehicular tires but which can be processed in small quantities when mixed with other Acceptable Waste provided large quantities of such wastes are not included within any truckload.

Procedures to Prevent Unacceptable Waste from Entering the Facility

All arriving solid waste vehicles are weighed at an inbound scale. At these scales, a clearly visible notice is posted that Unacceptable and Hazardous Waste is prohibited, together with a clear warning of potential hauler bans and other legal penalties for violators.

Although all vehicles are subject to inspection, priority for manual screening will be given to:

- *Those haulers known to serve industrial areas;*
- *Those haulers whose service areas are not well known;*
- *Front-end loaders and roll-off drop boxes; and*
- *Packer trucks with commercial pick-ups.*

The screening procedures used at the facility include the following activities:

- *Visual inspection of trucks by the RDF Tipping Floor Attendant and the Mass Burn Tipping Floor Attendant, for unusual looking loads;*

- *Routine visual inspection by tipping floor and mobile equipment personnel of material in the refuse vehicles during unloading;*
- *Visual inspection of the materials on the tipping floor and the pit of the Mass Burn Unit; and*
- *Selection of vehicles to be screened as part of the spot-check portion of the screening program outlined below is to be done both on a judgmental basis using criteria mentioned above, and on a random load basis.*

Comment 3: *Construction Facilities Site Plan (p. 2-23: The font utilized in Figure 2.3-1 is illegible throughout the diagram especially in Insert A.*

Response 3: A different font will be utilized in the Construction Facilities Site Plan (p. 2-23).

Comment 4: *H-POWER Site (p. 4-7): On page 4-7 the DEIS states, "On the basis of preliminary assessments made by potential contractors reviewing the conceptual design, it is anticipated that some soils will be excavated and removed from the site and that some structural fill will be imported to complete preparation of the site prior to slab and footing construction and full construction of the Expansion." How much structural fill is anticipated to be needed? Where will excavated material be taken?*

Response 4: Based on the current drawings and preliminary assessments, the quantity of excavation and fill anticipated are as follows:

Excavation:	Topsoil:	1,700 cyd
	Soil:	8,890 cyd
	Coral:	7,240 cyd
Total Excavation:		17,830 cyd
Total Fill:		21,290 cyd

Excavated on-site soils may be used as general fill provided that they comply with the requirements stated in the geotechnical report. All materials used will be in accordance with specifications for construction of such facilities by the State and County. It is anticipated that all excavated soils will be used on-site as fill material. Excavated soils not used on-site will be disposed in an appropriate manner.

Comment 5: *Subsidence and Settlement (p. 4-8): On page 4-8 the DEIS states, "Though previously cleared and grubbed, this shallow karst topography requires special construction measures to ensure the stability of foundations and to increase the load bearing capacity of the local soils." Can you summarize the special construction practices that are necessary due to the karst topography? It may be necessary to add a brief explanation of what a karst formation is. Not everyone is familiar with the term.*

Response 5: The following definition of karst formation will be included in the FEIS. “Karst topography is a landscape shaped by the dissolution of a layer or layers of soluble bedrock, usually carbonate rock such as limestone.” Due to the karst topography, it is recommended that all footing excavations be probed to detect the presence of voids beneath the footings and, if found, the voids shall either be 1) filled with grout or 2) opened, cleaned of debris and backfilled with properly compacted fill.

Comment 6: *Construction Laydown Area (pp, 4-7 – 4-8): Who has jurisdiction over the fenced area at the construction laydown site? Are they aware of the proposed project?*

Response 6: The City & County of Honolulu is the owner of the construction laydown areas and is aware of the proposed project.

Comment 7: *Tsunami (p. 4-9): What would be the impact to the structure if a large tsunami, on the order of the one that struck Hilo, Hawaii in 1960 were to strike the coast along the James Campbell Industrial Park? Are there design standards for tsunami resistant buildings? If there is will these be used in the proposed new power generator?*

Response 7: The design of the facility does not take into account the potential impacts of a tsunami, because the proposed facility is shielded from a tsunami by buildings on the makai side.

Comment 8: *Table 4.2-5: Results of BACT Determination for New Unit at H-Power (p. 4-23): What is the distinction between MACT and BACT? This is unclear throughout the text.*

Response 8: In response to your comment, we will add additional information in the text. To summarize: Maximum Achievable Control Technology (MACT) and Best Available Control Technology (BACT) are two different emission control requirements that arise out of different portions of the federal Clean Air Act. MACT is a requirement for control of hazardous air pollutants and BACT is a requirement for the control of any regulated pollutants.

