

FINAL REPORT

Feasibility of a Waste-to-Energy Project for the Municipality of Anchorage, Alaska

Geosyntec Project Number: ME1846
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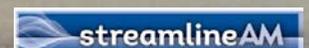


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DEFINITION OF ABBREVIATIONS AND ACRONYMS

Abbreviation/Acronym	Definition	Abbreviation/Acronym	Definition
⁰ F	Degrees Fahrenheit	JBER	Joint Base Elmendorf-Richardson
ARL	Anchorage Regional Landfill	kWhr	Kilowatt Hour (s)
AWWU	Anchorage Water and Wastewater Utility	ug	Micrograms
BACT	Best Available Control Technology	Mat-Su	Matanuska-Susitna Borough
Btu	British Thermal Unit	MOA	Municipality of Anchorage
CAA	Clean Air Act	MSW	Municipal Solid Waste
CEMS	Continuous Emissions Monitoring Unit	MWe	Megawatt Hours
CFR	Code of Federal Regulations	MSW	Municipal Solid Waste
CO	Carbon Monoxide	NOx	Nitrogen Oxides
CO2	Carbon Dioxide	ppm	Parts per Million
CT	Cooling Tower	PSD	Prevention of Significant Deterioration
CTS	Central Transfer Station	SDA	Spray Dryer Absorber
cu	Cubic	SO2	Sulfur Dioxides
DOE	U.S. Department of Energy	SWS	Solid Waste Services
dscf	Dry Standard Cubic Feet	tpd	Tons Per Day
dscm	Dry Standard Cubic Meter	T/G	Turbine Generator
EPA	U.S. Environmental Protection Agency	TCLP	Toxicity Characterizing Leaching Procedure
Gal	Gallon	WWTP	Wastewater Treatment Plant
GHG	Greenhouse Gas	WTE	Waste-To-Energy
HCl	Hydrogen Chloride		
HHV	Higher Heating Value		

DISCLAIMER

This Feasibility Report (Report) was prepared for the Municipality of Anchorage, Department of Solid Waste Service by Geosyntec Consultants, Inc. (Geosyntec) of Anchorage, Alaska, USA to provide a feasibility assessment for development of a waste-to-energy (WTE) project to serve the MOA. This Report was completed in accordance with the scope of work for the Project outlined in the executed agreement between StreamlineAM, LLC and Geosyntec, dated 5 December 2019, as amended.

Information contained in this Report were obtained from publicly available information or sources, or private information provided to Geosyntec. Geosyntec makes and provides no assurance as to the accuracy of any such information. The findings and recommendations in this Report are in no manner considered to be any more than a preliminary outline of potential arrangements, mechanisms, roles/responsibilities, project scope, environmental responsibilities, timeline, and financial and legal/permitting mechanisms to enable a functioning WTE project.

It is understood and agreed that advisory services contain reasonable assumptions, estimates and projections, which may not be indicative of actual or future values or events and are therefore subject to substantial uncertainty. This Report speaks only as of this date and may or may not be updated and subject to material changes during subsequent developments on a WTE project.

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1. EXECUTIVE SUMMARY

1.1 Integrated Solid Waste Plan

In 2018, the Municipality of Anchorage (MOA) and the Department of Solid Waste Services (SWS) authorized development of an integrated solid waste master plan (ISWMP) in order to optimize its system and assets through improved operational efficiencies, capital improvements and new practices/programs that increase landfill life, improve safety and customer service, protect the environment and increase waste reduction, and improve reuse and recycling of materials that are currently disposed of as waste.

As a community of almost 300,000 people, Anchorage generates a large quantity of waste each year (approximately 330,000 tons in 2016). SWS provides refuse collection services within its certificated service area, which services approximately 20% of the population of the MOA, and the remainder is serviced by the private sector. SWS services also include the disposal of solid waste, collection of household hazardous waste, drop off recycling at the Anchorage Regional Landfill (ARL), curbside organics collection within its service area and seasonal food scraps collection programs at both the ARL and the Central Transfer Station (CTS). ARL is the only operating landfill within the MOA and accepts more tonnage than any other landfill in the state.

1.2 Pre-Feasibility Report and Climate Action Plan

In September 2019, a pre-feasibility study was prepared and presented to the Assembly. The purpose of this study was to implement the recommendations of the ISWMP and the MOA's *Climate Action Plan* (CAP) to evaluate alternative technologies to landfill disposal in order to address SWS and potentially Anchorage Water Wastewater Utility (AWWU) and neighboring solid waste utility's needs. The pre-feasibility study focused on the appropriate capacity of the Waste-to-Energy (WTE) plant, the reliability and composition of the available waste stream, an expert analysis of commercially-proven WTE technologies under MOA conditions, the scope and type of energy and materials use agreements and other fee structures that would be required, and other risks to the financial sustainability of the facility's operation.

In the pre-feasibility study, Geosyntec presented the criteria and assumptions for recommending the most appropriate biological or thermochemical technology to be considered by the MOA for this project. Mass-burn incineration is recommended as it is the most well-established and reliable WTE technology in the marketplace today. The review presented in the pre-feasibility study assumed the development of a 1,000 to 1,200 ton per day WTE facility with associated advanced air emission controls, plus the development of a controlled landfill cell for management of generated ash. It is further assumed that pre- and post-incineration recovery of non-ferrous and ferrous metals, as well as co-incineration of biosolids, will take place, from which additional revenues from sale of secondary materials and tipping fees can be earned.

A Microsoft Excel™-based, pro forma model (Model) was constructed to help guide the MOA with the implementation steps of the proposed WTE facility project. Various scenarios (36) were constructed using Excel's Scenario Manager, which will enable the MOA to understand the projected financial impacts of accepting additional tonnage from the neighboring Boroughs,

inclusion of biosolids in the incoming waste tonnage to the WTE plant, and potential feed-in tariffs from energy sales to the local electric power utilities.

1.3 Feasibility Report

Overall, developing a WTE project in the MOA appeared to be a practical goal of the ISWMP and should be desirable by the MOA, and potentially neighboring Boroughs. The purpose of this Feasibility Report is to outline and guide the development of specific implementation steps to be conducted by the MOA should it be decided to implement a WTE project. As described in following sections, this Feasibility Report details the reasons for the specific tasks, the data that it will need to collect in order to proceed, an estimated schedule and milestones, and the costs to implement. The roadmap as detailed herein, draws upon lessons learned by other municipal WTE agencies and provides guidance for the Municipality.

1.4 Projected Schedule

Figure 1 shows the projected tasks and subtasks required for implementation of a MOA WTE project, including intermediate milestones and the interplay between many of the tasks. Assuming a project initiation of January 1, 2021, we are projecting an implementation phase of roughly three years with project closing in January 2024 with subsequent notice-to-proceed for construction. A more detailed Microsoft Project schedule is included in the Appendix A

1.5 Projected Budget Needs

Table 1 is a summary of projected budget needs by SWS to help implement the project over three fiscal years, 2020, 2021, and 2022.

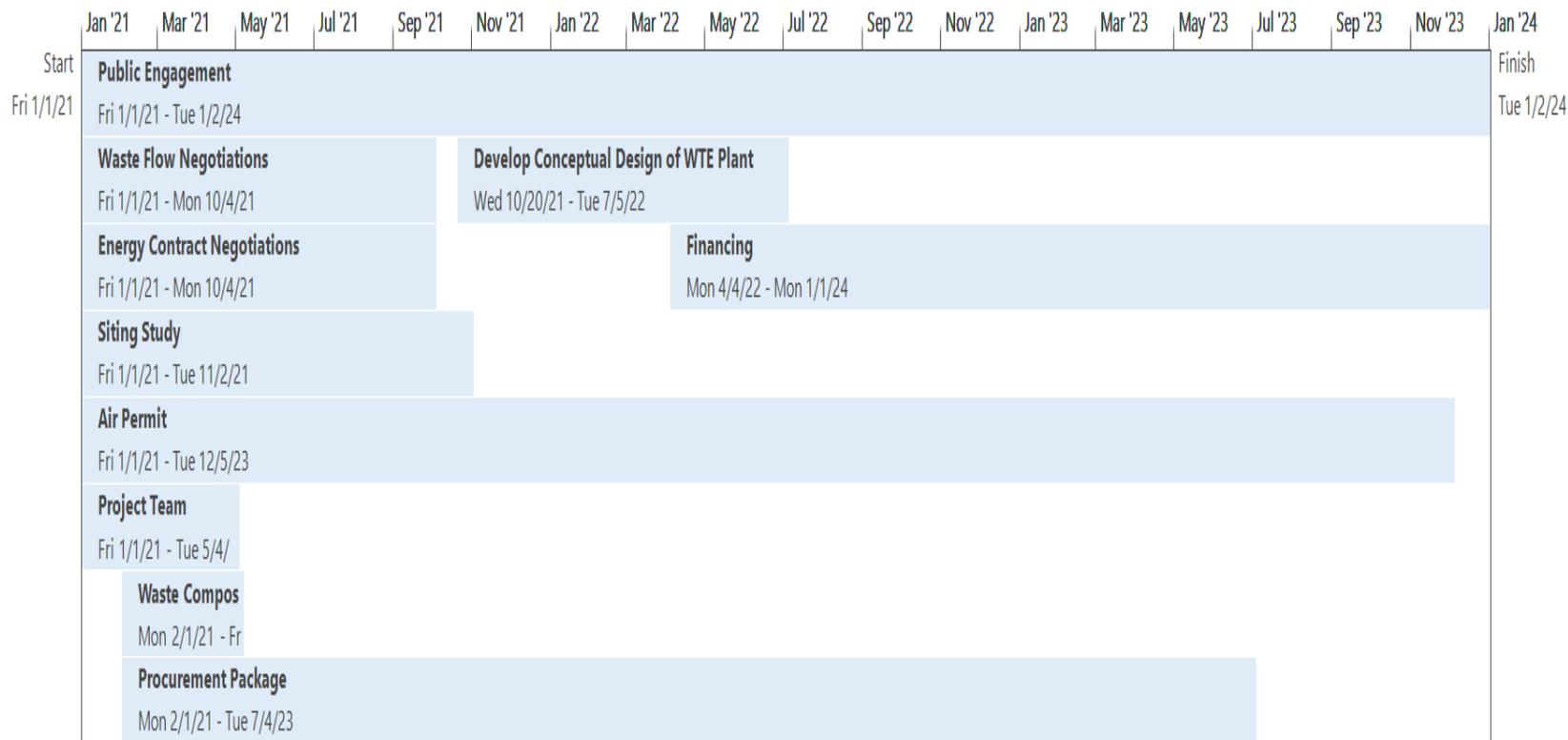


Figure 1: Projected Schedule for WTE Plant Implementation

Table 1: Estimated Implementation Costs for WTE Project

Tasks	Type of Outside Advisor/Consultant	Estimated Costs (\$)			SWS Passthrough (Fees, Permits, etc.)
		FY 2021	FY 2022	FY 2023	
Air Permit Application	Air Emissions Permitting Consultant	100,000	300,000	200,000	150,000
	Monitoring Station	500,000	500,000	50,000	850,000
Conditional Use Permit Application	Land Use Development Consultant	125,000	50,000	25,000	25,000
Energy Contract	Energy Consultant	100,000	50,000	0	25,000
Financial Plan	Bond Counsel ¹	0	0	0	0
	Financial Advisor ¹	0	0	0	0
Procurement	Engineer of Record/Program Manager	400,000	500,000	250,000	0
	Legal Support	250,000	50,000	50,000	0
Public Engagement Plan	Public Relations Expert	100,000	100,000	50,000	25,000
Siting Analysis	Land Use/Permitting Expert	250,000	25,000	0	100,000
SWS Staffing	WTE Program Manager	150,000	150,000	150,000	0
Total		\$1,975,000	\$1,725,000	\$775,000	\$1,175,000

¹ Costs included in the overall bond issue, as noted by the MOA Finance Department

2. INTRODUCTION

2.1 Scope of This Report

The purpose of this Feasibility Report (Report) is to outline and guide to the development of specific implementation steps to be conducted by the MOA should the Municipality desire implementation of a WTE project. The Report details the reasons for the specific tasks, the data that it will need to collect in order to proceed, an estimated schedule and milestones, and the costs to implement. The “roadmap”, which is detailed in the document, draws upon lessons learned by other municipal WTE developers and provides guidance for the Municipality.

2.2 Organization

The Report is subdivided into several sections, which are discussed in the paragraphs below:

- Section 1 – Executive Summary – an overview of the findings and recommendations of the Report.
- Section 2 – Introduction- an overview of the scope of the report.
- Section 3 – Facility Site Visits – provides a series of trip reports from visits to operating WTE plants in the United States.
- Section 4 - Stakeholder Meetings – summarizes the results of stakeholder meetings in Anchorage with key MOA decision makers and regulatory agencies that will be involved with the prospective MOA WTE plant.
- Section 5 – Roadmap for Project – provides a detailed list of tasks and subtasks that must be performed to help implement the project; estimated costs to complete; and estimated schedule.
- Section 6 – References – lists the references utilized in preparing this report.
- Appendix – a series of documents and proposed RFPs that can be used by the MOA to help implement the WTE plant.

3. FACILITY SITE VISITS

3.1 Purpose

As an initial step to better understanding WTE, it is useful to undertake tours of active WTE plants with the objective of obtaining lessons learned about pitfalls of implementation, what worked and what did not, how the public engagement efforts were undertaken, and plant designs and technology that should have been initiated or installed at the start. With these thoughts in mind, a tour of active plants by SWS was undertaken. Meetings were arranged with municipal managers and contract administrators as well as plant personnel. WTE plant visits were geographically centered near Tampa, Florida since there are five operating WTE in the region, all of which are publicly owned and privately operated. Further, Geosyntec's project manager worked as either a consulting engineer or County project manager on all these facilities. Each has its own implementation story and provide case studies for developing a roadmap for a prospective WTE project in Anchorage.

The following paragraphs briefly describe our observations and findings along with pertinent illustrations.

3.2 Overview of Waste-to-Energy in Florida

Briefly, Florida has grown from having one WTE plant in 1982 to 11 operating WTE facilities as of 2020. Florida has established the largest WTE capacity of any state in the country, managing approximately 20,000 tons of municipal solid waste (MSW) per day while continuously producing over 500 megawatts of renewable power. In addition, WTE reduces by approximately 90 percent the volume of solid waste that would otherwise be landfilled.

Within Florida, the primary factor favoring the development of WTE has been adverse environmental and land use issues associated with landfilling (the other major disposal option in the U.S.) and the lack of commercially established competing disposal technologies other than landfilling. Prior to implementation of state and federal regulations regarding liners and leachate collection from landfills, ground water contamination from unlined landfills began to become apparent and was a serious concern in Florida due to the large use of groundwater from shallow aquifers as a drinking water source. Even when lined, high groundwater conditions common in Florida forced landfills to develop above surrounding grades in a so-called "high rise" configuration. While protective of ground water, these landfills can rise to as high as two hundred feet above surrounding lands and are prominent features of the landscape in many Florida counties, often resulting in the landfill becoming the highest elevation in the County.

WTE is also supported by several key pieces of legislation that created favorable legal and tax conditions for the construction of WTE facilities. The Florida Resource Recovery Act directed the 19 most populous Florida counties to draft resource recovery plans to determine if WTE was a feasible option. Therefore, comprehensive evaluations of WTE have been conducted in all of Florida's most populous areas. Moreover, in response to concerns from the banking community about the fiscal viability of WTE facilities without a guaranteed waste stream, the legislature enacted a flow control statute. This provision authorized counties that were developing WTE facilities to direct the flow of MSW generated in the county to a designated solid waste disposal

facility. WTE was given a further advantage when the legislature exempted WTE equipment owned by, or operated on behalf of, local governments from the state sales tax. In the comprehensive Solid Waste Management Act (Act) of 1988, WTE received further financial incentive when the Act directed that WTE facilities were to be assumed to have a 100% capacity factor with regard to utility energy purchases (other cogeneration facilities selling to utilities are given a lower capacity factor, e.g., 80%). This increased the revenues for WTE facilities from energy production.

To ensure that no excess capacity developed, the 1993 Amendments to the Act subjected WTE facilities to a series of new siting and need criteria affecting the siting of new facilities and expansion of existing facilities. Key among these criteria are the requirement that WTE facilities cannot be built unless the county in which the facility was to be located had met a 30 percent waste reduction goal, and the county can show that the facility is an integral component of the county’s solid waste management program.

The most recent State of Florida Annual Report indicates that all counties and cities with operating WTE facilities have among the highest recycling percentages among all Florida’s 67 counties suggesting that there is no incompatibility between WTE and recycling.

3.3 Site Visits and Meetings

Site tours and meetings with WTE owners and operators were conducted 27 – 29 January 2020. The paragraphs that follow briefly describe our findings. Table 1 provides a summary of key statistics on plant operations.

Table 2: Overview of WTE Plants Toured

WTE Plant	Location	Technology	Plant Size (Tons Per Day)	Energy Output (Megawatts)
Hillsborough County Resource Recovery Facility	Brandon, FL	Mass Burn	1,800	46.5
Lee County Solid Waste Resource Recovery Facility	Ft. Myers, FL	Mass Burn	1,836	57.3
McKay Bay Refuse-to-Energy Facility	Tampa, FL	Mass Burn	1,000	22.5
Pasco County Solid Waste Resource Recovery Facility	Spring Hill, FL	Mass Burn	1,050	31
Pinellas County Resource Recovery Facility	St. Petersburg, FL	Mass Burn	3,150	75

3.3.1 City of Tampa, Florida

3.3.1.1 Location and Population

The City of Tampa is located on the west coast of Florida, near the Gulf of Mexico. It is the largest city in the Tampa Bay area, a four-county area comprised of roughly 3.1 million residents. With an estimated 2020 population of approximately 395,000, Tampa is the third largest city in Florida after Miami and Jacksonville. It is roughly the same population size as the MOA combined with surrounding Boroughs. Single stream curbside recycling is provided in Tampa with remaining MSW trucked to the WTE facility.

3.3.1.2 Overview

The McKay Bay Refuse-to-Energy Facility is owned by the City of Tampa (Figure 2). Centrally located on McKay Bay, the plant has proven to a compatible land use with the adjacent 62-acre nature park.

The plant is sized at 1,000 tons per day with four 250 ton per day combustion process trains, utilizing mass burn technology and generating 22.5 megawatts of electrical energy.



Figure 2: McKay Bay Resource Recovery Facility, Tampa, FL

3.3.1.3 History

The facility began operation in 1985 and was constructed at the site of former Tampa Incinerator, which operated from 1967 to 1979. With the implementation of the Clean Air Act Amendments of 1977, the Incinerator closed since it no longer met the more stringent air emission limits.

As a part of a joint City/County Solid Waste Committee, in 1982 a retrofit of the plant to transform it from an incinerator to a modern WTE facility began. Bonds were issued and plant construction was started in 1983 with commercial operation starting in 1985.

At that time, the City has entered into a long-term operation with maintenance agreement with Wheelabrator McKay Bay Inc (Wheelabrator). Starting in June 2020, the City will end the contract with Wheelabrator and take over full management authority of the plant. By doing so, the City

has estimated it will save approximately \$5 million per year in management fees. With the money saved the City is planning to invest in future plant upgrades as well as hiring additional employees who will now be City staff.

3.3.1.4 Design

MSW entering the facility unloads into an enclosed tipping floor. Two overhead cranes stack the MSW and charge the four boiler-charging hoppers. Each unit has a charging hopper and feed chute prior to the combustion chamber and boiler. The heat energy is transferred to steam through the boiler and then sent to a 22.5-megawatt turbine generator set and then exported to the electric grid.

By the time the combusted MSW exits the boiler, only ash and ferrous and non-ferrous metals remain. This residue, or bottom ash, is water-quenched then pushed out onto a conveyor system to an enclosed ash building where the fly ash from the air emission equipment is combined. Large ferrous and non-ferrous materials are then extracted from this stream and sent to recycling markets. The ash is then transported to the Hillsborough County Southeast Landfill where it is used for daily cover.

3.3.1.5 Plant and Environmental Performance

The plant's boilers were designed for maximum reliability and have exceeded all expectations. The facility has averaged greater than 95 percent overall online availability since a 2001 retrofit was completed. All four retrofitted combustion lines have completed 18 years of commercial operation, processing nearly six million tons of MSW since startup.

In 2001, the City retrofitted the plant to enable it to meet the new USEPA emission standards. The most advanced air emission control system was installed such as spray dryer absorber, carbon sorbent injection, fabric filter baghouses, and selective non-catalytic removal system allows the facility to meet stringent permit conditions. Cooling water for the turbine generator condenser and the rest of the plant is supplied by the City from treated wastewater.

The facility has operated in full compliance with all permits since its inception. Permits include a State solid waste operating permit, a Federal Title V air permit, a Federal/State PSD permit, a NPDES stormwater permit, and wastewater discharge permit. Pursuant to these permits and its operating agreement, the operator has conducted annual air compliance emission testing. The results of these inspections have concluded that the plant is operating in compliance with the operating agreement and applicable portions of its regulatory permits. Table 3 is a snapshot of these data for 2017 and 2018 for only one of the combustion units. As shown, the plant air emissions are significantly less than both the contract conditions and regulatory limits set by the State of Florida and the U.S. EPA.

Table 3: 2017 and 2018 Comparison of Emissions, McKay Bay Plant, Unit One

Pollutants	Units	Dec-16 Average Emission	Nov-17 Average Emission	Permit Limits	Contract Limits
Particulate	mg/dscm	5.6	13.8	27	24
Particulate	lb/hr	0.464	1.170	2.76	
Particulate	lb/mmBtu	0.00503	1.24E-02	2.30E-02	
Opacity	%	2	2	10	10
MWC Metals:					
Cadmium	mg/dscm	6.60E-04	2.80E-03	0.04	0.02
Cadmium	lb/hr	5.52E-05	2.37E-04	4.10 E-03	
Cadmium	lb/mmBtu	5.96E-07	2.49E-06	3.42 E-05	
Lead	mg/dscm	6.20E-03	2.11E-02	0.44	0.2
Lead	lb/hr	5.18E-04	1.79E-03	4.51E-02	
Lead	lb/mmBtu	5.58E-06	1.90E-05	3.76 E-04	
Mercury	microgram/ dscm	0.00084	<0.0004	70 or	70 or
Mercury	Rem. Eff %	9600%	>98.7%	> 85% (3)	> 85% (3)
HCL	ppmdv	3.5	1.9	29 or	25
HCL	Rem. Eff %	99.4%	99.7%	> 95%	> 95%
Fluoride	lb/hr	<0.0013	NT (1)	1.5	1.5
Fluoride	lb/mmBtu	<1.30E-5	NT (1)	1.25E-02	
Nitrogen Oxides (4)	ppmdv	130	143	205	150
Sulfur Dioxide (4)	ppmdv	0.2	0.0	29	29
Sulfur Dioxide (4)	Rem. Eff %	99.8%	NA (5)	> 75%	> 80%
PCDDs/PCDF	nanogram/ dscm	1.8	NT (2)	30	13
PCDDs/PCDF	lb/hr	1.54E-07	NT (2)	3.07 E-06	
PCDDs/PCDF	lb/mmBtu	1.64E-09	NT (2)	2.56 E-08	
Carbon Monoxide (4)	ppmdv	6.4	10.4	100	100

Source: Annual Consulting Engineer's Report, 2018

¹ PCDD/PCDF are Dioxins and Furans

3.3.2 Hillsborough County, Florida

3.3.2.1 Population

Hillsborough County is also located on the west coast of Florida. It includes three cities: Tampa, Temple Terrace, and Plant City. The 2018 estimate for the County indicates a population upwards of 1.4 million people.

3.3.2.2 Overview

The Hillsborough County Resource Recovery Facility, operating as Covanta Hillsborough, Inc., began commercial operation in October 1987 (Figure 3). After a 2009 expansion that increased

its processing capacity, the facility now processes up to 1,800 tons per day of solid waste. The facility located near Tampa, Florida in unincorporated Hillsborough County, generates up to 46.5 megawatts of energy and is owned by Hillsborough County, which supplies the MSW processed at the facility.



Figure 3: Hillsborough County Resource Recovery Facility, Tampa, FL

3.3.2.3 History

Prior to development of the WTE facility, the County depended almost entirely on one solid waste disposal facility, the Taylor Road (and subsequently named Hillsborough Heights) Landfill. However, the Taylor Road Landfill, with its adjacent Hillsborough Heights expansion, were very strongly opposed by its residential neighbors. Opposition was so strong to the landfill that several times staged protests included blocking garbage trucks from entering the site and padlocking the entry gate. Community residents also attended every Hillsborough County Commission meeting for over five years to protest the landfill's existence and to promote an alternative to landfiling.

With this backdrop, Hillsborough County and the City of Tampa (City) joined forces to plan and develop a long-term county-wide solid waste management plan that would include mass-burn WTE technology as its centerpiece. After a year's worth of efforts and several countywide public hearings, a feasibility report was issued that recommended that the old Tampa Incinerator be retrofitted to be a WTE plant, with a second WTE to be sited in northern Hillsborough County.

A consultant was retained to assist the County with project implementation, but their evaluation changed the recommendations of the initial feasibility report, instead calling for one, large WTE facility on the Tampa site. The impact of the recommendation resulted in disagreements between the City and County and over a series of months a consensus evolved that the County should withdraw from joint development and instead move independently on a County-only WTE project.

On its own now, the County retained a new consulting engineer since the former engineering company decided to stay with the City on its WTE project. A team of bond underwriters was also added along with Bond Counsel, a financial advisor, and permitting attorney. An internal project

team was constructed with staff from several county departments (County Administrator, Solid Waste Utilities, Fiscal Services, County Attorney, Purchasing), as well as from the Clerk of the Circuit Court. These staff became the working group and sounding board for recommendations to the County Commissioners. A Resource Recovery Program Administrator was soon added to provide day-to-day management of the WTE program.

The project team began a detailed siting selection study of 35 sites in the unincorporated County, ending with a recommendation of the preferred site for the WTE facility that was almost the centroid of solid waste generation within the County. The property owner, CSX Railroad, initially rejected the County's request to purchase 50 acres for the WTE plant, but later offered to sell the property if the County would purchase its entire 353-acre parcel for \$10.6 million. The County agreed to this purchase, realizing that this industrial zoned property could also be used for future development besides WTE.

Project Decision Points

Since the property needed to be properly rezoned for the WTE development, a public hearing was scheduled for the rezoning. Lasting more than 11-hours with 35 witnesses for the County and for the opposing groups, it was a very contentious meeting. Citizens where the new County landfill was to be located in south Hillsborough County argued for the WTE plant since it would reduce the impacts of that facility on their community. Opposition groups argued that the WTE would be a blight and discourage other development. Ultimately, after the hearing concluded, the County Commission voted 3-2 to approve the rezoning. Several months later, a follow-on vote demanded by project opponents to reconsider the zoning result confirmed the initial decision on a unanimous vote.

Following zoning decisions, several reports were developed over the course of six months to provide recommendations regarding WTE technology, facility ownership and operation. The County Commission eventually voted that a 1,200 ton per day WTE plant would be developed utilizing mass burn technology and be owned and financed by the County, but operated by a private company, creating a public-private partnership. The facility was also to be sized to accommodate the construction of future additional capacity, since at that time, Hillsborough was one of the fastest growing counties in the country and the WTE would likely require expansion.

Permitting Approval

With plant sizing and operational issues decided, permitting of the proposed WTE facility began. Like other WTE plants in the State, the Electrical Power Plant Siting Act (PPSA) was used to streamline and consolidate the regulatory review process that would to be addressed on the local, regional, state, and federal levels.

To expedite the overall project, permitting was initiated once the site was secured and prior to the selection of a private vendor to construct and operate the WTE facility. A comprehensive permit document like an environmental impact statement was submitted to the Florida Environmental Protection Agency, which served as the coordinating agency under the PPSA.

Public Education and Involvement

Early in the project development phase, a project fact sheet was developed along with a master presentation for public speaking. Over 100 presentations on the project were made to civic, social, environmental, and homeowner's associations. Architectural compatibility was made an important element of the project, considering project features such as architectural details and colors for the building and stack, enhanced landscaping of the site, and exterior finishes for the building (with brick accents and translucent siding) to give it the appearance of an office building. Opposition groups were invited to send representatives to sit on a landscaping committee to help prepare specifications to be included in the request for proposal (RFP) that was to be issued for project development. This active citizen involvement with the project helped reduce opposition, although there remained a small group that opposed the project even after facility construction began.

Request for Proposal Development

Following permitting, an RFP for the public-private partnership established that the facility would be designed and constructed by a private vendor. The RFP provided the County goals for the project by providing the specific technical, financial, institutional, and contractual aspects of the project. The RFP was crafted in a way that minimized ambiguities that might result in some proposers adding a risk factor to their ultimate bid price for the WTE facility. In support of the RFP, the County secured a signed electrical sales agreement with the local utility, provided a site with zoning approval, and nearly all the air emissions and environmental approvals as required under the PPSA. Following receipt of proposals, the County made its final selection and agreements were signed with the WTE developer selected (Ogden Martin).

Thereafter, the County also began the process of the financing for the project by hiring a financial advisor, bond counsel, and team of investment bankers who was able to secure project financing.

Financing

Once the agreements were signed with the WTE developer, an Engineer's Feasibility Statement was developed for the bond issue for the project. The County worked with a financial consultant to developing a compelling story of the project for bond investors. Presentations were made in New York to the bond rating agencies and a favorable bond rating of A+ was secured. The project went to market in 1984 and \$150 million of project bonds were sold.

Groundbreaking

Groundbreaking occurred in April 1985 and construction continued over the next two years, with commercial plant startup achieved on April 1987. Since that time the County's WTE plant has managed nearly 17 million tons of MSW. Increasing residential and commercial growth in the County required a 600 ton per day expansion in 2005 to increase the plant's design capacity to 1,800 tons per day. Initially, the WTE plant was designed with the assumption that MSW would have an average fuel value of 4,500 Btu per pound. As part of the 2005 expansion, a fourth combustion system at 600 tons per day was added assuming an average fuel value of 5,000 Btu per pound of MSW, reflecting the long-term trend of a greater fraction of plastics and lower fraction non-combustibles within MSW. There is a currently an early planning effort underway to site another WTE facility in the County.

Figure 4 contains a concise timeline for WTE project implementation in Hillsborough County.

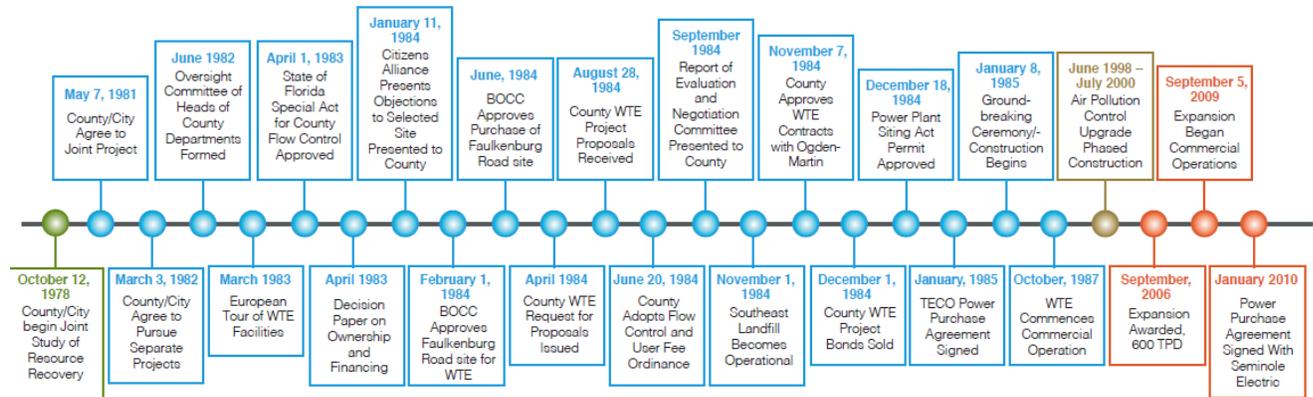


Figure 4: Timeline For Project Implementation, Hillsborough County WTE Project

3.3.2.4 Plant and Environmental Performance

The plant currently meets all State and Federal emission standards and permit emissions requirements. Based on its annual stack test results reported to the FDEP in 2019, actual emissions for specific constituents are up to 60 percent lower than permitted air emission limits.

3.3.3 Pinellas County, Florida

3.3.3.1 Location and Population

Pinellas County is also a county located on the west coast of Florida in the Tampa Bay Region. It is the sixth largest county in the state and is its most densely populated. According to the 2010 census, the number of people who live in Pinellas County is approximately 950,000.

3.3.3.2 Overview

The Pinellas County Resource Recovery Facility (Figure 5) is located on 15 acres within the 700-acre Pinellas County Solid Waste Management complex in St. Petersburg, Florida. The facility is owned by Pinellas County and began commercial operation in 1983. Covanta Pinellas (a private WTE vendor) assumed operational responsibility for the facility in late 2014. The facility can process up to 3,150 tons per day of solid waste, using three 1,050 ton per day furnaces, while generating up to 75 megawatts of electrical power.



Figure 5: Pinellas County Resource Recovery Facility, St. Petersburg, FL

3.3.3.3 History

Pinellas County was an early adaptor of WTE technology, making a commitment for a public-private partnership to develop the facility in the 1970s. The result of the procurement process was the selection of United Oil Products (UOP), later to become known as Wheelabrator Pinellas Incorporated (WPI), for a turnkey project to design, build, and operate two 1050 tons per day mass-burn waste-to-energy units. Commercial operation began in 1983. At approximately the same time, the County made a commitment for a third identical unit that went into operation in 1986.

3.3.3.4 Design

The County controls waste receipts at the entrance to the facility and coordinates with the WTE plant to direct MSW haulers to the enclosed tipping floor area for unloading. Front end loaders separate non-processable waste on the tipping floor and then push acceptable materials into a 30-foot deep loading pit. The source of combustion air is provided by forced draft fans which take air from the tipping floor, offering a slight negative pressure from the outside as a means of odor control for raw MSW within the tipping area.

Once MSW is pushed into the loading pit, crane operators control material placement into the WTE combustion grates. Total storage capacity of the loading pit supports full operation of the WTE plant over a 3-day holiday weekend.

The plant was designed assuming MSW with an average heating value of 4,800 BTU/lb. The WTE plant's net electrical output to the electrical grid is typically greater than 55 MW and the most recent capacity factor is 97.6%. Approximately 15 percent of the electrical energy produced is consumed within the facility.

Air emission controls are achieved using spray dry absorbers, filter bags, selective non-catalytic reduction system, and an activated carbon injection. In accordance with regulatory requirements, the WTE Facility is equipped with a continuous emissions monitoring system, which includes sampling points on each combustion unit.

The WTE facility generates both bottom ash and fly ash. Fly ash is consolidated and enters a pugmill where it is combined with a phosphoric acid solution in a patented process that conditions the material to meet requirements for landfill disposal. Following treatment, the fly ash is combined with the bottom ash stream where it is processed to remove ferrous and non-ferrous metals. The remaining ash is then hauled to the County landfill areas to be used as daily cover.

The biggest use of water in the WTE plant is in its cooling towers, which cool down hot steam that is made in the WTE plant. Makeup for the water used in the boilers to create steam is approximately 2.2 million gallons per month. Water is taken from a large on-site retention pond and treated to meet the intake requirements for the facility (Figure 6).



Figure 6: Water Treatment Plant At Pinellas County Resource Recovery Facility

3.3.3.5 Plant Performance

Typically, the WTE plant has two planned outages per year. One planned outage is a 10 day “cold shutdown” for each boiler unit to allow maintenance on electrical generating and distribution equipment or other mechanical work on systems that are not pressurized. Additionally, the WTE operator plans a three-day cleaning cycle once a month to bring down a boiler and clean the ash build up, slag etc. and other boiler maintenance.

Table 4 is a summary of reported air emissions data from the plant for December 2019. The table shows required permit averages (e.g., three-hour and 24-hour, etc.) for opacity, CO, SO₂, NO_x. Like the other WTE plants toured, the Pinellas County WTE plant achieves a high rate of environmental performance. Actual air emissions are up to 60 percent lower than permitted air emission limits.

Table 4: Recent Reported Air Emissions Data, Pinellas County Resource Recovery, December 2019

Date/Day	MAX - 6-min Opacity	MAX - 6-min Opacity	MAX - 6-min Opacity	24-hour NOx Ave	24-hour NOx Ave	24-hour NOx Ave	Inlet 24-hour A SO2 Ave	Inlet 24-hour A SO2 Ave	Inlet 24-hour A SO2 Ave	24-hour Geo SO2 Ave	24-hour Geo SO2 Ave	24-hour Geo SO2 Ave	24-hour Lime (gpm)	24-hour Lime (gpm)	24-hour G Lime (gpm)	24-hour RE% SO2 Ave	24-hour RE% SO2 Ave	24-hour RE% SO2 Ave	Max -4 hour CO Ave	Max -4 hour CO Ave	Max -4 hour CO Ave	24-hour CO Ave	24-hour CO Ave	24-hour CO Ave
Date	Boiler #1	Boiler #2	Boiler #3	Boiler #1	Boiler #2	Boiler #3	Boiler #1	Boiler #2	Boiler #3	Boiler #1	Boiler #2	Boiler #3	Boiler #1	Boiler #2	Boiler #3	Boiler #1	Boiler #2	Boiler #3	Boiler #1	Boiler #2	Boiler #3	Boiler #1	Boiler #2	Boiler #3
1-Dec	0	0	1	117	151	169	170	127	107	14	10	11	11	10	10	91	92	88	27	48	51	25	33	24
2-Dec	0	0	1	122	148	193	104	75	198	7	7	13	10	10	12	92	89	87	60	36	37	28	26	28
3-Dec	1	1	1	125	151	0	74	77	0	2	5	0	10	10	0	96	93	0	37	22	0	15	18	0
4-Dec	1	1	1	118	149	0	105	80	0	1	5	0	10	10	0	98	93	0	33	30	0	23	23	0
5-Dec	0	3	1	115	160	0	163	97	0	5	6	0	11	10	0	96	93	0	41	38	0	26	30	0
6-Dec	0	1	1	116	172	0	113	89	0	5	7	0	10	10	0	95	91	0	28	37	0	23	22	0
7-Dec	0	0	1	117	173	0	139	96	0	3	7	0	10	11	0	97	92	0	33	48	0	27	24	0
8-Dec	0	0	1	116	172	0	145	116	0	4	7	0	10	10	0	97	94	0	27	57	0	23	34	0
9-Dec	1	1	1	117	169	0	113	76	0	6	7	0	10	10	0	93	90	0	28	25	0	19	19	0
10-Dec	1	0	1	126	166	0	156	73	0	5	7	0	10	10	0	96	82	0	61	37	0	30	25	0
11-Dec	2	0	1	117	164	0	173	119	0	3	6	0	10	10	0	98	94	0	54	39	0	36	30	0
12-Dec	1	1	1	113	165	0	155	131	0	5	8	0	10	10	0	96	93	0	35	42	0	30	25	0
13-Dec	1	0	1	119	158	0	114	116	0	7	11	0	10	10	0	92	90	0	21	62	0	18	33	0
14-Dec	0	0	1	122	157	0	82	177	0	7	12	0	10	11	0	90	93	0	21	75	0	16	53	0
15-Dec	2	0	1	110	152	0	136	134	0	7	8	0	11	10	0	94	93	0	30	63	0	20	45	0
16-Dec	13	0	1	112	153	0	80	70	0	4	6	0	10	10	0	95	91	0	15	37	0	12	29	0
17-Dec	0	0	1	114	155	0	94	78	0	5	7	0	10	10	0	94	90	0	24	26	0	17	22	0
18-Dec	0	0	1	120	171	170	124	62	73	11	8	16	11	11	12	90	85	68	20	41	18	18	21	14
19-Dec	0	0	2	127	163	186	126	71	84	10	10	11	11	16	11	90	83	86	19	32	20	17	23	15
20-Dec	0	0	1	124	173	179	90	61	71	8	6	8	10	19	10	87	82	87	20	24	24	17	19	17
21-Dec	0	0	1	118	156	174	117	98	105	9	8	11	11	12	11	92	91	89	24	41	25	13	27	17
22-Dec	0	0	1	109	158	177	130	127	99	8	8	11	10	13	11	93	93	86	20	33	16	18	29	14
23-Dec	0	0	1	113	163	189	89	78	58	6	7	8	10	11	10	92	89	79	32	51	42	20	28	21
24-Dec	0	0	1	125	172	179	56	43	76	4	5	6	9	9	9	91	86	91	30	36	32	23	28	24
25-Dec	0	0	1	121	174	179	55	46	79	5	7	8	10	10	10	90	84	90	28	23	24	24	20	21
26-Dec	1	0	1	114	167	176	65	47	72	5	6	8	10	10	11	91	87	88	44	26	38	29	23	30
27-Dec	0	0	1	115	163	174	55	60	84	5	5	5	10	10	10	90	90	93	23	28	36	8	15	20
28-Dec	0	0	1	115	166	181	71	61	80	5	6	6	10	10	10	93	90	92	28	31	32	13	16	17
29-Dec	0	0	1.0	117	163	191.0	84	82	152.0	6	6	14.0	10	10	12	93	92.0	90.0	27	44	47.0	14	21	23
30-Dec	0	0	0.0	118	162	188.0	65	48	74.0	4	6	7.0	10	10	10	92	87.0	88.0	28	40	23.0	11	16	16
31-Dec	0.0	0.0	1.0	118.0	162.0	172.0	55.0	41.0	47.0	4.0	6.0	5.0	10	10	10	92.0	85.0	89.0	23.0	31.0	20.0	7	14	16
MTD:	MAX	3	2	127	174	193	173	177	198	14	12	16	11	19	12	98	94	93	61	75	51	36	53	30

Source: Pinellas County, 2020

3.3.4 Pasco County, Florida

3.3.4.1 Location and Population

Pasco County is centrally located on Florida's West Coast, about 30 miles north of Tampa and 50 miles west of Orlando. Pasco County's 513,000 permanent residents make it the 12th most populous county in Florida.

3.3.4.2 Overview

This 1,050 ton per day mass burn WTE facility (Figure 7) produces 31 megawatts of electrical power. In addition to tipping fees at the facility, there is a county-wide disposal assessment to pay for the WTE plant and ancillary landfill, currently set at \$62.00 per residential home per year.



Figure 7: Pasco County Resource Recovery Facility, Hudson, Florida

The Pasco County Solid Waste Resource Recovery Facility is owned by Pasco County and operated under long-term contract by Covanta Pasco, Inc. The plant began commercial operation in May 1991. The facility is part of a utility campus, including the WTE, regional wastewater treatment plant, biosolids processing facility, and a landfill.

The County's WTE plant is the centerpiece of its integrated solid waste management system (Figure 8).

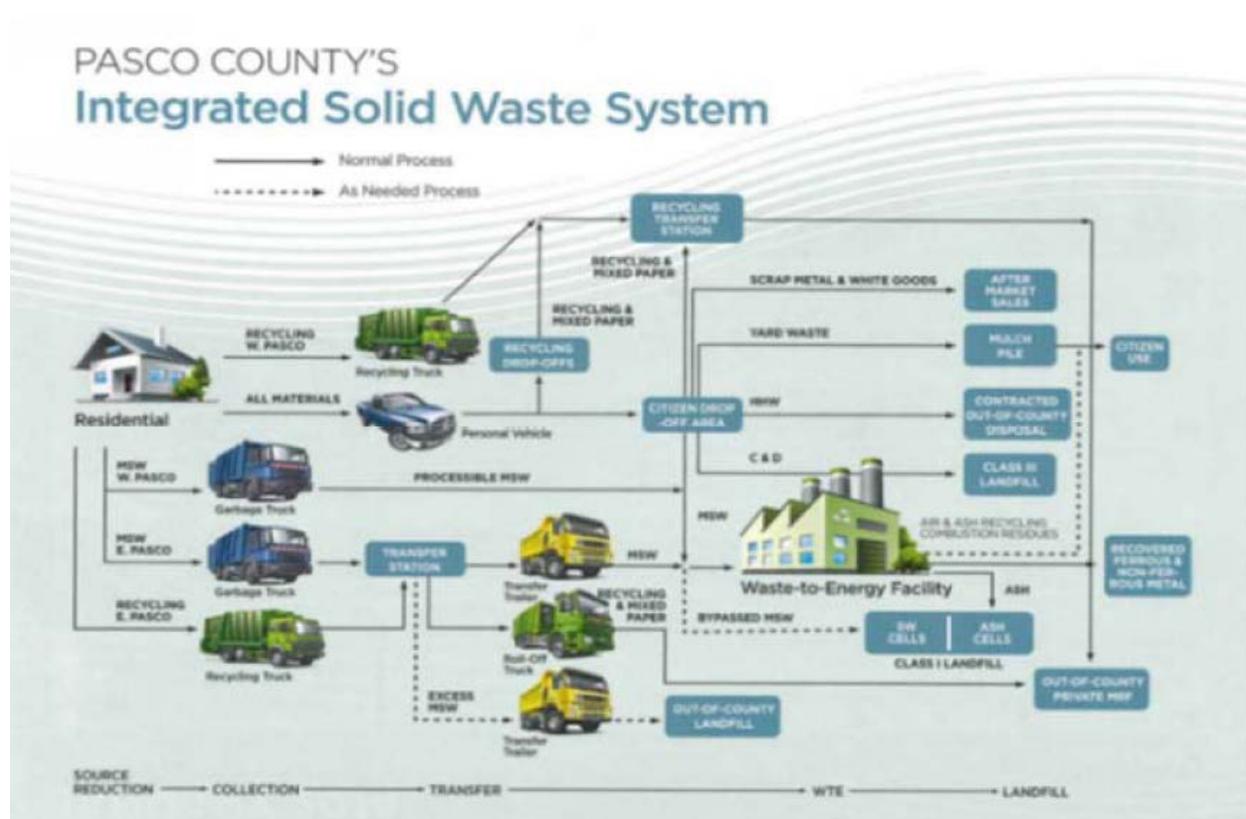


Figure 8: Pasco County's integrated solid waste system

As part of a collaborative effort between the University of Florida, Pasco County and the Hinkley Center for Solid and Hazardous Waste Research, a pilot-scale Portland cement concrete (PCC) roadway has been constructed using bottom ash from the County's WTE plant as a partial aggregate replacement in a PCC pavement on an onsite WTE campus roadway in 2018. Construction of the roadway has demonstrated conclusively that WTE bottom ash from the WTE plant did not adversely affect the workability or placement of the concrete. The project also demonstrated that WTE bottom ash (80 percent of the ash stream) is a valuable nontraditional aggregate when properly processed and used in appropriate percentages. Ash recycling can reduce the volume of waste delivered to landfills by nearly 90%. The project has led to the approval of the use of WTE bottom ash as an aggregate by the Pasco County Road and Bridge Department. This approval is the first approval of its kind in the United States. As a result, the County plans to construct roadways with this aggregate product. Additionally, the County is currently experimenting with technology to improve separation of nonferrous metals such as copper, gold, and silver to increase plant revenues.

3.3.4.3 Plant Performance

The WTE plant operator performs routine preventive maintenance, routine corrective maintenance and outage maintenance and repairs. Proper maintenance activities have resulted in high unit availability (average combustion unit availability of 93.49 percent) and a historical gross energy recovery higher than the contractual guarantees (Figure 9).

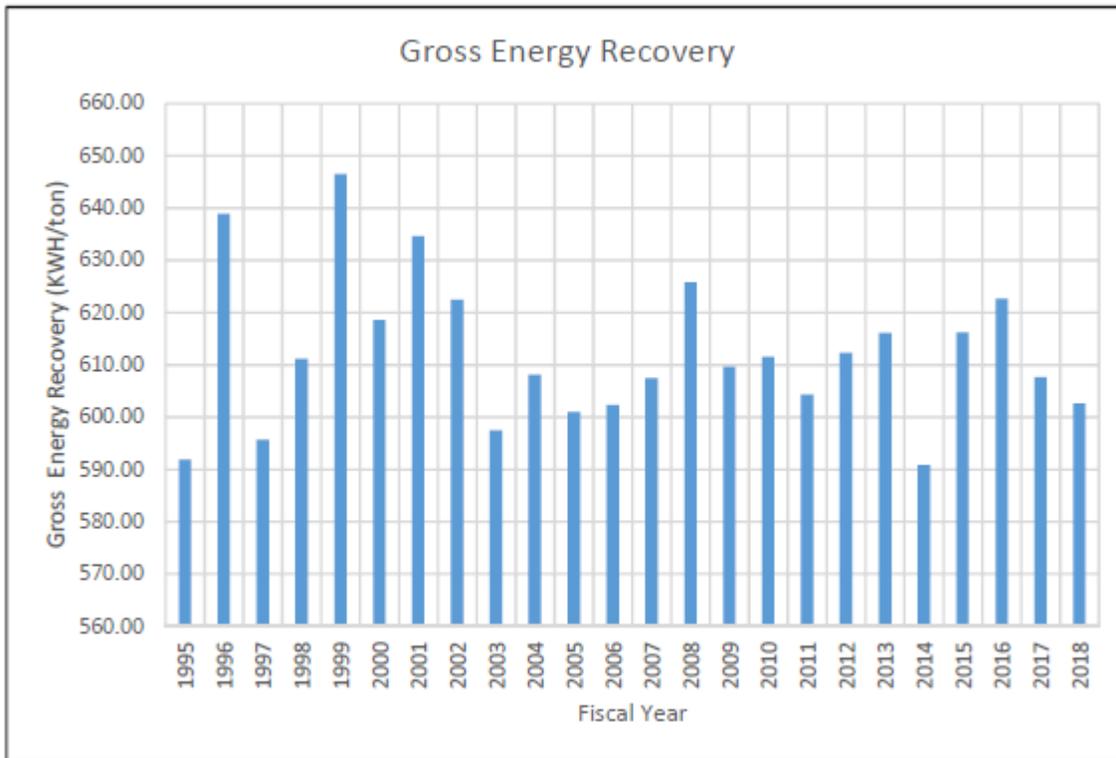


Figure 9: Gross Energy Recovery, kilowatt hours per ton, 1995-2018

There is typically a planned shut down for each combustion unit for major scheduled inspections, maintenance and repairs at least once per year. Major outages have typically been conducted during the spring and generally last 7 to 14 days. Minor outages of shorter durations were typically performed during the fall and are intended as mid-cycle cleaning and inspection outages. Major turbine-generator (TG) outages are generally performed every 5 to 7 years.

3.3.5 Lee County, Florida

3.3.5.1 Location and Population

Lee County is in southwestern Florida along the Gulf Coast. The most recent census data estimates the County population as more than 550,000, not including part-year residents who reside in the area during winter months.

3.3.5.2 Overview

The Lee County Solid Waste Resource Recovery Facility (Figure 10) is owned by Lee County, Florida and operated by Covanta Lee, Inc. under a long-term operations and maintenance agreement. The facility is co-located with a materials recovery facility for single-stream recyclables and wastewater treatment plant on a 280-acre solid waste management campus. The plant has a rated refuse capacity of 1,836 tons per day and an annual throughput capacity of 569,619 tons of MSW. It has a rated electrical generation capacity of up to 57 MW.

The facility is adjacent to a major County park system (Figure 10) with Little League fields, Dog Park, and Children's playground (Figure 11).



Figure 10: Lee County Resource Recovery Facility, Ft. Myers, FL

3.3.5.3 History

In 1989, Lee County developed a solid waste management plan that included the development of WTE. The original WTE facility had a 39-megawatt capacity and was brought on-line in 1994. Original capital cost was \$127 million. The WTE facility was expanded in 2007, adding a standalone turbine generator with 20 megawatts of capacity fueled by up to 636 tons of MSW per day. The capital cost of the expansion was \$123 million.

The facility also uses the effluent from a nearby wastewater treatment plant (reclaimed water) for all process water needs, including boiler makeup water. The WTE facility also recovers ferrous and non-ferrous metals from the post-combustion process. This is in addition to recyclables collected from a single-stream curbside recyclable collection program.



Figure 11: County Park With Ballfield and Children's Park In Background

3.3.5.4 Design

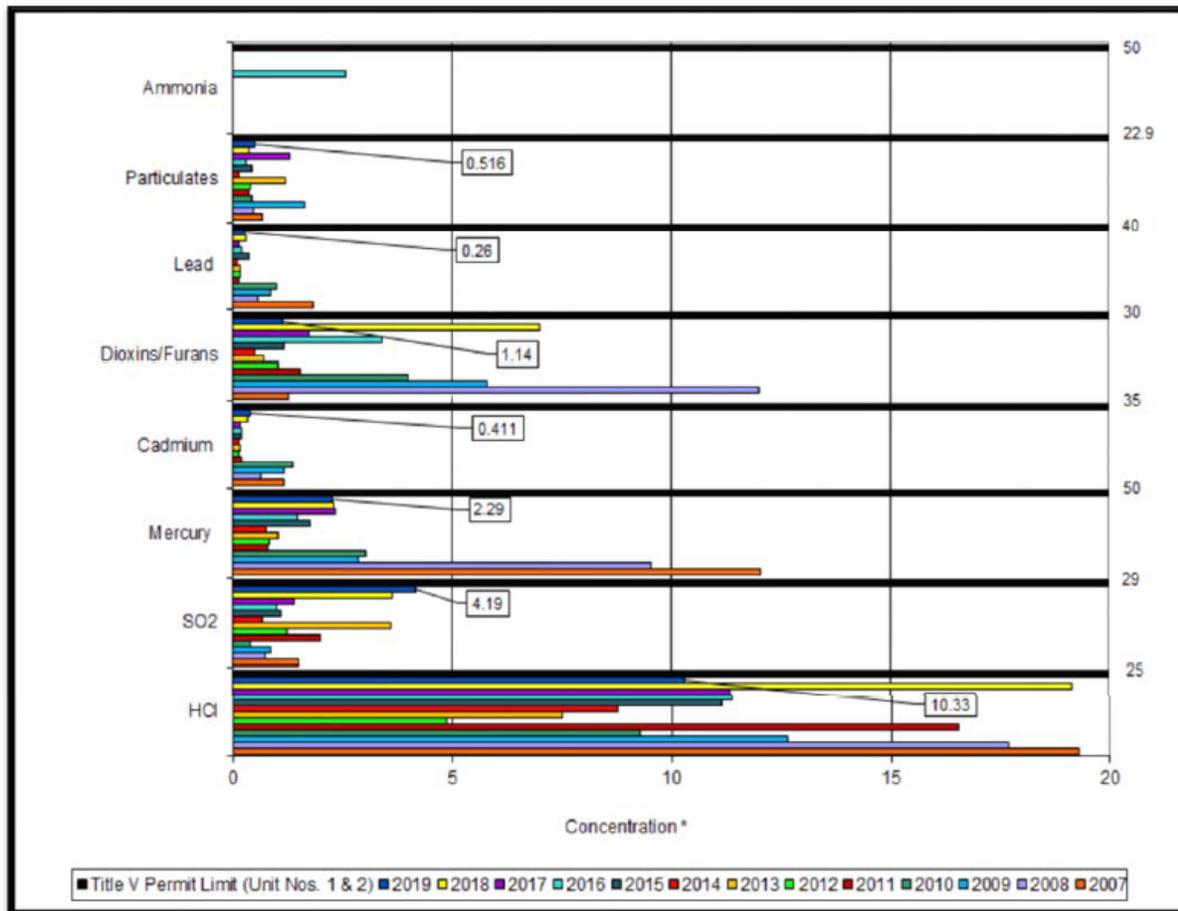
Similar to the other WTE facilities visited, collection vehicles are weighed at County scales before they are directed to an enclosed tipping floor where they dump their wastes into a storage pit. An overhead crane lifts the waste into a feed chute leading to a furnace. While the combustion gasses move through the boiler, the bottom ash makes its way to the end of the grate where it falls into a water quench.

From the boiler, the combustion gasses enter an air pollution control system that includes a dry scrubber, urea injection, activated carbon sorbent and a baghouse filter. Fly ash generated from the emissions control is mixed with bottom ash from the combustion process. Magnets and eddy current separators are used to remove ferrous and nonferrous metals before the ash stream is loaded onto trucks for delivery to the County's landfill in Henry County, some 30 miles away.

3.3.5.5 Plant and Environmental Performance

Since startup in 1994, the Facility has processed over 11.8 million tons of MSW and had a 10-year average of 92.9% boiler availability.

Pursuant to permit conditions, the plant must conduct annual stack testing of air emissions for each boiler. Figure 12 is a compilation of stack test results for the past 13 years. All results show that the plant's actual emissions are significantly lower than permitted conditions. The facility monitors actual emissions on an hourly basis using continuous emission monitoring equipment (Figure 13).



Note (1): Dioxin/Furan emissions testing was conducted on Boiler No. 2 during 2019 Stack Testing
 Note (2): Lead emissions have been decreased by a factor of 10 for trending purposes
 Note (3): Ammonia Testing was not conducted on Boiler Nos. 1 and 2 during 2019 Stack Testing

Figure 12: Stack Testing Results – Boilers 1 and 2, 2007-2019, Lee County Solid Waste Resource Recovery Facility

Source: Lee County, 2020



Figure 13: Continuous Emission Monitoring System At Lee County WTE

3.4 Observations and Lessons Learned for MOA WTE Project

During the WTE facility visits in January 2020, extensive discussions took place with County and operations staff to discuss long term performance of the WTE plants and to discuss lessons learned regarding the facilities if they could develop a new facility from the ground up. These are potentially important lessons for the MOA as it considers its own WTE development. Among the major lessons learned are the following:

- Develop a Proactive Public Engagement and Education Program

A key to the success in any WTE project is the development of an effective public engagement program that started early in the siting process and continued right through to current operations. All the WTE plants visited had a defined public engagement strategy through advertising their operations in annual solid waste system supplements in the local newspaper, billboards around their region, and frequent tours of the plant by school children, social and professional groups. Lee County, for example, has perhaps the best education program (Figure 14) by turning the plant’s conference room into a “education center” with models of the plant, and specific audio-visual displays.

During initial discussions regarding WTE, frequent and widespread presentations should be given to business, social, professional, and civic association groups. This face-to-face outreach to key decisionmakers and stakeholders helps to develop support for WTE.



Figure 14: Lee County WTE Conference Room

- Co-locate the WTE Plant with the Landfill

One of the common themes during the tour was the suggestion by all owners and operators of these plants was the WTE should be co-located at the owner's landfill. Figure 15 shows the adjacent landfill monofills at the Pasco County WTE plant. Most felt that having the landfill in proximity to the WTE plant reduced operational and transportation costs.



Figure 15: Pasco County Landfill With WTE Plant in Background

- **Boiler Operations and Maintenance Techniques**

The boiler system is the most maintenance-intensive component of the WTE facility. Therefore, a comprehensive and proactive maintenance program for the boiler is critical to reduce downtime. This includes the following: nondestructive testing for predictive and preventive maintenance such as monthly vibration tests, quarterly oil sampling, infrared thermography, ultrasonic testing for metal thickness, acoustic data, and motor electrical signature tests. Included in this category is the use of Inconel and other alloy materials for overlay on various boiler and heat transfer surfaces in the boilers. These best management practices result in higher boiler and turbine-generator availability and gross and net electric generation and were recommended by all parties we interviewed to be included at the outset in a prospective WTE RFP.

- **Refuse Pit Size**

Nearly all the WTE plants we visited had constructed MSW storage bunkers that have proven to be undersized for future growth. To a person, our tour participants encouraged the MOA to oversize the storage bunker for the WTE plant. They argued that a larger “pit” allows the operator to manage the incoming MSW more efficiently producing a better combustion process in the plant.

- **Provide Boiler Redundancy**

All the WTE plants we visited had multiple boiler trains so that the plant could continue operation when one or more other units went down for annual or semi-annual scheduled maintenance. This is common throughout the WTE industry. A recommendation was to include space in the initial design of the WTE facility for future expansion. Good examples are the Pinellas, Hillsborough and Lee County plants.

- **Maximize Ash Recycling Opportunities**

About 15 to 20 percent (by weight) of the MSW received by the WTE plants is currently landfilled. All recover ferrous and non-ferrous metals from the ash, use ash for landfill cover and for construction of interior roads within the landfill. Pasco County is exploring possibilities of bottom ash use in cement production. By the time the MOA might implement a WTE project, ash recycling opportunities may reduce landfilling of ash by nearly 90 to 95 percent.

- **Look for Partnering Opportunities with the Private Operator**

Another common theme by all the owner’s representatives was a recommendation to look for opportunities to partner with the WTE plant operator. They pointed out that a 20-year agreement is a long-term public-private partnership. All these operating agreements include strong guarantees by the plant operator. However, all owner’s representatives suggested to find ways in the operating contract to provide reasonable incentives for the plant operator to maximize efficiency. Typical in the industry is a sharing of the energy revenues and ash recovery.

- Find Additional Revenues within the Incoming Waste Stream

All the WTE plants are looking for opportunities to increase their revenue base by accepting special waste streams that require additional handling that yield higher than normal tipping fees. These include special wastes such as rejected or used pharmaceuticals, biosolids, and banned products. It was suggested by all that the MOA consider including these items in the initial planning and permitting process.

- Pursue the Longest Energy Purchase Agreement Term Possible

All WTE plants we toured had initial energy purchase contracts of a minimum of 20 years, essentially matching the life of the construction bonds for the facility. In Florida, all plants were able to secure contracts that initially provided for capacity and energy payments to the owner. Some of these payments were shared with the private WTE operator, typically 10 percent, to provide some incentive to improve energy generation. As these agreements expired, the communities were unable to secure capacity payments, only electric utility avoided costs. The agreements were generally about 10 years in length. Consequently, most owners recommended that MOA secure the longest-term energy purchase agreement as possible.

- Development a Microgrid For Improved Revenues

The Hillsborough and Pasco WTE facilities we visited are evaluating additional behind the meter uses for the power being generated to include adjacent public works facilities (wastewater treatment plants) and/or adjacent industrial/commercial customers on their campus. In this manner, the WTE can supply energy directly to a user and receive higher payments or avoid retail utility rates for County facilities, thereby improving revenues for the proposed MOA WTE facility (Figure 16).



Figure 16: Hillsborough County WTE Microgrid

- House a Municipal Contract Manager in Plant

The five facilities vary in the role of contract management support for monitoring the service agreement. All have an assignment contract manager who is authorized to review and approve monthly invoices and to send those to the proper agency for payment. All have some sort of agreement with an independent engineering firm with experience in WTE operations to review plant operation and provide periodic and annual reports. However, our tours suggested that those WTE which appeared to have the best maintenance and housekeeping were those with a contract manager housed in the WTE plant rather than a separate location from the plant. This model enabled daily observations and direct contact with the plant manager and his staff.

4. ANCHORAGE DEPARTMENTAL MEETINGS

During the week of 13 – 16 January 2020, Geosyntec and SWS staff met with representatives of key departments within the MOA. This comprehensive meeting is a concept that many WTE projects have utilized to initiate planning efforts. The goals of this meeting included the following:

- Get everyone updated on the planning efforts taken by SWS to date;
- Help drive alignment around a project mission and strategy;
- Ask key questions and obtain answers about MOA policies and procedures that may impact the project; and,
- Give everyone a chance to ask questions.

The following paragraphs briefly summarize the key questions, answers received, data requested, and scheduled meetings suggested by the participants.

4.1 Anchorage Water and Wastewater Utility (AWWU)

AWWU has a keen interest in finding a cost-effective way to dispose of biosolids (wastewater sludge) from the Asplund facility. The sludge incinerator at the facility has been in operations since the 1980s and has been upgraded or undergone cold shutdown for repairs several times. During maintenance periods, biosolids from the facility have been hauled directly to the landfill after processing on the facility's belt filter presses to remove excess water from the biosolids. Discussions with AWWU suggest that the biosolids after processing at the belt filter presses average between 30 to 32 percent water.

Several WTE plants in the U.S. incinerate significant quantities of biosolids, namely the Honolulu H-Power WTE plant and the Lee County Solid Waste Resource Recovery Facility. The Lee County permit allows processing of up to 90 tons per day of biosolids. No additional handling processes or equipment is used as the tipping floor cranes are used to meter the biosolids in with the MSW stream.

The WTE plant in Honolulu combusts biosolids. Geosyntec followed up with an email to the Environmental Services Department which manages this contract. A summary of the email follows in the paragraphs below:

“Our sludge receiving bin is sized at 90 wet tpd. It cost about \$10.6M to construct and was completed in 2014. For O&M it costs \$200,000/yr. (fixed fee) and \$7.20/ton (variable). The bin has two Schwing positive displacement pumps at the bottom that pump the sludge through a pipeline to a header with 21 nozzles so that sludge is directly metered and fed into the boiler. This pipeline bypasses the MSW acceptance pit.

Prior to sludge arriving at the plant it must be within the range of 15-30% solids, pass the paint filter test method, and have no foreign debris >1-inch size present. We have had sporadic issues with debris (i.e. gravel, branches, metal/wood items, rags) damaging the pumps. The wastewater treatment plants have a screw feed, centrifuge, or belt filter press to dewater their liquid sludge. The dewatered cake sludge is then loaded directly into a roll

off, dump truck, or other covered truck. Some trucks were initially not compatible with the bin- the bin has a curb and grate that created a conflict with some trucks' rear bumpers. The curb/grate was modified from the original design and then some trucks had to be modified further to fit the bin.

Overall this has been a very successful project, one of the first of its kind in the country and has helped win the City and Covanta several awards in the industry. It has significantly reduced the amount of sludge (and bulky waste that was previously used for mixing it) from being landfilled”.

Several questions were posed to AWWU concerning the availability of potable and non-potable water for WTE process and cooling purposes. It is not known at this stage whether the WTE plant would be required to operate with zero discharge since the site has not been established at this stage of feasibility. However, AWWU's existing service area encompasses multiple lands zoned for Industrial use inclusive of both water and sewer service. Leachate generated at the landfill is pre-treated, then trucked to AWWU's Turpin St. Septage Receiving Facility approximately 10 miles away. There it is disposed of by discharging into AWWU's wastewater collection system. at AWWU's Eagle River Wastewater Plant from the Landfill requiring tanker truck transportation. If a WTE is sited at the Landfill a wastewater service line would have to be constructed roughly seven miles long and/or convey wastewater through JBER's collection system to reach a point of entry into AWWU's existing system. Consequently, a future WTE siting study would have to include evaluation of water and wastewater services.

4.2 Communications

Public engagement for the prospective WTE project would be key facet should the MOA proceed to move forward on the project into the next phase. Communications is housed in the Mayor's Office and within SWS, but many departments such as AWWU and SWS are the primary points of contact for communications on large scale projects. Several of these have been handled in-house, while others have been implemented using outside public relations consultants. More of this is discussed in later sections of this report.

4.3 Finance Department

Based on the discussion with the Finance Department, the typical process for large project financing is that a Plan of Financing is traditionally completed by the Finance Department with help of third-party assistance of the MOA's Bond Counsel and Financial Advisor, who are currently under contract. The Bond Counsel would have to opine of the legality of a design, build, operate (DBO) type of project such as WTE. Typically, bonds issued by the MOA for such large projects would be considered Private Activity Bonds (PAB), a form of revenue bonds requiring the financing team to coordinate securing a portion of the annual State cap on these bonds in Alaska. This team would be responsible for securing the bond rating for the issue by the rating agencies MOA utilizes, Fitch and Standard and Poor's. Based on the comments from Finance, it does not appear that this would be an issue for WTE bonds issued in Alaska.

4.4 Office of Management and Budget

Several questions were asked regarding additional submissions to the Office of Management and Budget if this project is to move forward. There does not appear to be any specific submissions except for the typical Operating budget, CIB and CIP submissions, which would be required by SWS as part of its annual budget process.

4.5 Municipal Manager's Office

The Team had a follow up meeting with Municipal Manager Mr. Bill Falsey subsequent to the meeting with key departments. An important lesson learned from the Port of Anchorage project was that a total cost for the WTE project should be known upfront. Mr. Falsey agreed that public engagement also should be initiated at an early date to gain community consensus on the project.

4.6 Office of the Mayor, Chief of Staff

At the Office of the Mayor, the team engaged the Chief of Staff. The discussion also focused on community and public engagement efforts for the WTE project. Discussion occurred about the benefits of site visits by the Assembly or other decisionmakers to operating WTE facilities, including discussions with other officials involved in these projects. The information exchange and ability to witness actual operation is often found to be beneficial for decision makers. Discussion also occurred about the need to identify suitable site(s) for inclusion in a site selection process. There was also support for detailed site selection process as part of the WTE project which would engage the public in site selection.

4.7 Purchasing/Legal Departments

There are several examples of similar municipal procurements in the U.S. and the DBO method is well tested by WTE over the last 30 years. Specialized consulting expertise would be necessary to support MOA legal and procurement staff. Subsequent to our meetings in Anchorage, copies of similar RFPs and contract documents were transmitted to MOA staff for its review.

4.8 Real Estate Department

As of the date of this Report, no WTE project site has been identified, although preliminary reconnaissance has identified some candidate sites, (e.g., SWS recently purchased CTS site, existing ARL, Asplund WWTF) for further consideration. The next phase would require that a detailed site selection process be undertaken. Some preliminary comments or observations about the process were provided by the Real Estate Department:

- Once the land/right of way (ROW) needs are established SWS would work with Real Estate to secure property needs. This was a similar process undertaken for CTS site.
- For siting analysis, consistency with the 2040 Comprehensive Plan would be required. For an industrial land use such as WTE, it appears that a WTE facility would be a use designated within Zoning District I-2. A rezoning for the prospective WTE plant would require a Conditional Use Permit. The typical timeline for approval is six to nine months if a Comprehensive Plan modification is needed; a Conditional Use Permit would require an average timeline of three to four months.

4.9 SWS Department

A question was asked of SWS regarding project staffing for this prospective project. Typically, most, if not all, WTE projects owned by a local government agency have dedicated personnel or additional staff responsible for the implementation, contraction oversight, and operations, since it is time consuming, but a necessary administrative function given the size and complexity of these projects. A specific staff member with requisite skills and experience to manage large dollar, complex, highly visible projects has not been identified in SWS and a new position would be necessary. A draft position description in SWS has been developed and would be submitted as part of the budget process for this project to secure the resources required to undertake program development.

5. ROADMAP FOR PROJECT

The sections that follow provide detail on the key tasks required for implementation of an MOA WTE project. Each subsection includes a brief overview of the task, background on other similar WTE projects, a projected schedule for task completion, and budgetary estimates to complete for consideration by the Assembly.

5.1 Public Engagement Strategy

5.1.1 Overview

It is recommended that public stakeholders be engaged early in the WTE planning and decision making since the “decide, announce, and defend” approach to decision making that has been frequently used for large public works projects in the past is generally poorly received in recent times.

Therefore, the MOA will need to create meaningful two-way communication on the WTE project that allows learning by the public and by planning professionals so that decisions have the full support of elected officials, Assembly members, and the MOA’s residents. Weaving meaningful public involvement into the technical work of WTE planning is a challenge. The MOA must develop high-quality reports, plans, and programs that maintain strong public support, while utilizing new and creative ways to engage the public at all phases of the WTE facility planning process.

The purpose of the Public Engagement Plan is to ensure that all the project plans, programs, and studies include adequate public involvement prior to action by the MOA. Most agencies in the U.S. requires that organizations utilize proactive public involvement procedures that go beyond merely providing notice of decisions, providing opportunities for early and continuing involvement throughout the planning process. The Public Engagement Plan also explains and describe how the public can be involved in the WTE planning process.

5.1.2 What Other Projects Have Done

Observations gleaned from more than a dozen other WTE projects and the WTE industry for more than 30 years affords a clear idea of what works and does not work for public engagement. In discussions with public owners of these facilities, the lessons learned are as follows:

- Start your public engagement program well before the plant site selection process has begun in order to inform the public about the science of WTE. Don’t get behind the curve by responding to misinformation by interest groups from outside the region who espouse a particular agenda against any form of WTE.
- Brand the project by showing how the WTE project is part of a larger goal of environmental stewardship and supports community efforts to reduce, reuse, and recycle and reduce reliance on fossil fuel-based electricity generation.
- Develop a set of frequently asked questions and associated answers within fact sheets (Figure 17) that public decision makers and the general public typically ask about WTE. Proactively address common perceptions and misperceptions and avoid

spinning facts to make things appear better than they are. Ensure that communications are relatable to the public and eliminate unnecessary scientific jargon and acronyms whenever possible.

- Have a proactive schedule of “meet and greet” meetings with key influential members of the Anchorage community. This may include, but limited to the following: public interest groups, environmental groups, social organizations, professional organizations, business organizations, and, fraternal organizations. As an example, the Hillsborough WTE project conducted an outreach program that included more than 150 presentations over the two-year period leading up to the first decision to implement the WTE project. Look for opportunities for outreach to underserved community groups.
- Conduct these meetings at convenient and accessible meeting locations.
- Develop a project web site where all this information and materials, including project reports can be accessed by the public.
- Conduct a periodic review of the public engagement process – if it doesn’t work, change it!

OUT OF SIGHT... NOT OUT OF MIND

OVER 250 MILLION TONS OF TRASH ARE BURIED IN U.S. LANDFILLS EACH YEAR

THE AVERAGE PERSON DUMPS 4.5 POUNDS OF WASTE INTO LANDFILLS EVERY SINGLE DAY

THIS HAS HARMFUL EFFECTS:

- Land:** Over 250 million tons of trash are buried in U.S. landfills each year. Enough to bury 16,000 football fields 10 feet deep.
- Air:** Landfills emit 1.6 million tons of methane annually, a greenhouse gas that is over 20 times stronger than CO₂ over the next 20 years. Methane is the second largest contributor to climate change. Landfills release uncontrolled emissions that include carcinogens – over 170 pollutants and 46 air toxins even when they have collection systems in place.
- Water:** Landfills create leachate, a potentially toxic liquid. It can contaminate groundwater and make landfills an environmental burden for generations.
- Fire:** Accidental fires at landfills and the uncontrolled burning of residential waste are the leading man-made sources of dioxin emissions in the U.S.

STOP LANDFILLING AND PRACTICE THE 4R'S

- Reduce:** Approximately 30% of waste is avoidable through the simple steps you can take today. Reduce, reuse, recycle.
- Reuse:** Reuse products and materials to avoid waste. Buy second-hand or repair. Donate or sell. Donate or sell. Donate or sell.
- Recycle:** The U.S. consumes more paper, cardboard, steel, glass, and plastic than any other country. Recycle.
- Recover:** The most valuable resource is the earth. Use it wisely. Recover.

What would happen if everyone followed the 4R's? We would reduce greenhouse gas by one billion tons, the equivalent of taking 1,000 large coal power plants and taking 1 billion's emissions completely.

COVANTA
Powering Today. Protecting Tomorrow.

TO LEARN MORE ABOUT SUSTAINABLE WASTE MANAGEMENT, visit us at www.covanta.com

COVANTA The Case for Energy-from-Waste
Powering Today. Protecting Tomorrow. Reduce | Reuse | Recycle | Recover Energy-from-Waste

	EFW	Landfill
Sustainable Waste Management Energy-from-Waste (EFW) securely managed municipal solid waste (MSW) in a one-hour period, recovering energy and using advanced air pollution control equipment. MSW degrades in landfills for 100 years or more with uncontrolled emissions, presenting a long-term environmental liability that we leave future generations.	 1hr.	100-150 YEARS
Energy Generated from 1 Ton of Waste EFW facilities are much more efficient at turning waste into energy, generating nearly 10x more electricity from one ton of waste than landfill-gas-to-energy plants. Less than half of all waste buried in landfills is even used to generate energy.	 550 KWh (Enough to power the average home for 2 weeks.)	 65 KWh (Enough to power the average home for 2 days.)
Greenhouse Gases For every 1 ton of MSW managed at an EFW facility, we offset approximately 1 ton of greenhouse gas (GHG) emissions. In over 25 years of operation, the total GHG mitigation of our facilities has exceeded 350 million tons—the equivalent of planting 8 billion trees. Landfills are a leading source of the powerful GHG methane, 86x stronger than CO ₂ over a 20 year period.	 300 Million Tons of GHG Avoided is the equivalent of planting... 8 Billion Tree Seedlings	Landfills are a leading source of methane, a GHG up to 86x Stronger than CO ₂
Air Emissions Covanta's EFW facilities typically operate at 60-80% better than permitted emission limits. Landfills are subject to minimal regulation of air emissions, despite emission of over 170 air pollutants and 46 air toxins, including 4 known and 13 probable carcinogens.	 Highly regulated. Advanced air pollution control.	170 air pollutants / 46 air toxins Minimally regulated. Minimal air pollution control.
Recycling / Metals Recovery On average, communities with EFW facilities boast higher recycling rates than the national average. Additionally, the EFW process recovers 50 lbs. of metal for recycling for each ton of MSW processed. Annually, Covanta EFW facilities recover more than 490,000 tons of metals for recycling that otherwise would have been landfilled and lost. Landfills do not recover metals for recycling.	 50 lbs (Amount of metals recovered from 1 ton of MSW processed)	 Metals are buried and lost at the landfill.
Transportation EFW provides a local solution to sustainable waste management. MSW is typically transported only a few miles before it is converted into clean, renewable energy. Conversely, when MSW is landfilled, waste is frequently trucked hundreds of miles before it is buried in the ground, exacerbating the already negative environmental impact of landfills.	 A Local Solution	 A Long-Distance Dilemma

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Figure 17: Examples of WTE Public Engagement Materials

Appendix B includes an example of a draft RFP for a public engagement consultant.

Examples also exist within the MOA of ways to engage in meaningful public engagement when making major investment decisions. For major projects within the MOA, public works projects such as the AWWU Anchorage Loop Water Transmission Main Phase IV project, or the AWWU Elmore Reservoir site selection process are recent examples of engaging stakeholders using modern decision science methods to help reach optimal solutions for investments in critical infrastructure.

5.1.3 Estimated Schedule

Typical WTE development requires an engagement of five years from initiation to plant start-up, including 24 months for the site selection, design, and permitting phase and 24 to 36 months for WTE plant construction.

5.1.4 Estimated Public Engagement Costs

While costs for a public engagement specialist vary from one WTE agency to another dependent on the level of effort, a brief survey of other projects suggests that SWS should budget for specialist resources no less than the following:

- \$200,000 during the two- year implementation phase, including siting study; and,
- \$50,000 a year during WTE plant construction.

However, it is also known that public engagement efforts for other types of infrastructure projects have been even more extensive. One example is the level of effort anticipated to be exerted to explore, create and stand up a new Storm Water Utility in Anchorage, in which costs for a complete suite of engagement efforts are expected to exceed \$250,000. Costs will be driven by the type and form of engagement selected.

5.2 Waste Composition Analysis

5.2.1 Overview

Proper planning of a WTE facility requires that a reliable data base be available on solid waste characteristics expected to be generated within the service area of the facility. Such data is necessary not only for determining the current refuse disposal needs of the community, but also to determine the future requirements of the solid waste disposal system. The quantities of solid waste generated will impact the initial sizing of the boilers of the proposed WTE facility.

Further, the composition of the solid waste generated is an important factor since it correlates to the heating value (energy content) of the waste received by a facility, as well as the quantities of recyclable materials and residues that may be generated. Because the sale of energy plays an important role in the economic feasibility of a WTE facility, the heating value (or energy content) of the waste stream is a key design factor. The heating value is a basic measure of the heat energy released through the incineration of solid waste. There is a significant amount of data on the heating value of MSW that is well documented, and this data indicates wide variation in energy content depending on the composition of the waste stream. Typically, MSW exhibits a range of 2,500 to 8,500 Btu per pounds of waste and is dependent on the highly combustible fraction (paper, wood, cardboard, plastics, etc.) versus wet and/or low combustible materials (animal and vegetable wastes, glass, metals, etc.). Higher moisture and inert content will have higher detrimental impact

on the final MSW heating value. In addition, recycling programs for inert materials and metals such as glass, aluminum, and ferrous are complementary to WTE systems.

5.2.2 Experience from other WTE Projects

A waste composition study will need to be conducted for the MOA MSW waste stream to better understand the composition of the waste materials to be processed in a WTE facility. Waste sampling and the hand-sorting of the materials should be conducted on the tipping floor of the CTS facility to achieve a statistically significant sampling of the major components of the waste. Up to 26 different waste components are typically sorted (Table 5) with a distinction made in the sampling between loads containing residential waste and commercial waste since there is typically a significant difference in the composition for these two waste streams. If the waste stream is highly variable based on seasons (typical for areas with a large tourism component of the local economy), then a waste sort should be conducted during more than one season.

Using the data collected during the field study, the team should calculate the waste composition for both the residential and commercial generating sectors. The data from both sectors should be weighted based on the overall waste tonnages received at the CTS facility (Figure 18). Using standard waste heating values obtained from various sources, the heating value of the waste stream can be estimated.

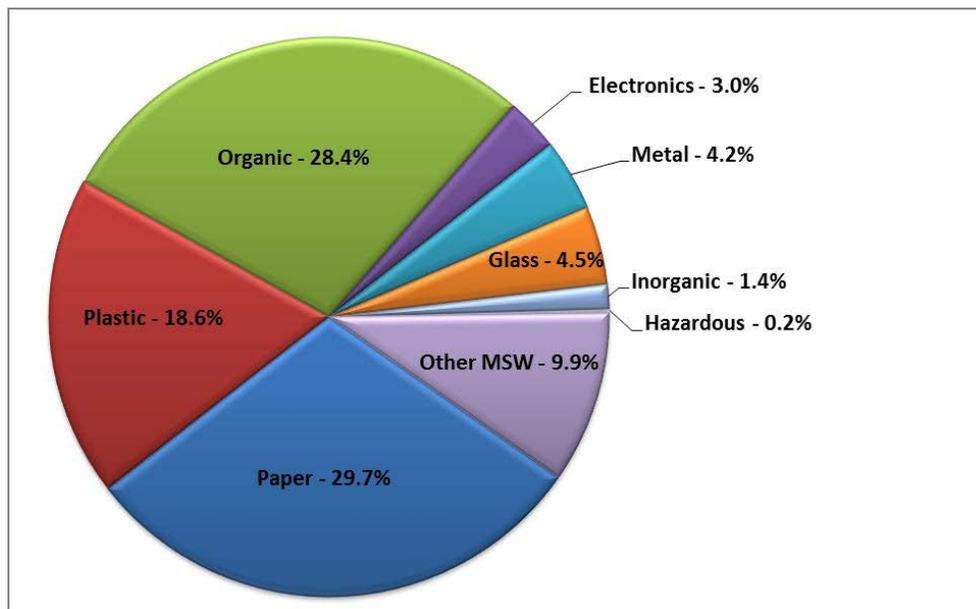


Figure 18: Overall Type of Results From Waste Composition Study

Major Waste Fractions	Waste Component Categories	Examples
Paper	Corrugated Cardboard	Packing/shipping boxes
	Kraft Paper	Grocery bags, deli packaging
	Newspaper/Print	Daily, weekly newspapers, including inserts
	Office Paper	Copy paper, computer printouts, junk mail, notebook paper, envelopes, junk mail
	Paperboard	Soda/beer cases, cereal boxes, tissue containers
	Books/Magazines	Hard and soft cover books, phone books, magazines
	Other Paper	Poly-coated/aseptic containers, food packaging, all other paper types
Plastic	All Plastic Bottles (#1-#7)	Soda, water, ketchup, mustard bottles
	All Plastic Containers	Margarine, yogurt, polystyrene containers
	Film Plastic	Shopping bags, shrink wrap, chip bags
	Other Plastic	Straws, peanuts, toys, foam plates/cups
Organic	Leaves/Grass	Foliage, grass clippings
	Brush/Pruning	Branches/stems
	Wood	Lumber, pallets, other wood
	Textiles/Carpet	Fabric trimmings, draperies, clothes, carpet
	Other Organics	Manure, textiles, carpet, leather, diapers
Electronics	All Electronics	Cell phones, computers and parts, chargers
Metal	Ferrous Metal	Ferrous/bi-metal cans (magnetic)
	Non-Ferrous Metal	Aluminum cans/foil, brass, copper
Glass	All Glass	All colored glass containers, ceramics, non-container glass
Inorganic	All Inorganic Materials	Concrete, brick, rocks, sheet rock, fluorescent lamps, gypsum board
Hazardous	Medical/Pharmaceuticals	Red-bagged materials, blood-contaminated tissues/clothes, un-used medicine/pills
	Other Hazardous Waste	Batteries, paints/thinners, corrosives/solvents, fuel/lubricants, HW containers
Special	All Special Waste Materials	Tires, ash, bulky materials (mattresses, box springs), auto fluff
Other MSW	Other Waste/Fines	Leftover material too small to sort

Table 5: Waste Composition Categories

Two important procedural factors must be considered:

- The target vehicle selected for sampling containing MSW is representative of the type of waste typically generated in the residential and commercial waste streams; and,
- The process of acquiring the waste sample did not alter the apparent MSW composition.

5.2.3 Estimated Cost and Schedule

While waste composition studies vary in price depending on the number of waste categories selected, the SWS should be able to secure a good single-season waste study from a reputable solid waste consultant for approximately \$50,000 with a total schedule of approximately one month. Engagement of SWS in the work will also be necessary, such as providing space for sampling, and

equipment needed to complete survey effort. Other costs associated with this task include administration, SWS overhead expenses, and the like for projects of this nature.

5.3 Waste Flow Negotiations

5.3.1 Overview

The MOA's WTE project will require long-term commitments for participating communities to ensure adequate MSW is delivered to the facility. In order to pursue these agreements, it is important to know where the waste is coming from and the expected quantities.

5.3.2 What Other Projects Have Done

5.3.2.1 Develop a "Wasteshed" Survey

A wasteshed study is typically undertaken by an agency considering implementing a WTE facility (Figure 24) in order to identify the locations and volumes of MSW and other wastes generated in the service area, providing an analysis of the major agencies or waste generator, shows historical trends in pricing, waste disposal volumes, and transportation costs to the disposal facility. Transportation costs using existing modelling software programs will be developed for truck, railroad, and barging of wastes.

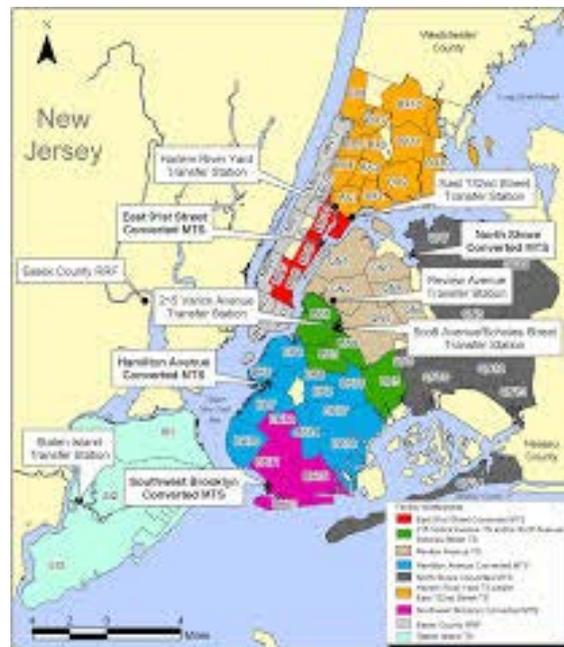


Figure 19: Example of Wasteshed Study

5.3.2.2 Develop a Standard Interlocal Agreement

Most WTE projects have developed interlocal agreements that each potential municipal government would execute, committing its MSW for a period equaling the length of the initial bond issue for the facility (typically 20 years). A provision often included allows agencies that

have short-term contracts with other waste disposal providers, to fulfil the terms of those contracts and then return to the MOA solid waste system. Presumably, the MOA would pledge to provide enough WTE capacity to meet the growth needs of each participant in the WTE project at a defined per ton fee, with a defined escalation (e.g., Consumer Price Index or fixed annual escalation).

In addition to securing waste commitments from municipalities, MOA could pursue large waste haulers (e.g., Alaska Waste, Waste Connections, Republic, Waste Management). Appendix C is an example of a typical interlocal agreement for waste supply to a WTE plant.

5.3.3 Estimated Costs and Schedule

It is projected that a wasteshed study can be completed for not less than \$35,000 within three months from notice-to-proceed by SWS. Subsequent tasks involve the identification, negotiation, and securing actual agreements. It is assumed that activity will be performed by SWS staff as a matter of their normal work.

5.4 Energy Contract Negotiations

5.4.1 Overview

A power purchase agreement (PPA) is a legal contract between the owner of a WTE facility and a power purchaser such as a utility or large power buyer/trader. The PPA is the principal agreement that defines a major revenue source for a WTE project and is thus a key instrument of project finance. Depending on the site that is selected for the WTE project, there are perhaps two different large electric power buyers within the MOA, Chugach Electric Association, Inc. (Chugach) and Matanuska Electric Association. Other electric buyers in Alaska could be considered if wheeling of the electricity from the WTE facility is deemed more economically advantageous to the project. For the purpose of this feasibility report, to determine overall approach, SWS has only conducted preliminary discussions with Chugach, as noted in the paragraphs below.

5.4.2 What Other Projects Have Done

Most local governments have little or no experience with power purchase agreements (PPAs), therefore, very few organizations have the internal resources and expertise to collect data on renewable energy projects, analyze the data, evaluate proposals and manage contracts and negotiations. That is why most choose to work with an energy broker or advisor who can guide them regarding the value of the generated energy. Energy brokers help facilitate a deal between an energy buyer and seller. Energy advisors can do the same, but also offer additional services beyond brokering the deal.

Before hiring an advisor of any kind, it is important to conduct due diligence, since the PPA will have major financial consequences on the WTE project for more than a decade. The energy advisor will provide the best data available to make informed choices. A copy of a draft RFP for an energy advisor is included in Appendix D.

5.4.3 Estimated Schedule

Our initial discussions with Chugach indicate that a memorandum of understanding (MOU) would likely be completed within three to four months, which includes time for completing hourly modeling and analysis of integration impacts associated with the WTE facility. The time

requirements are also dependent, in part, on the approach used for determination of the buyback rates from the WTE facility.