MACT imposes emission limitations for major sources of hazardous air pollutants in specifically listed source categories. For the Municipal Waste Combustor industry, the MACT standards were combined with, and promulgated as part of, the New Source Performance Standards for the industry at 40 CFR 60, Subpart Eb. Subpart Eb imposes emission limitations for MWC metals (particulate matter, lead, cadmium, and mercury), MWC acid gases (SO_2, HCl), dioxins/furans, NO_x, and CO.

BACT is an emission limitation that is imposed through the federal and state Prevention of Significant Deterioration (PSD) requirements for regulated air pollutants that exceed major source thresholds as a result of the project. BACT is defined as:

"an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under the Clean Air Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard...."

Comment 9: *H-POWER Surface Waters (pp. 4-34 – 4-37): The DEIS mentions at the end of this section that the facility personnel are trained in spill prevention countermeasures. To what level are they trained? In regard to surface waters at the construction laydown site the DEIS states, "Waters are also reported to sometimes occur within sinkholes on protected areas of the site, but these areas may also be affected by tidally influenced groundwaters." To what extent might this be the case?*

Response 9: Facility personnel are trained to recognize, report, and respond to oil spills on the facility (mainly small vehicle or equipment spills). These are localized spills that can be easily managed. In the event there is a large spill, personnel are trained to respond and to call Pacific Commercial Services. LLC or 911.

Surface water noted within sinkholes often have a direct hydraulic connection with the underlying groundwater, and are therefore subject to tidal influence. This is especially true of karst sinkholes in the area.

Comment 10: *Baseline Conditions (pp. 4-45 – 4-46)" In the last paragraph of this section there is a discussion of how much water H-Power is permitted to withdraw from its wells. The amount is 224 mgd a day. Does H-POWER use all of that water or just a percentage? Will the expanded plant use all of the 3.34 mgd it plans to withdraw via wells?*

Response 10: H-POWER does not use all of the water that it is permitted to use on a daily basis. Current and future permitted quantities define the maximum water quantity based on engineering design anticipated to be used on a daily basis. Typical actual daily use is currently less than the permitted figure and this is anticipated to be the case in the future, as well. Actual use will be determined when operation of the new plant commences.

Comment 11: *Operation Impacts & Mitigation (p. 4-53): The DEIS mentions that the proposed expansion has been designed to minimize water demands and resultant discharges. Does this extend to the technical design of the Expansion? If so, how?*

Response 11: Yes, the HPOWER expansion is designed to minimize water demands and resultant discharges. The expansion is designed to reuse as much water as possible. The boiler blow down water will be reused for lime slaking and as dilution water in the scrubber. Water from the settling basin will be reused in the ash discharger as quench water. Cooling tower uses water from the caprock wells. The non-contact cooling water will be injected back into the caprock.

Comment 12: *Flora and Invertebrate Fauna (p. 4-61): In paragraph 4 on page 4-61 the DEIS states that the enclosures within Parcels 33 and 34 shelter the last two naturally occurring populations of Achranthes splendes var. rotundata. What is unique about this site that promotes the growth of Achranthes splendens var. rotundata? Why is it not found in other nearby areas that have similar site characteristics?*

Response 12: *Achyranthes splendens* var. *rotundata* has historically been found in open areas that experience prolonged droughts and have very well-drained or minimal soil. *A. splendens* var. *rotundata* has a preference for sinkholes, which may provide more humid conditions and a higher, tidally fluctuating water table within these arid areas. However, the occurrence of *A. splendens* var. *rotundata* on Parcels 33 and 34 may also be due to a relative lack of damaging events rather than to a factor that specifically promotes growth. During the last three decades, the population has been severely impacted by a number of ongoing processes, including human disturbance and resource competition from invasive plants such as *Prosopis pallida* and *Pluchea spp.* Thus, *A. splendens* var. *rotundata* had a larger historical range than is currently observed but may be present here because these sites have so far avoided extirpation caused by human activities and exotic species. Another stand of *A. splendens* var. *rotundata* can be found in the Ka'ena Point area.

Comment 13: *Mitigation Recommendations (pp. 5-41– 5-42): There are seven mitigation options bulleted in this section. Who would be implementing these measures? Will this fall to the County to implement or will it be the plant's management?*

Response 13: Traffic mitigation measures are not required, but several options were listed for consideration. Such measures would be considered by both the City and the plant's management. Both the City and the plant's management work together on a routine basis, and a member of the City's staff is in residence at the facility.