The interconnection and operation of non-utility generator installations on the Chugach system with a nameplate capacity exceeding 5 MVA are to be completed under a separate contract between Chugach and the MOA SWS. To begin the formal process, attached in Appendix E is an Application for Interconnection of Electric Power Sources Greater than 5 MVA to the Power Transmission Grid, which will need to be completed by MOA SWS. In addition to this application, Chugach will need a complete design package that allows for generating system classification, review of the proposed interconnection facilities, and analyses of the impact of the proposed interconnection on the Chugach system.

Appendix C also includes sections of Chugach's tariff, which identifies the general terms and conditions for non-utility generation and interconnection with the Chugach system. This information is also available on Chugach's website at:

https://www.chugachelectric.com/system/files/regulatory_affairs/cea_operating_tariff-electric.pdf

Once the necessary approvals have been made by both Chugach and the MOA SWS, Chugach will submit the final agreement and all supporting analysis to the Regulatory Commission of Alaska (Commission) for approval. The agreement would be submitted as a tariff advice filing. Once filed, the Commission will issue a public notice and will request that interested parties submit comments on the filing. Chugach would expect a six-month period for review and approval, assuming no delay in the regulatory process.

Currently, Chugach does not expect the formation of the Railbelt Reliability Council to have a material impact on the agreement. For planning purposes, this report assumes the WTE facility will be located within Chugach's certificated electric service area and Chugach will purchase the power generated from the facility at its avoided cost. However, the formation of the Railbelt Reliability Council is on-going. The bills currently proceeding through the legislative process are Senate Bill 123 and House Bill 151 and, at this time, the outcome of the bills is unknown and therefore a final assessment of any impacts cannot be known at this time.

5.4.4 Estimated Costs

Appendix F also includes a reimbursement agreement which allows Chugach to be reimbursed by MOA SWS for certain costs incurred in support of the required analysis. Chugach estimates that the following costs should be budgeted:

- Interconnection Study - \$50,000
- Integration Study - \$50,000

SWS should also budget the services of an Energy Advisor at \$50,000.

5.5 Siting Analysis

5.5.1 Overview

The siting of a WTE project is not a simple task, particularly when the facility will be located in developed and environmentally conscious communities. A number of technical, environmental, and social (institutional) issues must be considered. Specific goal(s) of the site selection process must be defined in order to maximize community and economic benefits, meet environmental justice considerations, and provide consistency with MOA Land use plans. A flow-chart of a typical site-selection process is on Figure 23, requiring the SWS to develop specific site-evaluation criteria that have a reasonable chance of public acceptance. To achieve this, the site-evaluation criteria must be well documented and carried out in a uniform and consistent manner.

The method described can allow project developers to identify feasible sites, to eliminate the less suitable ones, and to recommend the best site(s) in a detailed and objective way. Furthermore, these siting methods can help enable communities to win public support for such sites, which is the key to the successful implementation of any WTE project.

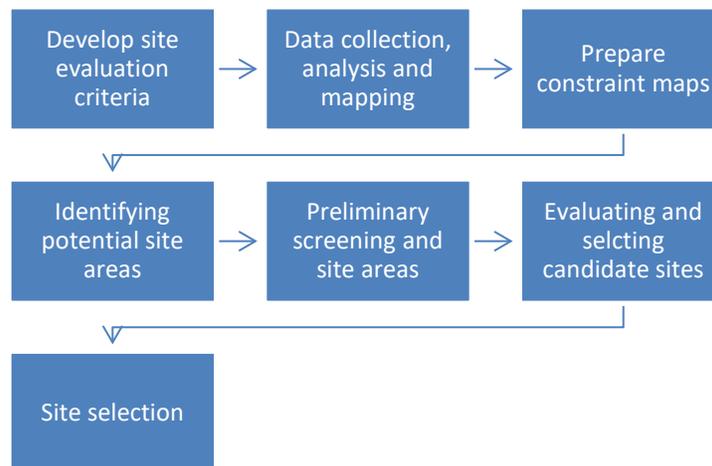


Figure 20: Flow chart of a site selection process

5.5.2 What Other WTE Projects Have Done

The following section provide a generic overview of typical WTE site selection studies.

Evaluation Criteria

The first step in the site-selection process is to identify and document the criteria. It is necessary that the criteria important to the siting of a facility are given balanced consideration. In order to maintain clarity in this effort and to provide a uniform method of reviewing and screening sites, the following three broad categories of site-evaluation criteria have been found extremely useful for many projects:

- Technical considerations;

- Environmental considerations; and,
- Social (institutional) considerations.

Each major division can then be subdivided into smaller evaluation criteria for more specific, detailed appraisals. Typical technical criteria are described below.

Site drainage. Site drainage is an important design consideration for a WTE facility. While the buildings, roadways, and ancillary facilities can be protected against flooding, surface runoff must be directed into nearby watercourses to be carried offsite or retained onsite. Depending on specific site constraints, development costs can be high to manage site drainage.

Foundation suitability. WTE facilities generally require large and complex buildings to house WTE equipment such as boilers, generators, and air pollution control devices. This necessitates stable soils for construction of foundations. While unstable geological conditions can be overcome through the design and construction of more complex foundations, such conditions could preclude the use of an otherwise attractive site because of the additional expenses involved.

Similarly, high groundwater conditions or shallowness of the site to bedrock could also result in more extensive and complex foundation designs. For example, large WTE facilities are often designed with a storage pit of sufficient capacity to store several days of solid waste fuel. Such storage areas are usually excavated below existing grade to provide the necessary storage volumes. Thus, sites with high groundwater conditions may require that either the entire structure be raised with fill, as an alternative, or a shallow tipping floor be utilized. In either case, such designs may significantly increase the construction and operation of the facility as compared to other sites.

Size and shape of site. The size and shape of a site required for a WTE facility is project specific, but is typically at least 10 acres, and ideally much more to accommodate buffers. Neighboring land uses also influence site size. A WTE site surrounded by heavy industrial land uses, for example, may require minimal buffering, thus reducing the acreage needed for the project. However, sites bordering residential land uses may require significantly more acreage to provide buffer zones between the plant and its neighbors. In addition, local traffic and road conditions may also impact the overall size of the site due to the fact that special access road configurations may be required to adequately handle the number of vehicles entering and leaving the facility. This could add additional acres to the required site area.

Accessibility. An operating WTE facility generates significant numbers of vehicles which deliver solid waste, to be processed and hauled away, recovered materials, and residues. Therefore, it is preferable that access to a facility site be from a major highway or rail system and not through residential areas. Project criteria include factors such as road widths, structural capabilities of roadways and bridges, weight limits, height restrictions, speed limits, and grades. The purpose is to determine whether existing roadways can safely carry an increased vehicle traffic load. The cost of providing these services can be useful information to assist in the ranking of candidate sites.

Location. The location of a site for a WTE facility is an important evaluation factor. Such facilities should be located within reasonable distances to the solid waste collection area, the energy sales

market, needed utilities such cooling and boiler makeup water, and the landfill that will accept the ash residues or bypass waste.

From a technical and cost standpoint, the ideal location for a WTE facility is a site located close to the center of the waste-generation centroid, adjacent to a sanitary landfill and energy customer, and within the local government's utility service area. It is unlikely that sites meeting all such factors can be found. Consequently, project developers often must evaluate the degree to which these requirements are met by the sites under analysis.

In addition, proximity to a proposed electricity or steam customer is another location criterion. The costs of constructing many miles of electrical transmission lines are often prohibitive for most WTE projects. Thus, the most economical locations for a facility are sites near large electrical transmission lines or existing electric utility substations. In the case of facilities proposing to export steam to an industrial or institutional customer, sites located near an existing steam loop or the customer itself are preferable to minimize the costs of expensive steam distribution lines and their associated equipment.

Another major consideration is the proximity of the site to the solid waste-generation center, as this will lower the cost to transport solid waste to the facility. Similarly, sites located in a line between the center of solid waste generation and the landfill, which will accept the plant's ash residue, have a higher comparative advantage as haul costs of the ash residue can be minimized. However, since WTE reduces the volume of the waste requiring landfill disposal by nearly 90%, it is generally more economical to locate the facility near the center of the community's MSW generation rather than closer to the ash residue landfill. Unfortunately, for many communities, the center of solid waste generation is usually found in their most developed and populated areas making siting in these areas difficult.

Utilities. WTE facilities generate substantial quantities of electric power and can consume large quantities of water. Sites located where such utility services are already available are preferable to those where these services must be provided at considerable expense to the project. Some utilities such as telephone services are readily available in most communities and can be easily extended, while other utilities such as water and wastewater service may be unavailable in some communities.

Electricity, water, and wastewater service are generally the major utility service needs of WTE facilities. Such facilities can consume substantial amounts of electric power principally at times of plant startup and outages. Electric service can usually be provided to WTE plants at reasonable expense in most communities. An electric transmission line or a substation must be located nearby to deliver the facility's energy output.

A sanitary discharge system is a requirement for the proper operation of a WTE facility. Liquid wastes usually result from many plant operations such as boiler blowdown, water pretreatment for the boiler, and the normal sanitary requirements of the work force. The community's sewer system is the preferable discharge system for most sites. However, with the Municipality there may be instances where such service may be currently unavailable to handle the flow of the plant because of prior commitments and/or capacity limitations in the network. Also, cooling water discharges

to the sewer system are presently limited by Ordinance. This may require the design to consider onsite treatment and discharge, thereby increasing the potential cost of the facility.

A source of water for cooling and process needs is another major utility required for a WTE plant. Potable water from a public system or an onsite well is usually necessary for normal sanitary needs. Nonpotable or recovered water from wastewater treatment plants or nearby rivers can be used for other facility operations such as evaporative cooling, boiler feed water makeup, and fire protection. The cost of providing this water service to the plant either results from extending existing water lines or drilling new onsite wells. This can impact the desirability of one site versus another requiring minimal expenditure for water service.

5.5.2.1 Environmental Considerations

Air quality. The impact of a WTE plant at a particular site on the local or regional air quality is an important consideration in site selection. WTE facilities incorporate some form of combustion process which results in various gaseous and solid emissions to the atmosphere. Good combustion control and the addition of air pollution control equipment, such as electrostatic precipitators, bag houses, and acid gas scrubbers, will help minimize the overall air pollution potential of a proposed facility, although there will still be some quantity of air emissions which could degrade the existing local and regional air quality. Areas designated by regulatory officials as not meeting existing standards for specified air emissions will generally require more expensive air pollution control equipment than plants located on sites in areas designated as attaining these regulatory standards.

Water quality. WTE facilities utilize significant quantities of water for cooling and process needs. Sites should consider the potential impact of the WTE facility upon the water quality of nearby bodies of water. Some states have recently considered promulgating stringent regulations restricting the development of certain land areas located near designated high-quality or protected waters for construction of certain public works projects.

Biological resources. There are a number of unique flora and fauna species that are protected by federal, state, and local regulations. It is important during the initial screening of sites for a WTE facility to identify the habitats of these threatened or endangered species to ensure that these areas be avoided for development.

5.5.2.2 Social Considerations

Surrounding land uses. The compatibility of a WTE facility with its surrounding land uses is an important consideration in siting. An operating WTE facility is an industrial activity with significant volumes of truck traffic and the potential to emit noise, odors, and dust. This is not to suggest that these potential impacts cannot not be mitigated, but the facilities are not completely free of impact to surrounding communities. The visual appearance of such facilities, for example, can be made compatible with many land uses through the judicious use of landscaping, buffer zones, and architectural materials.

Early determination of land use incompatibility can eliminate significant project delays at later phases of project implementation. For example, areas near airports require special attention as the Federal Aviation Administration regulations limit construction (particularly height) in or near airport runway approaches.

Permitting considerations. The number of permits and the length of time needed to acquire them for a WTE facility can be an important factor in the successful implementation of a project. Although some permits will generally be required regardless of site location, there are other permits which are applicable based upon specific site conditions. At the outset of a project, it is critical that both the potential number of permits and estimated length of time required to obtain those permits be evaluated for the specific candidate sites. Under this criterion, sites that potentially require the least number of permits would be preferred as compared to those sites requiring a greater number of permits. Consequently, sites that do not contain environmentally sensitive lands which are protected under current regulations would have greater likelihood of permitting success.

Land ownership. Land ownership is an important factor in determining the availability and ease of obtaining a site for a WTE facility. Land parcels under the control of the MOA are preferable over privately owned lands because there is less likelihood of acquisition delays. Many governments, however, must purchase land for the WTE facility. In this case, privately owned lands, which have only one owner, should be preferred over sites having multiple owners due to the increased ease and speed of land acquisition.

Cultural resources. Cultural resources include items such as archaeological areas, historic sites, and scenic landmarks. The construction of a WTE facility on or near sites having cultural significance can have both direct and indirect effects. Direct impacts can occur as a result of the actual construction and operation of a facility. Cultural resources can also be indirectly impacted if the presence of the WTE facility affects their use

Other Social Considerations. The State of Alaska set itself an ambitious goal of providing for 50% the State's energy needs through renewable energy resources by 2025. In addition, the Municipality's Climate Action Plan calls for greater self-sufficiency and for Anchorage to be known as a leader in stewardship and energy innovation. Further, Anchorage is to be an inclusive, equitable community prepared for impacts of climate change. Each of these goals are elements to be considered in decision making over the suitable location(s) for a WTE facility.

5.5.3 Estimated Cost and Schedule

A comprehensive siting study for a WTE project should be completed in six months following procurement of services to assist in site selection, depending on the need for extensive public hearings, with an estimated cost of not less than \$250,000. This assumes the use of a public engagement specialist that is discussed in greater detail in Section 5.1

5.6 Conceptual Design

5.6.1 Overview

The objective of this specific task is to provide the MOA with detailed specifications on the proposed WTE plant which can be used as part of the eventual procurement document. Figure 21 is an example of a typical conceptual design for a similar 1,000 ton per day, mass burn WTE plant.

5.6.2 What Other WTE Projects Have Done

Typically, at an early stage in WTE project planning, a consultant is retained to prepare conceptual design plans for the proposed WTE facility. The conceptual design should be detailed enough to produce a reasonably accurate engineering procurement and construction (EPC) cost estimate and project schedule, and to support permitting efforts. At a minimum, the conceptual design will include:

- Plant layout (see details below);
- Major equipment general arrangement;
- Building elevations (4 views);
- Heat and mass balance;
- Systems list;
- Major equipment list and possible manufacturers for each;
- Process flow diagrams;
- Electrical one-line diagram; and,
- Preliminary construction schedule.

At a minimum, the conceptual design should cover the following major equipment: weigh scale; tipping floor and storage pit; waste feeding and combustion technology; steam boilers; air pollution control (APC) equipment; steam turbine generator(s); water systems; electrical systems; and, the balance of plant equipment. The consultant should propose construction and operational performance guarantees consistent with the MOA's objectives and should estimate construction and operation costs.

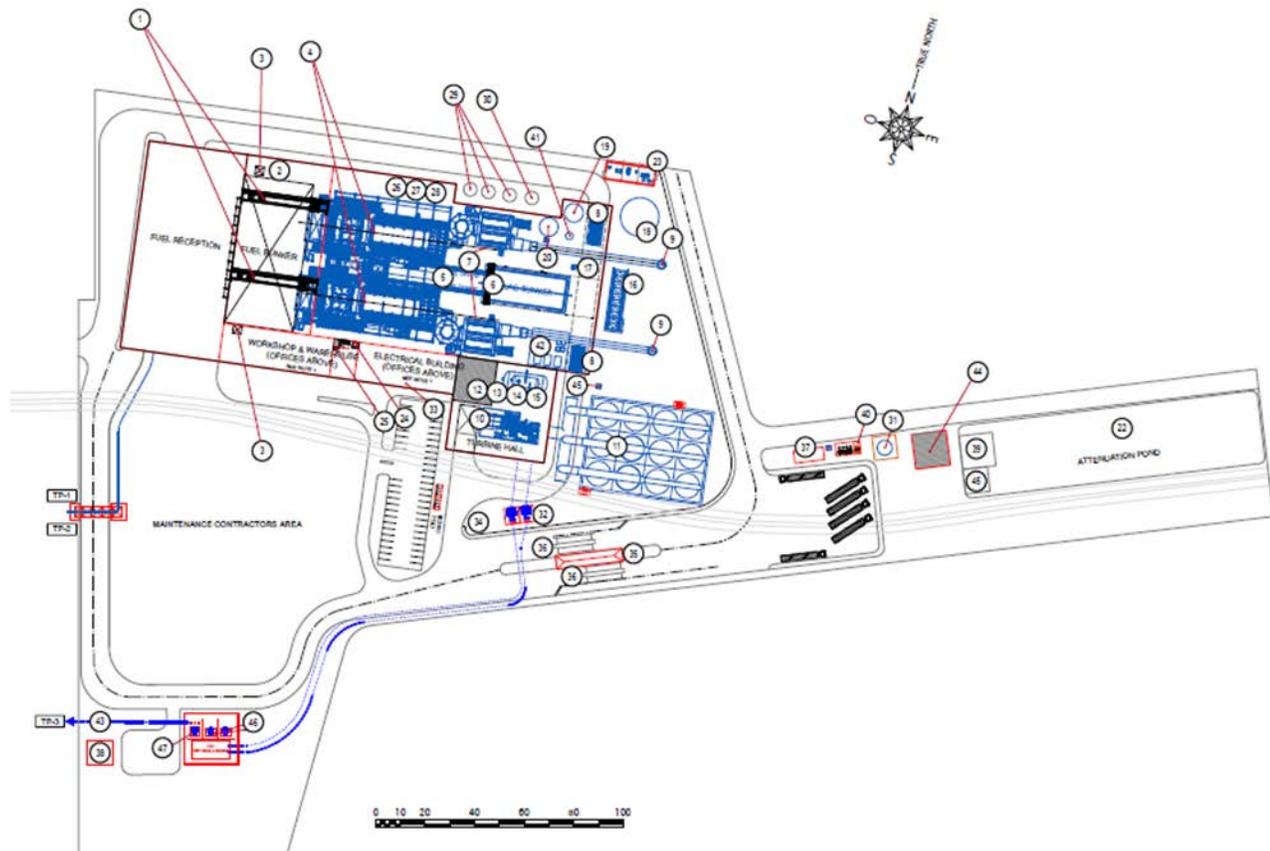


Figure 21: Illustration of Conceptual Design of WTE Facility

Source: Deltaway Energy, 2020

The plant layout should include the following items:

- Schematic Site Plan: A schematic site plan should be prepared to include, at a minimum, the layout of the buildings (e.g. mass burn facility, administrative building, storage facilities), roadways, parking areas (employee and visitor), landscape and hardscape areas, perimeter fencing, scale location, truck queuing area and ash storage/transport area. The plan shall include the site boundary, topography, and existing utilities.
- Schematic Grading and Drainage Plan: A schematic grading and drainage plan should be prepared to include, at a minimum, the proposed elevations of the principal building structure, roadway grading and the layout of a schematic stormwater collection and conveyance system.
- Earthwork calculations, including cut and fill quantities.
- Pavement design computations.

The consultant should also prepare a three-dimensional rendering of the proposed facility. The angle of the rendering should be discussed and agreed upon with the MOA. The rendering should consist of scaled buildings with large detail features. The rendering should include proposed landscape and hardscape areas, such as new roadway and parking configurations.

5.6.3 Estimated Cost and Schedule

It is envisioned that a reputable engineering company experienced in WTE design should be able to generate these conceptual designs within six months with a budget of approximately \$400,000 for these services.

5.7 Air Permitting

5.7.1 Overview

Air permitting for a WTE facility is lengthy process aimed at ensuring that emissions from its operations do not significantly contribute to unhealthy air quality. Proposed facilities must undergo a pre-construction review and receive a Construction Permit prior to commencing construction. Large facilities, such as WTE facilities, must obtain a Major Source Operating Permit, also known as a Title V Permit (referring to Title V of the Federal 1990 Clean Air Act Amendments), before they can operate. The Title V Permit for a WTE facility will typically contain numerous operating conditions that require the minimization of the release of emissions by prescribing emission control technology, operating practices, monitoring, and establishing acceptable emission limitations for pollutants of concern. The U.S. EPA has established minimum limits for new and existing WTE facilities under provisions of the Clean Air Act. The U.S. EPA has delegated the authority to the State of Alaska DEC, Division of Air Quality (ADEC) to implement the permitting programs and the Clean Air Act standards.

The federal preconstruction air permitting program for Construction Permits is called New Source Review (NSR). NSR air permit applications for major sources like WTE facilities are complex and require detailed technical analyses as well as review at the federal level by the U.S. EPA. The U.S. EPA sets National Ambient Air Quality Standards (NAAQS) for regulated pollutants, and the potential impact to maintaining these standards is reviewed as part of the NSR permitting program. If the proposed facility will be in an area that is classified as being in “attainment” or “unclassifiable” with the NAAQS, then the major source is subject to the NSR program’s Prevention of Significant Deterioration (PSD) regulations for those pollutants. If the source is in an area that is classified as being in “nonattainment” with the NAAQS for one or more pollutants, then that pollutant is subject to Nonattainment New Source Review (NNSR) regulations. Under the PSD and NNSR regulations, a source is classified as a “major source” based on the potential emissions of the proposed source. Because the proposed location for the project is in an area designated as attainment for criteria pollutants, PSD regulations apply to the proposed project. Potential emissions of criteria pollutants (ozone, fine particulate, lead, nitrogen dioxide, carbon monoxide, and sulfur dioxide) that are equal to or greater than 100 tons per year (tpy) will trigger major source PSD requirements for a WTE facility.

In addition to preconstruction NSR permits, operating permits are required under Title V (Part 70) of the Clean Air Act (CAA). A Title V operating permit is a legally enforceable document that details the requirements of the regulations to which the source is subject. A stationary source is “major” under Title V regulations if the potential-to-emit (PTE) is greater than or equal to 100 tpy of a criteria pollutant, 10 tpy of a single hazardous air pollutant (HAP), or 25 tpy of combined HAP.

ADEC administers an integrated PSD and Title V permit program. PSD preconstruction permits may be combined with Title V permits and issued as a single permit that contains the requirements under PSD and the operating permit requirements. The permitting process for Title V permits requires U.S. EPA review and public notice.

There are five main categories of emissions from WTE plants -acid-gases, particulate matter, heavy metals, products of in-complete combustion (PICs), and greenhouse gasses (GHG). Within these categories, there are many products of combustion, several of which are specifically regulated under the international and national emissions regulations. In the U.S., these WTE regulations are titled "New Source Performance Standards" (NSPS) for new WTE sources and "Emission Guidelines" (EGs) for existing WTE facilities (Table 6). In this report, the discussions are limited to the following WTE air emissions:

- Particulate matter (PM);
- Cadmium (Cd), mercury (Hg) and lead (Pb);
- Hydrochloric acid (HCl);
- Sulfur dioxide (SO₂);
- Nitrogen oxides (NO_x);
- Carbon monoxide (CO);
- Organics (dioxins and furans), and,
- GHG.

The hourly, daily, monthly, and yearly pollutant concentrations in air emissions from solid waste combustors vary. However, in general, the relative concentration and toxicity of any of the above contaminants in solid waste combustor gas will be affected by the following factors:

- Solid waste composition;
- Combustion temperature and residence time;
- Flow patterns and amounts of excess air; and,
- Furnace design.

By reviewing the emission information available from the WTE facilities in Florida visited during this study, we can expect that emission levels for a WTE facility sized at over 1,000 tons per day would exceed the 100 ton per year major source threshold for CO, NO_x and SO₂, and that the 25 ton per year major source threshold for combined HAP emissions (including HCl and metals) may also be exceeded.

Table 6 details the emission limits for WTE facilities in the U.S and a discussion of the types of pollutants in the air emissions resulting from WTE operations.

Table 6: Current US EPA Emission Limits for WTE Facilities in the U.S.

Concentration units [□]		Pollutant [□]	Incinerators case ^a [□]	Incinerators case ^b [□]	Energy recovery units ^c [□]	Waste-burning kilns ^d [□]	Small remote incinerators ^e [□]	
ppm [¶]	7%-O ₂ -dry [¶]	SO _x (ppm at 7% O ₂) [¶]	11 [¶]	20 [¶]	720 [¶]	28 [¶]	1.2 [¶]	
ppm- mg/Nm ³ [□]	7%-O ₂ -dry [¶]	HCl (ppm at 7% O ₂) [¶]	0.091 [¶]	62 [¶]	14 [¶]	3 [¶]	200 [¶]	
	7%-O ₂ -dry [¶]	NO _x (ppm at 7% O ₂) [¶]	23 [¶]	388 [¶]	76 [¶]	200 [¶]	170 [¶]	
	7%-O ₂ -dry [¶]	CO (ppm at 7% O ₂) [¶]	17 [¶]	157 [¶]	35 [¶]	90/190 [¶]	13 [¶]	
TEQ ng/Nm ³ [□]	7%-O ₂ -dry [□]	Particulate matter/dust- (mg/Nm ³ at 7% O ₂) [¶]	0.13 [□]	0.41 [□]	0.093 [□]	0.075 [□]	31 [□]	
μg/Nm ³ [□]	7%-O ₂ -dry [□]		¶	2.3 [□]	4 [□]	23 [□]	1.4 [□]	670 [□]
μg/Nm ³ [□]	7%-O ₂ -dry [□]		Dioxins (TEQ ng/Nm ³ at 7% O ₂) [¶]	0.84 [□]	470 [□]	0.56 [□]	3.7 [□]	3.5 [□]

Notes:

- a) Emission limitations for incinerators that commenced construction after June 4, 2010, or that commenced reconstruction or modification after August 7, 2014.
- b) Emission limitations for incinerators for which construction is commenced after November 30, 1999, but no later than June 4, 2010, or for which modification or reconstruction is commenced on or after June 1, 2001, but no later than August 7, 2014.
- c) Emission limitations for energy recovery units that commenced construction after June 4, 2010, or that commenced reconstruction or modification after August 7, 2014.
- d) Emission limitations for waste-burning kilns that commenced construction after June 4, 2010, August 7, 2013 or reconstruction or modification after August 7, 2014.
- e) Emission limitations for small, remote incinerators that commenced construction after June 4, 2010, or that commenced reconstruction or modification after August 7, 2014.

Particulate Matter. Particulate matter (PM). is any liquid or solid which is so finely divided as to be capable of becoming windblown or suspended in air or gas. Particle sizes for particulate matter from solid waste combustors usually range from 0.01 to 300 microns (micron -one millionth part of a meter) in diameter. Particulate matter from solid waste combustors is usually composed of the following materials: carbon particles, water particles, and particles of incomplete combustion.

Heavy Metals. Three heavy metals are the primary focus of regulated emissions: mercury (Hg), lead (Pb), and cadmium (Cd).

Although heavy metals are their own class of toxic emission, they are sometimes grouped with particulates. This may be attributed to the way they are collected.

Acid Gas. Acid gases such as sulfur dioxide (SO₂) and hydrogen chloride (HCl) are formed during combustion. Sulfur oxide (SO_x) compounds are formed from the oxidation of elemental sulfur, and HCl is formed when chlorine in the solid waste combines with free hydrogen atoms (Licata et al. 1994).

Spray dryers, sometimes called dry scrubbers, are the most common acid gas control technology. The USEPA regulations identify fabric filters as the best control technology (BCT) to combine with spray dryers for controlling acid gas emissions (USEPA 1997). The use of a spray dryer with a fabric filter can produce removal efficiencies of >95% for HCl and >85% for SO_x. When acid removal requirements are stringent, usage of double stage wet scrubbers may be required to further reduce emissions.

Products of Incomplete Combustion. Products of incomplete combustion (PICs) are of concern because carbon monoxide (CO) and organics such as dioxin or furan are formed by incomplete combustion. Most of the PICs combine with particles in the cooling flue gas produced by dry sprayers. The particles are then collected by electrostatic precipitators or fabric filters. This process alone can produce removal efficiencies as high as 99% for PICs.

Nitrogen Oxides. Nitrogen oxides (NO_x) are formed from the organic nitrogen present in solid waste and from the nitrogen present in the air used for combustion. NO_x emissions are of concern due to their contributions to the formation of ozone and the photochemical oxidants known as smog.

5.7.2 Air Permitting in Alaska

The ADEC has several ambient air quality monitors located throughout the state to measure concentrations of pollutants in the ambient air relative to the NAAQS. Some areas of the state were classified as a “nonattainment area” in the past, and only one area, is currently classified as a nonattainment area (Fairbanks North Star Borough). This area exceeds the health based 24-hour PM_{2.5} NAAQS. Near Anchorage, two areas had been classified as nonattainment in the past, however, they have been re-classified to “maintenance areas” since they have not violated the NAAQS in several years. This includes the Anchorage CO Maintenance Area shown in Figure 22 and the Eagle River PM₁₀ limited Maintenance Area in Figure 23. The Eagle River area was affected by dust from unpaved roads, until nearly all gravel roads were paved in the early 1990s. Based on the proposed facility’s anticipated emission levels and location in an attainment area, it would therefore be subject to PSD pre-construction review under the NSR program.

MOA has an existing Title V permit for its ARL operations. If the WTE facility is located adjacent to or on the same property of the landfill, the WTE facility may become permitted under a single revised Title V permit, and PSD review would consider the change in emissions from the proposed new WTE operations.

MOA CO Monitoring Network and Nonattainment Boundary

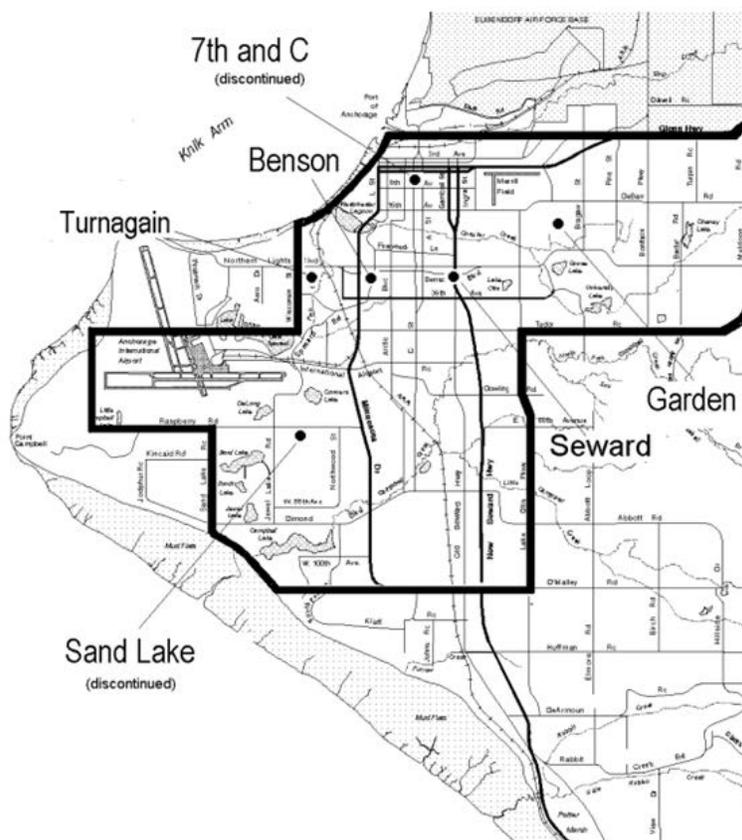


Figure 22: MOA CO Monitoring Network and Nonattainment Boundary

Source: <https://dec.alaska.gov/air/anpms/communities/co-anchorage/>

Eagle River PM₁₀ Non-Attainment Area Boundary
with Parkgate PM₁₀ Monitoring Site

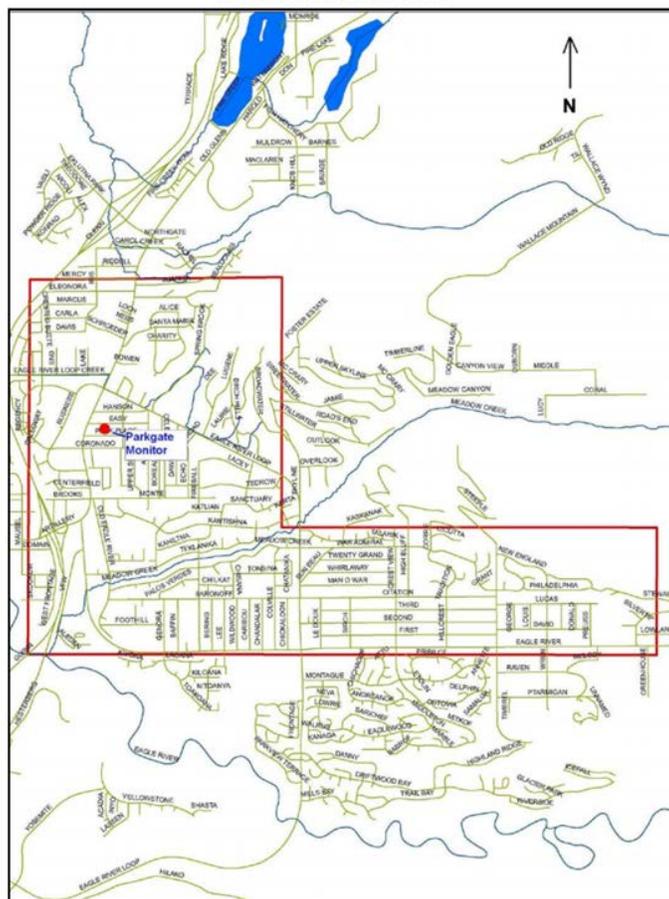


Figure 23: Eagle River PM₁₀ Non-Attainment Network Boundary

Source: <https://dec.alaska.gov/air/anpms/communities/pm10-eagle-river/>

Early engagement with ADEC can save time and educate the agency on aspects of the project that will be critical in their review and permitting analysis. The process typically starts with a pre-application meeting with ADEC to discuss the project and to obtain concurrence on the air permitting assumptions prior to preparing the PSD application. A construction permit application typically requires:

- A list of all emission units at the facility and description of all emission units' processes and byproducts, including process flow diagrams;
- A complete inventory of all regulated air pollutants, including GHG, expected to be emitted from the facility;
- The type, rate, and quantity of expected emissions in sufficient detail to determine all requirements and emission limits applicable to the facility;

- Preparation of an air pollution control program that comprehensively addresses the project in its environmental setting and complies with imposed limits on air emissions;
- A top-down analysis of best available control technology (BACT) for air pollutants of concern, including GHG; and,
- Proposed air quality monitoring to meet air quality standards.

5.7.3 What Other WTE Projects Have Done

5.7.3.1 Monitoring Plan

The following paragraphs briefly describe the preconstruction and compliance monitoring needs for WTE plants.

Pre-Construction Monitoring

A PSD permit application must contain an Air Quality Impact Analysis to determine whether the ambient pollutant concentrations due to the proposed WTE facility will cause exceedance of the NAAQS or of PSD increments. To complete this analysis, it is necessary to know what the current background concentrations of PSD pollutants are in the vicinity of the proposed facility, through preconstruction monitoring at a station set up for that purpose. For this analysis, between four and 12 months of continuous air quality monitoring data (e.g., four consecutive quarters) must be collected. Typically, it takes approximately two years to collect monitoring data that will meet this requirement. For a WTE facility, monitoring would be required for CO, PM10, NO_x and SO₂. This requirement can add significant time to the overall project permitting timeline, since this background monitoring must be complete before the PSD permit application is submitted. A preconstruction monitoring plan would be developed and reviewed with ADEC prior to installing the monitoring station to confirm that it will meet the proper siting requirements and will be able to generate data that will meet PSD quality assurance requirements.

Compliance Monitoring

Monitoring requirements under the NSPS and EGs require major sources of air pollution (WTE plants are a major source) to provide enhanced air emissions monitoring in order to demonstrate compliance with the CAA. Continuous emissions monitoring will be required for air compliance and will include oxygen, carbon monoxide, particulate matter and opacity, metals (including cadmium, lead, and mercury), sulfur dioxide, nitrogen oxides, hydrogen chloride, and dioxins/furans.

The U.S. EPA NSPS and EG requirements also require MSW combustors to demonstrate that the operations are being conducted at rated capacity and that the emissions comply at the tested and rated capacity of the facility. The U.S. EPA has established operating standards for several operational characteristics to ensure that the facility is operating at the tested and rated capacity.

Also, standards will apply for fly ash and bottom ash fugitive emissions from their ash handling system. Measuring the extent of fugitive emissions during the transfer of ash from a combustion unit to the ash storage facility determines compliance with this requirement.

5.7.3.2 Modeling Requirements

As part of the WTE air quality permit application, an air dispersion modeling assessment will be required to determine compliance with the NAAQS, Significant Impact Level (SIL), Significant Monitoring Concentration (SMC), Alaska Air Quality Standard (AAQS) and possibly, the PSD increments. Air dispersion modeling uses comprehensive facility information (emission rate, stack height, stack diameter, and stack gas exist temperature and velocity) coupled with representative meteorological data (such as temperature, wind direction and wind speed) to predict ambient air concentrations at and beyond the facility boundary. Data from the procurement document will help in developing these models. Dispersion modeling is also essential to conduct an analysis of the impact from the project and associated growth on visibility, vegetation and soil. The air quality modeling techniques used to perform the air quality analysis contained in the PSD application should be documented in a Modeling Protocol and reviewed with ADEC prior to modeling effort. NO_x, PM₁₀ and sulfur oxides are the key pollutants for modeling for WTE facilities.

The air dispersion modeling includes the following elements:

Project Information. The project information is one of the most important elements for modeling. Prior to model, the description of proposed project, list of emission units, methods of operation are essential information for the modeling. A project location map and a scaled site plant or plot plan can help with identify the emission units and buildings locations, ambient air boundary, nearby terrain feature and meteorological or monitoring sites selections. In Alaska, the land use analysis is not typically required since most of the areas are rural, but in the greater Anchorage area, land use analysis will be required since it includes some urban area.

Pre-Construction Monitoring (PSD Requirement). Section 165 (e) (2) of the CAA requires to submit ambient air quality monitoring data as part of PSD permit application. The data are required to be collected at the location (s) of existing/proposed maximum impact (s), and the data must be current and meet PSD quality assurance requirements prior to constructing the stationary source (Figure 24). Alternatively, ADEC may consider the modeling analysis which shows that the project impacts are below the SMC as adequate for meeting the pre-construction monitoring requirement, except for the project trigger PSD review for PM_{2.5}.



Figure 24: Example of Air Monitoring Station, Southcentral Power Project, Anchorage, Alaska

Source: Chugach Electric, 2020

Model Selection. It is important to match the level of model sophistication to the scope of the proposed project. Regulatory air dispersion models are typically categorized based on the motion range: near-field and long-range transport. Near-field models are designed to access impacts from 10 m to 50 km, that it can evaluate the impacts within the dispersion algorithms allowable distance (e.g. AERSCREEN, AERMOD and OCD). Long-range transport models are designed to access impacts beyond 50 km, which is often used in the Class I area impact assessments (CALPUFF). Since the site is not located in the Class I area, near-filed models AERMOD will be recommended for PSD analysis.

Meteorological Data. ADEC has confirmed that meteorological data will be available from a station at the Anchorage International Airport and will be considered representative of the conditions in the vicinity of the project site necessary for the modeling input.

Emission and Emission Unit Characterization. Emission rate is one of the most important inputs for air dispersion modeling and is calculated based on operational scenarios and hourly and annually averaging quantities. Emission units and release characteristics, such as stack height, stack diameter, stack gas exist velocity and temperature for each source need to be consistent with the modeled emission rates calculations. There are three types of common emission sources:

- Point Sources;
- Area Sources; and,
- Volume Sources.

Downwash. Wind flows are disrupted by aerodynamic forces in the vicinity of buildings and other solid structures. The emissions can be affected and results in high concentrations when pollutants

are emitted from stacks. EPA has developed guidance for determining the Good Engineering Practice (GEP) Stack Height, which is discussed in more detail in this report.

Receptors. A dispersion model can predict and calculate the concentration of the modeled pollutant at defined locations. The dispersion modeling analysis for PSD permit process usually involves two distinct phases: 1) a preliminary project impact analysis; and, 2) a cumulative impact analysis.

Preliminary project impact analysis (significance analysis). The preliminary project impact analysis models only the significant increase in potential emissions of a pollutant from a proposed new source, or the significant net emissions increase of a pollutant from a proposed project. The results of this project impact analysis are first compared to the applicable significant impact level (SIL) to determine if the facility needs to perform a cumulative impact analysis to demonstrate compliance with applicable AAAQS or increment. Background concentrations, and off-site impacts are not included in the project impact analysis. The preliminary analysis used to:

- Determine whether the facility can forego further air quality analyses for a particular pollutant;
- Allow the facility to be exempted from the ambient monitoring data requirements; and,
- Define the impact area within which a full impact analysis must be carried out.

U.S. EPA does not require a cumulative impact analysis for a particular pollutant when emissions of the pollutant from a proposed new source would not increase ambient concentrations by more than prescribed SILs. But based on ADEC Modeling Review Procedures Manual (published on October 8, 2018), it was suggested that if the project impacts will likely exceed the SILs, it can bypass the project impact analysis and just conduct a cumulative impact analysis.

Cumulative impact analysis. The cumulative impact analysis is required for any pollutant for which the proposed source's estimated ambient pollutant concentrations exceed prescribed SILs. This analysis expands the preliminary analysis in that it considers emissions from:

- The proposed emission source;
- Existing sources; and,
- Residential, commercial, and industrial growth that accompanies the new activity at the new source.

In the cumulative impact analysis, the project must estimate the total air quality concentration or total increment concentration. The concentration from non-project sources as listed above must be included in the analysis. U.S. EPA's recommended approach for incorporating the impact from non-project sources has changed over time, requiring modeling of the emissions from both the proposed project and other existing sources within the "significant impact area (SIA) in the cumulative impact analysis.

The results from the cumulative analysis are used to demonstrate compliance with the AAAQS and/or PSD increments. For pollutants with both AAAQS and PSD increments, the cumulative impact analysis may need to consist of two separate analyses since the selection of sources and emission rates for the AAAQS and PSD increment analyses use different criteria.

Figure 25 presented a basic flowchart of modeling analysis for PSD. Based on the "King County WTE Study Task 2- WTE Existing Conditions Memorandum" (August 18, 2017), the study shows that WTE has demonstrated the ability to meet continually restrictive environmental air emission limits and NO_x level can be reduced to below 5 PPM. Because of the continuously monitoring and control operations at the WTE facility, the modeling results likely under SILs will have only project impact analysis required.

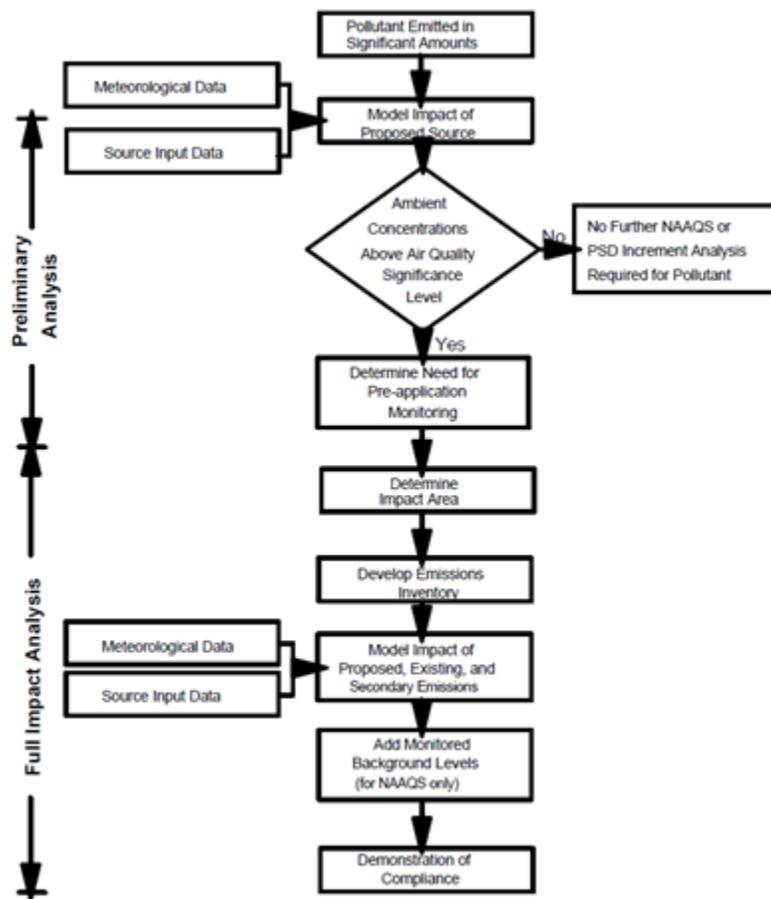


Figure 25: Basic Steps of PSD Modeling Flowchart

Source: <https://www.epa.gov/sites/production/files/2015-07/documents/1990wman.pdf>

General Procedures for the Modeling Review by ADEC: The general steps involved in a modeling review by ADEC are showed in Figure 26 and include the following materials:

- Air quality modeling checklist;
- The modeling review report template;
- A blank document to record deficiencies;
- The modeling protocol and ADEC comments and correspondence;
- The applicant’s modeling discussion; and,
- The applicant’s electronic modeling files.

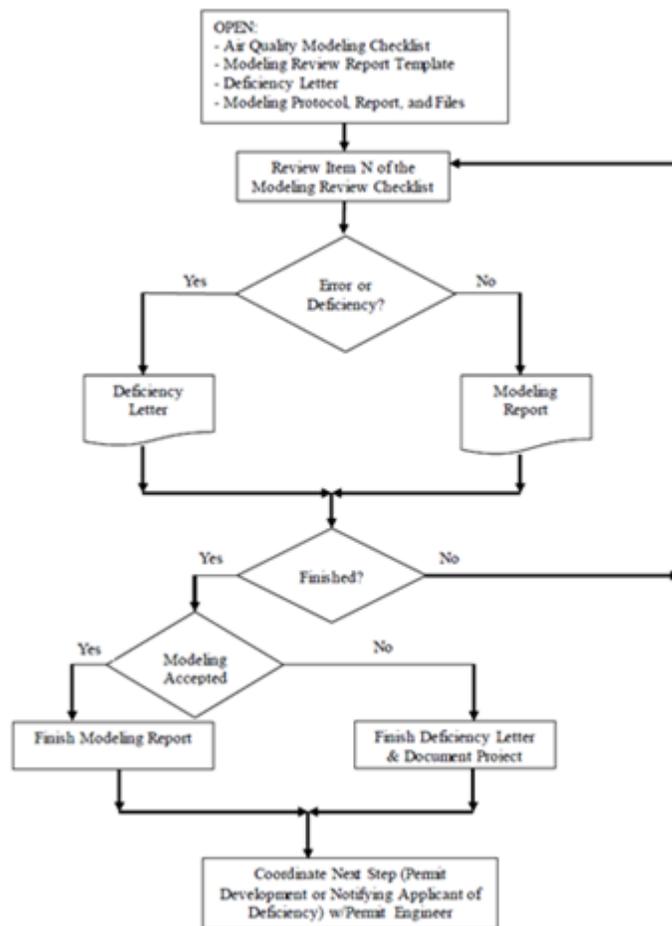


Figure 26: Flow Chart of Modeling Review Procedures

Source: <https://dec.alaska.gov/media/10865/modeling-procedures-manual-100818.pdf>

5.7.4 FAA Notice to Navigation

The FAA requires that a notification be submitted if proposed construction of a structure meets certain criteria in 14 CFR Part 77 including, but not limited to, if the construction is more than 200 feet above ground level or within certain distances of airport runways or landing areas. The initial notice consists of FAA Form 7460-1, which is available at FAA regional offices and online. A supplemental notice to the FAA may also be required in some instances. If required or requested, supplemental notice must be filed before the start date and upon completion of the proposed structure.

The FAA will determine if the structure would be a possible obstruction to air navigation and if a study is needed to evaluate the aeronautical effect. If necessary, the FAA would conduct the aeronautical study and would determine whether the proposed construction would be a hazard to air navigation.

5.7.5 Best Available Control Technology (BACT) Analysis and Design

The PSD regulations require that a new major source shall apply the best available control technology (BACT) for each regulated pollutant that has the potential to be emitted above the major source threshold. The BACT analysis is a top-down process which begins by ranking all potentially relevant control technologies in descending order of control effectiveness. The most stringent or “top” control option is identified as BACT unless the applicant demonstrates, and the permitting authority agrees, that energy, environmental, and/or economic impacts justify the conclusion that the most stringent control option does not meet the definition of BACT. Where the top option is not determined to be BACT, the next most stringent alternative is evaluated in the same manner. This process continues until BACT is determined.

The emission control technologies comprising BACT used at a similar existing WTE facility, the West Palm Beach Renewable Energy Facility No. 2 (PBREF2), were reviewed. It should be noted that the selection of BACT is done on a case-by-case basis, and while the establishment of BACT at similar facility would likely be used as a comparison or reference during the BACT analysis at a similar WTE facility, there is no guarantee that an identical BACT would be selected for the proposed WTE facility. With this in mind, a brief review of the BACT emission control technologies at PBREF2 follows:

- Post-combustion NO_x control is achieved by selective catalytic reduction (SCR);
- Acid gases (predominantly SO₂ and HCl) are removed using the spray dryer absorber in combination with the pulse jet fabric filter;
- Particulate including metals and lead are controlled by the fabric filter;
- CO, VOCs and dioxins/furans are primarily controlled through the combustion process, but powdered activated carbon (PAC) injection in combination with the fabric filter provides additional dioxin/furan control; and,

Mercury (Hg) is controlled by the PAC injection in combination with the fabric filter.

Following the SCR, the flue gas passes back through the heat exchanger system to recover energy back into the power cycle before passing through the induced draft fans and ultimately the stack. The system is designed for a minimum footprint for reduced capital costs and for maximum energy recovery to keep plant energy efficiency high (a measure for demonstrating GHG BACT, as discussed further in the following section).

5.7.6 Greenhouse Gas Permitting

The most recent and future permits for WTE facilities must now include quantification and minimization of greenhouse gas (GHG) emissions. Effective January 2, 2011, U.S. EPA established new GHG PSD permitting requirements for new major GHG emission sources (known as the ‘Tailoring Rule’), and in March of the same year, issued its PSD and Title V permitting guidance for GHG. Essentially, PSD facilities (those subject to PSD for another regulated pollutant) that also have a potential to emit GHG greater than 75,000 tons per year of CO₂e, must address PSD requirements for GHG. This involves a BACT analysis for GHG and adopting monitoring, recordkeeping and reporting requirements for GHG sources in the Title V permit. This BACT analysis and the proposed conditions are subject to public review and agency approval.

Particularly relevant to WTE facilities, the Tailoring Rule recognized that sources of bioenergy or biogenic GHG emissions deserve special consideration since the biomass portion of bioenergy feedstock may also be a carbon sink. U.S. EPA issued a deferral for CO₂ emissions from bioenergy and other biogenic sources under PSD and Title V Programs (76 FR 15249).

The final rule does not contain or require any specific methods for calculating biogenic CO₂ emissions. For stationary sources co-firing fossil fuel and biologically based fuel, and/or combusting mixed fuels (e.g., TDF, MSW, etc.), the biogenic CO₂ emissions from that combustion are included in this deferral. However, as stated above, the fossil CO₂ emissions are not. Various methods are available to calculate both the biogenic and fossil portions of CO₂ emissions, including those methods contained in the GHG Reporting Program (40 CFR part 98). Further, EPA issued interim guidance entitled, “Guidance for Determining BACT for Reducing CO₂ Emissions from Bioenergy Production” and various other methods are available to calculate both the biogenic and fossil portions of CO₂ emissions, including those methods contained in the GHG Reporting Program (40 CFR part 98).

The permit review conducted for the proposed Frederick County/Carroll County Renewable WTE Facility in Maryland is one of the few permit reviews in the U.S. that has addressed GHG PSD requirements. The composition of the MSW fuel at this proposed facility was determined to be 60% renewable, biogenic fuel on a heat content basis. The remaining 40% of the MSW fuel would be of a non-biogenic origin. The GHG emissions from the non-biogenic portion would exceed the 75,000 tpy CO₂e PSD applicability threshold, thus requiring a BACT review for all non-biogenic GHG emissions as well as for biogenic methane and nitrous oxide GHG emissions. The GHG BACT analysis for the project nevertheless addressed all biogenic and non-biogenic GHG emissions.

The available control technologies for GHG emissions for this WTE facility were carbon capture and sequestration (CCS), clean fuels, and energy efficiency. CCS consists of the separation and capture of CO₂ from the flue gas, pressurization of the captured CO₂, transportation of the CO₂ as a fluid via pipeline, and injection into long-term geologic storage. Identification of available technologies for WTE facilities (which are already utilizing partially ‘renewable’ biogenic fuel) had focused on energy efficiency solutions, since the technologies needed for a full-scale CCS implementation had not yet been commercially demonstrated. However, several potentially relevant CCS demonstration projects are underway and will have to be considered further in future GHG BACT analysis for WTE facilities.

5.7.7 Estimated Schedule and Cost

As shown in Figure 27, the air permitting process should be expected to require at least two and a half to three years.

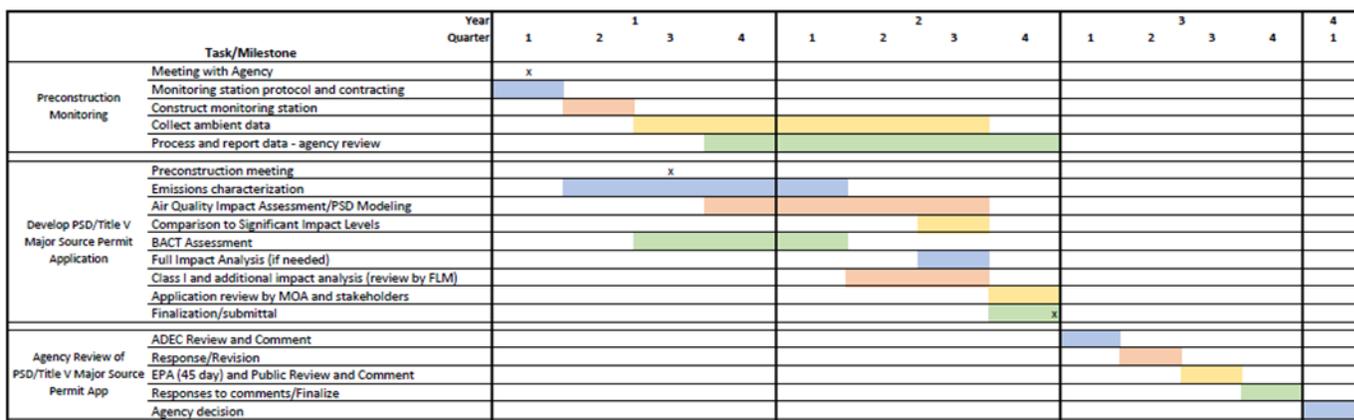


Figure 27: Air Permitting Projected Schedule

The initial pre-construction monitoring requirement is a critical path element of the schedule. ADEC has indicated that in the vicinity locations on SWS controlled or MOA controlled lands for the proposed WTE facility, ambient monitoring data collection has not been performed. Therefore, preconstruction monitoring data must be collected. To collect an acceptable 12-month period of data, approximately two years of approvals, installation, monitoring and data review must be planned prior to submittal of the PSD permit application. Emission estimates from facility design information, application preparation and modeling, as well as BACT assessment and air quality analysis can occur simultaneously, but the final comparison of results against the NAAQS must include the preconstruction monitoring results. Once the application is submitted and reviewed by ADEC, it will also undergo a review by EPA and by public stakeholders, which can often be conducted simultaneously. ADEC then must provide responses and finalize the conditions of the permit based upon comments from this review.

Based on our experience with PSD permitting efforts and discussions with ADEC about the process, we have estimated the direct costs for third party services related to the air permitting at

\$750,000 to \$850,000. The estimated cost for the pre-construction monitoring equipment and testing for the required period should also range from \$750,000 to \$850,000.

5.8 Local Permitting Tasks

5.8.1 Overview

The environmental permitting process can be potentially the most time-consuming and difficult step on the road to implementation for many WTE projects. This is in part due to the extensive amount of data needed to support permit applications. The previous section provides a discussion of the air permitting tasks, which are typically the most cumbersome and time-consuming regulatory approvals for such project. This section a general overview of the types of major local environmental and regulatory permits which probably will be required for a proposed WTE facility (Figure 28).

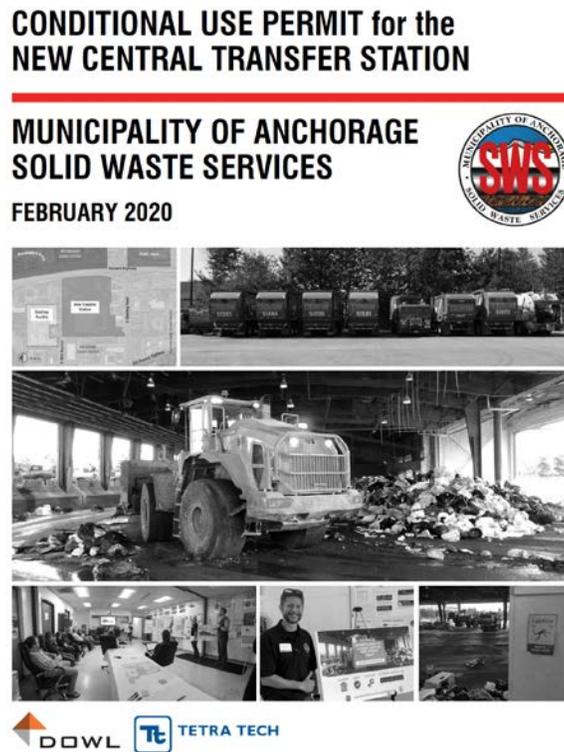


Figure 28: Example of Local MOA Conditional Use Permit Application

5.8.1.1 Conditional Use Permit (CUP)

This permit should be acquired once the site selection process is concluded with the selection of the recommended site for the project, prior to construction activities being initiated. The following is a summary of what is required as part of the CUP process:

- Pre-Application Meeting;
- Community Meeting;

- Application Package Submission; and,
- Planning and Zoning Commission Hearing (public hearing).

Pre-Application Meeting

The pre-application meeting must occur prior to the submission of the CUP application package. Once the application package is submitted, the MOA sets the meeting within 7 to 10 calendar days.

The following are the typical documents required for a pre-application meeting:

- Application;
- Brief narrative describing the project;
- Vicinity map;
- Conceptual site plan and architectural plans; and,
- Other pertinent site information, such as property card, wetland maps, etc.

Community Meeting

Written notification must be provided to the property owners within 500 feet of the project site 21 days prior to the meeting date. The mailing list is provided by the MOA (upon request) and a notification is prepared by the applicant. The MOA prefers that the community meeting be part of a scheduled community council meeting. However, the applicant can conduct a community meeting separate from the community council meeting with a valid reason, such as the meeting is in the summer when most community councils don't meet. A sign-in sheet and meeting summary are required to be included in the CUP package.

Application Package

The MOA published cut-off dates when applications are due for meeting dates. Typically, there is two months between the time the application is submitted and the public hearing date. The community meeting and pre-application meeting must be completed prior to submitting the CUP application.

The CUP application package includes the following:

- Application;
- Narrative;
- Vicinity and project site map;
- Plat;
- Wetland map;
- Watershed sign off;
- 35 percent level drawings for grading and drainage, landscaping, architectural (floorplans and elevations) and lighting plan. A lighting cut-sheet is also required;

- Traffic Impact Analysis (if applicable): This is summarized in the CUP narrative and a courtesy copy is provided to the MOA; and,
- Wetland permit information (if applicable).

The application package is routed to various municipal and state reviewers for comment. The CUP is also available for public comment prior to the public hearing. Staff will use this input and the application package to prepare the Staff Packet with Conditions of Approval that must be met to finalize the CUP.

Planning and Zoning Commission

A public hearing before the Planning and Zoning Commission is required for a CUP. The applicant or their representative will present the project and discuss the Staff recommendations and Conditions of Approval. The board votes for approval or disapproval at the hearing and the public is allowed to testify.

If the CUP is approved a resolution is passed at the next Planning and Zoning Commission hearing (typically a month). Once the resolution is passed, the Conditions of Approval can be met by the applicant. Once the Conditions of Approval are complete, they are stamped by the Planning Staff along with the current drawings that were provided in the application package. Once the resolution is passed, there is 21 days where the case can be appealed. Anyone can file an appeal.

5.8.1.2 Other Permits

As listed below, there are a variety of building permits, plat, and water/wastewater agreements that must be acquired during the design and pre-construction period. While these permits are not illustrated in an overall schedule, planning for the project would need to factor in these as “concurrent” activities running in parallel with the design phase of such a project. Some will be performed at the conclusion of design, e.g., a building permit and Urban Design Commission approval. Some will of necessity be done at the outset of design process, following site selection (e.g., Plat Board approval). For this report, costs for these activities are considered included in the fees charged for design by a selected DBO contractor. As such, we have not included these in our estimate for schedule and costs:

- Building Permit – Typically, the WTE plant designer submits these building permit submissions during the construction period. It is assumed that the Fire Department would be involved on all reviews of fire suppression and mitigation equipment. Since all these items are construction items with individual milestones, we have not included them in this roadmap plan;
- Plat Board Approval;
- Potable Water Agreement with AWWU;
- Wastewater Agreement with AWWU;
- Pre-Treatment Permit With AWWU; and,
- Urban Design Commission Approval.

5.8.2 Estimated Schedule and Cost

Overall, local approvals are expected to require four to six-months depending on the complexity of the project. From the pre-application meeting through the Planning and Zoning Commission hearing is approximately three months. Since drawings are needed for the CUP, it typically takes two months to prepare the CUP submittal package. The time needed to prepare the application package varies due to the complexity of the project and how quickly the design drawings can be completed to a 35% level.

Based on our discussions with local engineering and planning firms in Anchorage, we have estimated the costs for these the major CUP permit at \$150,000.

5.9 Project Team

5.9.1 Overview

Based on review of other WTE facilities, given the complexity of the development process an extremely important aspect of pursuing a successful program with the complexities of a WTE is the establishment of a strong project team that can guide such a long-term project to completion.

5.9.2 What Other WTE Projects Have Done

At the outset of a project, a key action is the establishment of an internal team that will have support from the elected decision makers. As such projects will require significant up-front development costs for staff and consulting services over several years, it is critical that there be a long-term commitment by the community to support the project. Without this commitment, it is unlikely that the project will succeed.

Ideally, the internal project team (Figure 29), which will direct the activities of the MOA's own staff and outside consultants or advisors, should have appropriate agency heads from their key administrative, public works, financial, legal, environmental, and communications areas. The purpose of this interagency committee is to guide the project through key decision points and to provide policy recommendations to the decision makers. As the agency heads of key government departments are members of this project committee, it is more likely that project decisions will receive a more balanced and thorough review before presentation to the community's elected representatives and result in unified staff recommendations. One disadvantage of this type of project structure, however, is that it requires extensive time commitments on a continual basis from government departments, which may not be possible, because of their own project demands and budgets. Thus, many projects have been unable to organize such an interagency management committee in practice.



Figure 29: Project Team at Hillsborough County WTE Facility Groundbreaking

To compensate for a lack of existing staff from internal agencies, many WTE projects have established the position of a full-time project manager who is responsible for coordination of government staff and outside consultants and advisors for the WTE project. The person selected for this position often comes from within the SWS having responsibility for the project or is hired from outside government as a contract employee. Regardless of this individual's civil service status, his or her role typically is to be responsible to coordinate, schedule, and monitor the activities of the internal project team and consultant staff. This individual is often assisted by other SWS staff members for specific tasks as they arise.

Appendix D includes a draft of a position description (PD) for consideration by the MOA for a WTE Project Manager position within SWS.

5.9.3 Estimated Schedule and Cost

Based on previous SWS experience with similar additions of staff, it is assumed that the PD could be approved in three months, with recruiting to begin. It is assumed that the fully burdened cost for this position would be \$150,000 annually.

5.10 Procurement Package

5.10.1 Overview

Assuming the MOA pursues a public-private partnership for the WTE development, procurement of the WTE facility design, construction, and operation by the MOA is one of the final steps on the road of project implementation. Since a WTE facility is one of the more capital intensive and complex public works project attempted by most communities, care must be taken at the outset by the MOA's legal advisors to develop a procurement process that both meets the project needs and follows state and local statutes.

5.10.2 What Other WTE Projects Have Done

Based on initial discussions with MOA staff, we have assumed that the MOA will utilize the Design-Build-Operate (DBO) approach, which is consistent with most other WTE projects. Under this approach, the MOA would assign total responsibility to a private firm over the conduct of the project, including the design, construction, startup, testing, operation, and possibly, the ownership and project financing responsibilities. The full-service approach can enable a community or owner to acquire the services of an WTE facility without making the community responsible for its long-term, day-to-day operation and maintenance (Figure 34).

Because WTE development requires procurement of specialized services, price is not the only criterion for procurement. Technical, financial, and management qualifications must also be significant consideration when selecting the private firm that is best able to deliver at WTE facility to the MOA

As a result, competitive proposals are the most common procedure utilized by other local governments to procure WTE facilities. Under this procedure, the MOA would solicit proposals (Figure 30), not bids, with documents termed Request-for-Qualifications (RFQ) and Request-for-Proposals (RFP). A single procurement package that contains both the RFQ and RFP can also be considered to speed up the procurement process. Typically, this procurement process can begin with the release of an RFQ to known WTE vendors. This document contains some comments from the MOA on system performance, procurement schedule, desired technology, and financing requirements. In most cases the RFQ requires vendors to submit very specific technical, managerial, and financial qualifications regarding their undertaking of the project. For example, respondents to the RFQ may be asked to provide technical data on their performance capabilities, such as operational data from commercial-sized reference plants utilizing their technology.

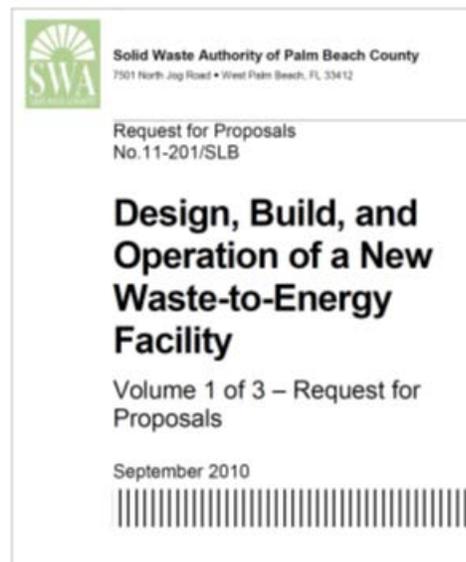


Figure 30: Example of RFP Issued by the Solid Waste Authority of Palm Beach County, FL

Once these submittals are analyzed by the MOA, vendors deemed qualified to undertake the project receive a copy of the RFP package which contains detailed performance specifications desired by the community for the waste-to-energy project. This document specifically describes criteria, which will be used by the MOA, to evaluate the proposals. Shortly after the RFP is released, the MOA would schedule a pre-proposal conference to help brief the potential proposers on information contained within the RFP, provide clarifications to proposer's questions; and review the procurement schedule. If needed, written questions submitted by proposers may result in changes in the RFP.

Following receipt of the proposals and their detailed technical evaluation, the MOA may elect to begin discussions with either the top-ranked proposer (as typically done) or enter simultaneous negotiations with two or more of the top-ranked proposers (as described in a RFP document). Following these discussions, each proposer may be offered the opportunity to revise its proposal and submit a "best and final offer" to the MOA. After evaluation of these final offers, an award of the procurement is announced. Whether MOA elects to select in this manner is a decision that will balance good practice with legal considerations associated with Title 7 of Anchorage Municipal Code.

Typically, most WTE projects engage the services of a consultant to prepare the very detailed RFQ/RFP, coordinate the procurement process, address technical questions received during the RFP, and support the MOA in its assessment of the proposals submitted by the various DBO teams. For purposes of this report, it is assumed the Municipality would elect to procure services in a similar way. The consultant should conduct the following activities:

- Outline the RFP process, including schedule, minimum qualification requirements, and selection process;
 - Develop draft RFQ document for review by the MOA and WTE DBO community;
 - Discuss and modify draft RFQ document;
 - Prepare and issue final RFQ document;
 - Facilitate and attend pre-bid meeting;
 - Prepare and issue RFQ addenda, if required, and respond to bidder inquiries regarding RFQ content and evaluation process;
 - Evaluate Statements of Qualifications (SOQs) received and draft and SOQ Evaluation Report for presentation to the Assembly;
 - Provide technical support to MOA and its WTE selection committee;
- Among other items, the RFP will include:
- Proposed Design and Construction Agreement; and,
 - Proposed Service Agreement.

The consultant will work with MOA's legal counsel, as well as SWS staff, to develop the proposed project scope and agreements for the draft and final RFP.

An example of the DBO RFP can be found in Appendix F; an example of an operating agreement is shown in Appendix G.

5.10.3 Estimated Schedule and Cost

It is projected that the preparation of the RFQ/RFP and procurement related services can be completed in no less than six months from notice-to-proceed by the MOA. Disruptions in the procurement process, e.g., delays in preparation and issuance of proposals, extended advertising periods, lengthy proposal reviews, negotiations with proposers, solicitation protests, etc. all will extend this period out.

A qualified engineering firm with expertise in WTE and solid waste procurement should be able to provide the required scope of services outlined above for \$500,000.

5.11 Financing Plan

5.11.1 Overview

As already discussed, WTE facilities are capital intensive projects, requiring significant bond or other debt-based funding raised from public sources or private sources. When issuing bonds or entering into a long-term financial contract, the MOA needs to prepare a financing plan and development of the official statement, making sure the responsibilities of all participants in the transaction are clearly defined. The MOA is assumed to have in-house staff supplemented with outside professionals to assist with the debt issue and to determine who is responsible for financing activities.

5.11.2 What Other Projects Have Done

Project or system wide financing of solid waste agencies have existed in the U.S. for well over 50 years. There are several projects that can be used as templates for similar financing that the MOA could draw upon. (Figures 31 and 32). All the WTE facilities that were toured during this study were financed as follows:

- Issued as private activity/industrial development revenue bonds with a nontaxable and taxable issue (A and B);
- The bonds are paid solely from and are secured by a lien (bond ordinance) upon and pledge of the net revenues of the agency's solid waste collection, disposal and recycling system;
- The bonds do not constitute general obligations or indebtedness of the issuing agency;
- The issuing agency has covenanted in the bond ordinance to fix, establish, revise from time to time rates and fees that will provide gross revenues equal to 100% of the cost of operation and maintenance and 115% or more of the annual bond service reserve;
- Some sort of legal or contractual flow control is established over the MSW within the system;
- Agreements for landfill disposal of ash from the WTE facility are in-place;

- Agreements are in-place for the design, construction, and operation of the WTE facility;
- Energy offtake/power purchase agreements in-place;
- Regulatory approvals for the construction and operation of the WTE facility have been received; and,
- Conclusions and findings of a consulting engineer and feasibility consulting indicating the ability of the facility to perform within the constraints of the agreements and to pay back the bonds.

This Preliminary Official Statement and the information contained herein are subject to completion of amendments. Under no circumstances shall the Preliminary Official Statement constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration, qualification or filing with the securities laws of any such jurisdiction.

PRELIMINARY OFFICIAL STATEMENT DATED OCTOBER 25, 2016

NEW ISSUE - Book-Entry Only Rating: Moody's: "A1" (stable outlook)
S&P: "Aa+" (stable outlook)
Fitch: "Aa" (stable outlook)
See "RATINGS" herein.

In the opinion of Bond Counsel, assuming compliance by the County with certain covenants, and/or existing statutes, regulations, and judicial decisions, (1) the interest on the Series 2016B Bonds will be excluded from gross income for federal income tax purposes of the holders thereof, except for interest on any Series 2016A Bond for any period during which it is held by a "substantial owner" of the facilities produced with the proceeds of the Series 2016A Bonds or a "related person" as such terms are used in Section 147(a) of the Internal Revenue Code of 1986, as amended, (2) the interest on the Series 2016B Bonds is an item of tax preference for purposes of computing the federal alternative minimum tax on individuals and corporations, (3) the interest on the Series 2016B Bonds will be excluded from gross income for federal income tax purposes of the holders thereof, and (4) the interest on the Series 2016B Bonds will not be an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations; however, interest on the Series 2016B Bonds shall be taken into account in determining adjusted current earnings for purposes of computing the alternative minimum tax on corporations. See "TAX MATTERS" herein for a description of other tax consequences to holders of the Series 2016 Bonds.

<p>HILLSBOROUGH COUNTY, FLORIDA</p> <p>\$89,805,000*</p> <p>Solid Waste and Resource Recovery</p> <p>Refunding Revenue Bonds,</p> <p>Series 2016A</p> <p>(AMT)</p>	<p>\$25,885,000*</p> <p>Solid Waste and Resource Recovery</p> <p>Refunding Revenue Bonds,</p> <p>Series 2016B</p> <p>(NON-AMT)</p>
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Dated: Date of Delivery **Date: September 1, as shown below**

The Hillsborough County, Florida Solid Waste and Resource Recovery Refunding Revenue Bonds, Series 2016A (AMT) (the "Series 2016A Bonds") and the Hillsborough County, Florida Solid Waste and Resource Recovery Refunding Revenue Bonds, Series 2016B (NON-AMT) (the "Series 2016B Bonds") and, together with the Series 2016A Bonds, the "Series 2016 Bonds") are being issued by Hillsborough County, Florida (the "County") as fully registered bonds in denominations of \$5,000 and integral multiples thereof. The Series 2016 Bonds, when issued and delivered, will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). Ownership interests in the Series 2016 Bonds may be purchased only in book-entry form in denominations of \$5,000 and any integral multiples thereof. Purchasers of beneficial ownership interests in the Series 2016 Bonds will not receive physical certificates representing their ownership interest in such Series 2016 Bonds. So long as the Series 2016 Bonds are registered in the name of Cede & Co., as nominee of DTC, reference herein to the Series 2016 Bonds shall mean Cede & Co. and shall not mean the ultimate purchasers of the Series 2016 Bonds. See "DESCRIPTION OF THE SERIES 2016 BONDS - Book-Entry Only System" herein.

Interest on the Series 2016 Bonds is payable semi-annually on each March 1 and September 1, commencing March 1, 2017. So long as the Series 2016 Bonds are registered in the name of Cede & Co., as nominee of DTC, payments of the principal of, premium, if any, and interest on the Series 2016 Bonds will be made directly to DTC or its nominee, Cede & Co., by the Clerk of the Circuit Court and Tax-Officer Clerk of the Board of County Commissioners of Hillsborough County, in regular and paying agent. Disbursement of such payments to DTC or Participants (as described herein) is the responsibility of DTC.

The Series 2016 Bonds are subject to redemption prior to their stated maturities, as more particularly described herein. See "DESCRIPTION OF THE SERIES 2016 BONDS - Redemption Provisions" herein.

The Series 2016A Bonds are being issued to provide funds sufficient, together with certain other legally available moneys, to (1) refund all of the County's outstanding Solid Waste and Resource Recovery Revenue Bonds, Series 2006A (AMT), (2) fund the Series 2016 Reserve Account in an amount equal to a portion of the Series 2016 Reserve Requirement, as further described herein and (3) pay certain costs and expenses relating to the issuance of the Series 2016A Bonds.

The Series 2016B Bonds are being issued to provide funds sufficient, together with certain other legally available moneys, to (1) refund all of the County's outstanding Solid Waste and Resource Recovery Revenue Bonds, Series 2006B (NON-AMT), (2) fund the Series 2016 Reserve Account in an amount equal to a portion of the Series 2016 Reserve Requirement, as further described herein and (3) pay certain costs and expenses relating to the issuance of the Series 2016B Bonds. See "PURPOSE OF THE SERIES 2016 BONDS" herein.

The Series 2016 Bonds are being issued under the authority of the Constitution and laws of the State of Florida, including Chapter 80-416, Laws of Florida, as amended, Chapter 120, Florida Statutes, Section 195.11, Florida Statutes, the Hillsborough County Charter, and other applicable laws, and pursuant to Ordinance No. 66-28, enacted by the Board of County Commissioners of the County (the "Board") on October 4, 2006, as amended and restated in its entirety by Ordinance No. 16-24 enacted by the Board on October 18, 2016, as supplemented by Resolution No. 16-1475, adopted by the Board on October 18, 2016 (collectively, the "Bond Ordinance").

The Series 2016 Bonds are payable solely from and are secured by a lien upon and pledge of (1) the herein defined Net Revenues of the County's solid waste disposal and resource recovery system (the "System"), (2) certain Qualified Hedge Receipts (as defined in the Bond Ordinance) described herein and (3) such applied in accordance with the Bond Ordinance, all moneys, including revenues therefrom, in certain funds and accounts established by the Bond Ordinance, all in the manner and to the extent provided in the Bond Ordinance (collectively, the "Pledged Funds"). The pledge of and lien upon the Pledged Funds in favor of the Series 2016 Bonds shall be on parity with the County's outstanding Solid Waste and Resource Recovery Revenue Bond, Series 2011 (AMT) and any Additional Bonds subsequently issued pursuant to the Bond Ordinance, to the extent and in the manner provided in the Bond Ordinance.

The Series 2016 Bonds shall not be or constitute general obligations or indebtedness of the County within the meaning of the Constitution of the State of Florida, but shall be payable solely from and secured by a lien upon and a pledge of the Pledged Funds, in the manner and to the extent provided in the Bond Ordinance. No Bondholder shall ever have the right to compel the exercise of the ad valorem taxing power of the County or taxation in any form on any real or personal property to pay such Series 2016 Bonds or the interest thereon, nor shall any Bondholder be entitled to payment of such principal or interest from any funds of the County other than the Pledged Funds, in the manner and to the extent provided in the Bond Ordinance. The Bondholders shall have no lien upon the System.

THIS COVER PAGE AND THE INSIDE COVER PAGE CONTAIN CERTAIN INFORMATION FOR QUICK REFERENCE ONLY. THEY ARE NOT, AND ARE NOT INTENDED TO BE, A SUMMARY OF THE ISSUE. INVESTORS MUST READ THE ENTIRE OFFICIAL STATEMENT TO OBTAIN INFORMATION ESSENTIAL TO THE MAKING OF AN INFORMED INVESTMENT DECISION.

SEE INSIDE COVER FOR THE MATURITY SCHEDULE.

The Series 2016 Bonds are offered when, as and if issued and received by the Underwriters, subject to the unqualified opinion as to legality by Elyatt Miller Oliva P.A., Tampa, Florida, Bond Counsel. Lorenz & Becker, P.A., Miami Beach, Florida, is serving as Co-Bond Counsel. Certain legal matters will be passed upon for the County by Samuel S. Hamilton, Esq., Senior Assistant County Attorney, and certain dispositive matters will be passed upon by Adams, Gillette & Dickerson, P.A., Tampa, Florida, as Disclosure Counsel to the County. V.J. Alvarez & Associates, P.A., Tampa, Florida, is serving as Co-Underwriter Counsel. GrayRobinson, P.A., Tampa, Florida, is serving as counsel to the Underwriters. Public Resources Advisory Group, Inc., St. Petersburg, Florida, is acting as Financial Advisor for the County. It is expected that the Series 2016 Bonds will be available for delivery in New York, New York, via DTC on or about November 21, 2016.

<p>J.P. Morgan</p> <p>Wells Fargo Securities</p>	<p>Morgan Stanley</p> <p>Citigroup</p>
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Dated: November 1, 2016

* Preliminary, subject to change.

Figure 31: Example of recent solid waste bond issue for a WTE project

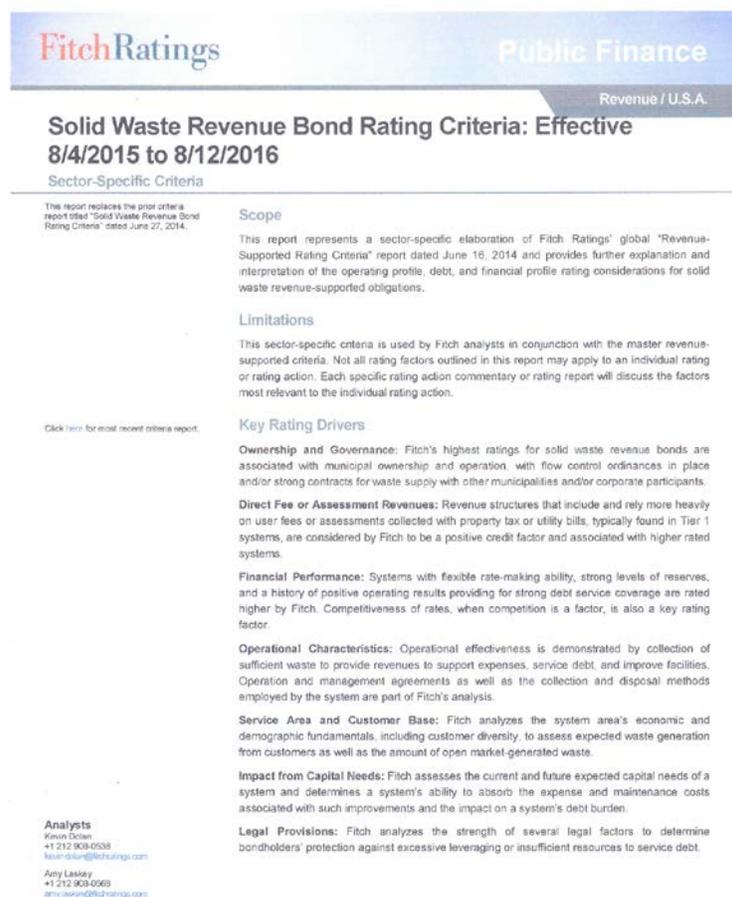


Figure 32: Rating agency criteria

5.11.2.1 Bond Counsel and Financial Advisor

In order to issue bond financing, the MOA will need its bond counsel K and L Gates, LLP, and its financial advisor, Hilltop Securities, Inc. to help prepare a Financing Plan. The bond counsel and financial advisor draft many of the documents utilized in the bond issue and are involved in the structuring and closing of the financing. Bond counsel also renders an opinion on the validity of the bond offering, the security for the offering, and whether and to what extent interest on the bonds is exempt from taxation. The opinion of bond counsel provides assurance both to issuers and to investors who purchase the bonds that all legal and tax requirements relevant to the matters covered by the opinion are met.

5.11.2.2 Rating Agencies

Financing for the WTE project will require a bond rating to determine the overall risk of the issue and assign a "grade" to the bond. The three major rating agencies are Moody's Investor Services, Standard and Poor's, and Fitch Ratings. Assigned ratings will have an impact on both the ability of the MOA to raise funds and the price the MOA will be required to pay.

5.11.2.3 Feasibility Consultant

In support of the bond offering, the feasibility consultant develops project-related revenue projections over the life of a financing term. The formal feasibility study, required for such

financing mechanisms, includes substantial supporting documentation, including historical data on the MOA/SWS, demographic and market trends, top taxpayers and industries within the MOA, recent and planned development, and potential risk factors and sensitivity analyses. This study is included in the official statement for the bonds, providing third-party independent support of the revenue anticipated to be available over time to repay debt service. The feasibility consultant works closely with underwriters, bond counsel, issuers and other entities involved in bond issuance.

5.11.3 Estimated Schedule and Cost

In discussions with the MOA's Public Finance and Investments Division, its bond counsel, K and L Gates, LLP, and its financial advisor, Hilltop Securities, Inc. A preliminary Financing Plan for this WTE project was developed. The complete Plan is included for the reader in Appendix H.

5.11.3.1 Financing Need

Currently, the cost of the WTE Plant is estimated to be \$350 - \$400 million. This Plan of Finance assumes the Plant will cost \$400 million. The Municipality will need an additional \$36 million for the payment of costs of debt issuance, interest expense during the construction period and the establishment of a Debt Service Reserve Fund (DSRF). The total cost for the WTE Plant is forecasted to be \$436 million.

5.11.3.2 Current and Best Practice Alternative – Revenue Debt

Without having sought or solicited the State of Alaska or federal grant funding sources, debt secured by the revenues of the WTE Plant are a Best Practice for financing facilities such as this Plant. Due to the long construction period, estimated to be at least 30 months, the alternative of using a Short-Term Borrowing Program (STBP) during the construction period is a common, efficient and economical way to finance the construction costs for projects such as this Plant. Once the construction period is complete and the Plant is up and running, the STBP outstanding debt would then be refinanced with Long Term Revenue Refunding Bonds (LTRRB) in the capital marketplace. Tax-exempt LTRRB will be used to the extent possible. Should a taxable portion of debt be required, to be determined by the Municipality's bond counsel, the appropriate taxable financing alternative will be determined by the CFO in discussion with the Municipality's Financial Advisor and Public Finance Manager.

The MOA has used numerous STBPs since 2008 for interim financing for many of the Municipality's utilities and enterprises. STBPs have been and are currently being utilized for Municipal Light & Power, ASU, AWU, the Port of Alaska and the SWS Disposal Utility. STBP are generally variable, short term interest rates based upon a short-term interest index. Interest rates have historically been between 1% and 3% below the cost of revenue bonds and have brought dramatic savings to the Municipality. The aggregate savings among all STBPs since 2008 exceeds \$100 million.

5.11.3.3 Plan of Finance Timing

Assuming a starting date beginning in April 2020, with construction to follow by mid-year 2023, the short- and long-term plan of finance employing short term borrowing followed by bond issuance would have milestones as follows:

Short Term

- Oct 2021 Introduce to the MOA Assembly an ordinance establishing one or more borrowing programs for the financing of the construction of the Plant in an amount not to exceed \$436 million and delegate to the CFO responsibilities related to such borrowing programs
- Nov 2021 Hold one or more Assembly Work Sessions on this Plant and Financing
- Oct 2021 Hold Public Hearing for the ordinance
- March & April 2022 Solicit the marketplace for one or more providers of a Short-Term Borrowing Program (STBP)
- May 2022 Implement a STBP
- June 2022 Begin drawing on STBP to pay cost of issuance, initial payments for material and other related capital expenditures
- Oct 2022 Begin paying lender monthly or quarterly interest on the STBP with draws from the STBP (borrowing for the interest payments during the construction period is a common Best Practice and is referred to as ‘capitalized interest’)
- April 2024 This is the 30th month in a forecasted 30-month construction period
- May 2024 Retire the STBP outstanding debt and close the STBP upon the issuance of long-term revenue refunding bonds

Long Term Revenue Bonds

- Feb 2024 Prepare a Financing Schedule for the issuance of Long-Term Revenue Refunding Bonds (LTRRB)
- The original ordinance in Oct 2021 will authorize both the STBP and the LTRRB March & April 2024
- Work with Financial Advisor and Bond Counsel on preparing to sell LTRRB
- May 2024 Sell and close LTRRB and refund the STBP outstanding debt and pay costs of issuance

5.12 Summary

Figure 33 shows the projected tasks and subtasks required for implementation of the WTE project, intermediate milestones, and the interplay between many of the tasks. Assuming a project initiation of January 2021, we are projected an implementation phase of roughly three years with project closing in January 2024 and notice-to-proceed for construction. A more detailed Microsoft Project schedule is included in the Appendix A.

Table 8 provides a summary of projected budget needs by SWS to help implement the project over three fiscal years, 2020, 2021, and 2022.

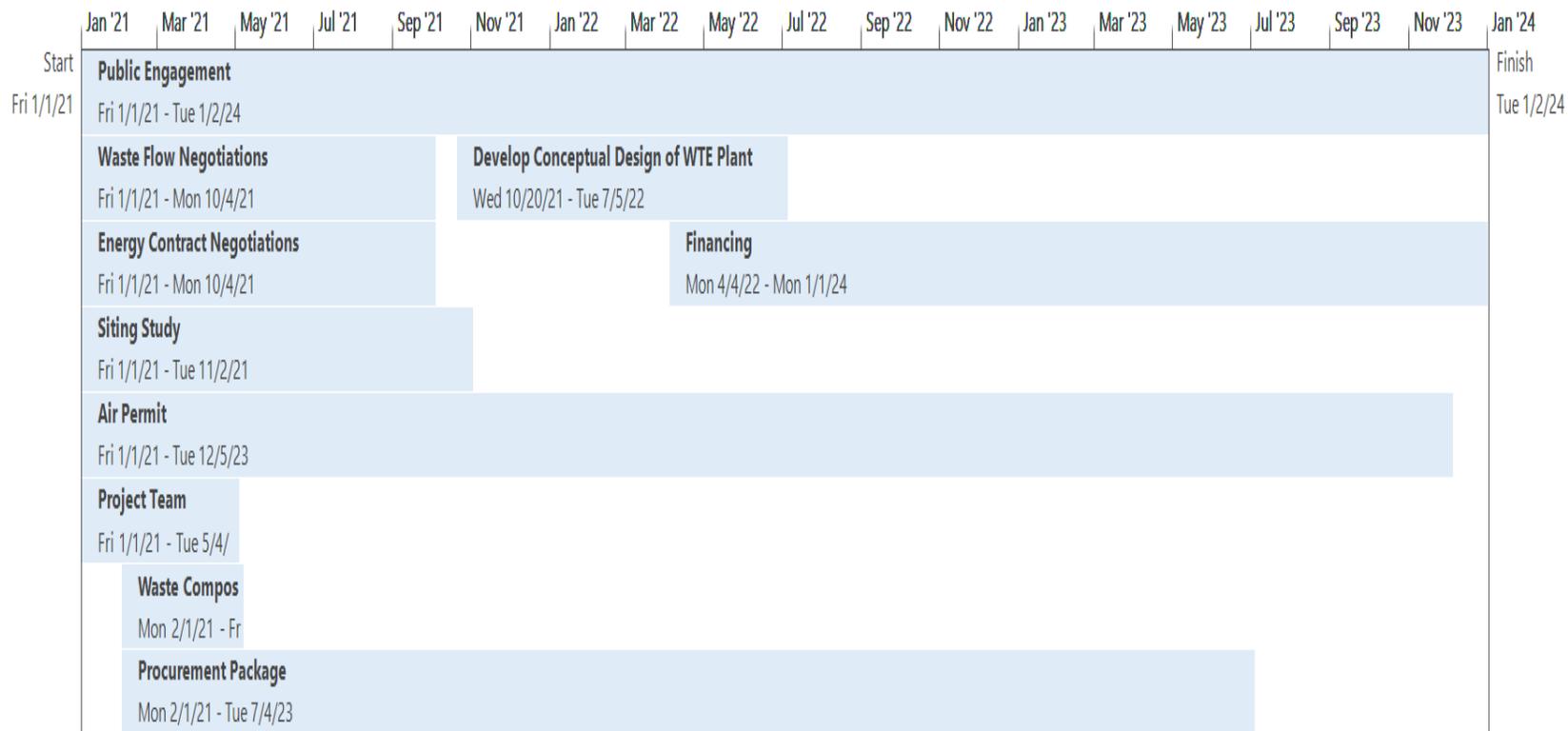


Figure 33: Projected Schedule for WTE Plant Implementation

Table 7: Estimated Implementation Costs for WTE Project

Tasks	Type of Outside Advisor/Consultant	Estimated Costs (\$)			SWS Passthrough (Fees, Permits, etc.)
		FY 2021	FY 2022	FY 2023	
Air Permit Application	Air Emissions Permitting Consultant	100,000	300,000	200,000	150,000
	Monitoring Station	500,000	500,000	50,000	850,000
Conditional Use Permit Application	Land Use Development Consultant	125,000	50,000	25,000	25,000
Energy Contract	Energy Consultant	100,000	50,000	0	25,000
Financial Plan	Bond Counsel ¹	0	0	0	0
	Financial Advisor ¹	0	0	0	0
Procurement	Engineer of Record/Program Manager	400,000	500,000	250,000	0
	Legal Support	250,000	50,000	50,000	0
Public Engagement Plan	Public Relations Expert	100,000	100,000	50,000	25,000
Siting Analysis	Land Use/Permitting Expert	250,000	25,000	0	100,000
SWS Staffing	WTE Program Manager	150,000	150,000	150,000	0
Total		\$1,975,000	\$1,725,000	\$775,000	\$1,175,000

Notes:

¹ Paid out of the proceeds of the bond issue

6. REFERENCES

Arcadis, FY 2017 Annual Operations, McKay Bay Refuse-to-Energy Facility, FY 2017.