Comment 14: *Citations: In several parts of the DEIS, there are citations to references that don't appear in the reference section. On page 4-45, there is a citation to a USGS 1998 report but no reference in the Reference Section on pages 12-1 – 12-3. Likewise, on page 5-6 there are a number of citations to reports including McAllister 1933; Kamakau 1976; Thrum 1907 and Sterling and Summers 1978, that don't appear in the reference section. These citations may be from references in the accompanying appendix report, but they should be in the reference section of the DEIS.*

Response 14: References that were inadvertently omitted of Section 12.1 – References, will be included in the FEIS.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:

STP 8.3156

March 9, 2009

Mr. Stephen Langham
Environmental Services
Refuse Division, H-POWER
91-174 Hanua Street
Kapolei, Hawaii 96707

Dear Mr. Langham:

Subject: H-POWER Expansion Project, Kapolei, Oahu, Hawaii
Draft Environmental Impact Statement (DEIS)
TMK: 1-9-026: 030, 033, 034

Thank you for requesting the State Department of Transportation's (DOT) review of the subject project to expand the H-POWER facility, which is located in the Campbell Industrial Park area of Oahu.

DOT understands that the subject proposed project is intended to increase the City and County of Honolulu's capacity to deal with solid waste disposal and to increase renewable energy production. The proposed project includes the addition of a third combuster unit (900 ton/day Mass Burn waterwall municiple waste combustor), all associated air pollution control equipment and the equipment needed to tie it into the exisiting plant. There will also be modifications to the exisiting systems and the addition of a new turbine generator.

DOT requests that its concerns for potential project impacts be addressed in the Final EIS. The following comments are offered by the DOT Airports Division Planning Section, who may be contacted via telephone number (808) 838-8817.

1. The proposed project is not anticipated to generate any significant, adverse impacts to operations at the State-owned Kalaeloa Airport.

2. However, given the proximity of the proposed project to Kalaeloa Airport, DOT notes that the applicant will file Form 7460-1, "Notice of Proposed Construction or Alternation" with the Federal Aviation Administration (FAA).

3. As an administrative note, the legend in Figure1.6-1 in the subject DEIS is incorrect. Rather than indicating the entire area as "Military Installation," the legend should be updated to show Kalaeloa Airport as owned by the State of Hawaii.

The following comments are offered by the DOT Highways Division Planning Branch, who may be contacted via telephone number (808) 587-1830.

1. The traffic impact discussion does not include any mention of additional personnel needed to operate the expanded portion of the facility. It would be useful to know if this was an omission, if the information was contained elsewhere in the DEIS, in which it should have been referenced, or if the actual personnel requirements would not materially change.

2. The calculation of additional truck traffic delivering trash for processing and conversion seems reasonable. However, it does not provide any estimate for increases in truck traffic over time, since the expanded facility will not be ready for the additional trucks until 2012. In general, the potential impacted intersections occur on roads that are private or otherwise not under DOT jurisdiction.

3. The discussion of the construction impacts might have merited a separate treatment since the impacts would be present while the expansion was constructed and would not represent a continuing and ongoing impact once construction is completed.

DOT appreciates the opportunity to provide comments and requests four (4) copies of the project Final EIS be provided for final review. If there are any other questions, please contact Mr. David Shimokawa of the DOT Statewide Transportation Planning Office at (808) 587-2356.

Very truly yours,

Francis Paul Keeno

for BRENNON T. MORIOKA, PH.D., P.E.
Director of Transportation

c: Katherine Kealoha, Office of Environmental Quality Control
Eric Takamura, Department of Environmental Services
Dr. Russell Okoji, AMEC Earth & Environmental, Inc.

Covanta Honolulu Resource Recovery Venture
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5/6/2009

Mr. Brennon T. Morioka, Ph.D., P.E.
Director of Transportation
Department of Transportation
869 Punchbowl Street
Honolulu, Hawaii 96813-5097

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility,
Kapolei, Hawaii

Dear Mr. Morioka:

Thank you for your letter dated March 9, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

The following comments are offered by the DOT Airports Division Planning Section:

Comment 1: *The proposed project is not anticipated to generate any significant, adverse impacts to operations at the State-owned Kalaeloa Airport.*

Response 1: Comment noted.

Comment 2: *However, given the proximity of the proposed project to Kalaeloa Airport, DOT notes that the applicant will file Form 7460-1, "Notice of Proposed Construction or Alteration" with the Federal Aviation Administration (FAA).*

Response 2: Form 7460-1, "Notice of Proposed Construction or Alteration" will be filed with the FAA 30 days prior to construction.

Comment 3: *As an administrative note, the legend in Figure 1.6-1 in the subject DEIS is incorrect. Rather than indicating the entire area as "Military Installation," the legend should be updated to show Kalaeloa Airport as owned by the State of Hawaii.*

Response 3: Figure 1.6.-1 will be updated accordingly in the Final EIS.