CDM Smith, Annual Inspection Report, Pasco County Resource Recovery Facility, Fiscal Year 2018.

Covanta, The Case for Waste to Energy, 2020.

Dowl and Tetra Tech, Conditional Use Permit for the New Central Transfer Station, February 2020.

Ferraro, Christopher, et. al. "From Trash to Treasure", *Concrete International*, November 2016 pp. 46-51.

Florida Department of Environmental Protection 2010 Annual Report to the Legislature. Florida Department of Environmental Protection, Tallahassee, Florida, 2010.

King County, Washington, WTE Study Task 2- WTE Existing Conditions Memorandum, August 18, 2017.

Lee County, Florida, Summary Operations and Maintenance Report, Fiscal Year 2019.

Oculus, Florida Department of Environmental Protection, Environmental and Stack Testing Results, WTE Facilities, 2020.

Personal Communications with the following individuals: William Embree, Pinellas County; Joe O'Neill, Hillsborough County, FL; John Powers, Pasco County, FL; Mark Wilfalk, City of Tampa, FL; Erich Tscherteu, Lee County, FL; Dr. Marco Castaldi, City College of New York/ Columbia University/Earth Engineering Center, NYC; and Patrick Walsh, Covanta Energy.

Pinellas County, FL, Service Agreement for Resource Recovery Facility.

Pinellas County, FL, Power Purchase Agreement, Duke Power.

SWANA Excellence Award Application. City of Tampa McKay Bay Resource Recovery Facility, Bronze Winner, 2009.

SWANA Excellence Award Application. Lee County Resource Recovery Facility, Gold Winner, 2009.

SWANA Excellence Award Application. Pasco County Resource Recovery Facility, Gold Winner, 2015.

SWANA Excellence Award Application. Pinellas County Resource Recovery Facility, Gold Winner, 1999.

APPENDIX A

MS Project Schedule

Municipality of Anchorage Waste-to-Energy Project Preliminary Implementation Schedule

ID	Task Mode	Task Name	Duration	Start	Finish	2021		2022				2023				2024					
						Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	
1		Public Engagement	783 days	Fri 1/1/21	Tue 1/2/24																
2		Develop the Strategy	90 days	Fri 1/1/21	Thu 5/6/21																
3		Deploy Strategy	690 days	Mon 5/10/21	Sun 12/31/23																
4		Waste Composition Analysis	70 days	Mon 2/1/21	Fri 5/7/21																
5		Pre-Planning	10 days	Mon 2/1/21	Fri 2/12/21																
6		Sorting	30 days	Mon 2/15/21	Fri 3/26/21																
7		Report	30 days	Mon 3/29/21	Fri 5/7/21																
8		Waste Flow Negotiations	197 days	Fri 1/1/21	Mon 10/4/21																
9		Develop Wasteshed Survey	90 days	Fri 1/1/21	Thu 5/6/21																
10		Negotiation Interlocal Agreements	90 days	Fri 5/7/21	Thu 9/9/21																
11		Energy Contract Negotiations	197 days?	Fri 1/1/21	Mon 10/4/21																
12		Negotiate MOU	30 days	Fri 1/1/21	Thu 2/11/21																
13		Conduct Interconnection Study	167 days	Fri 2/12/21	Mon 10/4/21																

Project: Draft 3 Preliminary Im
Date: Sun 3/1/20

Task		Inactive Summary		External Tasks	
Split		Manual Task		External Milestone	
Milestone		Duration-only		Deadline	
Summary		Manual Summary Rollup		Progress	
Project Summary		Manual Summary		Manual Progress	
Inactive Task		Start-only			
Inactive Milestone		Finish-only			

Municipality of Anchorage Waste-to-Energy Project Preliminary Implementation Schedule

ID	Task Mode	Task Name	Duration	Start	Finish	2021				2022				2023				2024			
						Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	
14		 Siting Study	218 days	Fri 1/1/21	Tue 11/2/21																
15		 Public Engagement	210 days	Fri 1/1/21	Thu 10/21/21																
16		 Establish Review Panel	7 days	Fri 1/1/21	Mon 1/11/21																
17		 Collect Data on Sites	90 days	Mon 1/11/21	Fri 5/14/21																
18		 Conduct Analysis	60 days	Mon 5/17/21	Fri 8/6/21																
19		 Draft Report	30 days	Mon 8/9/21	Fri 9/17/21																
20		 Public Hearings/Workshop	14 days	Mon 9/20/21	Thu 10/7/21																
21		 Assembly Presentation	7 days	Mon 10/11/21	Tue 10/19/21																
22		 Develop Conceptual Design of WTE Plant	185 days	Wed 10/20/21	Tue 7/5/22																
23		 Develop Designs	165 days	Wed 10/20/21	Tue 6/7/22																
24		 Present Findings to Assembly	20 days	Wed 6/8/22	Tue 7/5/22																
25		 Air Permit	763 days	Fri 1/1/21	Tue 12/5/23																
26		 Meeting with ADEC	1 day	Mon 2/1/21	Mon 2/1/21																

Project: Draft 3 Preliminary Im
Date: Sun 3/1/20

Task		Inactive Summary		External Tasks	
Split		Manual Task		External Milestone	
Milestone		Duration-only		Deadline	
Summary		Manual Summary Rollup		Progress	
Project Summary		Manual Summary		Manual Progress	
Inactive Task		Start-only			
Inactive Milestone		Finish-only			

Municipality of Anchorage Waste-to-Energy Project Preliminary Implementation Schedule

ID	Task Mode	Task Name	Duration	Start	Finish	2021				2022				2023				2024		
						Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2
27		Submit Air Monitoring Station Protocol	30 days	Wed 2/3/21	Tue 3/16/21															
28		Receive ADEC Approval	30 days	Wed 3/17/21	Tue 4/27/21															
29		Conduct Minimum Four Quarters of Monitoring	395 days	Wed 4/28/21	Tue 11/1/22															
30		Receive Regulatory Approval of Data	30 days	Wed 11/2/22	Tue 12/13/22															
31		Conduct Modeling and Assessments	435 days	Wed 3/3/21	Tue 11/1/22															
32		Submit Application Package	30 days	Wed 11/2/22	Tue 12/13/22															
33		ADEC Review and Comment	90 days	Wed 12/14/22	Tue 4/18/23															
34		EPA Review and Public Comment	45 days	Wed 4/19/23	Tue 6/20/23															
35		Response to Comments	90 days	Wed 6/21/23	Tue 10/24/23															

Project: Draft 3 Preliminary Im Date: Sun 3/1/20	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			

Municipality of Anchorage Waste-to-Energy Project
Preliminary Implementation Schedule

ID	Task Mode	Task Name	Duration	Start	Finish	2021				2022				2023				2024		
						Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2
49		Issue Addenda	30 days	Wed 5/11/22	Tue 6/21/22															
50		Receive Proposals	90 days	Wed 6/22/22	Tue 10/25/22															
51		Selection Committee Technical Review	30 days	Wed 10/26/22	Tue 12/6/22															
52		Receive Approval From Assembly to Negotiate	30 days	Wed 12/7/22	Tue 1/17/23															
53		Contract Negotiations	120 days	Wed 1/18/23	Tue 7/4/23															
54		Financing	456 days?	Mon 4/4/22	Mon 1/1/24															
55		Bond Ordinance Review	60 days	Mon 4/4/22	Fri 6/24/22															
56		Assembly Work Sessions	14 days	Wed 7/6/22	Mon 7/25/22															
57		Hold Public Hearing	6 days	Tue 7/26/22	Tue 8/2/22															
58		Solicit Short Term Borrowers	44 days	Thu 12/1/22	Tue 1/31/23															

Project: Draft 3 Preliminary Im
Date: Sun 3/1/20

Task		Inactive Summary		External Tasks	
Split		Manual Task		External Milestone	
Milestone		Duration-only		Deadline	
Summary		Manual Summary Rollup		Progress	
Project Summary		Manual Summary		Manual Progress	
Inactive Task		Start-only			
Inactive Milestone		Finish-only			

Municipality of Anchorage Waste-to-Energy Project
Preliminary Implementation Schedule

ID	Task Mode	Task Name	Duration	Start	Finish	2021				2022				2023				2024		
						Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2
59		Implement a STBP	20 days	Thu 2/2/23	Wed 3/1/23															
60		Begin Drawing on STBP	21 days	Fri 3/3/23	Fri 3/31/23															
61		Pay Lender Interest	20 days	Wed 7/5/23	Tue 8/1/23															
62		First Construction Drawdown	21 days	Mon 12/4/23	Mon 1/1/24															



Project: Draft 3 Preliminary Im Date: Sun 3/1/20	Task		Inactive Summary		External Tasks	
	Split		Manual Task		External Milestone	
	Milestone		Duration-only		Deadline	
	Summary		Manual Summary Rollup		Progress	
	Project Summary		Manual Summary		Manual Progress	
	Inactive Task		Start-only			
	Inactive Milestone		Finish-only			

APPENDIX B

Public Engagement RFP



Municipality of Anchorage

Ethan Berkowitz, Mayor
Purchasing Department

January X, 2020

REQUEST FOR PROPOSAL

RFP 2020PXXX

Provide Professional Services to Assist in Public Engagement Services for a Waste-to-Energy Facility

The Municipality of Anchorage is an equal opportunity employer.

Enclosed is pertinent information for use in preparing your proposal.

A non-mandatory meeting for discussion of the proposal will be held at **1:30 P.M. Local Time, XXXXXX, X, 2020**, in the Purchasing Office at 632 W. 5th Avenue, Suite 520, Anchorage, Alaska 99501. *Interested persons wishing to participate at their own expense via teleconferencing may call 1-907-343-6089 no earlier than **1:25 P.M. Alaska Local Time, the day of the meeting.*** It is respectfully requested, if you are going to teleconference the meeting, please use a land line.

To maintain the project schedule, all questions should be submitted no later than **5:00 P.M.** on XXX, X, 2020.

Proposals must be received at the Purchasing Office, 632 W. 6th Avenue, Suite 520, Anchorage, Alaska 99501, **prior to 5:00 P.M., Local Time, XXXXX, X, 2020.** Office hours are Monday through Friday, 8:00 a.m. - 12:00 p.m. and 1:00 p.m. - 5:00 p.m., excluding holidays. Time of receipt will be as determined by the Purchasing Office time stamp. Proposals received by the Purchasing Office after the time specified will be returned to the proposer unopened. **Facsimile or email or any other electronic media submittals will not be accepted. FOR AUXILIARY AIDS, SERVICES, OR SPECIAL MODIFICATIONS TO PARTICIPATE PLEASE CONTACT THE PURCHASING DEPARTMENT TO REQUEST REASONABLE ACCOMMODATIONS AT 907-343-4590; FAX 907-343-4595; OR wwpur@muni.org**

For information about this solicitation contact **Chris Hunter** at (907) 343-4520, facsimile (907) 343-4595 or at our email address: wwpur@muni.org. All correspondence should include the **RFP** number and title. A copy of the Request for Proposal may be obtained from the Purchasing Office at the above address or an electronic (.pdf) copy of the Request for Proposal is available at Municipality of Anchorage, Purchasing Office's website: <http://www.muni.org/Departments/purchasing/Pages/bidding.aspx>. It is your responsibility to periodically check the website for addenda.

ONE SIGNED ORIGINAL, single sided, unbound, plus seven (7) complete copies of your proposal must be submitted. In addition to the copies, a CD or a flash-drive containing a PDF copy of the complete proposal, including attachments must also be provided.

The Municipality of Anchorage reserves the right to reject any and all proposals and to waive any informalities in procedures.

Sincerely,

Ronald S. Hadden
Purchasing Officer

SOLID WASTE SERVICES UTILITY
Request for
Proposals RFP
#2020Pxxx

Provide Professional Services to
Assist in Public Engagement Services for a Waste-
to-Energy Facility

Section 1.0 - General Information
Section 2.0 - Rules Governing Competition
Section 3.0 - Scope of Work
Section 4.0 - Proposal and Submission
Requirements Section 5.0 - Evaluation Criteria
and Process
Section 6.0 - Selection Process
Section 7.0 - Sample Contract or Minimum Mandatory Contract
Provisions Section 8.0 - Attachments

1.0 GENERAL INFORMATION

1.1 Purpose

The Municipality of Anchorage, Alaska (MOA) seeks proposals from marketing, public relations and/or communications professionals to assist the MOA informing the press and general public of the MOA's work on a proposed waste-to-energy (WTE) project in an effective, timely and concise manner. Candidates should have the capability and experience needed to provide comprehensive, strategic and innovative services on designated projects. The intended result of the communications program is to increase civic engagement for MOA's programs, projects, meetings, and events related to the WTE project.

Award of this contract is subject to future appropriations.

1.2 Background

Investigation of alternative waste disposal technology was one of the recommendations from both the MOA's Climate Action Plan and the Integrated Solid Waste Master Plan¹. The MOA conducted a study to assess the recommended technology to use in a proposed WTE plant for the MOA. In addition, this "White Paper"² also provided details on the economics of the proposed plant through development of a Pro Forma Model. The results and recommendations were summarized in a Final Report and presented to the following committees: Solid Waste Services Solid Waste Advisory Committee, Assembly Enterprise and Utility Oversight Committee-of-the-Whole (Assembly), and the Board of Directors of Anchorage Water

¹ Municipality of Anchorage, Climate Action Plan (2019) and Municipality of Anchorage, Integrated Solid Waste Plan (2018).

² Municipality of Anchorage, Development of a Waste-to-Energy Facility for the Municipality of Anchorage: Final White Paper (2019).

Wastewater Utility (AWWU).

Subsequently, the MOA Assembly held a joint meeting with the Mat-Su Assembly where the issue of the proposed WTE facility was discussed. The outgrowth of all these meetings, and subsequent discussion with the MOA Administration, was a decision to proceed with development of a feasibility study of the WTE facility in a timely and expeditious manner.

Public involvement will be a major component of this project. It is necessary to educate and inform the public of the need for the project and the planning efforts, as well as collaborate with and gather input from stakeholders as the project develops.

1.3 Questions

Any questions regarding this proposal are to be submitted in writing to:

Municipality of Anchorage
Purchasing Department
632 W. 6th Avenue, Suite 520 (physical address)
P.O. Box 196650 (mailing address)
Anchorage, AK 99519-6650
(907) 343-4590 (phone)
(907) 343-4595 (fax)
wwpur@muni.org (e-mail) (preferred method of contact)

For ease of identification please identify the project/title number in the subject line of any correspondence.

Purchasing Office hours of operation are: 8:00 a.m. to noon; 1:00 p.m. to 5:00 p.m. local time Monday through Friday, excluding Municipal holidays. Due to time constraints on this project, all questions regarding the scope of work should be received prior to the deadline indicated on the RFP cover letter.

1.4 Preparation Costs

The Municipality shall not be responsible for proposal preparation costs, nor for costs including attorney fees associated with any (administrative, judicial or otherwise) challenge to the determination of the highest ranked Proposer and/or award of contract and/or rejection of proposal. By submitting a proposal each Proposer agrees to be bound in this respect and waives all claims to such costs and fees.

2.0 RULES GOVERNING COMPETITION

2.1 Examination of Proposals

Proposers should carefully examine the entire RFP and any addenda thereto, and all related materials and data referenced in the RFP. Proposers should become fully aware of the nature of the work and the conditions likely to be encountered in performing the work.

2.2 Proposal Acceptance Period

Award of this proposal is anticipated to be announced within 90 calendar days, although all offers must be complete and irrevocable for 120 calendar days following the proposal due date.

2.3 Confidentiality

The content of all proposals will be kept confidential until the selection of the Contractor is publicly announced. At that time the selected proposal is open for review. After the award of the Contract, all proposals will then become public information.

2.4 Proposal Format

Proposals are to be prepared in such a way as to provide a straight forward, concise delineation of the Proposer's capabilities to satisfy the requirements of this RFP. Emphasis should be concentrated on

- 1) conformance to the RFP instructions;
- 2) responsiveness to the RFP requirements;
- 3) completeness and clarity of content.

2.5 Signature Requirements

All proposals must be signed. A proposal shall be signed: by an officer or other agent of a corporate vendor, if authorized to sign contracts on its behalf; a member of a partnership; the owner of a privately-owned vendor; or other agent if properly authorized by a power of attorney or equivalent document. Signature on the "Letter of Transmittal" (See Para 4.3.4) will meet this requirement.

Failure to sign the Proposal is grounds for rejection. The name and title of the individual(s) signing the proposal must be clearly shown immediately below the signature.

2.6 Proposal Submission Requirements

- 2.6.1 **ONE ORIGINAL, single sided unbound, plus seven (7) complete copies** of the proposal must be received by the Municipality prior to the date and time specified in the cover letter. Copies may be bound or enclosed in folders/binders as the Proposer chooses.
- 2.6.2 IN ADDITION to the copies required by paragraph 2.6.1, a CD or flash drive is required containing a PDF copy of the complete proposal, including attachments and the fee schedule. The CD or flash drive is to be placed in the sealed package containing the fee schedule (See Section 4) to avoid early disclosure of fees.
- 2.6.3 All copies of the proposals are requested to be submitted in a single sealed cover which should be plainly marked as a Request for Proposal Response with the Number, Title, and company name prominently displayed on the outside of the package.
- 2.6.4 Proposals must be delivered or mailed to:

Physical Address

Municipality of Anchorage
Purchasing Department
632 W. Sixth Avenue, Suite 520
Anchorage, AK 99501

Mailing Address

Municipality of Anchorage
Purchasing Department
P.O. Box 196650
Anchorage, AK 99519-6650

2.7 News Releases

News releases by or on the behalf of any Proposer pertaining to the award resulting from the RFP shall not be made without prior written approval of the Municipal Purchasing Officer.

2.8 Disposition of Proposals

All materials submitted in response to this RFP will become the property of the Municipality of Anchorage. One copy of the submitted material shall be retained for the official files of the Purchasing Department and will become public record after award of the Contract.

2.9 Oral Change/Interpretation

No oral change or interpretation of any provision contained in this RFP is valid whether issued at a pre-proposal conference or otherwise. Written addenda will be issued when changes, clarifications, or amendments to proposal documents are deemed necessary by the Municipality.

2.10 Modification/Withdrawal of Proposals

A Proposer may withdraw a proposal at any time prior to the final submission date by sending written notification of its withdrawal, signed by an agent authorized to represent the agency. The Proposer may thereafter submit a new proposal prior to the final submission date; or submit written modification or addition to a proposal prior to the final submission date. Modifications offered in any other manner, oral or written will not be considered. A final proposal cannot be changed or withdrawn after the submission date, except for modifications requested by the Municipality after the date of receipt and following oral presentations

2.11 Late Submissions

PROPOSALS NOT RECEIVED PRIOR TO THE DATE AND TIME SPECIFIED IN THE COVER LETTER WILL NOT BE CONSIDERED AND WILL BE RETURNED UNOPENED AFTER RECOMMENDATION OF AWARD.

2.12 Rejection of Proposals

The Municipality of Anchorage reserves the right to reject any or all proposals if determined to be in the best interest of the Municipality.

2.13 Equal Employment Opportunity Contract Compliance

2.13.1 Every municipal contract shall include language substantially the same as the following: "The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital status, or physical or mental disability. The contract will comply with all laws concerning the prohibition of discrimination including, but not limited to, Title 5 and Title 7 of the Anchorage Municipal Code."

2.13.2 Every municipal contract shall state, in all solicitations or advertisements for employees to work under the contract, that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital status, or physical or mental disability.

3.0 SCOPE OF WORK

The Consultant shall provide all services requested by the MOA. The MOA intends to use the work performed under this RFP to help develop a WTE facility.

At a minimum, the Proposer must be able to perform the required services as noted in the paragraphs below.

3.1 Media and Public Relations

- Assist in developing and implementing a strategic public engagement plan for the WTE project. The selected proposer will be expected to review and confirm basic methodology, processes, and engagement strategy developed by SWS under separate contract.
- Review and augment SWS-developed lists of key stakeholders; and maintain a diverse media distribution list and media contacts on behalf of the MOA
- Prepare and distribute press releases and media material. Examples include, but are not limited to, project fact sheets, project team talking points, utility bill stuffers, post cards, e-newsletters, visual displays, and public service announcements
- Perform any other public relations related services relevant to the ongoing needs of the Municipality.
- Develop social media programs, with emphasis on Facebook, Twitter and other similar digital communication channels used by the MOA
- Regular coordination meetings with key SWS staff (Public Information Officer) to review messaging, review of outreach materials and assistance with meeting coordination.

3.2 Marketing

- Develop an integrated strategic marketing plan designed to increase awareness of MOA waste to energy programs, activities, events, and amenities. Implement marketing items and organize promotional communications.
- Develop a strategy to assist in branding the WTE project and increasing the reputation and appeal of the brand.
- Organize public service announcements and media-related functions regarding events. Develop printed material including newsletters, brochures, fliers, slide presentations and any other informational literature to support MOA programs, events and amenities.
- Conduct market research to help enhance and professionalize promotional materials and identify markets. Develop marketing activities.
- Assist in the development of WTE's project communications to the community, i.e. local media, e-mails, use of signs, etc.
- Support the marketing and public relations components related to the MOA's short and long-term goals for the project

3.3 Public Engagement Plan Final Report

- Prepare Public Engagement Report summarizing total public outreach effort, including meetings, public engagement plan, stakeholder meetings, public

RFP 2020PXXX

workshops, survey results, public comments, social media engagements, and related activities.

- Report shall summarize challenges related to creation of WTE facility and resolution of public input and interaction.

3.3 ADDITIONAL SERVICES

The selected consultant may be asked to provide additional services beyond those identified above to assist in the creation of the WTE project. These could include assistance with public outreach efforts undertaken by SWS involving Community Council meetings; Community Workshop meetings; Focus Group (small stakeholder) meetings; or other Stakeholder, Community and Business Meeting presentations; deployments of the media and public relations efforts.

4.0 PROPOSAL AND SUBMISSION REQUIREMENTS

To achieve a uniform review process and obtain the maximum degree of comparability, it is required that the proposals be organized in the manner specified below. Proposals shall not exceed twenty (20) pages in length (excluding letter of transmittal, resumes, title page(s), index/table of contents, or dividers). Information in excess of those allowed will not be evaluated/scored. One page shall be interpreted as one side of single-spaced, typed, 8 1/2" X 11", piece of paper.

4.1 Title Page

Show the RFP number and subject, the name of your firm, address, telephone number(s), name of contact person, and date.

4.2 Table of Contents

Clearly identify the materials by section and page number.

4.3 Letter of Transmittal (Limited to one (1) page).

4.3.1 Briefly state your firm's understanding of the services to be performed and make a positive commitment to provide the services as specified.

4.3.2 Give the name(s) of the person(s) who are authorized to make representations for your firm, their titles, address, and telephone numbers.

4.3.3 Provide a statement that your firm is compliant with the requirements of Section 2.13 - Equal Employment Opportunity Contract Compliance.

4.3.4 The letter of transmittal must be signed by a corporate officer or other individual who has the authority to bind the firm.

4.4 Fee Schedule

Under a separate cover, submit two (2) copies of a fee schedule for all services, which may be required in performance of this work. The fee schedule shall be all inclusive of overhead, G&A, fringe benefits, profit, insurance, etc. The fee schedule will not be used in evaluations. Only the highest ranked Proposer's fee schedule will be opened for the purpose of commencing contract negotiations.

Label the separate cover with:

- Fee Schedule
- RFP number and name
- Company name

4.5 Proposal Contents

4.5.1 Firm's Qualification and Experience

Describe in detail the firm's qualifications and experience providing the subject scope of work presented in Section 3.0. All respondents shall provide a reference list of no less than three (3) former municipal clients for whom your firm has done like work with the name of the contact person and a current phone number where they may be reached for verification of experience and qualifications.

4.5.2 Methodology and Approach

Provide detailed information on the firm's methodology in meeting the scope of work requirements identified in Section 3.0. Describe overall approach to include any special considerations, which may be envisioned.

4.5.3 Staff Qualifications and Experience

Provide resumes for all personnel who will be assigned to this contract and their function in this contract. Include an organizational chart displaying all staff/positions. Identify the contract manager for this contract. State education, professional registrations, and years of experience performing this type of work.

4.5.4 Availability of Personnel and Resources

Describe the firm's ability to respond quickly to requests, participate in meetings, and collaboratively review work products with SWS staff during SWS business hours (8:00 am - 5:00 pm Alaska Time, Monday through Friday, excluding holidays). Identify any other client commitments that may cause a conflict in providing the services for this contract.

4.5.5 Contractor Location

Identify the location of the firm's office and how long the firm has been at that location. Identify the location of the offices of any subconsultants and personnel working outside of the proposing firm's office.

5.0 EVALUATION CRITERIA AND PROCESS

5.1 Criteria

The criteria to consider during evaluations, and the associated point values, are as follows:

1. Firm's Qualification and Experience	25 points
2. Methodology and Approach	30 points
3. Staff Qualifications and Experience	25 points
4. Availability of Personnel and Resources	15 points
5. Contractor Location	<u>5 points</u>

Total Points Available 100 points

5.2 Qualitative Rating Factor

Firms will be ranked using the following qualitative rating factors for each RFP criteria:

- 1.0 Outstanding
- .8 Excellent
- .6 Good
- .4 Fair
- .2 Poor
- 0- Unsatisfactory

The rating factor for each criteria category will be multiplied against the points available to determine the total points for that category.

EXAMPLE: For the evaluation of the experience factor, if the evaluator feels the response as provided was "Good" they would assign a "qualitative rating factor" of .6 for that criterion. The final score for that criterion would be determined by multiplying the qualitative rating factor of .6 by the maximum points available (30) and the resulting score of 18 would be assigned to the criterion. This process would be repeated for each criterion.

5.3 Evaluation Process

A committee of individuals representing the Municipality of Anchorage will perform an evaluation of the proposal(s). The committee will rank the proposal(s) as submitted. The Municipality of Anchorage reserves the right to award a contract solely on the written proposal.

The Municipality also reserves the right to request oral interviews with the highest ranked firms (short list). The purpose of the interviews with the highest ranked firms is to allow expansion upon the written responses. If interviews are conducted, a maximum of three (3) firms will be short-listed. A second score sheet will be used to score those firms interviewed. The final selection will be based on the total of all evaluators' scores achieved on the second rating. The same categories and point ranges will be used during the second evaluation as for the first. The highest ranked Proposer after the second scoring, if performed, may be invited to enter into final negotiations with the Municipality for the purposes of contract award.

6.0 SELECTION PROCESS

The Proposer with the highest total evaluation points may be invited to enter into contract negotiations with the Municipality of Anchorage. If an agreement cannot be reached, the second highest Proposer may be contacted for negotiations. This process may continue until successful negotiations are achieved. However, the Municipality reserves the right to terminate negotiations with any Proposer should it be in the Municipality's best interest. The Municipality of Anchorage reserves the right to reject any and all proposals submitted.

7.0 SAMPLE CONTRACT OR MINIMUM MANDATORY CONTRACT PROVISIONS

In addition to carefully reading all of the information in the RFP, all Proposers must carefully read and review the attached sample contract (ATTACHMENT 1). The successful Proposer shall be required to enter into a Contract with the Municipality of Anchorage, which will be substantially similar to the sample.

Therefore, the Proposer must make any proposed changes to the sample Contract that the Proposer desires. All changes must be made legibly and conspicuously on and include two copies of changes attached with the Original Proposal. This may be in a sealed envelope if desired. Page(s) on which the change(s) appear must be tabbed as to be easily identified. The Proposer must also provide the rationale for all changes.

IF NO CHANGES ARE MADE, THE PROPOSER SHALL BE DEEMED TO HAVE ACCEPTED THE SAMPLE CONTRACT. IF THE PROPOSER MAKES CHANGES, SUCH CHANGES WILL BE CONSIDERED IN ANY NEGOTIATIONS WITH THE MUNICIPALITY OF ANCHORAGE. CHANGES MADE TO THE SAMPLE CONTRACT SHALL NOT BE CONSIDERED DURING PROPOSAL EVALUATIONS.

8.0 ATTACHMENTS

ATTACHMENT 1: Sample Contract

ATTACHMENT 2: Relevant Documents

(KV NOTE: recommend we include three things here)

Municipality of Anchorage, Climate Action Plan (2019)

Municipality of Anchorage, Integrated Solid Waste Management Plan (2018).

Municipality of Anchorage, Development of a Waste-to-Energy Facility for the Municipality of Anchorage: Final White Paper (2019).

APPENDIX C

Interlocal Agreement

10.02.14
SS



Agenda Sheet for City Council Meeting of:
09/08/2014

Date Rec'd	8/27/2014
Clerk's File #	OPR 2014-0610
Renews #	
Cross Ref #	
Project #	
Bid #	
Requisition #	

Submitting Dept	SPOKANE REGIONAL SOLID WASTE SYSTEM
Contact Name/Phone	KEN GIMPEL 625-6532
Contact E-Mail	KGIMPEL@SPOKANECITY.ORG
Agenda Item Type	Contract Item
Agenda Item Name	4490 INTERLOCAL AGREEMENT WITH THE CITY OF CHENEY FOR DISPOSAL SERVICES

Agenda Wording
Interlocal Agreement (ILA) with the City of Cheney for solid waste disposal services at the WTE Plant with a term of seven years with three 1-year extension options--\$2.8 million revenue.

Summary (Background)
With the dissolution of the the SRSWS on November 16, 2014, the City of Cheney has elected to develop their own Solid Waste Management Plan and System. This ILA with the City of Cheney is for disposal services at the WTE. The disposal rate described in the ILA is for Cheney's city-owned and operated solid waste collection vehicles only. Cheney citizens who self haul solid waste will pay the same gate fee as all other customers.

Fiscal Impact	Budget Account
Revenue \$ 2,800,000	# 4490-44110-37052-34363
Select \$	#
Select \$	#
Select \$	#

Approvals		Council Notifications	
Dept Head	GIMPEL, KEN	Study Session	Public Works Cmte 8/25/14
Division Director	ROMERO, RICK	Other	
Finance	DOLAN, PAM	Distribution List	
Legal	DALTON, PAT	ttauscher@spokanecity.org	
For the Mayor	SANDERS, THERESA	lbutz@spokanecity.org	
Additional Approvals		<i>J. Faught</i>	
Purchasing			

APPROVED BY SPOKANE CITY COUNCIL ON _____
9/8/2014
[Signature]
 SPOKANE CITY CLERK

BRIEFING PAPER
Public Works Committee/Council Briefing Session
Spokane Regional Solid Waste System
August 25, 2014

Subject

Interlocal Agreement (ILA) with the City of Cheney for solid waste disposal services at the WTE Plant. The term of the ILA is seven years with three 1-year extension options thereafter. The ILA contains a termination clause by either party with twelve months prior notice the other party. The value of the ILA to the City of Spokane is approximately \$2.8 million.

Background

The Interlocal Agreement between the City of Spokane and Spokane County that formed the Spokane Regional Solid Waste System (SRSWS) terminates November 16, 2014. With the dissolution of the SRSWS, Spokane County jurisdictions must decide whether to join the County's new Regional Solid Waste System or develop their own Solid Waste Management Plan and provide all of the services required by state statute. The City of Spokane has elected to remain part of the County's new Regional Solid Waste System. The City of Cheney has elected to develop their own Solid Waste Management Plan and their own Solid Waste Management System. In early August 2014, the City of Cheney's Solid Waste Management Plan was approved by the Department of Ecology. The City of Spokane has been working with the City of Cheney to develop an ILA for disposal services at the WTE Plant. The City of Cheney will provide all other services (recycling, yard waste, household hazardous waste, public education and outreach, etc.) to their citizens and businesses. The disposal rate described in the ILA is for Cheney's city owned and operated solid waste collection vehicles only. Cheney citizens that self haul solid waste to the WTE Plant will pay the same gate fee as all other customers.

Impact

This ILA will provide disposal service only to Cheney's city owned and operated solid waste collection vehicles only. The City of Cheney will be responsible for providing all other state required services to its citizens and businesses. The City of Spokane will benefit from the additional disposal revenue.

Action

Recommend approval of the Interlocal Agreement with the City of Cheney.

Funding

The City of Cheney will pay the City of Spokane approximately \$407,000 per year for solid waste disposal services at the WTE Plant.

City of Spokane No. OPR 2014-0610_____
City of Cheney No. _____

**INTERLOCAL AGREEMENT
BETWEEN THE CITY OF CHENEY AND THE CITY OF SPOKANE
FOR DISPOSAL OF SOLID WASTE**

This WASTE DISPOSAL AGREEMENT (this "**Agreement**") is made and entered into as of this ____ day of August, 2014 by and between the City of Cheney, a municipal corporation of the State of Washington (the "**CHENEY**") and the City of Spokane, a municipal corporation of the State of Washington ("**SPOKANE**"). Cheney and Spokane are each sometimes referred to herein as "**Party**" and collectively as "**Parties.**"

RECITALS

A. CHENEY on September 1, 1989 entered into "An Interlocal Agreement between the City of Spokane, Spokane County and the City of Cheney" (Spokane Auditors File No: 8909150064) (the "**Interlocal Agreement**") to control the management, handling, and disposal of solid waste within CHENEY.

B. The Interlocal Agreement was for a term of twenty five (25) years or for so long as bonds remained outstanding, which date is on or about November 16, 2014 (the "**Interlocal Agreement Expiration Date**").

C. Subsequent to the Interlocal Agreement Expiration Date, SPOKANE will own and operate that certain Waste to Energy Facility located at 2900 South Geiger Blvd., Spokane, Washington, 99224, including the solid waste incinerator and the portion of the facility that serves the general public (the "**WTE**").

D. CHENEY, by and through an open meeting of the Cheney City Council held on November 20, 2013, has decided not to enter into a new Interlocal Agreement with Spokane County and has provided appropriate notice to Spokane County regarding the same.

E. In anticipation of the Interlocal Agreement Expiration Date, CHENEY has developed its own Comprehensive Solid Waste Management Plan (the "Plan"), which is under review by the Washington State Department of Ecology ("DOE").

F. In addition to developing its own Plan, CHENEY must identify a disposal site capable of processing Municipal Waste from mixed residential, commercial, and industrial sources. The WTE is capable of processing Municipal Waste from mixed residential, commercial, and industrial sources.

G. In the event the Plan is approved prior to the Interlocal Agreement Expiration Date, the Parties have agreed to terminate the Interlocal Agreement and enter into this Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, SPOKANE is willing to permit CHENEY to use the WTE pursuant to CHENEY's Plan and the terms of this Agreement for disposal of CHENEY's Municipal Waste:

SECTION NO. 1: PURPOSE

The purposes of this Agreement are to:

- A. Formally terminate the 1989 Interlocal Agreement as of November 16, 2014 or upon approval of CHENEY's Solid Waste Management Plan by the DOE. Effective November 17, 2014, or upon approval of CHENEY's Solid Waste Management Plan by the DOE this Agreement will replace all terms and conditions contained in the 1989 Agreement; and
- B. Provide that CHENEY will continue to operate in accordance with the terms and conditions of the 1989 Interlocal Agreement including subsequent amendments as mutually agreed to by the Parties, through November 16, 2014 or upon approval of CHENEY's Solid Waste Management Plan by the DOE; and
- C. Establish the terms and conditions between CHENEY and SPOKANE for the disposal of all solid waste collected within CHENEY, which is to be delivered to SPOKANE's WTE; and
- E. Establish flow control requirements to be maintained by CHENEY to ensure the proper disposal of solid waste; and
- F. Establish the terms and conditions for continued service to CHENEY self haul customers who deliver solid waste to the WTE; and
- G. Require CHENEY to provide all services required under RCW 70.95 (with the exception of disposal services) and RCW 70.105, which include; solid waste planning, moderate risk waste management, waste reduction and recycling outreach and education and recycling.

SECTION NO. 2: DEFINITIONS

As used in this Agreement, the following words, unless the context otherwise dictates, shall have the following meanings:

- A. **CHENEY-** means the City of Cheney, or any vendor contracted by CHENEY for services related to the management of solid waste.
- B. **CHENEY Disposal Rate** means the per ton disposal fee, as outlined in Section 5 of this Agreement, that CHENEY shall pay SPOKANE for each ton of solid waste delivered to the WTE by CHENEY's owned and operated commercial vehicles.
- C. **Dangerous Wastes** - means any discarded, useless, unwanted, or abandoned substances, including but not limited to certain pesticides, or any residues or containers of such substances which are disposed of in such quantity or concentration as to pose a substantial present or potential hazard to human health, wildlife, or the environment, because such wastes or constituents or combinations of such wastes:
 - 1) Have short-lived, toxic properties that may cause death, injury, or illness or have mutagenic, teratogenic, or carcinogenic properties; or
 - 2) Are corrosive, explosive, flammable, or may generate pressure through decomposition or other means.
- D. **Extremely Hazardous Waste** —means any dangerous waste which:
 - 1) Will persist in a hazardous form for several years or more at a disposal site and which in its persistent form:
 - a. Presents a significant environmental hazard and may be concentrated by living organisms through a food chain or may affect the genetic make-up of human beings or wildlife, and
 - b. Is highly toxic to human beings or wildlife.
 - 2) If disposed of at a disposal site in such quantities as would present an extreme hazard to human beings or the environment.
- E. **Gate Fee** - means the per ton disposal fee outlined in SECTION NO. 5 of this Agreement CHENEY's residents shall pay SPOKANE for each ton of solid waste delivered to the WTE as "self haul" waste.
- F. **Hazardous Waste** - means and includes all dangerous and extremely hazardous waste, including substances composed of both radioactive and hazardous components.
- G. **Moderate-Risk Waste** – means:

- 1) any waste that exhibits any of the properties of hazardous waste, but is exempt from regulation under chapter 70.105 RCW solely because the waste is generated in quantities below the threshold for regulation; and
- 2) any household wastes which are generated from the disposal of substances identified by the department as hazardous household substances.

- H. **Nonprocessable Waste** - means any solid waste that SPOKANE deems to be unacceptable at the WTE.
- I. **Solid Waste or Wastes** - means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to; garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.
- J. **Waste To Energy Facility, WTE, or Facility** - means that solid waste facility located at 2900 South Geiger Boulevard, Spokane, Washington 99224, including the solid waste incinerator and the portion of the facility that serves the general public for disposal of household hazardous waste, recyclables, solid waste, yard debris, and other waste products.

SECTION NO. 3: DURATION

- A. This Agreement shall be effective 12:00 A.M. on November 17, 2014 ("Commencement Date") and run through 11:59 P.M. on November 16, 2021, unless CHENEY provides written notice of termination as provided under subparagraph C of this Agreement.

Any notice of termination shall be provided in writing and not later than twelve (12) months prior to the effective date. Notwithstanding the above provisions, this Agreement may be extended in one (1) year increments for a total of three (3) additional years, or as otherwise agreed upon by the Parties (the "Extension Term").

- B. **Extension Terms.** At least ninety (90) days prior to expiration of the Initial Term or an Extension Term, a party may deliver written notice of intent to renew this Agreement. The Notice shall propose the period and terms of renewal. The party receiving the notice shall within ten (10) days of delivery respond by stating its intent to renew this Agreement. Thereafter, the Parties shall negotiate the Extension Term in good faith. No response by the party receiving the notice shall be deemed a refusal to extend this Agreement.
- C. **Termination.** Either PARTY may terminate this Agreement by providing written notice of termination not later than twelve (12) months prior to the effective date.

SECTION NO. 4: DISPOSAL SERVICES

- A. **Scope of Services.** CHENEY, or residents of CHENEY who choose to "self-haul" waste, shall deliver all Acceptable Waste, as defined in subparagraph B below, to the WTE. Once delivered to the WTE, SPOKANE shall be responsible for all costs associated with the disposal of the

Acceptable Waste, including, but not limited to; incineration, ash disposal, by-pass of unburned materials, and all maintenance, operation, repairs and ordinary renewals and replacements necessary for the operation of the WTE. Once Municipal Waste enters the WTE, SPOKANE shall be responsible for determining its weight.

B. **Acceptable Waste.** The following shall be acceptable waste at the WTE:

- 1) **"Municipal Waste"** including, but not limited to, Solid Waste from mixed residential, commercial, and industrial sources.
- 2) **"Self Haul"** means solid waste delivered to the WTE by the public in privately owned and operated vehicles.
- 3) **"Solid Waste"** meaning all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, yard debris, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

The above definitions shall be automatically amended to conform to all WTE permits and operating requirements established by state and federal authorities.

C. **Guaranteed Capacity.** The guaranteed minimum available capacity for Acceptable Waste shall be two-hundred forty-eight thousand two hundred (248,200) tons per year.

D. **Primary Services.** The WTE shall be maintained in good working order and repair so as to allow CHENEY to dispose of its Municipal Waste without interruption or unreasonable delay. Municipal Waste may be delivered and shall be received at the WTE during all regular hours of operation unless otherwise agreed.

SECTION NO. 5: DISPOSAL RATE; BILLING

A. **CHENEY Disposal Rate.** CHENEY will pay to SPOKANE sixty dollars (\$60) per ton for each ton of Municipal Waste delivered to the WTE from CHENEY (the "**CHENEY Disposal Rate**"). The CHENEY Disposal Rate shall be inclusive of all costs, including applicable taxes. SPOKANE agrees not to exceed the authority granted under state or local law, including taxing authority.

- 1) **"Self-Haul Rate"** in the event residents of CHENEY choose to self-haul Acceptable Waste to the WTE, those residents shall be charged the then current SPOKANE WTE Gate Fee. For purposes of this Section those residents who self-haul shall have the waste weighed upon entry into the WTE and shall, at that point, pay the WTE Gate Fee directly to the WTE at the WTE weigh station.

- 2) **Rate Adjustment.** On January 1 of each year following 2015, SPOKANE will adjust the CHENEY Disposal Rate to reflect increases in the United States Department of Labor, Bureau of Labor Statistics, West-Size B/C, Consumer Price Index, All Items for All Urban Consumers (CPI-U) (the "Index"). The adjustment factor for computing annual rate adjustments shall be computed by dividing the Index number for October of the just completed year by the Index number for October of the previous year. In the event the Index number stays the same or decreases, no rate adjustment will be made, and the next rate adjustment shall not occur until the Index number increases to a number exceeding the highest previous Index number, and shall be computed using the previous highest index number.

Example Calculation of Annual Rate Adjustments:

	INDEX	ADJUST FACTOR	CHENEY DISPOSAL RATE
Base Yr.N	125		\$60
N+1	128.844	1.030752	\$61.84
N+2	133.315	1.034710	\$63.99
N+3*	132.474	No change	\$63.99
N+4**	133	No change	\$63.99
N+5	137.748	1.033252	\$66.12
N+6	140.054	1.016741	\$67.23
*No change-Index decreased			
**No change-Index did not exceed highest previous Index			

- 3) **Invoicing and Payment.** SPOKANE shall, through invoice, bill CHENEY the CHENEY Disposal Rate on or before the 20th day of the month for services rendered the previous month. The invoice shall contain the dates of disposal, weight of Solid Waste, disposal cost per ton, assessed taxes, fees or other charges and such other information as necessary to support the invoiced amount due. CHENEY will pay SPOKANE within thirty (30) calendar days of receiving the invoice.
- 4) **Billing Questions and Disputes.** If CHENEY has any questions, desires further information, or has a dispute regarding the invoice, CHENEY shall advise SPOKANE in writing within ten (10) business days of invoice receipt. Notwithstanding payment of an invoice as set forth in section 4.3, CHENEY reserves the right, and SPOKANE acknowledges the right to dispute amounts paid without the necessity of making such payment "under protest." Any dispute between the Parties as to an invoice shall be resolved pursuant to Section 8.4 of this Agreement. Past due invoices shall accrue interest at the current local government investment pool rate - until paid.

SECTION NO. 6: AUDIT / RECORDS

CHENEY shall maintain for a minimum of three (3) years following final payment all records related to its performance of the Agreement. CHENEY shall provide access to authorized SPOKANE representatives at reasonable times and in a reasonable manner to inspect and copy any such record. In the event of conflict between this provision and related auditing provisions required under federal law applicable to the Agreement, the federal law shall prevail.

SPOKANE shall maintain for a minimum of three (3) years following final payment all records related to its performance of the Agreement. SPOKANE shall provide access to authorized CHENEY representatives at reasonable times and in a reasonable manner to inspect and copy any such record. In the event of conflict between this provision and related auditing provisions required under federal law applicable to the Agreement, the federal law shall prevail.

SECTION NO. 7: LIABILITY

Each Party to this Agreement shall be responsible for damage to persons or property resulting from the negligence on the part of itself, its employees, its directors, its agents or its officers. The Parties shall each indemnify, defend and hold harmless the other Party, its officers and employees from all claims, demands, or suits in law or equity arising from the Party's intentional or negligent acts or breach of any obligations under this Agreement.

If the comparative negligence of the Parties and their officers and employees is a cause of such damage or injury, the liability, loss, cost, or expense shall be shared between the Parties in proportion to their relative degree of negligence and the right of indemnity shall apply to such proportion.

Where an officer or employee of a Party is acting under the direction and control of the other Party, the Party directing and controlling the officer or employee in the activity and/or omission giving rise to liability shall accept all liability for the other Party's officer's or employee's negligence.

Each Party's duty to indemnify shall survive the termination or expiration of this Agreement. Each Party waives, with respect to the other Party only, its immunity under Chapter 51 of the Revised Code of Washington ("RCW"), "Industrial Insurance." The Parties have specifically negotiated this provision. THIS WAIVER HAS BEEN MUTUALLY NEGOTIATED BY THE PARTIES.

SECTION NO. 8: INSURANCE

During the term of this Agreement, SPOKANE and CHENEY shall each maintain in force at its own expense, the following insurance coverage or self-insurance:

- A. Worker's Compensation Insurance in compliance with RCW 51.12.020, which requires subject employers to provide workers' compensation coverage for all their subject workers and Employer's Liability or Stop Gap Insurance in the amount of \$5,000,000;

- B. General Liability Insurance on an occurrence basis, with a combined single limit of not less than \$10,000,000 each occurrence for bodily injury and property damage. It shall include contractual liability coverage for the indemnity provided under this Agreement;
- C. Automobile Liability Insurance with a combined single limit, or the equivalent of not less than \$5,000,000 each accident for bodily injury and property damage, including coverage for owned, hired and non-owned vehicles; and
- D. Professional Liability Insurance with a combined single limit of not less than \$5,000,000 each claim, incident or occurrence. This is to cover damages caused by the error, omission, or negligent acts related to the professional services to be provided under this Agreement, if any. This coverage must remain in effect for two (2) years after the Agreement is completed.

There shall be no cancellation, material change, reduction of limits or intent not to renew the insurance coverage(s) without providing thirty (30) days written notice from a Party or its insurer(s) to the other Party. Verification of insurance shall be provided upon request.

SECTION NO. 9: RELATIONSHIP OF THE PARTIES

The relationship between the Parties is that of independent contractors. Neither Party, nor its agents and employees, shall under any circumstances be deemed an agent or representative of the other Party and neither shall have authority to act for and/or bind the other in any way, or represent that it is in any way responsible for acts of the other Party. This Agreement does not establish a joint venture, agency, or partnership between the Parties.

SECTION NO. 10: MISCELLANEOUS

- A. **Assignment and Delegation.** This Agreement shall be binding upon the Parties, their successors and assigns. No Party may assign or delegate, in whole or in part, its interest in this Agreement without the prior written approval of the other Party, which shall not be unreasonably withheld.
- B. **Notices and Other Communications.** All notices, approvals, consents, and other communications required or permitted pursuant to this Agreement shall be in writing and shall be delivered by hand or sent by facsimile or prepaid courier or registered mail, to a Party at the address set forth below, or at such other address provided by such Party via written notice. Such communications shall become effective on the day when delivered by hand or the first (1st) business day following delivery by any other means.

If to CHENEY:

City of Cheney
 Attn: Tom Trulove, Mayor
 609 Second Street
 Cheney, WA 99004

If to SPOKANE:

City of Spokane
 Attn: Mayor or Designee
 Seventh Floor, City Hall
 808 West Spokane Falls Boulevard
 Spokane, WA 99201

With Copy To:

Witherspoon • Kelley
Attn: Stanley M. Schwartz
422 West Riverside Avenue
Suite 1100
Spokane, WA 99201

With Copy To:

City of Spokane
Attn: City Attorney
Fifth Floor, City Hall
808 West Spokane Falls Boulevard
Spokane, WA 99201

- C. **Governing Law; Venue.** This Agreement is entered into, and its interpretation and enforcement, shall be governed exclusively by its terms and by the laws of the State of Washington, United States of America, without giving effect to that body of laws pertaining to conflict of laws. Any action brought by either Party against the other Party for claims arising out of this Agreement shall only be brought in a court of competent jurisdiction in Spokane County, Washington.
- D. **Meet and Confer / Arbitration.** If either Party has a claim, demand or dispute under this Agreement, notice of the same shall be sent to the other Party. The notice shall provide a brief description of the dispute. Thereafter, the Parties shall follow the below process.
- 1) **Meet and Confer.** Within five (5) business days of the notice, the Parties shall meet and confer to resolve the dispute. If the Parties are unable to resolve the dispute within ten (10) business days of the notice, either party may seek arbitration.
 - 2) **Arbitration.** Arbitration shall be conducted in accordance with the JAMS Arbitration Rules or by an Alternate Dispute Resolution Process that can be mutually agreed upon. The arbitrator's fees and costs shall be equally shared. The arbitration shall be conducted pursuant to RCW Chapter 7.04A with the arbitrator's decision final and binding on the Parties.
- E. **Attorneys' Fees.** If any suit is brought or legal action is taken for the enforcement of any provision of this Agreement or as a result of any alleged breach thereof or for a declaration of any right or duty hereunder, the Party who substantially prevails in such suit or legal action shall be paid reasonable attorneys' fees from the Party who does not substantially prevail, and any judgment or decree rendered shall include an award thereof.
- F. **Entire Agreement.** This Agreement embodies the entire understanding among the Parties, is merged and fully integrated, and supersedes any and all prior negotiations, understandings, or agreements.
- G. **Third Parties.** Nothing in this Agreement, express or implied, is intended to confer upon any person, other than the Parties hereto and their successors and assigns, any rights or remedies under or by reason of this Agreement.
- H. **Favored Rate Clause.** To the extent enforceable by law, Spokane affirms that if, after execution of this contract, it enters into a new disposal agreement with another jurisdiction which contains the identical terms and waste volume services outlined in this Agreement, to include, but not limited to disposal for jurisdiction's commercially collected garbage, self self-haul

service to jurisdiction's residents, and moderate risk waste services to jurisdiction's residents, and waste volumes, and charges a lower disposal fee than the CHENEY Disposal Fee set forth in this Agreement, Spokane shall adjust the CHENEY Disposal Fee to match the lower Jurisdiction's fee.

- I. **Anti-kickback.** No officer or employee of CHENEY, having the power or duty to perform an official act or action related to this Agreement, shall have, or acquire, any interest in this Agreement, or have solicited, accepted, or granted, a present or future gift, favor, service, or other thing of value from any person with an interest in this Agreement.
- J. **Severability.** If any provision of this Agreement is determined by any court of competent jurisdiction to be invalid, illegal or unenforceable in any respect, such provision will be enforced to the maximum extent possible given the intent of the Parties hereto. If such clause or provision cannot be so enforced, such provision shall be stricken from this Agreement and the remainder of this Agreement shall be enforced as if such invalid, illegal or unenforceable clause or provision had (to the extent not enforceable) never been contained in this Agreement.
- K. **Amendment; Waivers.** This Agreement shall not be amended, supplemented or modified except in writing executed by authorized representatives of the Parties, with the same formality of this Agreement. Waiver by a Party of any breach of any provision of this Agreement by the other Party shall not operate, or be construed, as a waiver of any subsequent or other breach and no Party's undertakings or agreements contained in this Agreement shall be deemed to have been waived unless such waiver is made by an instrument in writing signed by an authorized representative of that Party.
- L. **Counterparts.** This Agreement may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, and either Party may execute this Agreement by signing any such counterpart. Signed counterparts executed and delivered by electronic mail or facsimile transmission shall be binding on the Parties and have the same force and effect as an original signed counterpart.
- M. **Representations and Warranties.** Each Party represents and warrants that it has executed this Agreement freely, fully intending to be bound by the terms and provisions contained herein; that it has full power and authority to execute, deliver and perform this Agreement; that the person signing this Agreement on behalf of such Party has properly been authorized and empowered to enter into this Agreement by and on behalf of such Party; that prior to the date of this Agreement, all corporate action of such Party necessary for the execution, delivery and performance of this Agreement by such Party has been duly taken; and that this Agreement has been duly authorized and executed by such Party, is the legal, valid and binding obligation of such Party, and is enforceable against such Party in accordance with its terms.
- N. **Compliance with Laws.** The Parties shall observe all federal, state and local laws, ordinances and regulations; to the extent they may be applicable to the terms of this Agreement.

SECTION NO. 11: RCW 39.34 REQUIRED CLAUSES

- A. **Purpose:** See Section No. 1 above.
- B. **Duration:** See Section No. 3 above.
- C. **Organization of Separate Entity and Its Powers:** No new or separate legal or administrative entity is created to administer the provisions of this Agreement.
- D. **Responsibilities of the Parties:** See provisions above.
- E. **Agreement to be Filed:** SPOKANE shall file this Agreement with its City Clerk and place it on its web site or other electronically retrievable public source. CHENEY shall file this Agreement with its City Clerk or place it on its web site or other electronically retrievable public source.
- F. **Financing:** Each party shall be responsible for the financing of its contractual obligations under its normal budgetary process.
- G. **Termination:** This Agreement can be terminated in accordance with Section 3.
- H. **Property Upon Termination:** Title to all property acquired by any party in the performance of this Agreement shall remain with the acquiring party upon termination of the Agreement.

IN WITNESS WHEREOF, the Parties hereto have duly executed this Agreement as of the date first written above.

THE CITY OF CHENEY:



Tom Trulove, Mayor

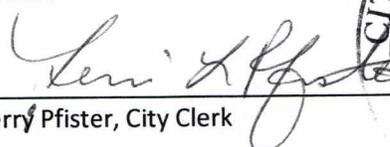
THE CITY OF SPOKANE:



David Condon, Mayor
(09/12/14)
David A. Condon
Mayor
City of Spokane

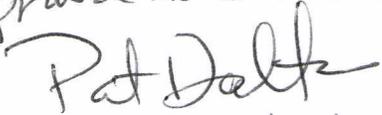
ATTEST:


Cindy Niemeier, Finance Director

ATTEST:


Terry Pfister, City Clerk



Approval as to form:


Asst City Attorney

APPENDIX D

Energy Advisor RFP



Municipality of Anchorage

Ethan Berkowitz, Mayor
Purchasing Department

January X, 2020

REQUEST FOR PROPOSAL

RFP 2020PXXX

Provide Professional Services for Energy Consultant Services for a Waste-to-Energy Facility

The Municipality of Anchorage is an equal opportunity employer.

Enclosed is pertinent information for use in preparing your proposal.

A non-mandatory meeting for discussion of the proposal will be held at **1:30 P.M. Local Time, XXXXXX, X, 2020**, in the Purchasing Office at 632 W. 5th Avenue, Suite 520, Anchorage, Alaska 99501. *Interested persons wishing to participate at their own expense via teleconferencing may call 1-907-343-6089 no earlier than **1:25 P.M. Alaska Local Time, the day of the meeting.*** It is respectfully requested, if you are going to teleconference the meeting, please use a land line.

To maintain the project schedule, all questions should be submitted no later than **5:00 P.M.** on XXX, X, 2020.

Proposals must be received at the Purchasing Office, 632 W. 6th Avenue, Suite 520, Anchorage, Alaska 99501, **prior to 5:00 P.M., Local Time, XXXXX, X, 2020.** Office hours are Monday through Friday, 8:00 a.m. - 12:00 p.m. and 1:00 p.m. - 5:00 p.m., excluding holidays. Time of receipt will be as determined by the Purchasing Office time stamp. Proposals received by the Purchasing Office after the time specified will be returned to the proposer unopened. **Facsimile or email or any other electronic media submittals will not be accepted. FOR AUXILIARY AIDS, SERVICES, OR SPECIAL MODIFICATIONS TO PARTICIPATE PLEASE CONTACT THE PURCHASING DEPARTMENT TO REQUEST REASONABLE ACCOMMODATIONS AT 907-343-4590; FAX 907-343-4595; OR wwpur@muni.org**

For information about this solicitation contact **Chris Hunter** at (907) 343-4520, facsimile (907) 343-4595 or at our email address: wwpur@muni.org. All correspondence should include the **RFP** number and title. A copy of the Request for Proposal may be obtained from the Purchasing Office at the above address or an electronic (.pdf) copy of the Request for Proposal is available at Municipality of Anchorage, Purchasing Office's website: <http://www.muni.org/Departments/purchasing/Pages/bidding.aspx>. It is your responsibility to periodically check the website for addenda.

ONE SIGNED ORIGINAL, single sided, unbound, plus seven (7) complete copies of your proposal must be submitted. In addition to the copies, a CD or a flash-drive containing a PDF copy of the complete proposal, including attachments must also be provided.

The Municipality of Anchorage reserves the right to reject any and all proposals and to waive any informalities in procedures.

Sincerely,

Ronald S. Hadden
Purchasing Officer

SOLID WASTE SERVICES UTILITY
Request for
Proposals RFP
#2020Pxxx

**Provide Professional Services for Energy Consultant Services for a
Waste-to-Energy Facility**

Section 1.0 - General Information
Section 2.0 - Rules Governing Competition
Section 3.0 - Scope of Work
Section 4.0 - Proposal and Submission
Requirements Section 5.0 - Evaluation Criteria
and Process
Section 6.0 - Selection Process
Section 7.0 - Sample Contract or Minimum Mandatory Contract
Provisions Section 8.0 - Attachments

1.0 GENERAL INFORMATION

1.1 Purpose

The Municipality of Anchorage, Alaska (MOA) seeks qualifications from energy consultants to provide professional consulting services related to the sales of electricity from a proposed waste-to-energy (WTE) project in an effective, timely and concise manner. Candidates should have the capability and experience needed to provide comprehensive, strategic and innovative services on designated projects. The intended result of the communications program is to assist the MOA in negotiating energy sales agreements, to evaluate proposals, and to assist in the decision-making processes related to the WTE project.

Award of this contract is subject to future appropriations.

1.2 Background

Investigation of alternative waste disposal technology was one of the recommendations from both the MOA's Climate Action Plan and the Integrated Solid Waste Master Plan¹. The MOA conducted a study to assess the recommended technology to use in a proposed WTE plant for the MOA. In addition, this "White Paper"² also provided details on the economics of the proposed plant through development of a Pro Forma Model. The results and recommendations were summarized in a Final Report and presented to the following committees: Solid Waste Services Solid Waste Advisory Committee, Assembly Enterprise and Utility Oversight Committee-of-the-Whole (Assembly), and the Board of Directors of Anchorage Water

¹ Municipality of Anchorage, Climate Action Plan (2019) and Municipality of Anchorage, Integrated Solid Waste Plan (2018).

² Municipality of Anchorage, Development of a Waste-to-Energy Facility for the Municipality of Anchorage: Final White Paper (2019).

Wastewater Utility (AWWU).

Subsequently, the MOA Assembly held a joint meeting with the Mat-Su Assembly where the issue of the proposed WTE facility was discussed. The outgrowth of all these meetings, and subsequent discussion with the MOA Administration, was a decision to proceed with development of a feasibility study of the WTE facility in a timely and expeditious manner.

1.3 Questions

Any questions regarding this proposal are to be submitted in writing to:

Municipality of Anchorage
Purchasing Department
632 W. 6th Avenue, Suite 520 (physical address)
P.O. Box 196650 (mailing address)
Anchorage, AK 99519-6650
(907) 343-4590 (phone)
(907) 343-4595 (fax)
wwpur@muni.org (e-mail) (preferred method of contact)

For ease of identification please identify the project/title number in the subject line of any correspondence.

Purchasing Office hours of operation are: 8:00 a.m. to noon; 1:00 p.m. to 5:00 p.m. local time Monday through Friday, excluding Municipal holidays. Due to time constraints on this project, all questions regarding the scope of work should be received prior to the deadline indicated on the RFP cover letter.

1.4 Preparation Costs

The Municipality shall not be responsible for proposal preparation costs, nor for costs including attorney fees associated with any (administrative, judicial or otherwise) challenge to the determination of the highest ranked Proposer and/or award of contract and/or rejection of proposal. By submitting a proposal each Proposer agrees to be bound in this respect and waives all claims to such costs and fees.

2.0 RULES GOVERNING COMPETITION

2.1 Examination of Proposals

Proposers should carefully examine the entire RFP and any addenda thereto, and all related materials and data referenced in the RFP. Proposers should become fully aware of the nature of the work and the conditions likely to be encountered in performing the work.

2.2 Proposal Acceptance Period

Award of this proposal is anticipated to be announced within 90 calendar days, although all offers must be complete and irrevocable for 120 calendar days following the proposal due date.

2.3 Confidentiality

The content of all proposals will be kept confidential until the selection of the Contractor is publicly announced. At that time the selected proposal is open for review. After the award of the Contract, all proposals will then become public information.

2.4 Proposal Format

Proposals are to be prepared in such a way as to provide a straight forward, concise delineation of the Proposer's capabilities to satisfy the requirements of this RFP. Emphasis should be concentrated on

- 1) conformance to the RFP instructions;
- 2) responsiveness to the RFP requirements;
- 3) completeness and clarity of content.

2.5 Signature Requirements

All proposals must be signed. A proposal shall be signed: by an officer or other agent of a corporate vendor, if authorized to sign contracts on its behalf; a member of a partnership; the owner of a privately-owned vendor; or other agent if properly authorized by a power of attorney or equivalent document. Signature on the "Letter of Transmittal" (See Para 4.3.4) will meet this requirement.

Failure to sign the Proposal is grounds for rejection. The name and title of the individual(s) signing the proposal must be clearly shown immediately below the signature.

2.6 Proposal Submission Requirements

- 2.6.1 **ONE ORIGINAL, single sided unbound, plus seven (7) complete copies** of the proposal must be received by the Municipality prior to the date and time specified in the cover letter. Copies may be bound, or enclosed in folders/binders as the Proposer chooses.
- 2.6.2 IN ADDITION to the copies required by paragraph 2.6.1, a CD or flash drive is required containing a PDF copy of the complete proposal, including attachments and the fee schedule. The CD or flash drive is to be placed in the sealed package containing the fee schedule (See Section 4) to avoid early disclosure of fees.
- 2.6.3 All copies of the proposals are requested to be submitted in a single sealed cover which should be plainly marked as a Request for Proposal Response with the Number, Title, and company name prominently displayed on the outside of the package.
- 2.6.4 Proposals must be delivered or mailed to:

Physical Address

Municipality of Anchorage
Purchasing Department
632 W. Sixth Avenue, Suite 520
Anchorage, AK 99501

Mailing Address

Municipality of Anchorage
Purchasing Department
P.O. Box 196650
Anchorage, AK 99519-6650

2.7 News Releases

News releases by or on the behalf of any Proposer pertaining to the award resulting from the RFP shall not be made without prior written approval of the Municipal Purchasing Officer.

2.8 Disposition of Proposals

All materials submitted in response to this RFP will become the property of the Municipality of Anchorage. One copy of the submitted material shall be retained for the official files of the Purchasing Department and will become public record after award of the Contract.

2.9 Oral Change/Interpretation

No oral change or interpretation of any provision contained in this RFP is valid whether issued at a pre-proposal conference or otherwise. Written addenda will be issued when changes, clarifications, or amendments to proposal documents are deemed necessary by the Municipality.

2.10 Modification/Withdrawal of Proposals

A Proposer may withdraw a proposal at any time prior to the final submission date by sending written notification of its withdrawal, signed by an agent authorized to represent the agency. The Proposer may thereafter submit a new proposal prior to the final submission date; or submit written modification or addition to a proposal prior to the final submission date. Modifications offered in any other manner, oral or written will not be considered. A final proposal cannot be changed or withdrawn after the submission date, except for modifications requested by the Municipality after the date of receipt and following oral presentations

2.11 Late Submissions

PROPOSALS NOT RECEIVED PRIOR TO THE DATE AND TIME SPECIFIED IN THE COVER LETTER WILL NOT BE CONSIDERED AND WILL BE RETURNED UNOPENED AFTER RECOMMENDATION OF AWARD.

2.12 Rejection of Proposals

The Municipality of Anchorage reserves the right to reject any or all proposals if determined to be in the best interest of the Municipality.

2.13 Equal Employment Opportunity Contract Compliance

2.13.1 Every municipal contract shall include language substantially the same as the following: "The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital status, or physical or mental disability. The contract will comply with all laws concerning the prohibition of discrimination including, but not limited to, Title 5 and Title 7 of the Anchorage Municipal Code."

2.13.2 Every municipal contract shall state, in all solicitations or advertisements for employees to work under the contract, that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry, age, sex, sexual orientation, gender identity, marital status, or physical or mental disability.

3.0 SCOPE OF WORK

The Consultant shall provide all services requested by the MOA. The MOA intends to use the work performed under this RFP to help develop a WTE facility.

At a minimum, the Proposer must be able to perform the required services as noted in the paragraphs below.

- Assist in the development of ally required documentation necessary to obtain price quotes from Electric Providers for the sales of electrical power from the proposed WTE facility.
- Review proposed contract requirements and/or terms that are of concern to the MOA.
- Compile proposals on a customized excel spreadsheet for energy quote comparison.
- Assist in the review/evaluation of the bids and/or proposals for sales of electricity from the proposed MOA WTE facility, which includes reviewing all quotes and contracts submitted to the MOA.
- Meet with MOA staff and Project Team to review electrical bids/proposal details such as company references; financial stability; pricing; pass thru fees; gross receipts tax; and other contract terms, etc.
- Assist in making a recommendation of the proposals to MOA and Project staff and/or answer any questions MOA staff may have during the decision-making process.
- Make a presentation of findings to MOA and Project Team staff and the Assembly as needed.

3.3 ADDITIONAL SERVICES

The selected consultant may be asked to provide additional services beyond those identified above to assist in the creation of the WTE project. These could include assistance with public submittals, support with project related media public relations efforts.

4.0 PROPOSAL AND SUBMISSION REQUIREMENTS

To achieve a uniform review process and obtain the maximum degree of comparability, it is required that the proposals be organized in the manner specified below. Proposals shall not exceed twenty (20) pages in length (excluding letter of transmittal, resumes, title page(s), index/table of contents, or dividers). Information in excess of those allowed will not be evaluated/scored. One page shall be interpreted as one side of single-spaced, typed, 8 1/2" X 11", piece of paper.

4.1 Title Page

Show the RFP number and subject, the name of your firm, address, telephone number(s), name of contact person, and date.

4.2 Table of Contents

Clearly identify the materials by section and page number.

4.3 Letter of Transmittal (Limited to one (1) page).

4.3.1 Briefly state your firm's understanding of the services to be performed and make a positive commitment to provide the services as specified.

4.3.2 Give the name(s) of the person(s) who are authorized to make representations for your firm, their titles, address, and telephone numbers.

4.3.3 Provide a statement that your firm is compliant with the requirements of Section 2.13 - Equal Employment Opportunity Contract Compliance.

4.3.4 The letter of transmittal must be signed by a corporate officer or other individual who has the authority to bind the firm.

4.4 Fee Schedule

Under a separate cover, submit two (2) copies of a fee schedule for all services, which may be required in performance of this work. The fee schedule shall be all inclusive of overhead, G&A, fringe benefits, profit, insurance, etc. The fee schedule will not be used in evaluations. Only the highest ranked Proposer's fee schedule will be opened for the purpose of commencing contract negotiations.

Label the separate cover with:

- Fee Schedule
- RFP number and name
- Company name

4.5 Proposal Contents

4.5.1 Firm's Qualification and Experience

Describe in detail the firm's qualifications and experience providing the subject scope of work presented in Section 3.0. All respondents shall provide a reference list of no less than three (3) former municipal clients for whom your firm has done like work with the name of the contact person and a current phone number where they may be reached for verification of experience and qualifications.

4.5.2 Methodology and Approach

Provide detailed information on the firm's methodology in meeting the scope of work requirements identified in Section 3.0. Describe overall approach to include any special considerations, which may be envisioned.

4.5.3 Staff Qualifications and Experience

Provide resumes for all personnel who will be assigned to this contract and their function in this contract. Include an organizational chart displaying all staff/positions. Identify the contract manager for this contract. State education, professional registrations, and years of experience performing this type of work.

4.5.4 Availability of Personnel and Resources

Describe the firm's ability to respond quickly to requests, participate in meetings, and collaboratively review work products with SWS staff during SWS business hours (8:00 am - 5:00 pm Alaska Time, Monday through Friday, excluding holidays). Identify any other client commitments that may cause a conflict in providing the services for this contract.

4.5.5 Contractor Location

Identify the location of the firm's office and how long the firm has been at that location. Identify the location of the offices of any subconsultants and personnel working outside of the proposing firm's office.

5.0 EVALUATION CRITERIA AND PROCESS

5.1 Criteria

The criteria to consider during evaluations, and the associated point values, are as follows:

1. Firm's Qualification and Experience	25 points
2. Methodology and Approach	30 points
3. Staff Qualifications and Experience	25 points
4. Availability of Personnel and Resources	15 points
5. Contractor Location	5 points

Total Points Available 100 points

5.2 Qualitative Rating Factor

Firms will be ranked using the following qualitative rating factors for each RFP criteria:

- 1.0 Outstanding
- .8 Excellent
- .6 Good
- .4 Fair
- .2 Poor
- 0- Unsatisfactory

The rating factor for each criteria category will be multiplied against the points available to determine the total points for that category.

EXAMPLE: For the evaluation of the experience factor, if the evaluator feels the response as provided was "Good" they would assign a "qualitative rating factor" of .6 for that criterion. The final score for that criterion would be determined by multiplying the qualitative rating factor of .6 by the maximum points available (30) and the resulting score of 18 would be assigned to the criterion. This process would be repeated for each criterion.

5.3 Evaluation Process

A committee of individuals representing the Municipality of Anchorage will perform an evaluation of the proposal(s). The committee will rank the proposal(s) as submitted. The Municipality of Anchorage reserves the right to award a contract solely on the written proposal.

The Municipality also reserves the right to request oral interviews with the highest ranked firms (short list). The purpose of the interviews with the highest ranked firms is to allow expansion upon the written responses. If interviews are conducted, a maximum of three (3) firms will be short-listed. A second score sheet will be used to score those firms interviewed. The final selection will be based on the total of all evaluators' scores achieved on the second rating. The same categories and point ranges will be used during the second evaluation as for the first. The highest ranked Proposer after the second scoring, if performed, may be invited to enter into final negotiations with the Municipality for the purposes of contract award.

6.0 SELECTION PROCESS

The Proposer with the highest total evaluation points may be invited to enter into contract negotiations with the Municipality of Anchorage. If an agreement cannot be reached, the second highest Proposer may be contacted for negotiations. This process may continue until successful negotiations are achieved. However, the Municipality reserves the right to terminate negotiations with any Proposer should it be in the Municipality's best interest. The Municipality of Anchorage reserves the right to reject any and all proposals submitted.

7.0 SAMPLE CONTRACT OR MINIMUM MANDATORY CONTRACT PROVISIONS

In addition to carefully reading all of the information in the RFP, all Proposers must carefully read and review the attached sample contract (ATTACHMENT 1). The successful Proposer shall be required to enter into a Contract with the Municipality of Anchorage, which will be substantially similar to the sample.

Therefore, the Proposer must make any proposed changes to the sample Contract that the Proposer desires. All changes must be made legibly and conspicuously on and include two copies of changes attached with the Original Proposal. This may be in a sealed envelope if desired. Page(s) on which the change(s) appear must be tabbed as to be easily identified. The Proposer must also provide the rationale for all changes.

IF NO CHANGES ARE MADE, THE PROPOSER SHALL BE DEEMED TO HAVE ACCEPTED THE SAMPLE CONTRACT. IF THE PROPOSER MAKES CHANGES, SUCH CHANGES WILL BE CONSIDERED IN ANY NEGOTIATIONS WITH THE MUNICIPALITY OF ANCHORAGE. CHANGES MADE TO THE SAMPLE CONTRACT SHALL NOT BE CONSIDERED DURING PROPOSAL EVALUATIONS.

8.0 ATTACHMENTS

ATTACHMENT 1: Sample Contract

ATTACHMENT 2: Application for a New or Amended Certificate of Public Convenience and Necessity

APPENDIX E

Interconnection Agreement

CHUGACH ELECTRIC ASSOCIATION, INC.
Application for Interconnection of Electric Power Sources
greater than 5 MVA to the Power Transmission Grid

Who Should File This Application: Association members proposing to construct and/or operate electrical generation facilities of capacity greater than 5 MegaVolt-Amperes (MVA) interconnected and in-parallel with Chugach Electric Association, Inc.'s (Chugach's) subtransmission or transmission systems.

Application Use: This application is used by Chugach to perform an Interconnection Study to determine required interconnection equipment and configuration for the Chugach/Applicant interface. Accordingly, every effort should be made by the Applicant to supply as much information as possible.

Design Information Submittal: In addition to the items listed in this form, the Applicant shall include the following design information submittal items as outlined.

A. One-Line diagram - This is a schematic electrical drawing with sufficient detail to show the major elements of the facility electrical connections, interconnections and protective equipment, and point of interconnections to the Chugach electrical system.

B. Control, Relay, Metering, and Telemetry Functional Drawing - This diagram shall indicate the functions of the individual control components, relays, metering, and telemetry equipment.

C. Paralleling Device Control Drawings - These drawings shall show the conditions, relays, and instrument transformers that cause all switchgear and/or circuit breakers applied to the interconnecting facility to open or close. The source of power for each control should be clearly indicated in the drawings.

OWNER/APPLICANT INFORMATION		
Company:		
Representative:	Phone Number:	Fax Number:
Title:		
Mailing Address:		
PROPOSED LOCATION OF GENERATING PLANT AND INTERCONNECTION		
Address:		
PROJECT DESIGN / ENGINEERING		
Company:		
Representative:	Phone Number:	Fax Number:
Title:		
Mailing Address:		
ELECTRICAL CONTRACTOR		
Company:		
Representative:	Phone Number:	Fax Number:
Title:		
Mailing Address:		
ESTIMATED LOAD INFORMATION		
The following information will be used to help properly design the Chugach-Customer interconnection. This information is not intended as a commitment or contract for billing purposes.		
Minimum anticipated load (generation not operating)		
_____ kVA	_____ Duration (indicate hours, minutes, etc.)	
Maximum anticipated load (generation not operating)		
_____ kVA	_____ Duration (indicate hours, minutes, etc.)	

(Complete all applicable items, Copy this page as required for additional generators.)

SYNCHRONOUS GENERATION DATA

Unit Number:	Total number of units with listed specifications on site:		
Manufacturer:			
Type:	Manufacture Date:	Windings (Delta, Wye):	
Serial Number (each):			
Phases: 1 or 3	Speed (RPM):	Frequency (Hz):	
Rated Output (each unit) Kilowatt:		Kilovolt-Ampere:	
Rated Power Factor (%):	Rated Voltage (Volts):	Rated Current (Amperes):	
Field Voltage (Volts):	Field Current (Amperes):	Motoring Power (kW):	
Synchronous Reactance:	X_d :	X_q :	% on kVA base
Transient Reactance:	X_d' :	X_q' :	% on kVA base
Subtransient Reactance:	X_d'' :	X_q'' :	% on kVA base
Negative Sequence Reactance:	X_2 :		% on kVA base
Zero Sequence Reactance:	X_0 :		% on kVA base
Neutral Grounding Impedance:	R_n :	X_n :	% on kVA base
Inertia constant, H (joules/VA):			
I^2t or K (heating time constant):			
Exciter data:			
Governor data:			
Additional Information:			

INDUCTION GENERATOR DATA

Unit Number:	Total number of units with listed specifications on site:		
Manufacturer:			
Type:	Manufacture Date:	Windings (Delta, Wye):	
Serial Number (each):		Speed (RPM):	
Rotor Resistance, R_r , (Ohms):		Stator Resistance, R_s , (Ohms):	
Rotor Reactance, X_r , (Ohms):		Stator Reactance, X_s , (Ohms):	
Magnetizing Reactance, X_m , (Ohms):			
Design Letter:	Frame Size:		
Exciting Current:	Temp Rise (deg C):	H constant, (joules/VA):	
Rated Output (kW):			
Reactive Power Required	kVAR (no load):	kVAR (full load):	
If this a wound-rotor machine, describe any external equipment to be connected (resistor, rheostat, power converter, etc.) to rotor circuit, and circuit configuration. Describe ability, if any, to adjust generator reactive output to provide power system voltage regulation.			
Additional Information:			

MISCELLANEOUS (Use this area and any additional sheets for applicable notes and comments).

Blank lined area for miscellaneous notes and comments.

SIGN OFF AREA

I agree to provide Chugach Electric Association, Inc. (Chugach) with any additional information, as requested or required, to process this application. I also agree to comply with Chugach's regulations and tariffs as amended. I certify that I am the owner, lessee, tenant, or agent of the premise where the service has been applied. I agree to provide safe and unobstructed access to premises for Chugach employees, pay applicable rates and abide by the terms and conditions as prescribed by the tariff for all present and future utility service.

The conditions under which a deposit will be required or waived are set forth in Chugach's operating tariff. I declare the information provided is true, accurate, and complete to the best of my knowledge and belief. The information contained in the application has been voluntarily submitted for the purpose of receiving electric service, and is understood upon presentation, this application becomes the property of Chugach.

Applicant Signature Printed Name and Title Date

The information submitted in this Application will remain active and valid for a period of 12 months from the date the Application is signed. If, after this 12-month period, Chugach does not receive a request for authorization to operate in parallel, or reasonable proof that the project is going forward, the Applicant will be considered as "withdrawn" and the Application will be cancelled.

Information below to be filled out by Chugach Representative

Chugach Representative:	Phone:
Name of Project:	
Chugach service point location (attach service map if available):	

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical****10 Non-Utility Generation Interconnection And Operating Guidelines, And Purchases And Sales Of Electric Power To And From Qualifying Facilities**

This tariff: 1) Establishes interconnection guidelines applicable to all Non-Utility Generators (including Qualifying Facilities); and, 2) Establishes tariffs for pricing, terms and conditions for purchases from and sales to Qualifying Facilities as required under 3 AAC 50.790.

10.1 Definitions

- (a) Interconnection: Electrical connection of Non-Utility Generation facilities with the Chugach electrical system.
- (b) Non-Utility Generation or Non-Utility Generator: Any electrical generation source not owned or operated by an electric utility certificated by the Regulatory Commission of Alaska.
- (c) Parallel Operation: The condition where a Non-Utility Generator operates while electrically connected to the Chugach system. Under this condition, electric power can flow from the Chugach system to the Producers' facility or from the Producer's facility into the Chugach system.
- (d) Qualifying Facility: A Qualifying Facility as defined under currently effective federal law (18 C.F.R. Part 292).
- (e) Integration Services: Services necessary to integrate non-utility generation into Chugach's electric transmission and / or distribution system in a manner such that all operational and reliability criteria are met. Integration services include but are not limited to regulating reserves, imbalance service, and dispatch and scheduling. Integration costs are project specific and determined through a required integration study completed by Chugach.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical**

10.2 Interconnection and Operating Guidelines for Non-Utility Generation

The following guidelines apply to Non-Utility Generators that are electrically Interconnected to the Chugach system and in Parallel Operation including standby/buyback customers and Qualifying Facilities

(a) Required Disclosures

At a minimum, an applicant requesting Interconnection shall initially provide the information listed below in a form and in sufficient detail to allow Chugach to perform an initial review of the project and anticipated Interconnection charges to the applicant.

- 1) Detailed information on the exact location of facilities.
- 2) Specific information on the location of all proposed electrical Interconnections related to each project, including both Interconnections with Chugach and with electric loads served by the projects.
- 3) Electrical characteristics of the facility in its various modes (generation, purchase of power from Chugach) including anticipated seasonal or time of day variations or limitations.
- 4) Power quality information.
- 5) Line configuration and transformer connections.
- 6) Other Interconnection specifications.
- 7) All diagrams relating to each project that relate to information requested in this list.
- 8) Type of equipment planned.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical**

10.2 Interconnection and Operating Guidelines for Non-Utility Generation (Continued)

- 9) Equipment availability, including any anticipated lead times for receipt of equipment.
- 10) Timing of anticipated service requirements.
- 11) Description of planned maintenance outages and unscheduled outages, including the basis for this description.
- 12) All other information reasonably required by Chugach for the purpose set out above.

(b) Terms and Conditions of Service

- 1) Non-Utility Generators may Interconnect in Parallel Operation with the Chugach electric system provided there are no adverse effects to Chugach consumers, personnel, equipment or system operation.
- 2) Installation and operation of Non-Utility Generators must be in conformance with Chugach requirements and all applicable federal, state and local safety codes and regulations. At a minimum, interconnections must be consistent with the most current interconnection standards approved by the Commission and with IEEE 1547 standards.
- 3) A Non-Utility Generator may not commence Parallel Operation of generation facilities without final written approval from Chugach. Chugach shall have the right to require inspection, or witness testing of the Non-Utility Generators' equipment or devices associated with the Interconnection by qualified third parties.
- 4) Chugach shall have the right to disconnect a Non-Utility Generator from its system without notice if a hazardous condition exists in the equipment of the Non-Utility Generator and immediate action is necessary to protect persons, utility facilities, or other customers' facilities from damage or interference imminently likely to result from the hazardous condition. Not later than 10 calendar days after disconnection of service, Chugach will notify the Non-Utility Generators in writing of the reasons for the disconnection.

L – Text moved to Sheet No. 108.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical**

10.2 Interconnection and Operating Guidelines for Non-Utility Generation (Continued)

- 5) Chugach will estimate its costs related to the applicant's proposed Interconnection. The applicant will be responsible for full payment of the costs Chugach would not have incurred but for the applicant's Interconnection.
- 6) Each Non-Utility Generator installation shall have telephone service at each metering/recording point for use by Chugach. Either dedicated or shared telephone lines may be used. Monthly telephone charges will be pay by the Non-Utility Generator.
- 7) The applicant has the option of reimbursing Chugach for Interconnection costs not in excess of \$5,000 up to a 5 year repayment period provided the applicant shall provide reasonable security assuring Chugach that it will recover the full amount of its advance of Interconnection costs plus interest. Interest charges will be assessed at 10.5 percent per annum compounded daily. Terms and conditions for the financing of Interconnection costs that exceed the \$5,000 limit shall be evaluated on a case-by-case basis through discussions between Chugach and the applicant. If Chugach and the applicant are unable to reach agreement, the question may be brought by either party to the Commission for adjudication.
- 8) Interconnection must be implemented in such a way that system disturbances do not result in portions of the Chugach system becoming islanded with the applicant's facility.

(c) Classification of Non-Utility Generation Installations

Chugach's guidelines for Interconnection and operation are segregated between installations containing a nameplate capacity up to and including 5 MVA that are Interconnected at voltages less than 34.5 on Chugach's Distribution system, and installations with a nameplate capacity that exceed 5 MVA and Interconnect at or above 34.5 kV.

L – Text moved from Sheet No. 107.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical**

10.2 Interconnection and Operating Guidelines for Non-Utility Generation (Continued)

(d) Interconnection Application Procedures: 5 MVA or Less

Any Non-Utility Generator with a nameplate capacity of 5 MVA or less intending to Interconnect and operate generation in parallel with the Chugach electric system is required to follow the technical Interconnection and operational requirements contained in Chugach's Interconnection Guidelines for Non-Utility Generation (Appendix C). These guidelines contain the general requirements and technical operating parameters for Interconnecting Non-Utility Generation on the Chugach system.

Non-Utility Generation for installations of 5 MVA or less are categorized as Class A, B, C and D.

Class A Facilities: Installations containing a nameplate capacity up to 10 KVA where the stiffness ratio at the point of Interconnection with the Chugach system is at least 100.

Class B Facilities: Installations containing a nameplate capacity from 10 KVA up to 100 KVA where the stiffness ratio at the point of Interconnection with the Chugach system is at least 50.

Class C Facilities: Installations containing a nameplate capacity from 100 KVA up to 1,000 KVA where the stiffness ratio at the point of Interconnection with the Chugach system is at least 30.

Class D Facilities: Installations containing a nameplate capacity from 1,000 KVA up to 5,000 KVA where the stiffness ratio at the point of Interconnection with the Chugach system is at least 20.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical**

10.2 Interconnection and Operating Guidelines for Non-Utility Generation (Continued)

Separate “In-and-Out Metering” shall be utilized to capture real and reactive power flows into and out of a producer’s facility. However, for Class A facilities, the Non-Utility Generator has the option of having a single detent meter used during Parallel Operation. A detent meter is a watt-hour meter that measures power flows in a forward direction to measure kWh sold by Chugach to a Non-Utility Generator.

(e) Interconnection Application Procedures: Greater than 5 MVA

Interconnection and operation of Non-Utility Generator installations with a nameplate capacity exceeding 5 MVA will be completed under a separate contract between Chugach and the applicant. The contract will require approval of the Regulatory Commission of Alaska prior to commencement of Parallel Operation with the Chugach system.

The applicant is required to submit a completed application form entitled, “Application for Interconnection of Electric Power Sources Greater than 5 MVA to the Power Transmission Grid” (see Appendix D). The applicant must provide Chugach with a complete design package that allows for generating system classification, thorough review of the proposed Interconnection facilities, and analyses of the impact of the proposed Interconnection on the Chugach system.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical**

10.3 Power Purchases From Qualifying Facilities

(a) Purpose

The purpose of this tariff is to establish the price, terms and conditions generally applicable to power purchases under 3 AAC 50.790 from a Qualifying Facility.

(b) General Principles

Chugach will purchase firm and non-firm energy from Qualifying Facilities in conformance with standard cost of service principles. Rates established hereunder:

- 1) Must be just and reasonable, shall not unreasonably discriminate against Qualifying Facilities, and must not adversely affect Chugach consumers;
- 2) Shall not require Chugach to pay more than its avoided costs for power or energy purchased from a Qualifying Facility, except by agreement in a special contract per 3AAC50.770(h);
- 3) Shall reflect costs associated with integration services;
- 4) Are available only to Qualifying Facilities;
- 5) Shall apply only so long as the penetration of all Non-Utility Generators (excluding dispatchable generators for which Chugach has contracted to dispatch) is below 10MW of installed capacity on the Chugach Electric System. If and when such non-utility generation levels reach a total nameplate capacity of 9 MW, Chugach shall submit a report to the Commission addressing whether the 10 MW limit continues to be appropriate, including proposed revisions to tariff language, if necessary; and
- 6) Chugach shall not be required to purchase power from a Qualifying Facility if, due to operational circumstances, purchases result in costs greater than those which Chugach would have incurred if it had not made such purchases but had instead generated or purchased an equivalent amount of power. If Chugach determines that ongoing purchases will result in costs greater than those which Chugach would have incurred if it had not made such purchases, Chugach shall notify each affected Qualifying Facility in writing in time for the Qualifying Facility to stop the delivery of electric power to Chugach, or, if such notice is not possible under the circumstances shall pay the expense it would have incurred had power continued to be purchased from the Qualifying Facility at established rates during the same period.