The following comments are offered by the DOT Highways Division Planning Branch:

Comment 1: *The traffic impact discussion does not include any mention of additional personnel needed to operate the expanded portion of the facility. It would be useful to know if this was an omission, if the information was contained elsewhere in the DEIS, in which it should have been referenced, or if the actual personnel requirements would not materially change.*

Response 1: A discussion of additional personnel is provided in Section 5.5.3.2 Socioeconomic Impact of H-POWER Expansion (Operations). This will be discussed in the traffic section of the final EIS, as well, but the personnel requirements do not change in a way that adversely impacts traffic. Only five to eight new fulltime positions would be created to support the expanded operation.

Comment 2: *The calculation of additional truck traffic delivering trash for processing and conversion seems reasonable. However, it does not provide any estimate for increases in truck traffic over time, since the expanded facility will not be ready for the additional trucks until 2012. In general, the potential impacted intersections occur on roads that are private or otherwise not under DOT jurisdiction.*

Response 2: Thank you for noting that the impacted intersections occur on roads that are not under DOT jurisdiction. Regarding the traffic analysis, it is true that the 2008 baseline was compared to the 2012 operational level assuming a maximum operational level (worst case). We have performed additional level of service calculations for the affected intersections comparing an estimated 2012 baseline with and without the estimated additional traffic from the operation of the proposed expansion unit assuming maximum operational traffic.

The following section will be added to the FEIS:

5.2.5 TRAFFIC IMPACTS DUE TO PROJECTED GROWTH IN THE JCIP

Although JCIP is almost completely developed, limited growth of the JCIP area may have an impact on traffic conditions during construction and operation of the proposed Expansion. Actual projected growth numbers were unavailable for JCIP, however growth rates for Kapolei and Ewa were reported as follows in several source documents, including City of Kapolei, Moving Kapolei Forward. http://www.kapolei.com/pdf/news/Moving%20Kapolei%20Forward.pdf; Kapolei Magazine. http://www.kapolei.com/pdf/magazine/MovingKapoleiForward.pdf; Kapolei Quick Facts. http://www.kapolei.com/quick_facts.cfm?quickFactID=16; …ID-21; and Oahu Metropolitan Planning Organization. Oahu Regional Transportation Plan. www.honolulutraffic.com/DraftORTP2030.pdf.

- 6-11% growth/year in jobs in Kapolei
- 5-8% growth/year in population in Kapolei
- 5.6% growth/year in population in Ewa
- 8% growth/year in jobs in Ewa

Due to the minimal growth potential in JCIP itself, AMEC conservatively assumed that the JCIP would expand at a rate of 5% per year. These estimates are likely very optimistic considering the current economic climate. Both Operational and Construction scenarios were evaluated.

Growth was compounded annually to 2012 for the Operational scenario and through 2010 for the Construction scenario to coincide with the construction year with peak transient traffic impacts.

5.2.5.1 Traffic Impacts During Facility Operation

Traffic conditions during operation of the expanded facility prior to roadway improvements and in consideration of JCIP growth through 2012 are discussed below. At Intersection 1, the Northbound direction remains an LOS of F. Southbound traffic declines from an LOS of D to an LOS of E when compared to Level of Service Analysis During Operation Following Expansion (Section 5.2.2). Intersection 2 in the Eastbound, AM analysis declines from an LOS of E to F. Eastbound PM changes from an LOS of B to C. Intersection 3 Southbound conditions remained a LOS of F in the AM hours, but declined from an LOS of B to C in the PM. AM Westbound traffic remained an LOS of F. PM traffic declined from an LOS of C to E. At Intersection 4, a slight decline in the Southbound AM traffic is observed with an LOS change from A to B. Eastbound AM and PM both show a decline from an LOS of C to D and C to F, respectively. Overall there is a slight impact to traffic conditions when potential growth of JCIP (at 5% per year) is considered.

TABLE 5.2-9 LEVEL OF SERVICE ANALYSIS DURING OPERATION FOLLOWING EXPANSION WITH PROJECTED GROWTH TO 2012 PRIOR TO ROADWAY IMPROVEMENTS

	Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (342 sec)**	***E (40 sec)***	A(0)	A(0)
PM Peak	**F (>1000 sec)**	***E (41 sec)***	A(0)	A(0)
	Intersection 2: Kalaeloa + Eastbound H1 Ramps			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0 sec)	A(0 sec)	***F (64 sec)***	n/a
PM Peak	A(0 sec)	A(0 sec)	*C (15 sec)*	n/a
	Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	B (15 sec)	**F (220 sec)**	B (13 sec)	**F (206 sec)**
PM Peak	**F (323 sec)**	*C (24 sec)*	B (13 sec)	***E (58 sec)***
	Intersection 4: Kalaeloa + Malakole (Signal)			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	A (10 sec)	*B (11 sec)*	*D (48 sec)*	B (12 sec)
PM Peak	B (17 sec)	B (10 sec)	***F (100 sec)***	B (12 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Traffic conditions during operation of the expanded facility following roadway improvements and in consideration of JCIP growth through 2012 are discussed below. At Intersection 1, the

Northbound direction remains an LOS of F. Southbound AM and PM traffic declines from an LOS of D to an LOS of E when compared to Traffic Impacts During Facility Operation Post Kalaeloa Roadway Improvements (Section 5.2.4.1). Intersection 2 in the Eastbound, declines from an LOS of E to F in the AM and from B to C in the PM. At Intersection 3, a slight decline in the Southbound traffic is observed with an LOS change from C to D in the AM and B to C in the PM. Northbound PM traffic also has a slight decline from C to D. Westbound AM and PM have a sharp decline from an LOS of C to F. Intersection 4 Northbound PM has a slight decline from an LOS of B to C. Southbound conditions also slightly declined from an LOS of A to B. Eastbound PM declined from C to D, where AM improved from D to C. This isolated improvement at Intersection 4 may be attributed to the Highway Capacity Software redistribution of signal times. Traffic for the intersection should be viewed as a whole. Overall a decline in LOS is observed when JCIP growth is considered. However, traffic conditions are alleviated to some degree when roadway improvements of Kalaeloa are completed.

TABLE 5.2-10 LEVEL OF SERVICE ANALYSIS DURING OPERATION FOLLOWING EXPANSION WITH PROJECTED GROWTH TO 2012 AFTER ROADWAY IMPROVEMENTS

	Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (342 sec)**	***E (40 sec)***	A (0 sec)	A (0 sec)
PM Peak	**F (>1000 sec)**	***E (41 sec)***	A (0 sec)	A (0 sec)
	Intersection 2: Kalaeloa + Eastbound H1 Ramps			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	A (0 sec)	A (0 sec)	***F (67 sec)***	n/a
PM Peak	A (0 sec)	A (0 sec)	*C (16 sec)*	n/a
	Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	C (29 sec)	*D (50 sec)*	B (16 sec)	***F (87 sec)***
PM Peak	*D (47 sec)*	*C (24 sec)*	B (15 sec)	***F (98 sec)***
	Intersection 4: Kalaeloa + Malakole (Signal)			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	B (15 sec)	*B (12 sec)*	*C (30sec)*	B (13 sec)
PM Peak	*C (23 sec)*	B (14 sec)	*D (39 sec)*	B (12 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

5.2.5.2 Traffic Impacts During Facility Construction -

Traffic conditions during construction of the expanded facility prior to roadway improvements and in consideration of JCIP growth through 2012 are discussed below. Increases due to personnel and construction vehicles are discussed separately. Month 13 baseline traffic was used as the peak traffic month due to construction vehicle increases during the construction period, while Month 22 baseline traffic was used as the peak traffic month due to increases in construction personnel.

Construction Vehicle Increases – Month 13

At Intersection 1, the Northbound direction remains an LOS of F. LOS designations for the other directional traffic remains the same at this intersection when compared to Level of Service Analysis During Facility Construction (Section 5.2.3). Intersection 2 in the Eastbound, AM analysis declines from an LOS of C to E. Intersection 3 Westbound conditions slightly declines in the AM and PM from an LOS of E to F and C to D, respectively. At Intersection 4, a decline in the Eastbound PM traffic from an LOS of C to E is observed.

TABLE 5.2-11 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION (CONSTRUCTION VEHICLE INCREASES) WITH PROJECTED GROWTH TO 2010

	Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (106 sec)**	D (30 sec)	A(0)	A(5 sec)
PM Peak	**F (>1000 sec)**	D (33 sec)	A(0)	A(3 sec)
	Intersection 2: Kalaeloa + Eastbound H1 Ramps			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	*E (43 sec)*	n/a
PM Peak	A(0)	A(0)	B (14 sec)	n/a
	Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	B (14 sec)	**F (137 sec)**	B (13 sec)	***F (130 sec)***
PM Peak	**F (229 sec)**	B (17 sec)	B (13 sec)	*D (39 sec)*
	Intersection 4: Kalaeloa + Malakole (Signal)			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	A (9 sec)	A (8 sec)	C (30 sec)	B (12 sec)
PM Peak	B (16 sec)	A (10 sec)	***E (56 sec)***	B (11 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Personnel Increases – Month 22

At Intersection 1, the Northbound direction remains an LOS of F. LOS designations for the other directional traffic remains the same when compared to Level of Service Analysis During Facility Construction (Section 5.2.3). Intersection 2 in the Eastbound, AM analysis declines from an LOS of D to E. Intersection 3 Westbound conditions slightly decline in the AM and PM from an LOS of E to F and C to D, respectively. At Intersection 4, a decline in the Eastbound PM traffic from an LOS of C to E. Overall there is a slight impact to traffic conditions assuming a JCIP growth rate of 5% per year.