L- Text moved from Sheet 112.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical**

10.3 Power Purchases From Qualifying Facilities (Continued)

(c) Required Disclosures

At a minimum, an applicant requesting status as a Qualifying Facility shall initially provide the information listed below in a form and in sufficient detail to allow Chugach to a) confirm that the entity meets the most current standards for a qualifying utility, b) perform an initial review of the project and, if required, c) to begin developing rates for purchases from the Qualifying Facility.

- 1) Qualifying Facilities shall provide the information required under Interconnection and Operating Guidelines for Non-Utility Generation, section (b) Required Disclosures as set out above but shall do so as needed to conform to the purposes set out under this section.
- 2) Site control information (land ownership and use rights).
- 3) Curves showing the shapes of anticipated electric power production. These should be for representative time periods to reflect anticipated seasonal or time of day variations or limitations.
- 4) Description of suppliers of fuel, water or other essential supplies, including any contracts or solicitations for these supplies.
- 5) Identity of the proposed owners of the Qualifying Facility.
- 6) Financing.
- 7) All concluded or proposed contracts, agreements, solicitations or arrangements (including heat or electric power sales) of any sort that relate to each project.

L-Text moved to Sheet 111.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical**

10.3 Power Purchases From Qualifying Facilities (Continued)

- 8) As to customers of the Qualifying Facility that the Qualifying Facility intends to sell heat supply information about:
 - i) Curves showing the shapes of anticipated electric power production as they relate to supply of heat to customers obtaining heat from each project.
 - ii) Thermal host names and addresses.
 - iii) Thermal host requirements (including seasonal heat load profiles).
- 9) All other information reasonably required by Chugach for the purposes set out above.

(d) Chugach Evaluation of Application

Within 90 days after receipt of complete information sufficient for the purposes stated above, Chugach shall review the information, determine whether, based on the information presented, the proposed project may be a valid Qualifying Facility and notify the applicant of its preliminary determination.

If Chugach determines, based on the information presented, the proposed project may be a valid Qualifying Facility, it shall develop a preliminary cost estimate of needed Interconnection study and any other reasonably needed engineering services and develop a contract requiring payment by the Qualifying Facility for these services all within 120 days after receipt of complete information.

If the applicant has not obtained formal Federal Energy Regulatory Commission (FERC) certification that the project is a Qualifying Facility, and Chugach determines that the facility is not a valid Qualifying Facility or in its reasonable judgment no determination of whether the proposed project is a valid Qualifying Facility can be made, either the applicant or Chugach may request that the Regulatory Commission of Alaska determine whether Chugach must treat the project as a Qualifying Facility.

Notwithstanding this review process, either the applicant or Chugach may seek a formal determination by the FERC whether the project is a Qualifying Facility. If the applicant obtains formal FERC certification not subject to further appeal that it is a Qualifying Facility, or if Chugach does not challenge the Regulatory Commission of Alaska's determination that the project must be treated as a Qualifying Facility, Chugach shall be obligated to follow the procedures in this tariff applicable to a Qualifying Facility notwithstanding any prior contrary determination by Chugach.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
- Font and Format May Vary – Content is Identical****10.3 Power Purchases From Qualifying Facilities (Continued)**

Class D and larger Non-Utility Generators must first obtain Commission certification (i.e. FERC certification as distinct from FERC self-certification) as a Qualifying Facility before Chugach shall be obligated to follow the procedures in this tariff applicable to a Qualifying Facility.

(e) Qualifying Facilities with Capabilities of 5 MVA or Less with Distribution System Interconnection

- 1) Non-firm purchases: Rates for purchases of non-firm power from a Qualifying Facility with a rated capability equal to or less than 5 MVA shall be determined at the time the applicant has provided the above information. For generators up to and including 200 KVA of capacity, the rate shall be that shown on Tariff Sheet 97. For generators larger than 200 KVA of capacity, the rate shall be determined as provided on Tariff Sheet 89.4.2.

Within 60 days after a request for Interconnection, Chugach shall provide the requesting Qualifying Facility with a preliminary calculation of the non-firm avoided cost rate for a period not to exceed 5 years; provided, however, that the rate actually paid by Chugach shall be that established from time to time according to the method described in Tariff Sheet 97 or Tariff Sheet 89.4.2, and subject to the rules set out in the “General Provisions” portion of this tariff.

- 2) Firm purchases: No avoided costs shall be paid for avoided capacity for power from a Qualifying Facility with a rated capability equal to or less than 5 MVA unless the process described below for establishing rates for Qualifying Facilities with capabilities greater than 5 MVA is completed.

To the extent that Chugach and a Qualifying Facility are unable to agree on rates to be paid to a Qualifying Facility, disputes may be brought before the Commission for decision pursuant to 3 AAC 50. 810.

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
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10.3 Power Purchases From Qualifying Facilities (Continued)

- (f) Qualifying Facilities with Capabilities Greater than 5 MVA or which Interconnect to Chugach’s Sub-transmission or Transmission system.

For Qualifying Facilities with capabilities greater than 5 MVA or which Interconnect to Chugach’s sub-transmission or transmission system Chugach shall review the required disclosures for the proposed project, verify valid of the Qualifying Facility as set out above under “Required Disclosures” and develop a preliminary cost estimate of needed study and contract requiring payment by the Qualifying Facility.

Once the Interconnection study has been conducted, Chugach shall prepare a proposed rate for purchases from the Qualifying Facility based on avoided cost principles and enter into good faith negotiation of a power purchase agreement with the Qualifying Facility.

Factors relating to Chugach’s ability to avoid costs shall be adjusted based on factors, including but not limited to adjustments for factors set out in 18 C.F.R. 292.304(e) which include:

- 1) Availability of capacity or energy from a Qualifying Facility during the system daily and seasonal peak periods, including:
 - i) The ability to dispatch the Qualifying Facility;
 - ii) Reliability of the Qualifying Facility;
 - iii) Terms of any contract that affect the avoided cost value to Chugach of the Qualifying Facility;
 - iv) The ability of the Qualifying Facility to be scheduled in ways which allow Chugach to avoid costs;
 - v) Usefulness of the Qualifying Facility during emergencies;

**ELECTRONIC REPLICATION OF SHEET ON FILE WITH RCA
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10.3 Power Purchases From Qualifying Facilities (Continued)

- vi) The individual and aggregate value of energy and capacity from qualifying facilities on Chugach's electrical system; and
- vii) Impacts, if any, of capacity increments and lead times for construction of the Qualifying Facility.

To the extent that Chugach and the Qualifying Facility are unable to agree on rates and other terms and conditions of a power sales and purchase agreement covering purchases by Chugach from the Qualifying Facility those disputed terms and conditions may be brought before the Commission for decision pursuant to 3 AAC 50. 810.

10.4 Power Sales To Qualifying Facilities

Sales of electric power to a Qualifying Facility that supplies some of its electric power from its own Interconnected resources shall be at the applicable Standby and Buyback rate under Sheets 89.4 through 89.4.3. Where the Qualifying Facility does not supply any of its electric power from its own Interconnected resources it will be charged for power sold to the Qualifying Facility by Chugach at the applicable commercial rate commensurate with the size of the Interconnecting Qualifying Facility.

REIMBURSEMENT AGREEMENT

This Reimbursement Agreement (the “**Agreement**”), dated as of [DATE] (“**Effective Date**”), is entered into by and between the Municipality of Anchorage, Alaska (“**Interconnection Customer**”) and Chugach Electric Association, Inc. (“**Chugach**”). Capitalized terms used in this Reimbursement Agreement, unless defined herein, shall have the meanings ascribed to them in Chugach’s tariff (“**Tariff**”).

RECITALS

A. Chugach and Interconnection Customer have entered into discussions to interconnect a waste to energy project resource (the “**Resource**”) with Chugach’s electrical transmission and distribution system. Pursuant to the Tariff, the Interconnection Customer is responsible for full payment of the costs Chugach would not have incurred but for the Interconnection.

B. Pursuant to the Tariff, an integration study is required to further evaluate Interconnection Customer’s request for Interconnection of the Resource, and other studies may be required based on the results of the integration study.

C. At Interconnection Customer’s request and subject to the reimbursement and other provisions below, Chugach is willing to study and engage with Interconnection Customer to evaluate and, in accordance with the applicable provisions of the Tariff and in accordance with Good Utility Practice, allow for the Interconnection of the Resource (“Interconnection Services”) pursuant to an Interconnection Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

I. INFORMATION.

Interconnection Customer agrees to provide all information requested by Chugach that is reasonably necessary to assist in the determination of all facilities, terms, and conditions necessary for the provision of Interconnection Services for the Resource.

II. COST RESPONSIBILITY.

Interconnection Customer will be responsible for the full payment of the costs Chugach would not have incurred but for Interconnection Customer’s request that Chugach evaluate the Interconnection Services.

Interconnection Customer shall reimburse Chugach for actual cost (including any related costs or legal fees reasonably incurred for work completed on Chugach’s behalf) related to the

proposed Interconnection Services including, without limitation, studies necessary to (a) integrate the Resource into Chugach's electric system in a manner such that all operational and reliability criteria are met and (b) ensure safe, reliable operation of Chugach's electric system pursuant to the Tariff and in accordance with Good Utility Practice.

Notwithstanding the foregoing commitments, Chugach makes no binding commitment herein or otherwise regarding the costs, timing, or accuracy of the studies undertaken in relation to the consideration of the Interconnection Services. Subject to the prior sentence, a proposal for the scope of the studies necessary to analyze Chugach's provision of the Interconnection Services will be provided to Interconnection Customer in advance of initiation of the work associated with any such proposal.

As a prerequisite to Chugach initiating any work associated with the Interconnection Services, Interconnection Customer shall pay a deposit to Chugach equal to fifty percent (50%) of the good faith estimate of Chugach's costs related to the proposed Interconnection Services as set forth in the schedule of costs provided by Chugach.

Chugach shall provide Interconnection Customer with an invoice of such costs on a monthly basis as such costs are accrued and Interconnection Customer shall pay such invoices to Chugach within 20 days of Interconnection Customer's receipt of the invoice. Chugach shall hold the deposit collected until such time as expected remaining costs are less than or equal to the amount of the deposit, at which point Chugach shall deduct such funds being held on deposit to cover the invoice. If at any point thereafter the deposit is not sufficient to pay an invoice, Interconnection Customer shall remit payment to Chugach to cover any such invoice within 20 days of receipt of such invoice. Interconnection Customer shall be entitled to request documentation supporting such invoices only to the extent the information contained in such supporting documentation is not privileged or confidential to Chugach.

If Interconnection Customer notifies Chugach that it no longer plans to proceed with the request for Interconnection Services, Chugach shall promptly terminate work under this Reimbursement Agreement. Interconnection Customer shall be responsible for any costs incurred by Chugach (including costs incurred for work completed on Chugach's behalf) prior to the termination of such work.

Interconnection Customer shall be provided a copy of and have the right to use finalized work product resulting from Chugach's (including its consultants') work under this Reimbursement Agreement; provided, that Interconnection Customer shall have no right to work product consisting of information or materials that are privileged or proprietary to Chugach (or its consultants). Chugach shall schedule a Study Results Meeting including Interconnection Customer, Chugach and relevant Chugach consultants within 10 business days of delivering the Integration Study results to Interconnection Customer. At the Study Results Meeting the Parties will discuss the contents of the study results report and address Interconnection Customer questions and input relating to the study results. For clarity, no Party is required to disclose privileged or proprietary information to the other Party during the Study Results Meeting.

In the event of termination by Interconnection Customer, or completion of all work undertaken pursuant to this Reimbursement Agreement by Chugach, all Interconnection Customer funds on deposit or paid to Chugach which are in excess of Chugach's costs incurred, shall be promptly refunded to Interconnection Customer.

III. DISCLAIMER OF WARRANTY, LIMITATION OF LIABILITY

This Reimbursement Agreement is not intended, nor shall it be interpreted, to constitute agreement by Chugach to allow Interconnection Customer to connect the Resource to the Transmission or Distribution System, or agreement by Chugach to provide Interconnection of the Resource to the Transmission or Distribution System, to permit Parallel Operation of the Resource with Chugach's electrical system, or the provision by Chugach to Interconnection Customer or any third party of any type of Transmission or Distribution Service. Without limiting the generality of the foregoing, this Reimbursement Agreement is not intended, nor shall it be interpreted, to constitute agreement by the Chugach to provide any aspect of the Interconnection Services.

In no event will Chugach or any other person employed by Chugach (including subcontractors) be liable for indirect, special, incidental, punitive, or consequential damages of any kind including loss of profits, whether under this Reimbursement Agreement or otherwise, even if Chugach or other persons employed by Chugach have been advised of the possibility of such a loss. Nor shall Chugach or other persons employed by Chugach be liable for any delay in delivery or of the non-performance or delay in performance of Chugach's obligations under this Reimbursement Agreement.

IV. MISCELLANEOUS

Any notice or request made to or by either party regarding Reimbursement Agreement shall be made to the representative of the other party as indicated below.

Chugach

Chugach Electric Association, Inc.
P.O. Box 196300 560 1
Electron Drive
Anchorage, AK 99519
Attention: Arthur Miller
Phone: (907) 762-4758
E-mail: arthur_miller@chugachelectric.com

Interconnection Customer

Municipality of Anchorage
Mailing Address
Anchorage, AK 995__
Attention: Name, Title
Business Phone: (907) _____
E-mail:

No waiver by either party of one or more defaults by the other in performance of any of the provisions of this Reimbursement Agreement shall operate or be construed as a waiver of any other or further defaults, whether of a like or different character.

This Reimbursement Agreement or any part thereof may not be amended, modified, or waived other than by a writing signed by all parties hereto.

This Reimbursement Agreement shall be binding upon the parties hereto, their heirs, executors, administrators, successors, and assigns.

This Reimbursement Agreement shall be governed by the laws of the State of Alaska, notwithstanding any conflicts of laws principles.

[Signature page follows]

IN WITNESS WHEREOF, Chugach and Interconnection Customer have caused this Reimbursement Agreement to be executed by their respective corporate officers.

Chugach:

Signature

Printed Name

Title

Interconnection Customer:

Signature

Printed Name

Title

Confidentiality and Non-Disclosure Agreement

This Confidentiality and Non-Disclosure Agreement (the "**Agreement**"), dated as of [DATE] ("**Effective Date**"), is between Chugach Electric Association, Inc., an Alaska electric cooperative corporation ("**Chugach**"), and the Municipality of Anchorage, Alaska, a political subdivision organized under the laws of the State of Alaska ("**MOA**") (each, a "**Party**" and, collectively, the "**Parties**").

1. In connection with the Parties discussions concerning the terms and conditions under which Chugach may interconnect the MOA's waste to energy project (the "**Project**") to Chugach's electric transmission and distribution system and purchase the power output from the Project (the "**Purpose**"), either Party ("**Disclosing Party**") may disclose Confidential Information (as defined below) to the other Party ("**Recipient**"). Recipient shall use the Confidential Information solely for the Purpose and, subject to Section 3, shall not disclose such Confidential Information other than to its affiliates and its or their employees, officers, agents, directors, attorneys, contractors, and consultants (collectively, "**Representatives**") who: (a) need access to such Confidential Information for the Purpose; (b) are informed of its confidential nature; and (c) are bound by confidentiality obligations no less protective of the Confidential Information than the terms contained herein. Recipient shall safeguard the Confidential Information from unauthorized use, access, or disclosure using no less than a commercially reasonable degree of care. Recipient will be responsible for any breach of this Agreement caused by its Representatives.

2. "**Confidential Information**" means all non-public proprietary or confidential information of Disclosing Party, in oral, visual, written, electronic, or other tangible or intangible form, that, if disclosed in writing or other tangible form, is clearly labeled as "confidential," or if disclosed orally, is identified as confidential when disclosed and within 10 days thereafter, is summarized in writing and confirmed as confidential, and all notes, analyses, summaries, and other materials prepared by Recipient or any of its Representatives that contain, are based on, or otherwise reflect, to any degree, any of the foregoing ("**Notes**"); provided, however, that Confidential Information does not include any information that: (a) is or becomes generally available to the public other than as a result of Recipient's or its Representatives' material breach of this Agreement; (b) is obtained by Recipient or its Representatives on a non-confidential basis from a third-party that, to Recipient's knowledge, was not legally or contractually restricted from disclosing such information; (c) was in Recipient's or its Representatives' possession prior to Disclosing Party's disclosure hereunder; or (d) was or is independently developed by Recipient or its Representatives without using any Confidential Information. Confidential Information also includes: (x) the facts that the Parties are in discussions regarding the Purpose (or, without limitation, any termination of such discussions) and that Confidential Information has been disclosed; and (y) any terms, conditions, or arrangements discussed.

3. If Recipient or any of its Representatives is required by applicable law or a valid legal order to disclose any Confidential Information, Recipient shall notify Disclosing Party of such requirements so that Disclosing Party may seek, at Disclosing Party's expense, a protective order or other remedy, and Recipient shall reasonably assist Disclosing Party therewith. If Recipient remains legally compelled to make such disclosure, it shall: (a) only disclose that portion

of the Confidential Information that it is required to disclose; and (b) use reasonable efforts to ensure that such Confidential Information is afforded confidential treatment.

4. On Disclosing Party's request, Recipient shall, at its discretion, promptly return to Disclosing Party or destroy all Confidential Information in its and its Representatives' possession other than Notes, and destroy all Notes; provided, however, that Recipient may retain copies of Confidential Information that are stored on Recipient's IT backup and disaster recovery systems until the ordinary course deletion thereof. Recipient shall continue to be bound by the terms and conditions of this Agreement with respect to such retained Confidential Information.

5. This Agreement imposes no obligation on either Party to disclose any Confidential Information or to negotiate for, enter into, or otherwise pursue the Purpose. Disclosing Party makes no representation or warranty, expressed or implied, as to the accuracy or completeness of the Confidential Information, and will have no liability to Recipient or any other person relating to Recipient's use of any of the Confidential Information or any errors therein or omissions therefrom.

6. Disclosing Party retains its entire right, title, and interest in and to all Confidential Information, and no disclosure of Confidential Information hereunder will be construed as a license, assignment, or other transfer of any such right, title, and interest to Recipient or any other person.

7. The rights and obligations of the Parties under this Agreement expire 3 years after the Effective Date.

8. Recipient acknowledges and agrees that any breach of this Agreement will cause irreparable harm and injury to Disclosing Party for which money damages would be an inadequate remedy and that, in addition to remedies at law, Disclosing Party is entitled to equitable relief as a remedy for any such breach. Recipient waives any claim or defense that Disclosing Party has an adequate remedy at law in any such proceeding. Nothing herein shall limit the equitable or available remedies at law for Disclosing Party.

9. This Agreement and all matters relating hereto are governed by, and construed in accordance with, the laws of the State of Alaska, without regard to the conflict of laws provisions of such State. Any legal suit, action, or proceeding relating to this Agreement must be instituted in the state courts located in Anchorage, Alaska. Each Party irrevocably submits to the exclusive jurisdiction of such courts in any such suit, action, or proceeding.

10. All notices must be in writing and addressed to the relevant Party at its address set forth in the preamble (or to such other address as such Party specifies in accordance with this Section 10). All notices must be personally delivered or sent prepaid by nationally recognized courier or certified or registered mail, return receipt requested, and are effective upon actual receipt.

11. This Agreement constitutes the entire agreement of the Parties with respect to its subject matter, and supersedes all prior and contemporaneous understandings, agreements, representations, and warranties, whether written or oral, with respect to such subject matter. This Agreement may only be amended, modified, waived, or supplemented by an agreement in writing signed by both Parties.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the Effective Date hereof.

Chugach Electric Association, Inc.

Municipality of Anchorage

By _____

By _____

Name:

Name:

Title:

Title:

APPENDIX F

Example of RFP



Solid Waste Authority of Palm Beach County

7501 North Jog Road • West Palm Beach, FL 33412

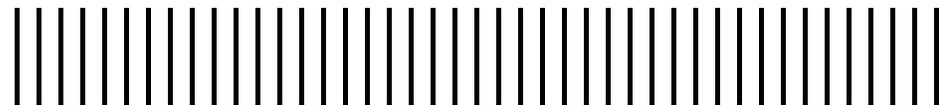
Request for Proposals

No.11-201/SLB

Design, Build, and Operation of a New Waste-to-Energy Facility

Volume 1 of 3 – Request for
Proposals

September 2010



Prepared By:

Malcolm Pirnie, Inc.

3582056

**MALCOLM
PIRNIÉ**

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- Volume 3: Design Criteria Package

Abbreviated Terms and Definitions

Capitalized and abbreviated terms contained in this report are defined below. The terms listed below appear in multiple section of this document, defined upon initial appearance thus defined here for reference thereafter.

ACFM	Actual Cubic Feet Per Minute
ASME	American Society of Mechanical Engineers
Btu	British Thermal Unit
B&W	Babcock and Wilcox Power Generation Group, Inc.
CF	Cubic Feet
CFM	Cubic Feet Per Minute
CO	Carbon Monoxide
CO₂	Carbon Dioxide
CMAA	Construction Managers Association of America
CMMS	Computerized Maintenance Management Systems
DCS	Distributed Control System
EDST	Eastern Daylight Savings Time
FPL	Florida Power and Light
Gal	Gallon
GPD	Gallons Per Day
GPM	Gallons Per Minute
Hg	Mercury
HHW	Household Hazardous Waste
Hz	Hertz
ISWM Plan	Integrated Solid Waste Management Plan
KV	Kilovolt
KWh	Kilowatt Hour
MCR	Maximum Continuous Rating
mgd	Million Gallons Per Day
MRF	Recovered Materials Processing Facility
MSW	Municipal Solid Waste
MW	Megawatt
MWC	Municipal Waste Combustion

M/W/SBE	Minority/Woman/Small Business Enterprise
NCRRF	North County Resource Recovery Facility
NO_x	Nitrogen Oxide
O&M	Operation and Maintenance
PAHS	Polycyclic Aromatic Hydrocarbons
PBREF	Palm Beach Renewable Energy Facility
PBRRC	Palm Beach Resource Recovery Corporation
PPA	Power Purchase Agreement
PPSA	Power Plant Siting Act
PSIG or psig	Pounds Per Square Inch Gauge
PSD	Prevention of Significant Deterioration
RDF	Refuse Derived Fuel
RFP	Request for Proposals
RFQ	Request for Qualifications
RPM	Revolutions Per Minute
SCFM	Standard Cubic Feet Per Minute
SOQ	Statement of Qualifications
SO₂	Sulfur Dioxide
SO_x	Sulfur Oxide
tpd	Tons Per Day
VOC	Volatile Organic Compounds
WTE	Waste-to-Energy

The terms listed below appear in multiple sections of this document and are thus defined here for reference. Other terms are defined in the Agreements.

Acceptance Testing or Compliance testing means the procedure designed to examine the New WTE Facility's full range of operations, from waste delivery, through combustion, energy generation, metals recovery, and ash disposal to ensure that the New WTE Facility's components were designed, fabricated and installed properly and can function within their normal operating ranges under normal operation conditions and meet performance guarantees.

Addenda/Addendum means a written addition to the RFP provided to all Qualified Respondents.

Aesthetic Conceptual Design means the plan provided Proposers which gives guidance and design considerations for the aesthetic treatments the Authority would like incorporated into Proposals.

Agreements means the collective of the Design/Build Contract and Operation and Maintenance Agreement included in Volume 2 of this RFP.

Authority means the Solid Waste Authority of Palm Beach County, Florida.

Authority Governing Board means the County Commission of Palm Beach County serving as the governing board of the Authority.

Award of Contract means the approval by the Authority Governing Board of the Selected Proposer to execute the Agreements with the Authority.

Combustion Stoker Manufacturer means the firm that will be the designer and supplier of the combustion stoker grate system.

Commercial Operation means the condition when the New WTE Facility has passed Acceptance Testing and is operating within its normal operating ranges under normal operating conditions.

Commercial Operation Date shall have the meaning as set forth in GC-72 of Exhibit 2 to the Design/Build Contract.

Conditions of Certification means the licensing provisos or restrictions established by the State of Florida for construction and operation of the New WTE Facility.

Construction Company or Construction Team Member means the Proposal Team Member which will be responsible for the construction of the New WTE Facility.

Consulting Engineer means the design criteria professional working under direct contract to the Authority responsible for preparing the Design Criteria Package and supporting the Authority in the development and technical review of the RFP.

County means Palm Beach County, Florida.

Design/Build Contract means the agreement between the Authority and Selected Proposer covering the design, construction, commission, start up and Acceptance Testing of the New WTE Facility which is included in Volume 2 of this RFP.

Design Criteria means the set of minimum technical requirements for the equipment, systems and other components for construction of the New WTE Facility as provided in Volume 3 in this RFP.

Designer or Design Team Member means the Proposer's Project Team Member responsible for the design of the New WTE Facility.

Effective Date means the date set forth in each of the Agreements.

Evaluation Committee means those persons identified by the Authority to evaluate the Proposals.

Force Majeure means an unexpected or uncontrollable event as defined in the Agreements.

Fund Drawdown Schedule means the proposed maximum cash flow schedule specified in Proposal Form 11.

Governing Board means the Governing Board of the Authority composed of all members of the Palm Beach County Commission.

Landfill Depletion Model means the Authority's long range planning tool for projecting the remaining life of its existing landfills.

Lead Negotiator means the individual empowered to represent each Qualified Respondent during the RFP phase.

LOW refers to "Low Load" capability and means the lowest point each municipal waste combustion unit can safely operate for extended periods, without supplemental fuel firing.

Major Technology Supplier means the manufacturers of the refuse crane, boiler, emission control systems, turbine generator and air cooled condenser equipment identified on Proposal Form 8.

Mass Burn means the combustion of municipal solid waste with minimum prior processing or sorting.

M/W/SBE Plan means the entirety of Proposal Forms 4, 5, and 6 which reflect the percentage of M/W/SBE participation pledged by Proposers and/or proof of the “good faith” efforts expended attempting to enlist potential participants.

New WTE Facility means the Authority’s new 3,000 tpd mass burn waste-to-energy facility to be located on a site in the Energy Park immediately north of the Authority’s existing PBREF No. 1 and will be named PBREF No.2. The New WTE Facility’s design, construction, and operation are the subjects of this RFP.

North County Resource Recovery Facility (NCRRF) is also referred to as PBREF No. 1, as defined herein.

Notice to Proceed (NTP) means the official written documentation provided to the Selected Proposer directing the commencement of such activities defined in the NTP.

Operation and Maintenance Agreement means agreement between Authority and Selected Proposer covering the operation and maintenance of the New WTE Facility after the Commercial Operation Date which is included in Volume 2 of this RFP.

Operator means the entity which will be responsible for the long-term operation and maintenance of the New WTE Facility.

Palm Beach Renewable Energy Park (Energy Park) means the Authority site as defined in Schedule 10 of the Operation and Maintenance Agreement.

Palm Beach Renewable Energy Facility Number 1 (PBREF No.1) means the Authority’s existing 1,800 tpd RDF fired (2,000 tpd MSW) WTE facility located in the Energy Park. It is also referred to as the North County Resource Recovery Facility or NCRRF.

Palm Beach Renewable Energy Facility Number 2 (PBREF No.2) means the New WTE Facility.

Project means the design, construction, start-up, Acceptance Testing and long-term operation and maintenance services to the Authority for the New WTE Facility, including, but not limited to, all professional design services and all labor, materials, and equipment used or incorporated in such design, construction and operation.

Project Guarantor means the Proposal Team Member financially responsible for guaranteeing the performance of the Selected Proposer, and all sub-contractors and suppliers, pursuant to the Agreements. The Project Guarantor can be either the Selected

Proposer or a third party who executes an agreement with the Authority guaranteeing the entire performance of the Selected Proposer.

Project Site means the area located immediately north of the Authority's existing PBREF No.1, as defined in Exhibit 16 of the Design/Build Contract. Access to the Project Site is provided via Jog Road from 45th Street and Bee Line Highway.

Proposal means the document received in response to this RFP.

Proposal Team (Team Member) means the Proposer, Designer, Construction Company, Operator, Combustion Stoker Manufacturer; and Project Guarantor.

Proposer means each of the Qualified Respondents submitting a response to this RFP.

Public Records Law means Chapter 119, Florida Statutes, regarding public records.

Qualified Respondents means those Respondents deemed qualified by the Authority through the RFQ process to submit a Proposal in response to the RFP.

Reference Facilities means those waste-to-energy facilities offered by the Qualified Respondents to demonstrate its experience in one or more of the areas of waste handling, combustion technology, emission control, design, construction or operation.

Request for Qualifications (RFQ) means RFQ No. 09-230/SLB Design, Build and Operation of a New Waste-to-Energy Facility, issued in December, 2008.

Statement of Qualifications (SOQ) means the responses to the RFQ.

Selected Respondent or Selected Proposer means the Qualified Respondent ultimately recommended for selection by the Evaluation Committee through the RFP process and approved by the Authority Governing Board to enter into the Agreements with Authority.

Team Member means each firm that is part of the Proposal Team.

1. Overview

1.1. Summary

The Solid Waste Authority of Palm Beach County (Authority) is seeking to contract with a Selected Proposer capable of providing design, construction, start-up, Acceptance Testing, and long-term operation and maintenance of a new mass burn waste-to-energy facility (New WTE Facility) that will process approximately 3,000 tons per day (tpd) of municipal solid waste (MSW). The New WTE Facility will be officially known as Palm Beach Renewable Energy Facility No. 2 (PBREF No. 2). Other project development tasks including siting, environmental permitting, and financing will primarily be the responsibility of the Authority. The New WTE Facility will be located on a site immediately north of the Authority's existing Palm Beach Renewable Energy Facility No. 1 (PBREF No.1), a refuse derived fuel WTE facility.

All proposals (Proposals) submitted in response to this Request for Proposals (RFP) shall be evaluated by the Evaluation Committee utilizing the criteria specified in Section 4 of this RFP.

1.2. Purpose of Solicitation

The Authority intends to develop a New WTE Facility with a nominal capacity of 3,000 tons per day to be operational in 2015 or earlier. The Authority is looking for cost effective, innovative solutions which will provide reliable and efficient long-term MSW disposal capacity. With this RFP, the Authority is requesting Proposals from Qualified Respondents that have demonstrated qualifications and capabilities to design, build, and operate the New WTE Facility. The Proposals submitted shall address all items listed in this solicitation. Failure to provide all requested items may affect the Evaluation Committee's evaluation of a Proposer's submittal and may be sufficient cause for rejection of the Proposal.

1.3. Project Location

The New WTE Facility will be located near 6501 Jog Road, West Palm Beach. Access to the Project Site is from Jog Road via 45th Street, State Road 702, a two-lane road at the southern boundary of the Palm Beach Renewable Energy Park (Energy Park), and Bee Line Highway, State Road 710, a four-lane divided highway, at the northern boundary of the Energy Park. The Project Site is buffered by developed and undeveloped land owned by the Authority to the west, north, and east. The PBREF No.1 borders the New WTE Facility site to the south.

1.4. Project Background

Palm Beach County, Florida (County) is the third most populous county in Florida. The Bureau of Economic and Business Research of the University of Florida currently estimates the County population at 1,294,654 and projects it to increase to 1,729,500 by 2030.

The construction of the New WTE Facility will complement services that are already being provided by the existing PBREF No.1, a 2,000 tpd Municipal Solid Waste (MSW) (1,800 tpd RDF) WTE facility owned by the Authority and operated by the Palm Beach Resource Recovery Corporation (PBRRC), a subsidiary of B&W. The New WTE Facility would increase the Authority's overall waste processing capacity up to 5,000 tpd of MSW.

Construction of the New WTE Facility addresses the principal objectives of the Authority's 2006 Integrated Solid Waste Management Plan (ISWM Plan) to develop a system of programs and facilities for effectively and economically managing solid waste through source reduction, recycling, composting, combustion, and landfilling. The ISWM Plan calls for expanded combustion capacity in order to extend the life of the existing landfill beyond its currently anticipated lifespan. The complete ISWM Plan can be found on the Authority's website: <http://www.swa.org/pdf/MasterPlan.pdf>.

1.5. The Solid Waste Authority of Palm Beach County

The Authority is the governmental agency responsible for providing an economical and environmentally-sound solid waste management system for Palm Beach County, Florida. The Authority was established as an independent special taxing district under the Palm Beach County Solid Waste Act, Chapter 75-473, Laws of Florida, Special Acts of 1975, as amended and supplemented (Act). The Act was amended in 1991, converting the Authority to a dependent special district, with the County Commissioners of Palm Beach County serving as the Authority Governing Board. In 2001, the Special Act was "codified", incorporating all past amendment into a new "Special Act", abolishing all past acts such that the Authority is now operating under "Chapter 2001-331 Laws of Florida".

Among other specific purposes and powers, the Act gives the Authority the power to construct and operate solid waste disposal facilities, including resource recovery facilities. The Authority has the responsibility for collection of solid waste in the unincorporated areas of the County, as well as responsibility for recycling and solid waste disposal County-wide.

2. Procurement Process, Schedule, Terms and Conditions

2.1. Procurement Process and Timetable

A summary schedule of the major activities associated with the Authority’s procurement process for the development of the New WTE Facility from issuance of this RFP through contract award, is presented in Table 2-1. The Authority, at its sole discretion, may modify the schedule as it deems appropriate to the Project. The Authority will notify Proposers of any changes in association with submittal dates by written addendum in accordance with Section 2.3, Communications Protocol.

**Table 2-1:
Procurement Timetable**

NO.	ACTIVITY	DATE
1	Issue RFP to Qualified Respondents	9/27/2010
2	Last Date for Authority to Receive Questions on RFP	10/25/2010
4	Last Date for Authority to Issue Addendum in Response to Final Questions	11/8/2010
5	Proposals Due	12/15/2010
6	Proposer Presentations to Evaluation Committee	Week of 2/21/2011
7	Evaluation Committee Reviews and Ranks Non-Cost Proposals	Week of 2/21/2011
8	Evaluation Committee Reviews Cost Proposals And Makes Award Recommendation to Authority Governing Board	Week of 3/14/2011
9	Authority Governing Board Awards Contracts	April 2011

2.2. Proposal Submission, Time, Date, and Place

The Authority must receive all Proposals no later than 3 P.M., local time, on the date established in Section 2.1, Procurement Process and Timetable, at the following address:

Ms. Sandra L. Brady, CPPB
Director of Purchasing Services
Solid Waste Authority of Palm Beach County
Attn: Purchasing Services
7501 North Jog Road
West Palm Beach, FL 33412
Fax: (561) 640-3400
sbrady@swa.org

The Authority cautions Proposers to assure actual delivery of mailed or hand-delivered Proposals directly to the Authority's Purchasing Services office at 7501 North Jog Road in West Palm Beach, Florida, prior to the deadline set for receiving Proposal submittals. If the Proposal is hand delivered, deposit it with the Purchasing Specialist to the left of the front desk in the Administration Building. Telephone confirmation of timely receipt of the qualification may be made by calling (561) 640-4000, before the established deadline. All Proposals received after the established deadline will be rejected and returned unopened to the Proposer.

Proposals shall be submitted in two separate, sealed packages: One Non-Cost Proposal package and one Cost Proposal package. These packages shall be submitted in accordance with the requirements of Section 3.1 of this RFP.

2.3. Communications Protocol

All communications concerning this procurement shall be directed to the Director of Purchasing identified in Section 2.2 above, in writing. All questions shall be submitted no later than the date specified in Section 2.1, Procurement Process and Timetable. Communications and questions will be made available to all Qualified Respondents. Unless extended by Addendum, a final response to questions will be issued by the Authority no later than the date identified in Section 2.1, Procurement Process and Timetable.

2.3.1. Cone of Silence

Proposers are advised that a Cone of Silence is in effect that prohibits a Proposer or any person representing the Proposer from communicating with any member of the Solid Waste Authority Governing Board, their staff, any Authority employee authorized to act on behalf of the Authority to award the contract under this RFP or any member of the committee authorized to evaluate the proposals.

The Cone of Silence will continue in effect until the Governing Board awards the contract, rejects all proposals or otherwise takes action to end the solicitation.

Proposers may contact Board members, their staff or employees through written communication, only. In addition, proposers may only communicate with members of the Evaluation Committee in writing and by submitting such written communication to the Director of Purchasing as more fully set forth in Section 2.2 of this RFP. There shall be no direct communication with any member of the Evaluation Committee by any Proposer or any of their representatives. Violation of this Cone of Silence by a Proposer or any of their representatives in connection with this proposal may result in the rejection or disqualification of the proposal.

2.4. RFP Review, Evaluation and Selection Process

2.4.1. Presentation by Proposers

Proposer shall make a presentation of its Proposal to the Evaluation Committee on the date established in Section 2.1, Procurement Process and Timetable. Each presentation will be scheduled for half an hour for each Proposer's presentation plus one and one half hours for questions and answers, for a total presentation time not to exceed two hours for each Proposer. The presentation order, time, and location will be communicated to all Proposers after the receipt of Proposals.

Presentations should be specific to this Proposal and not a general sales presentation. Presentations should focus on how the Proposal responds specifically to the evaluation criteria specified in Section 4, Evaluation Procedure and Criteria. **Information not contained in the Non-Cost Proposal, Volumes 1 and 2 (including, without limitation, price information contained in the Cost Proposal), should not be presented.**

2.4.2. Evaluation of Proposals

The Evaluation Committee will review and rank the Non-Cost Proposals using the procedures and criteria described in Section 4, Evaluation Procedure and Criteria. After consideration of the results of an evaluation of Cost Proposals, the Evaluation Committee shall make an award recommendation to the Authority Governing Board. The Authority Governing Board may accept or modify the recommendation and authorize execution of Agreements with one of the Proposers or may reject all Proposals.

If the Authority Governing Board authorizes execution of the Agreements, the Authority staff will work with the Selected Proposer to finalize documents and schedule a closing.

2.5. Rights of the Authority

This RFP constitutes an invitation for Qualified Respondents to submit Proposals to the Authority. This RFP does not obligate the Authority to procure or contract for any of the

scopes of services set forth in this RFP. The Authority reserves and holds at its sole discretion, various rights and options under Florida law, including without limitation, the following:

- a) To prepare and issue addenda to the RFP prior to the execution of Agreements that may expand, restrict, or cancel any portion or all work described in the RFP without obligation to commence a new procurement process or issue a modified or amended RFP.
- b) To receive questions from Qualified Respondents and to provide such answers in writing as it deems appropriate.
- c) To waive any informalities, technicalities or irregularities in the Proposals.
- d) To reject any and all Proposals.
- e) To change the date for receipt of Proposals or any deadlines and dates specified in the RFP.
- f) To change the procurement and/or selection process prior to receipt of Proposals.
- g) To conduct investigations with respect to the information provided by each Proposer and to request additional information (either in writing or in presentations and interviews) to support such Proposer's responses and submittals.
- h) To visit facilities referenced in the Proposer's Proposal at any time or times during the procurement process.
- i) To seek clarification of Proposals from such Proposer either in writing or in presentations and interviews.
- j) To cancel the RFP with or without the substitution of another RFP.
- k) To negotiate price, only, with any Proposer as a part of the Board's selection process.

2.6. Activities of the Authority during Procurement Period

2.6.1. Power Purchase and Interconnection Agreements

The Authority has held preliminary discussions with Florida Power and Light (FPL) to determine its interest in providing a market for the electricity generated by the New WTE Facility and in interconnecting the New WTE Facility to the FPL transmission system. Additional discussion with FPL and other potential power purchasers may take place prior to contract award. The Authority makes no representation as to what future electric

interconnection or power sales structure will be in place during the life of the Agreements.

2.6.2. Preparation of Environmental Permit Applications

The Authority shall be responsible for obtaining the environmental permits and licenses necessary for the construction and operation of the New WTE Facility including certification under the Florida Power Plant Siting Act (PPSA) and Prevention of Significant Deterioration (PSD) Program. Qualified Respondents may be asked to supply the Authority with specifications and data necessary to complete these permit applications and to respond to requests from permitting agencies.

The Selected Respondent, with the assistance of the Authority, will be required to apply for and obtain all other permits, such as building permits, needed for construction and/or operation.

Exhibits 9 and 10 to the Design/Build Contract provide a summary of the permits the Authority and Selected Respondent will be responsible to obtain.

2.7. Costs Incurred by Proposers

All expenses incurred by the Proposers in preparation and submission of Proposals to the Authority, site visits, interviews or any other work performed in connection therewith shall be borne by the Proposers and shall not be reimbursed by the Authority.

2.8. Disclaimer of RFP Accuracy

The Authority assumes no responsibility for the completeness or the accuracy of the information presented in this RFP, or otherwise distributed or made available during this procurement process. Without limiting the generality of the foregoing, the Authority will not be bound by or responsible for any explanation or interpretation of the RFP documents other than those given in written addenda. In no event shall Proposers rely on any oral statement by the Authority, its staff, agents, advisors, or consultants.

2.9. Public Records Act/Information Disclosure to Third Parties

Upon posting of recommendation of the Evaluation Committee Rankings or ten (10) days after opening the Non-Cost and Cost Proposal submissions, whichever is earlier, any material submitted in response to this RFP will become “public record” and shall be subject to public disclosure consistent with Chapter 119.071(b)1.a., Florida Statutes (Public Records Law). As such, the Authority shall not in any way be liable or responsible for the disclosure or result of disclosure of any submissions or portions thereof submitted in response to the RFP.

The law provides for certain exclusions to disclosure. If the Proposer believes that some information contained in their Proposal is exempt from disclosure, the Proposer is instructed to label such information as confidential, specify the pertinent section of the public record law that justifies nondisclosure, and request in writing the Authority keep such information confidential and free from disclosure. The Authority reserves the right to make any final determination of the applicability of the public records law. In addition, all Proposals received by the Proposal submission date will become the property of the Authority and will not be returned.

2.10. Decisions and Protests

The function of the Evaluation Committee in this RFP process is to review Proposals and make an award recommendation to the Authority Governing Board. An award recommendation will be posted the next business day for review by interested parties at Purchasing Services for a period of five (5) calendar days. Failure to file a protest with the Director of Purchasing Services within the time prescribed in the SWA's Purchasing Manual, Section 10, shall constitute a waiver of proceedings. It is the Proposer's sole responsibility to ascertain the time of posting of the award recommendation. This may be accomplished by telephone, FAX, E-Mail or other means deemed timely by the Proposer. A final award decision will be made by the Authority Governing Board at a regularly scheduled public meeting at which time any party may be heard. A decision by the Authority Governing Board shall be considered final. Any aggrieved party may apply in the Circuit Court of Palm Beach County, Florida, within thirty (30) days of the rendition of such decision, for review by Writ of Certiorari in accordance with the applicable Florida Appellate Rules. It is anticipated that the Agreements included in this RFP will be executed by the Selected Proposer and Authority upon contract award by the Authority Governing Board and submission of required insurance certificates, bonds and Guarantee Agreements.

2.11. Public Entity Crime

Pursuant to Florida Statute 287.133, as amended: A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in s. 287.017 for CATEGORY TWO for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

2.12. Collusive Agreements

The Proposer is required to submit Proposal Form 3 stipulating agreement to the following: "Proposer certifies that his proposal is made without previous understanding,

agreement, or connection with any person, firm, or corporation making a Proposal for the same item(s) and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action.”

3. Proposal Requirements

3.1. Proposal Submission

The Proposals are due on the time and date and at the place all as stated in Section 2.2 of this RFP.

3.1.1. Non-Cost Proposal - Proposal Volumes I and II

Proposers shall submit one (1) original and ten (10) photocopied sets, and two (2) Compact Discs (CD) or DVDs each disc containing all documents in Adobe PDF electronic format along with required milestone schedule in Microsoft Project 2007 or Primavera 6.0 or later format of the Non-Cost Proposal, Proposal Volumes I and II, as described in Section 3.2. The complete original shall be submitted in a separate sealed envelope identifying it as the original document.

The Non-Cost Proposal, Proposal Volumes I and II, (original, copies, and CD or DVD) should be submitted in a sealed container. It shall be clearly labeled on the outside with the Proposer's name, address, telephone number, and shall be identified as follows: Proposal for the Design, Build, and Operation of a New WTE Facility, Request for Proposals No. RFP 11-201/SLB, Non-Cost Proposal Volumes I and II.

3.1.2. Cost Proposal - Proposal Volume III

Proposers shall submit in a separate sealed envelope one (1) original, one (1) photocopy, and two (2) Compact Discs (CD) or DVDs each disc containing all documents in Adobe PDF electronic format of the Cost Proposal, Proposal Volume III, as described in Section 3.2 and a copy of the Cost Proposal Model fully completed in Microsoft Excel 2007 format.

The Cost Proposal (original, copy, and CD or DVD) should be clearly labeled on the outside with the Proposer's name, address, telephone number, and shall be identified as follows: Proposal for the Design, Build, and Operation of a New WTE Facility, Request for Proposals No. RFP 11-201/SLB, Cost Proposal Volume III.

3.1.3. Proposal Formatting

Original and photocopies shall be on 8½" by 11" paper and bound into spiral bound or three-ring binder volumes. Oversize drawings shall be included as Adobe PDF files on CD or DVD and reproduced on 11" by 17" paper and bound into the original, copies and CD or DVD. Proposal pages shall be numbered. The minimum font size for all text sections of the Proposal shall be eleven-point (11 pt). The minimum font size for tables

saved as Microsoft Project or Primavera formatted files shall be eight-point (8 pt). No marketing brochures should be included in the Proposals.