TABLE 5.2-12 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION (PERSONNEL INCREASES) WITH PROJECTED GROWTH TO 2010

	Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	**F (106 sec)**	D (30 sec)	A(0)	A(5 sec)
PM Peak	**F (>1000 sec)**	D (32 sec)	A(0)	A(3 sec)
	Intersection 2: Kalaeloa + Eastbound H1 Ramps			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	A(0)	A(0)	***E (43 sec)***	n/a
PM Peak	A(0)	A(0)	A (14 sec)	n/a
	Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	B (13 sec)	**F (145 sec)**	B (13 sec)	***F (131 sec)***
PM Peak	**F (237 sec)**	B (17 sec)	B (13 sec)	*D (39 sec)*
	Intersection 4: Kalaeloa + Malakole (Signal)			
	Northbound	Southbound	Eastbound	Westbound
AM Peak	A (9 sec)	A (9 sec)	C (29 sec)	B (12 sec)
PM Peak	B (16 sec)	A (10 sec)	***E (58 sec)***	B (11 sec)

*Bolded items either "At Capacity" (LOS E) or "Forced Flow" (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Traffic conditions during construction of the expanded facility following roadway improvements and in consideration of JCIP growth through 2012 are discussed below. Increases due to construction personnel and construction vehicles are discussed separately.

Construction Vehicle Increases – Month 13

Conditions at Intersection 1 and 2 remain the same when compared to Traffic Impacts During Facility Construction Post Kalaeloa Roadway Improvements (Section 5.2.4.2). Intersection 3 Northbound AM and PM conditions decline slightly from an LOS of B to C for both. Southbound AM conditions decrease to an LOS of D from C. Westbound conditions decline in the AM and PM from an LOS of D to E for both. At Intersection 4, slight decline a decline in the Northbound AM traffic from an LOS of A to B and in Eastbound PM traffic from an LOS of C to D.

TABLE 5.2-13 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION (CONSTRUCTION VEHICLE INCREASES) FOLLOWING EXPANSION WITH PROJECTED GROWTH TO 2010 AFTER ROADWAY IMPROVEMENTS

	Northbound	Southbound	Eastbound	Westbound
Intersection 1: Kalaeloa + Farrington/Westbound H1 Ramps				
AM Peak	**F (106 sec)**	D (30 sec)	A(0)	A(5 sec)
PM Peak	**F (>1000 sec)**	D (33 sec)	A(0)	A(3 sec)
Intersection 2: Kalaeloa + Eastbound H1 Ramps				
AM Peak	A(0)	A(0)	**E (45 sec)**	n/a
PM Peak	A(0)	A(0)	B (15 sec)	n/a
Intersection 3: Kalaeloa + Honolulu Advertiser Bldg. (Signal)				
AM Peak	*C (22 sec)*	*D (25 sec)*	B (16 sec)	***E (60 sec)***
PM Peak	*C (26 sec)*	B (18 sec)	B (15 sec)	***E (60 sec)***
Intersection 4: Kalaeloa + Malakole (Signal)				
AM Peak	*B (11 sec)*	A (8 sec)	*D (40 sec)*	B (15 sec)
PM Peak	B (18 sec)	B (12 sec)	C (31 sec)	B (12 sec)

*Bolded items either “At Capacity” (LOS E) or “Forced Flow” (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

Construction Personnel Increases – Month 22

Conditions at Intersection 1 and 2 remain the same when compared to Traffic Impacts During Facility Construction Post Kalaeloa Roadway Improvements (Section 5.2.4.2). Intersection 3 Northbound PM conditions decline slightly from an LOS of B to C. Westbound conditions decline in the AM and PM from an LOS of D to E for both. At Intersection 4, slight decline a decline in the Northbound AM traffic from an LOS of A to B and in Eastbound PM traffic from an LOS of C to D.

TABLE 5.2-14 LEVEL OF SERVICE ANALYSIS DURING CONSTRUCTION (PERSONNEL INCREASES) FOLLOWING EXPANSION WITH PROJECTED GROWTH TO 2010 AFTER ROADWAY IMPROVEMENTS

	Northbound	Southbound	Eastbound	Westbound
Intersection 1: Kalealoa + Farrington/Westbound H1 Ramps				
AM Peak	**F (106 sec)**	D (30 sec)	A(0)	A(5 sec)
PM Peak	**F (>1000 sec)**	D (33 sec)	A(0)	A(3 sec)
Intersection 2: Kalealoa + Eastbound H1 Ramps				
AM Peak	A(0)	A(0)	**E (45 sec)**	n/a
PM Peak	A(0)	A(0)	B (15 sec)	n/a
Intersection 3: Kalealoa + Honolulu Advertiser Bldg. (Signal)				
AM Peak	C (22 sec)	C (24 sec)	B (16 sec)	***E (59 sec)***
PM Peak	*C (25 sec)*	B (18 sec)	B (15 sec)	***E (59 sec)***
Intersection 4: Kalealoa + Malakole (Signal)				
AM Peak	*B (12 sec)*	A (8 sec)	*D (39 sec)*	B (15 sec)
PM Peak	B (18 sec)	B (12 sec)	C (31 sec)	B (11 sec)

*Bolded items either "At Capacity" (LOS E) or "Forced Flow" (LOS F).
Italicized items indicate a change in LOS from Existing Conditions.

As with Operational traffic, projected growth of the JCIP does negatively impact traffic conditions during Construction activities (truck and personnel increases). However, roadway improvements that are currently underway assist in alleviating some of the congestion. Mitigation options discussed in Section 5.2.4.3 could also further reduce impacts of JCIP growth and the proposed Expansion to the area.

Comment 3: *The discussion of the construction impacts might have merited a separate treatment since the impacts would be present while the expansion was constructed and would not represent a continuing and ongoing impact once construction is completed.*

Response 3: Discussion of construction impacts are presented in Section 5.2.3 of the DEIS (current conditions) and in Section 5.2.4.2 (post Kalaeloa Roadway improvements).

Comment 4: *DOT appreciates the opportunity to provide comments and requests four (4) copies of the project Final EIS be provided for final review.*

Response 4: Four copies of the Final EIS will be provided as requested.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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LINDA LINGLE
GOVERNOR OF HAWAII

CHIYOME L. FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EMD / CWB

03022PMT.09

March 10, 2009

Mr. Stephen Langham
Refuse Division, H-Power
Department of Environmental Services
City & County of Honolulu
91-174 Hanua Street
Kapolei, Hawaii 96707

Dear Mr. Langham:

SUBJECT: Draft Environmental Impact Statement (DEIS) for H-Power Expansion Project Kapolei, Island of Oahu, Hawaii Reference #: 09-019

The Department of Health, Clean Water Branch (CWB), has reviewed the subject document and offers these comments on your project. Please note that our review is based solely on the information provided in the subject document and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:

   a. Storm water associated with industrial activities. A NOI for modification to the NDPES Notice of General Permit Coverage File No. HI R70B771 shall be submitted for the expansion to the subject facility.

   b. Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.

   c. Hydrotesting water.

   d. Construction dewatering effluent. Coverage under this general permit may be required for the dewatering activities conducted during the excavation for the relocation a steam pipe and installation of footings.

   You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

3. For types of wastewater not listed in Item 4 above or wastewater discharging into Class 1 or Class AA waters, you may need an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.

4. You must also submit a copy of the NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.

5. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage is required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

If you have any questions, please visit our website at http://www.hawaii.gov/health/environmental/water/cleanwater/index.html, or contact the Engineering Section, CWB, at 586-4309.

Sincerely,

Alec Wong

ALEC WONG, P.E., CHIEF
Clean Water Branch

MT:cu

c: Ms. Kathryn Kealoha, Office of Environmental Quality Control [via fax 586-4186 only]
Mr. Timothy Steinberger, DEQ, City & County of Honolulu [via fax 768-3487 only]
Mr. Jaicai Liu, Environmental Planning Office, Department of Health

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Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

5/6/2009

Mr. Alec Wong, P.E., Chief
State of Hawaii
Department of Health
Clean Water Branch
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Mr. Wong,

Thank you for your letter dated March 10, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process and have the following responses to your comments.

Comment 1*: Any project and its potential impacts to State waters must meet the following criteria:*

a. *Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.*
b. *Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.*
c. *Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).*

Response 1: We are aware of these regulations and appropriate permits which will address these issues are being prepared.

Comment 2: *You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:*

a. *Storm water associated with industrial activities. A NOI for modification to the NDPES Notice of General Permit Coverage File No. HI R70B771 shall be submitted for the expansion to the subject facility.*
b. *Storm water associated with construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.*

c. Hydrotesting water.
d. Construction dewatering effluent. Coverage under this general permit may be required for the dewatering activities conducted during the excavation for the relocation of a steam pipe and installation of footings.

You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at http ://vvww.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html.

Response 2: We are aware of these regulations and appropriate permits are in the planning. A NOI form will be submitted at least 30 calendar days prior to the start of any discharge activity.

Comment 3: *For types of wastewater not listed in Item 4 above or wastewater discharging into Class 1 or Class AA waters, you may need an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at http ://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html.*

Response 3: We are aware of these regulations and appropriate permits are in the planning. If necessary, a NPDES individual permit will be submitted at least 180 calendar days prior to the start of the discharge activity for wastewater not addressed in Item 4 above.

Comment 4: *You must also submit a copy of the NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.*

Response 4: Comment noted. A copy of our request for review to SHPD or SHPD's determination letter will accompany our NOI or NPDES permit application.

Comment 5: *Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage is required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.*

Response 5: We are aware of these regulations and any discharges will comply with the State's Water Quality Standards.

If you have any questions regarding this letter, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation

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LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

March 16, 2009

Mr. S. Samuel Joshi
Covanta Energy Corporation
40 Lane Road
Fairfield, New Jersey 07004

LOG NO: 2009.0809
DOC NO: 0903WT74
Archaeology

Dear Mr. Joshi:

SUBJECT: 6E-8 Historic Preservation Review—
DRAFT Environmental Impact Statement (DEIS)—
H-POWER Expansion Project,
Hono'uli'uli Ahupua'a, 'Ewa District, O'ahu, Hawai'i
TMK: (1) 9-026-030, 033, 034

Thank you for the opportunity to review this DRAFT Environmental Impact Statement, which we received via CD on January 28, 2009.

The H-POWER site is located in the Campbell Industrial Park at Kalaeloa [formerly called Barbers Point or Barber's Point]. The H-POWER facility, which began operation in May 1990, is operated by Covanta Honolulu Resource Recovery Venture (CHRRV) on behalf of the City and County of Honolulu.

This project will entail the expansion of the current H-POWER facility onto parcels 33 and 34 adjacent to the current facility. They are currently vacant. A garden for endemic plants and the site for the reburial of a single human burial previously discovered when the initial facility was built in the 1980's area present on the site. Because of the possibility that sinkholes prevalent in this portion of 'Ewa could contain historic properties, an archaeological and cultural impact assessment study in support of the proposed expansion on 24.635 acres of industrially zoned land was undertaken to determine the presence or absence of historic properties (*ARCHAEOLOGICAL AND CULTURAL IMPACT ASSESSMENTS FOR THE PROPOSED H-POWER EXPANSION PROJECT, HONO'ULI'ULI AHUPUA'A, 'EWA DISTRICT, ISLAND OF O'AHU, TMK: (1) 9-1-026:30, 33, AND 34[McCoy and Clark, September 2008]*.

There is evidence that large portions of Parcels 33 and 34 have been grubbed and graded. Clearing may have occurred on more than one occasion. Aerial photographs suggest that the land clearing project undertaken by Campbell Estate in the early 1960s on Parcel 30 and documented during the archaeological reconnaissance survey in 1983 also included Parcels 33 and 34.

No historic properties were recorded during this archaeological assessment; however, it is recommended that precautionary monitoring be performed during any ground disturbing activities. We find that there are **no historic properties affected** by this project.

Please call Wendy Tolleson at (808) 692-8024 if there are any questions or concerns regarding this letter.

Aloha,

Nancy A. McMahon

Nancy A. McMahon (Deputy SHPO)
State Historic Preservation Officer

CC:

Mr. Stephen Langham
Environmental Services Refuse Division, H_POWER
91-174 Hanua Street
Kapolei, Hawai'i 96707

ENV Director
City and County of Honolulu
Department of Environmental Services
1000 Uluohia Street, Suite 308
Kapolei, Hawai'i 96707

Dr. Russell Okoji
AMEC Earth & Environmental, Inc.
3375 Koapaka Street, Suite F-251
Honolulu, Hawai'i 96819

Covanta Honolulu Resource Recovery Venture
c/o Covanta Energy Corporation
40 Lane Road
Fairfield, NJ 07004
Telephone: 973-882-2771
Facsimile: 973-485-7438

COVANTA
ENERGY

5/6/2009

Ms. Nancy A. McMahon
Deputy State Historic Preservation Officer
Department of Land and Natural Resources
State Historic Preservation Division
601 Kamokila Boulevard, Room 555
Kapolei, Hawaii 96707

Subject: Draft Environmental Impact Statement (DEIS);
Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility, Kapolei, Hawaii

Dear Ms. McMahon:

Thank you for your letter dated March 16, 2009, concerning the Draft Environmental Impact Statement for the Proposed 3rd Boiler Expansion of H-POWER Energy-from-Waste Facility located in Kapolei, Hawaii. We appreciate your participation in the environmental impact statement review process.

We understand that the Department of Land and Natural Resources, State Historic Preservation Division finds that no historic properties will be affected by the proposed Expansion. As a precautionary measure a cultural monitor will be on-call should the presence of any cultural deposits or if a subsurface void is discovered. Should you have any questions in the future, please feel free to call me at (973) 882-2771 or Dr. Russell Okoji of AMEC at (808) 391-9906.

Sincerely,

Samuel Joshi

S. Samuel Joshi, PE, QEP
Manager, Environmental Engineering
Covanta Energy Corporation