Any Proposal received after the designated time will be rejected by the Authority and returned unopened to the Proposer. Failure by the Proposer to provide the above information on the outside of the envelope may also result in the rejection of the Proposer's Proposal. The Proposer may submit the Proposal in person or by mail.

3.2. Organization of Proposals

The Proposals shall be organized as shown on Table 3-1.

**Table 3-1:
Proposal Table of Contents**

No.	PROPOSAL SECTION
Volume I	
i	Title Page
ii	Table of Contents
1	Executive Summary
2	General Information
2.1	Form 1 – Transmittal Letter
2.1.1	Attachment 1-A – Certification of Authorization
2.1.2	Attachment 1-B – Affidavit from the Proposer
2.1.3	Attachment 1-C – Affidavit from the Design Team Member
2.1.4	Attachment 1-D – Affidavit from the Construction Team Member
2.1.5	Attachment 1-E – Affidavit from the Project Guarantor
2.1.6	Attachment 1-F – Affidavit from the Combustion Stoker Manufacturer
2.1.7	Attachment 1-G – Affidavit from Bonding or Insurance Company
2.2	Form 2 – Licenses
2.2.1	Professional Engineer License
2.2.2	Building Contractor License
2.2.3	Domestic Businesses Registration (if applicable)

No.	PROPOSAL SECTION
2.3	Form 3 – Non-Collusion Affidavit
2.4	Proposal Team (including Project organization chart)
3	Other Capabilities
3.1	Local and Minority/Woman/Small Business Enterprise (M/W/SBE) Participation
3.1.1	Form 4 - Participation of M/W/SBE Firms
3.1.2	Form 5 - Letter of Intent to Perform as a M/W/SBE Subcontractor/Supplier
3.1.3	Form 6 - Statement of Good Faith Efforts
3.2	Bonds
3.3	Insurance
3.4	Project Guarantee
4	Experience
Volume II	
i	Title Page
ii	Table of Contents
5	Technical Design and Management Approach
5.1	Overall Design
5.2	Aesthetics/Architectural Treatment
5.3	Energy Efficiency/Sustainability
5.4	Process Systems (including Form 7 – Reference Facilities, if applicable)
5.4.1	Drawings
5.4.2	Major Equipment Descriptions and Specifications (including Form 8 – Detailed Facility and Equipment Data)
5.4.3	Mass and Energy Balance Diagrams
5.4.4	Electrical, Process and Instrumentation Diagrams
5.4.5	Emission Control Systems (including Form 7 – Reference Facilities, if applicable)

No.	PROPOSAL SECTION
5.5	Plan and Development Schedule (including Form 9 – Performance Guarantees Summary)
5.6	Commissioning, Start Up, and Acceptance Testing Plan
5.7	Operation, Maintenance, and Management Plan (including organizational charts)
Volume III	
i	Title Page
ii	Table of Contents
6	Cost Proposal
6.1	Cost Proposal Narrative
6.2	Form 10 – Cost Proposal Summary
6.3	Form 11 – Fund Drawdown Schedule

3.3. Contents of Proposal

The Proposer shall provide the appropriate information in accordance with the content requirements set forth in the following sections and with the format requirements set forth on Table 3-1 above. Proposers are advised that, if selected, information contained in portions of Proposal will be included in or integrated into the Agreements.

3.3.1. Title Page (*Proposal Section i*)

The Title Page shall have the name of the Proposal and the RFP Number. The page shall indicate clearly the name of the Proposer submitting the Proposal and the name, address, phone number, fax number and e-mail address of the Proposer’s designated contact person. The Proposer’s designated contact person is the individual who shall be the main point of contact for the Authority to communicate with regarding this procurement. If the individual is different than designated in Proposer’s Statements of Qualification (SOQ), then provide Qualification Form 3 from the RFQ in Section 2.4 – Proposal Team. The Title Page on each of the volumes of the Proposal shall be numbered to match the contents.

3.3.2. Table of Contents (*Proposal Section ii*)

The Table of Contents shall follow the numbering format shown on Table 3-1. A complete Table of Contents shall be included in each volume of the Proposal.

3.3.3. Executive Summary (*Proposal Volume I, Section 1*)

The Executive Summary shall be a non-technical summary that highlights the key features of the Proposer's approach to the project in no more than ten (10) pages of text plus the architectural renderings. Where the Proposer includes more than one firm, this section shall include a brief description of the role of each of the Team Members on this project. Relevant experience of each Team Member should be highlighted.

The Executive Summary shall note what features of the Proposer's technical and implementation approach are particularly advantageous to the Authority. Projects where the Proposer has successfully implemented similar approaches should be cited. Two architectural renderings of the Proposed New WTE Facility east elevation shall be provided. The first shall be based upon the Design Criteria in Volume III of this RFP. The second shall illustrate the approach proposed for using the Aesthetic Treatment Allowance specified in Table 3-2, Cost Proposal Assumptions, to improve on the base design.

3.3.4. General Information (*Proposal Volume I, Section 2*)

3.3.4.1. Form 1 – Transmittal Letter (*Proposal Volume I, Section 2.1*)

Proposer shall submit a completed Proposal Form 1 – Transmittal Letter acknowledging, among other things, that the Proposer has completely reviewed, understands, and agrees to be bound by the requirements of this RFP. The Proposal Transmittal Letter shall be signed by a representative of the Proposer who is empowered to sign it and to commit the Proposer to the obligations contained in the Proposal.

The Certificate of Authorization, Attachment 1-A to Proposal Form 1, shall be submitted with the Proposal. If the Proposer is a partnership, the Proposal shall be signed by one or more of the general partners. If the Proposer is a corporation, an authorized officer shall sign his or her name and indicate his or her title beneath the full corporate name. Anyone signing the Proposal as an agent shall file with it legal evidence of his or her authority to execute such Proposal.

Attachment 1-B to Proposal Form 1 shall be the Affidavit from the Proposer. Attachment 1-C to Proposal Form 1 shall be the Affidavit from the Design Team Member. Attachment 1-D to Proposal Form 1 shall be the Affidavit from the Construction Team Member. Attachment 1-E to Proposal Form 1 shall be the Affidavit from the Project Guarantor. Attachment 1-F to Proposal Form 1 shall be the Affidavit from the Combustion Stoker Manufacturer. Attachment 1-G to Proposal Form 1 shall be the Affidavit from the Bonding or Insurance Company.

3.3.4.2. Form 2 – Licenses (*Proposal Volume I, Section 2.2*)

Proposer shall list on Proposal Form 2 – Licenses those Proposal Team Member(s) which hold Florida licenses and certificates of registration. A copy of the licenses and certificates of registrations shall be attached.

The following licenses and certificates of registration are required:

- A copy of the State of Florida Professional Engineer Certificate of Registration for the Design Team Member;
- General Contractor license(s) for the Construction Team Member; and
- If Team Members operate as domestic businesses in Florida, provide verification that each is registered with the State of Florida’s Office of the Secretary of State.

A Proposal without these licenses and certificates WILL BE JUDGED NON-RESPONSIVE by the Authority.

3.3.4.3. Form 3 – Non-Collusion Affidavit (*Proposal Volume I, Section 2.3*)

Proposer shall provide a completed Proposal Form 3 – Non-Collusion Affidavit as described in Section 2.12 of this RFP.

3.3.4.4. Proposal Team (*Proposal Volume I, Section 2.4*)

Proposer shall identify the single-entity responsibility for the project. The history, ownership, organization, and background of the Proposer shall be provided with an emphasis on the experience of the Proposer in the field of waste-to-energy. The Proposer shall identify the Team Members that will undertake the lead roles for the design, construction, and operation of the New WTE Facility and the contractual relationships between the Proposer, Team Members and major suppliers and subcontractors. Proposed Major Technology Suppliers (refuse crane, boiler, emission control systems, turbine generator and air cooled condenser equipment manufacturers) shall be identified on Proposal Form 8.

Team Members shall not be changed without the prior written permission of the Authority after submission of the Proposal. If there is a change in composition of Team Members from that submitted with the Proposer’s SOQ, then updated qualifications as specified in the RFQ shall be submitted for the changed party by the date established for receipt of last questions in Section 2.1 of this RFP. For example, if a Proposer met the qualification requirement for the Construction Company on its own and now wants to use a third party to act as the Construction Company for the New WTE Facility, the Proposer must submit qualifications on the new Team Member. A Project organization chart shall be included showing the relationship between the parties composing the Proposal Team and Major Technology Suppliers.

3.3.5. Other Capabilities (*Proposal Volume I, Section 3*)

3.3.5.1. Local and Minority/Woman/Small Business Enterprise (M/W/SBE) Participation (*Proposal Volume I, Section 3.1*)

The Authority Governing Board seeks to have development of the New WTE Facility generate the maximum positive impact on the local economy including the employment of the maximum number of local residents during all phases of the project's life. The Authority asks Proposers to specify the minimum percentage of unskilled and skilled employment hours the Proposer will agree to use local residents during construction of the facility, average hourly rates for both unskilled and skilled employment hours the Proposer will agree to pay local residents during construction of the facility; and an enforceable implementation plan. Each Proposer shall submit a plan detailing its approach to achieving its local hiring commitment identified in Proposal Form 9, Performance Guarantees Summary and its enforceable plan for implementation through all phases of the project. The plan should include detail showing the actions Proposer will take to identify, attract, train, and employ residents of Palm Beach County, Florida. In addition, the detailed plan must clearly describe or identify which job titles, classes, or categories of workers are included in Proposer's calculations for the unskilled workforce and which are included in the skilled workforce consistent with the skilled/unskilled definitions provided in GC-51. The plan should, also, describe how Proposer plans to track, and demonstrate to the Authority, Proposer's compliance with Proposer's local hiring commitment. If Proposer provides benefits to its employees, Proposer may wish, but is not required, to describe such benefits in this section of its response. The submission of a Local Hiring Plan is required. **A Proposal without a Local Hiring Plan WILL BE JUDGED NON-RESPONSIVE by the Authority.**

The Authority Governing Board has also set fifteen (15) percent as the Authority's goal for Minority/Woman/Small Business Enterprise (M/W/SBE) participation in contracts and purchases. Each Proposer shall submit a plan showing how it will assist the Authority in achieving this goal through M/W/SBE subcontractor participation or any other method. M/W/SBE participation is sought in both the construction and operating aspects of the project via the Proposer's use of certified suppliers, subcontractors, and subconsultants. Hiring of minority personnel, although laudable, does not qualify for the purposes of meeting the goal. The goal is to encourage doing business with M/W/SBE's certified by other governmental entities. The Authority does not have a certification program. Proof of current certification from an agency of the federal government, state of Florida, or another Florida local governmental agency will be required. The Authority will require documentary proof of the implementation, progress, and final outcome of the proposed plan.

Proposal Forms 4, 5, and 6 comprise an M/W/SBE Model Plan acceptable to the Authority for use by the Proposers in response to this RFP. The intent of the M/W/SBE Model Plan format is to reflect the percentage of M/W/SBE participation pledged by Proposers and/or proof of the “good faith” effort expended attempting to enlist potential participants. The M/W/SBE Model Plan consists of: Proposal Form 4 – a form for listing the M/W/SBE vendors proposed; Proposal Form 5 – letters of intent from the proposed M/W/SBE’s subcontractors, suppliers and/or subconsultants; and Proposal Form 6 – defines a “good faith” effort and required documentary proof. Alternate plans may be acceptable to the Authority, at its sole discretion, so long as substantially the same information is provided.

The submission of an M/W/SBE Plan is required. **A Proposal without an M/W/SBE Plan WILL BE JUDGED NON-RESPONSIVE by the Authority.** If the Proposer has not been able to achieve fifteen (15) percent M/W/SBE documented participation in Proposal Forms 4 and 5, then Proposal Form 6 is still required to be submitted to document and demonstrate efforts to achieve participation.

The Proposer’s Plan will be incorporated into the Design/Build Contract between the Proposer and the Authority and Proposer shall demonstrate a determined effort to implement the Plan.

3.3.5.2. Financial Capabilities

3.3.5.2.1. Bonds (*Proposal Volume I, Section 3.2*)

The Selected Proposer will be required to provide a public construction bond (Bond) equal to the full amount of any partial Notice to Proceed and prior to issuance of a final Notice to Proceed for full Project construction a Bond equal to fifty-five percent (55%) of the Contract Price but not less than \$250 million as required by Exhibit 13 of the Design/Build Contract. Proposer shall identify the Bonding Company who will be issuing the required Bond and provide evidence it meets the requirements of Section 2.2.14.2 of the Design/Build Contract. Attachment 1-G, Affidavit from Bonding or Insurance Company, must be provided as required by Section 3.3.4.1 of this RFP.

3.3.5.2.2. Insurance (*Proposal Volume I, Section 3.3*)

The Selected Proposer will be required to provide insurance coverage specified in the Agreements. Proposer shall identify the Insurance Company or Companies who will be issuing the required insurance as required by Exhibit 11 of the Design/Build Contract. Evidence shall be provided that the Insurance Company or Companies identified meet the required rating standard. Attachment 1-G, Affidavit from Bonding or Insurance Company, must be provided as required by Section 3.3.4.1 of this RFP. Alternatively,

Proposer may provide a Certificate of Insurance specifying the Authority as Certificate Holder so long as the policy expiration date is on or after the first Notice to Proceed date specified in Section 3.3.8.3 of this RFP.

3.3.5.2.3. Project Guarantee (*Proposal Volume I, Section 3.4*)

The Project Guarantor shall be financially responsible for guaranteeing the performance of the Selected Proposer and all subcontractors and suppliers under the terms of the Agreements. The Project Guarantor shall enter into Guarantee Agreement at the time the Agreements are executed by the Proposer and the Authority. Attachment 1-E, Affidavit from the Project Guarantor, must be provided as required by Section 3.3.4.1 of this RFP.

The Project Guarantor shall have a minimum net worth of \$250 million. In addition to determining net worth, the Authority will evaluate the financial strength of the Project Guarantor based on such things as debt to equity ratio, profitability, contingent liabilities, and liquidity.

Proposer shall describe fully the relationship between the Proposer and the Project Guarantor. Proposer shall also provide evidence, satisfactory to the Authority, that the Project Guarantor meets the minimum net worth requirements. Financial information provided by the Proposer in response to the RFQ shall be updated including Security and Exchange Commission 10-K and 10-Q filings.

3.3.6. Experience (*Proposal Volume I, Section 4*)

Proposers have already demonstrated that they meet the minimum qualification and experience requirements set out in the RFQ. In responding to this RFP, Proposers are asked to describe how the Proposal Team Members, major suppliers and subcontractors have worked together on other projects. Greater weight will be given to experience on WTE Projects of similar size, scope and technology as the New WTE Facility.

3.3.7. Technical Design and Management Approach (*Proposal Volume II, Section 5*)

Proposer shall describe how it intends to: (a) design, construct, commission, start up and conduct Acceptance Testing of the New WTE Facility in accordance with the Design/Build Contract; and (b) operate and maintain the New WTE Facility in accordance with the Operation and Maintenance Agreement. The Proposer shall describe its understanding of the requirements of the Authority as set forth in this RFP including Agreements and Design Criteria.

This section shall allow the Authority to gain an understanding of how the Proposer shall approach the project, what the Proposer sees as priorities and how the Proposer shall maximize and protect the Authority's assets. The Authority is looking for incorporation of knowledge gained in design, construction and operation of WTE facilities world-wide

in recent years. It is looking for cost effective, innovative solutions which will provide for reliable and efficient long-term operation at the New WTE Facility.

3.3.7.1. Overall Design (*Proposal Volume II, Section 5.1*)

This section shall describe the Proposer’s overall approach to the design of the New WTE Facility. Proposer shall provide a narrative description of the New WTE Facility it proposes to develop for the Authority. Emphasis should be on those design and construction elements that the Proposer believes will distinguish its technical design and management approach. Narrative may reference Proposal Forms, drawings, equipment descriptions and specifications, diagrams, and other information and data provide in response to other sections of this RFP. Technical descriptions shall be presented in such a manner as to provide a clear understanding of the proposed design, equipment configuration and operational characteristics of the New WTE Facility. Proposer should specifically describe its overall design including aesthetics and architectural treatment, waste receiving and storage area, combustion technology, steam and electrical generation, emission control technology, metals recovery technology, electrical and instrumentation systems and electrical interconnection.

3.3.7.2. Aesthetics/Architectural Treatment (*Proposal Volume II, Section 5.2*)

The Authority has continually demonstrated best practices and innovation in the design and operation of its facilities. These facilities are characterized by their operational functionality, environmental responsibility and a strong commitment to community service and outreach. These facilities and operations have earned numerous awards and the respect and strong support of the residents and other government agencies.

The Aesthetic Conceptual Design provided to Proposers presents the Authority’s general concepts for the aesthetic and environmental design scenarios for the New WTE Facility, however, the Proposer’s base design shall be in accordance with the Design Criteria Package (Volume III of this RFP). The Authority has established an allowance to provide for the ultimate incorporation during the design phase of the Project of certain aesthetic and architectural treatments that are outside of the scope of the base design. This section of the Proposal shall describe the Proposer’s overall approach to the Aesthetic Conceptual Design for the New WTE Facility. Proposer shall provide a narrative description of the New WTE Facility it proposes as a base design. Proposer should then describe how it would use the allowance specified in Table 3-2, Cost Proposal Summary Assumptions, to enhance the base aesthetic and architectural treatment. Emphasis should be on those design and construction elements that the Proposer believes will distinguish its approach. The narrative should specifically reference how each design element is addressed in a strategic and cost effective manner that will provide added environmental, economic, and social benefits. This narrative may reference the architectural renderings, Proposal Forms, drawings, equipment descriptions and specifications, diagrams, and other information and data provided in response to other sections of this RFP. The narrative should be accompanied by a table that summarizes which aesthetic, environmental and educational features are a part of the base design and separately which

additional features are proposed in the enhanced design utilizing the Aesthetic Treatment Allowance from Table 3-2.

3.3.7.3. Energy Efficiency/Sustainability (*Proposal Volume II, Section 5.3*)

The Authority is requesting that Proposers incorporate offsets or substitutions of a more sustainable approach instead of a conventional approach, where cost-effective over the life cycle of the New WTE Facility. All project buildings and building components, equipment, landscaping, hardscape, other project areas, including operations, shall be considered. At a minimum, the Administration Building and visitor center shall be designed to be certified LEED Platinum under the sustainable building programs set forth in *Chapter 255.2575 F.S., Energy Efficient and Sustainable Buildings*. The Authority encourages LEED Certification of other project areas, or the entire project area, if feasible, however, Proposers must detail how this will be accomplished.

The Authority is open to considering a wide range of potential offsets that may be available in the design, construction, maintenance and operation of the New WTE Facility, while continuing to meet the requirements established in the Design Criteria. The Authority encourages Proposers to submit environmentally and socially conscious Proposals incorporating offsets in an innovative manner that adds little or no additional cost and/or best design practices including the recycling of construction debris generated. The internal use of potable water, natural gas, electricity and other consumables during operation should be minimized. The estimated cost savings, favorable net present values, and payback periods as evaluated over the life cycle of the New WTE Facility should be clearly demonstrated as part of the Proposals. This section should include a table summarizing the energy efficiency, water consumption and wastewater minimization measures proposed. If applicable, the table shall also identify which offsets are included in the base design and cost proposal and which offsets are proposed in the enhanced design utilizing the Aesthetic Treatment Allowance from Table 3-2.

The Authority encourages Proposers to be committed to energy-efficiency and sustainability at the onset of the Project. It has been consistently shown throughout the construction industry that projects that take on an integrated, sustainable construction and operation mindset from project conception and throughout the design process tend to be more cost-effective and are easier to implement.

3.3.7.4. Process Systems (*Proposal Volume II, Section 5.4*)

This section shall describe the Proposer's detailed design of the New WTE Facility. It shall provide sufficient information, data, figures and preliminary design drawings, which along with references to equipment Proposal Forms and other data sheets provided in other Sections, demonstrate that the Proposal satisfies all of the requirements presented in this RFP. Greater weight shall be given to Proposals which provide more complete information on Proposal Form 8. Technical descriptions shall be presented in such a manner as to provide a clear understanding of the proposed design, equipment configuration and operational characteristics of the New WTE Facility. Proposer shall

emphasize any innovations proposed to be incorporated into the design along with experience with such innovations at other facilities. Specific installation references may be cited as Reference Facilities on Proposal Form 7 provided. Reference Facilities do not have to be the work of Proposal Team Members but, if not, they must be the work of a major supplier or subcontractor or illustrate a design feature incorporated into the Proposal.

Proposer shall specifically address the following process systems or areas: waste receiving and storage including refuse cranes; combustion and steam and electrical generation; emission control; and metals recovery.

While the new WTE Facility is located adjacent to PPREF No. 1, except for where specifically provided for in Volume 3, Design Criteria, of this RFP, PBREF No. 2 shall not share any common facilities or equipment with PBREF No. 1.

The Authority wants to maximize the net electrical energy and recovered metals available for sale and minimize the usage of air emission control reagents and potable and groundwater.

■ **Drawings (*Proposal Volume II, Section 5.4.1*)**

At a minimum, Proposer shall provide the following drawings to illustrate the Proposer's overall approach to design of the New WTE Facility and satisfaction of all technical requirements of the RFP. To the extent practical, all drawings shall be on 24" x 36" sheets at a scale of not less than 1" = 40' unless otherwise noted.

- a) Site layout with clearly identified site civil engineering elements.
- b) Landscaping and hardscape plan for the entire site.
- c) Architectural drawings (plan and all four exterior elevations).
- d) Plan and sections of the process area and receiving building at a scale no less than 1/8" = 1'0", including Facility General Arrangement Drawings that shall show the major equipment, the proposed building floor plan including the various functions specified, maintenance and access clearance requirements. Cross sections shall also be provided.

All site layout, landscaping and hardscape, and architectural drawings must show dimensions and be clearly labeled or have a key for all materials as well as be clearly labeled as either Base Design or Aesthetically Enhanced Design.

■ **Major Equipment Descriptions and Specifications (*Proposal Volume II, Section 5.4.2*)**

Proposer shall provide for each piece of major equipment proposed to be supplied, a description of the equipment including, but not limited to, such items as a completed Proposal Form 8, Detailed Facility and Equipment Data, catalog cuts, layout drawings, horsepower, efficiency, and materials of construction. Description and specification shall be cross referenced to the Facility General Arrangement Drawings.

■ **Mass and Energy Balance Diagrams (*Proposal Volume II, Section 5.4.3*)**

Proposers shall provide process mass and energy balance and water mass balance (including tables of all water sources and uses when operating at Maximum Continuous Rating as used in the Design Criteria including the scenarios when rainwater is available and is not available) diagrams, accompanied by written explanations. The balances shall be submitted for guaranteed conditions, maximum design conditions and any other operating levels deemed sufficient by the Proposer to illustrate anticipated operating conditions of the Facility. Proposers shall also submit performance curves for the turbine generator and condenser system proposed.

■ **Electrical, Process and Instrumentation Diagrams (*Proposal Volume II, Section 5.4.4*)**

Proposers in this Section shall provide information for evaluation of the proposed electrical and instrumentation systems for the New WTE Facility. Proposers shall provide the following electrical system diagrams:

- a. Single line diagrams for electrical and plant distribution systems down to 480v bus; and
- b. Metering and relay scheme for electrical interconnection.

Proposer shall provide Process and Instrument Diagrams that show all equipment required to control the process equipment. A written description of the operating concept, including special features and system limitations, shall be included along with a Distributed Control System (DCS) control hierarchy diagram. Diagrams for several systems may be combined on a single sheet. Diagrams shall be provided, at a minimum, for the following systems:

- a. Furnace firing diagram
- b. MSW feed, combustion, heat recovery and flue gas system
- c. Main steam supply and power generation system including turbine-generator, heaters, drains and vents
- d. Extraction steam system
- e. Boiler feedwater system
- f. Superheater and economizer system
- g. Demineralizer or reverse osmosis system
- h. Condenser condensate system

- i. Closed cooling water system
- j. Combustion air and stoker system
- k. Burner management and auxiliary fuel system
- l. Selective non-catalytic reduction system NO_x
- m. Air heater system
- n. Acid gas and baghouse system
- o. Carbon injection system
- p. Residue handling system/metals recovery system
- q. Wastewater treatment system

■ **Emission Control Systems (*Proposal Volume II, Section 5.4.5*)**

Proposer shall provide a narrative of its technical approach for minimizing the generation and maximizing the control of potential air pollutants. Both design and operating aspects shall be discussed. Proposer shall emphasize any innovations, advanced or improved performance features proposed to be incorporated into the design along with experience with such at other facilities. Specific installation references may be cited as Reference Facilities on Proposal Form 7 provided. The Proposer's approach to integrating the Emission Control Systems with the other facility systems including the DCS shall also be incorporated into the narrative. Greater weight will be given to proposed controls systems with better performance than the minimum required in the Design Criteria and those which can accommodate greater variations in inlet conditions. Flexibility and adaptability to future changes in regulatory requirements will also be given greater weight.

3.3.7.5. Plan and Development Schedule (*Proposal Volume II, Section 5.5*)

Proposer shall provide a narrative of its plan for the development of the Project from Notice to Proceed through Acceptance Testing and into Commercial Operation. The narrative shall include a listing of long lead time items and schedule constraints. Emphasis should be on those aspects of its plan which the Proposer believes will provide the Authority with the greatest value. It should include a description of the Proposer's overall QA/QC approach including fabrication of the stokers, boilers, refuse handling cranes, turbine generator, air cooled condenser and air pollution control equipment.

The Authority wants to maximize the use of local labor and businesses including M/W/SBE during the design, construction and Acceptance Testing of the Project. The narrative shall provide details on how the Proposer plans to accomplish this.

Safety of individuals working for members of the Proposal Team, subcontractors, suppliers and Authority representatives during construction, start up and Acceptance Testing is also of great importance and shall be addressed in the plan.

The Authority's goal is to have the New WTE Facility in Commercial Operation in 2015 but would like this schedule accelerated to the extent that it is cost effective. Proposers should assume for planning purposes that it will receive a partial Notice to Proceed May

1, 2011, for engineering and preparation of procurement documents including detailed specifications for the turbine generator and other items which would impact the overall schedule. An additional partial Notice to Proceed will be given September 1, 2011, with anticipated receipt of Certification under the Power Plant Siting Act, for procurement of the turbine generator and other items which would impact the overall schedule and preparation of procurement packages for boilers, grates and other long lead time items. A full Notice to Proceed will be given November 1, 2011, with the anticipated closing of the 2012 Series Bond Issue.

Proposer shall provide a schedule for the design, construction, commissioning, start-up and Acceptance Testing of the New WTE Facility. This schedule shall be submitted with the Proposal and in Adobe PDF and Microsoft Project 2007 or Primavera 6.0 format on a CD or DVD. This schedule shall include all critical milestones from the date of the first partial Notice to Proceed through and including the beginning of Commercial Operation. Only the two partial Notices to Proceed dates are fixed. The Proposer shall provide the date for full Notice To Proceed, first fire of Processible Waste and Commercial Operation Date. The schedule must match the dates proposed on Proposal Form 9 and proposed Fund Drawdown Schedule on Proposal Form 11. This schedule along with the drawdown schedule will become attachments to the Design/Build Contract. At a minimum, the following major milestones shall be included in the schedule:

1. **First Partial Notice to Proceed – May 1, 2011;**
2. Submission of turbine generator procurement package to Authority for review and approval;
3. Submission of procurement packages for other schedule impact items to Authority for review and approval;
4. Submission of final site plan and architectural treatments to Authority for review and approval;
5. **Second Partial Notice to Proceed – September 1, 2011;**
6. Issuance of bid documents for turbine generator;
7. Issuance of bid documents for other schedule impact items;
8. Award of turbine generator;
9. Award of other schedule impact items;
10. Submission of boiler procurement package to Authority for review and approval;

11. Submission of grate procurement package to Authority for review and approval;
12. Submission of other long lead time item procurement packages to Authority for review and approval including Emission Control Systems;
13. **Issuance of Full Notice to Proceed for the balance of the project - November 1, 2011;**
14. Issuance of bid documents for boilers;
15. Award of boilers;
16. Issuance of bid documents for grates;
17. Award of grates;
18. Issuance of bid documents for other long lead time items including Emission Control System;
19. Award of other long lead time items including Emission Control System;
20. Mobilization on West Palm Beach Project site;
21. Commencement of site work;
22. Commencement of building construction;
23. Erection of boiler drums (all boilers);
24. Completion of stack;
25. Delivery of turbine generator;
26. Boiler hydrostatic testing (all boilers);
27. First fire of Processible Waste;
28. Beginning of Acceptance Testing;
29. Commercial Operation Date; and
30. Completion of punch list and final inspection.

3.3.7.6. Commissioning, Start Up and Acceptance Testing Plan (*Proposal Volume II, Section 5.6*)

In this section, the Proposer shall clearly present how it intends to commission, start up and test the New WTE Facility in accordance with the Design Criteria. Proposer shall discuss the role of the various Team Members and major suppliers and subcontractors in the process including Acceptance Testing. Proposer shall describe how it would utilize the Spare Parts Allowance specified in Table 3-2 of this RFP. Discussion shall include plan for preparation and completion of punch list and final inspection.

3.3.7.7. Operation and Maintenance Plan (*Proposal Volume II, Section 5.7*)

In this section, the Proposer shall clearly present the technical aspects of the Proposer's plan to operate and maintain the New WTE Facility during Commercial Operation. Proposer should demonstrate a clear and complete understanding of all operation and maintenance services required and ways and means of minimizing the Authority's costs. The Operation and Maintenance Agreement including Schedule 2, Performance Guarantees, details specific technical and performance requirements to be met. The Proposer's submission shall include sufficient detail to enable the Authority to identify and understand the Proposer's approach and ability to comply with these requirements. Response to this section shall be made a part of the Operation and Maintenance Agreement as Schedule 7, Operation and Maintenance Plan.

The Proposal shall reflect the efficient operation of the New WTE Facility over the term of the Operation and Maintenance Agreement in a manner consistent with the Authority's objective of maintaining the New WTE Facility at a high standard of care that includes: (i) tipping floor management and storage pit operations; (ii) maximizing processing availability and electrical output; (iii) timely maintenance and repair, including good engineering and housekeeping practices to preserve and protect the Authority's capital assets; (iv) prudent renewal and replacement of equipment and equipment components; and (v) health and safety of Proposer and Authority staff.

This section shall also address plans for dealing with emergency conditions, sampling and laboratory procedures, and quality assurance /quality control (QA/QC) measures that will be implemented. The Proposer shall identify the critical elements of the proposed performance QA/QC program and how the Proposer intends to keep the Authority apprised of the New WTE Facility's performance.

The Proposer shall describe how it intends to maintain the New WTE Facility and protect the Authority's investment. The Proposer shall describe in detail how the New WTE Facility will be maintained including the use of third party contractors and what computerized maintenance management systems (CMMS) will be used. Examples of the types of management reports available from the CMMS shall be presented. The means by

which Authority's staff will have access to view the information and reports contained in the CMMS shall be described.

The Proposer shall describe how staff will be hired, trained and certified per ASME requirements, and deployed to ensure the reliable operation and maintenance of the New WTE Facility. The plan shall include overall and shift organization charts as well as descriptions of what the requirements and duties are for the various job classifications. Organization charts shall indicate the number of staff in each position and which positions will be full-time and which, if any, will be part-time (less than 40 hours a week). The skills required for each position shall be described along with a training and certification plan.

3.3.8. Cost Proposal (*Proposal Volume III, Section 6*)

3.3.8.1. Cost Proposal Narrative (*Proposal Volume III, Section 6.1*)

Proposer shall provide a narrative description of its Cost Proposal. It shall provide sufficient information which, along with Proposal Form 10 – Cost Proposal Summary and Proposal Form 11 – Fund Drawdown Schedule demonstrates that the Proposal satisfies all of the requirements of this RFP. Emphasis shall be on those aspects of its Cost Proposal which the Proposer believes will provide the Authority with the greatest value and distinguish it from other Proposers.

3.3.8.2. Cost Proposal Summary (*Proposal Volume III, Section 6.2*)

Proposer shall provide a narrative description of its Cost Proposal and complete and submit Proposal Form 10 – Cost Proposal Summary and Proposal Form 11 - Fund Drawdown Schedule. The Microsoft Excel format spreadsheet model provided to all Qualified Respondents shall be completed and submitted as part of the Proposal. It will be used as part of the economic evaluation the Cost Proposal.

The Authority will open the Cost Proposals and conduct an economic evaluation following the Evaluation Committees review and ranking of the Non-Cost Proposals. The economic evaluation will include calculations of the net present value of each Proposal over the terms of the Agreements.

Each Proposal's net present value will be calculated using the economic model developed by the Authority which will use the assumptions on Table 3-2, below, and the inputs specified on Proposal Form 10 – Cost Proposal and Performance Guarantees Summary and Proposal Form 11 – Fund Drawdown Schedule. The economic model utilized for evaluation reflects the terms and conditions contained in the Agreements as well as assumptions presented in Table 3-2.

Proposer should take note that provisions for the escalation of the proposed Construction Price from the Proposal Date to the several Notices to Proceed have been eliminated from the Design/Build Contract and the Cost Proposal Model.

**Table 3-2
Cost Proposal Summary Assumptions**

Evaluation Model Component	Assumption	Units
Term of Operation & Maintenance Agreement	20	Years
Annual Throughput Guarantee	1,000,000	Tons Per Year (tpy)
Facility Design Capacity	3,000	Tons Per Day (tpd)
Processible Waste Processed	1,000,000	Tons Per Year (tpy)
Proposal Date	12/15/2010	Date
First Notice to Proceed	5/1/2011	Date
Second Notice to Proceed	9/1/2011	Date
Final Notice to Proceed	11/1/2011	Date
Net Present Value (NPV) Discount Factor - Construction	5%	% per year
Net Present Value (NPV) Discount Factor - O& M	5%	% per year
Bond Financing Cost	10%	% per year
Annual Operation Fee Escalation	3%	% per year
Electric Capacity Factor	90%	Percent (%)
Electric Capacity Payment	\$27,380.00	\$/MW
Electric Capacity Payment Escalation Rate	1.90%	% per year
Electric Energy Escalation Rate	3.00%	% per year
As-Avoided Coal Energy	\$0.0267	\$/kWh
Operator Energy Revenue Share Above Net kWh/Ton Guarantee	60%	Percent (%)
Recovered Ferrous Market Price	\$62.00	\$ per Ton
Recovered Non-Ferrous Market Price	\$500.00	\$ per Ton

Evaluation Model Component	Assumption	Units
Operator Material Revenue Share	0%	Percent (%)
Pebble Lime Unit Price	\$0.095	\$ per pound
Hydrated Lime Unit Price	\$0.13	\$ per pound
Urea Unit Price	\$1.90	\$ per gallon
Ammonium Hydroxide (19% NH ₃) Unit Price	\$.35	\$ per pound NH ₃
Carbon Unit Price	\$0.85	\$ per pound
Residue Generation Rate	26%	% of Processed Tons
Ash Disposal Cost	\$16.00	\$ per Ton
Aesthetic Treatment Allowance	\$12 Million	\$
Spare Parts Allowance	\$10 Million	\$
Average Annual Higher Heating Value of Waste Processed	4,600	Btu per Pound

3.3.8.3. Agreements

The Design/Build Contract and Operation and Maintenance Agreement (Agreements) are included in Volume 2 of this RFP.

Any suggested changes to the Agreements shall be submitted to the Authority before the last date for the submission of questions to the Authority as provide in Section 2.1, Procurement Process and Timetable, of this RFP. Any changes acceptable to the Authority will be provided as an Addendum. Once the Addendum process is complete, the Authority will be under no obligation to make further revisions to the Agreements and the Selected Proposer will be expected to execute the Agreements with no further negotiations or revisions except for the correction of scrivener errors and the incorporation relevant information, such as Contract Price, required to be provided in the Selected Proposer’s Proposal. No exceptions to the Final Agreements including attachments and schedules will be considered or evaluated. The taking of any exceptions by a Proposer may result in the Proposal being found to be non-responsive. It is expected that the Agreements will be executed by the Selected Proposer and Authority within thirty (30) Days of the Authority Governing Board award of contract. Nothing contained herein shall be construed as limiting Authority’s right to execute change orders after execution of the Agreements or

from incorporating in the final design any design concept or technical enhancement suggested or discussed during this procurement process.

4. Evaluation Procedure and Criteria

4.1. General

All Proposals submitted in response to this RFP will be evaluated by the Authority utilizing the criteria specified in this Section 4. Proposers will make a presentation to the Evaluation Committee the date established in Section 2.1, Procurement Process and Timetable. At its discretion, the Authority may also require that any Proposer(s) provide written answers to written questions and allow site visits at any of their existing facilities and Reference Facilities.

The Evaluation Committee's review and award ranking recommendation will be sent to the Authority Governing Board. The Authority Governing Board will act on the recommendations at a public meeting. It may accept or change the ranking and authorize execution of Agreements with the highest ranked Proposer or reject all proposals.

The Authority shall be the sole judge of its own best interests.

4.2. Evaluation Criteria

The review and analysis of the Proposals by the Evaluation Committee will be based on the following criteria:

- Proposal Completeness
- Financial Capabilities
- Experience of Proposal Team
- Technical Design and Management Approach
- Cost

For the purposes of the Evaluation Committee's review and for purposes of the Proposer's preparation of their Proposals, the evaluation criteria are described in the following sections.

4.2.1. Evaluation of Proposals

4.2.1.1. Proposal Completeness

The Evaluation Committee will review the Proposals for completeness. Proposals must include all Proposal requirements specified in Section 3 of this RFP. If any exceptions are taken to the Final Agreements, as prohibited by Section 3.3.8.3 of this RFP, the Proposal may be deemed to be non-responsive. A Proposal shall be rejected if a majority

of the Evaluation Committee finds it to be incomplete. Minor informalities may be waived by the Authority.

4.2.1.2. Other Capabilities

The Evaluation Committee will review the Proposer's Local Hiring Plan and M/W/SBE Plan based on the response to Section 3.3.5.1 of this RFP. These capabilities shall include the ability of the Proposer to demonstrate the ability to meet the Local Hiring Plan and M/W/SBE Plan requirements. This evaluation will focus on the Proposer presenting a clear, reasonable and achievable plan for meeting the Authority's goal of employing maximum number of local residents during all phases of the Project. The evaluation will also consider the Proposer's demonstration that the Proposer's minimum percentage of unskilled and skilled employment hours and average hourly rates during the construction of the Project would contribute significantly to meeting the Authority's goal during the construction phase.

The evaluation will review whether the Proposer presents a clear, reasonable and achievable plan for meeting the Authority's goal of fifteen (15%) percent Minority/Women/Small Business Enterprise participation during all phases of the Project and that the Proposer's M/W/SBE Plan would contribute significantly to meeting the Authority's goal during the construction phase.

4.2.1.3. Financial Capabilities

The Evaluation Committee will review the Proposer's financial capabilities to meet the goals and obligations anticipated by the Agreements based on the response to Section 3.3.5.2 of this RFP. These capabilities shall include the ability of Proposer to secure the required bonds and insurance and Project Guarantor's ability to meet minimum financial strength requirements. A Proposal shall be rejected if a majority of the Evaluation Committee finds the Proposer did not secure the required bonds and insurance and Project Guarantor did not meet minimum financial strength requirements.

4.2.1.4. Experience

The Evaluation Committee will review the strength of the technical and management experience of the Proposer and Team Members based on the response to Section 3.3.6, Experience of this RFP. This evaluation will focus on experience of Proposer and Team Members working together on projects of similar size, technology and scope.

4.2.1.5. Technical Design and Management Approach

The overall quality and completeness of the Proposer's approach in addressing the requirements and objectives of the RFP shall be evaluated based on the response to Section 3.3.7 - Technical Design and Management Approach, of this RFP. The specific techniques and measures proposed to be used will be evaluated. If provided, Reference

Facilities will be considered in the evaluation. The items to be evaluated will include the following:

- Proposed overall design [RFP Volume I, Section 3.3.7.1 and Proposal Volume II, Section 5.1]
- Proposed aesthetic and architectural treatment [RFP Volume I, Section 3.3.7.2 and Proposal Volume II, Section 5.2] ;
- Proposed energy efficiency and sustainability plan [RFP Volume I, Section 3.3.7.3 and Proposal Volume II, Section 5.3];
- Proposed process systems [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4.1 through 4] ;
- Proposed emission pollution control systems [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4.5] ;
- Project plan and development schedule [RFP Volume I, Section 3.3.7.5 and Proposal Volume II, Section 5.5] ;
- Commissioning, Start Up and Acceptance Testing Plan [RFP Volume I, Section 3.3.7.6 and Proposal Volume II, Section 5.62] ; and
- Operation and maintenance plan [RFP Volume I, Section 3.3.7.7 and Proposal Volume 2, Section 5.7] (See Section 3.3.7.7).

4.2.1.6. Cost

The Authority will conduct an economic evaluation of the Proposals following the Evaluation Committee review and ranking of Proposals based on criteria other than Cost. The economic evaluation will include calculations of the net present value of each Proposal over the terms of the Agreements.

4.3. Evaluation and Ranking of Non-Cost Proposals

Evaluation Committee members will individually review all Proposals for Completeness, Financial Capabilities, Proposal Team Experience and Technical and Management Approach as specified in Table 4-1. Table 4-2 provides an evaluation work sheet for Evaluation Committee Members. In each category where points are to be assigned, the top ranked Proposal shall receive the maximum allowable number of points on an individual Evaluation Committee member's work sheet. If less than half of the maximum allowable points are given to another Proposer, the Evaluation Committee Member shall note a reason for the points given. Points shall be assigned in whole integers. The Non-Cost Proposal with the highest point score will be ranked first with a value of three (3), the Proposal with the second highest point score will be ranked second with a value of two (2), and the Proposal with the third highest point score will be ranked third with a value of one (1). Evaluation Committee members shall differentiate between the Non-Cost Proposal rankings for 3, 2, and 1. Therefore, an Evaluation Committee member

cannot give the same overall score for each Proposal. The individual Evaluation Committee members ranking values will then be added together. The Committee’s overall ranking of non-Cost Proposals will be from highest to lowest. If there is a tie in the overall ranking of non-Cost Proposals, the Proposer with the most first ratings by individual Evaluation Committee members will be listed first.

**Table 4-1.
Evaluation Criteria and Points**

EVALUATION CRITERIA	Points
PROPOSAL COMPLETENESS	PASS/FAIL
OTHER CAPABILITIES	
Local Hiring Plan	5
Minority/Woman/Small Business Enterprise Plan	5
SUBTOTAL	10
FINANCIAL CAPABILITIES	
Ability to Obtain Bonds	PASS/FAIL
Ability to Obtain Insurance	PASS/FAIL
Guarantor’s Financial Capabilities	PASS/FAIL
PROPOSAL TEAM EXPERIENCE	10
TECHNICAL DESIGN AND MANAGEMENT APPROACH	
Proposed Facility Overall Design	10
Proposed Facility Aesthetics and Architectural Plan	5
Proposed Facility Energy Efficiency and Sustainability Plan	5
Proposed Process Systems	20
Proposed Emission Control Systems	15
Project Plan and Development Schedule	15
Operation and Maintenance Plan	10
SUBTOTAL	80
TOTAL	100

**Table 4-2
Evaluation Worksheet**

Numbers in Brackets refer to Sections of this RFP and Proposal

EVALUATION CRITERIA	POINTS
PROPOSAL COMPLETENESS	PASS/FAIL
Proposal is responsive to all requirements of the RFP including completion of all Proposal Forms.	
OTHER CAPABILITIES	
<p style="text-align: center;">Local Hiring Plan</p> <p>[RFP Volume I, Section 3.3.5.1 and Proposal Volume I, Section 3.1]</p>	5
<p>a) Proposer presents a clear, reasonable and achievable plan for meeting the Authority’s goal of employing maximum number of local residents during all phases of the Project.</p> <p>b) The Proposer’s minimum percentage of unskilled and skilled employment hours and average hourly rates during the construction of the Project would contribute significantly to meeting the Authority’s goal during the construction phase.</p>	
<p style="text-align: center;">Minority/Woman/Small Business Enterprise Plan</p> <p>[RFP Volume I, Section 3.3.5.1 and Proposal Volume I, Section 3.1]</p>	5
<p>a) Proposer presents a clear, reasonable and achievable plan for meeting the Authority’s goal of fifteen (15%) percent Minority/Women/Small Business Enterprise participation during all phases of the Project.</p> <p>b) The Proposer’s M/W/SBE Plan would contribute significantly to meeting the Authority’s goal during the construction phase.</p>	
FINANCIAL CAPABILITIES	
<p style="text-align: center;">Ability to Obtain Bonds</p> <p>[RFP Volume I, Section 3.3.5.2.1 and Proposal Volume I, Section 3.2]</p>	PASS/FAIL
Proposal is complete and includes a completed Proposal Form 1, Attachment 1-G, from a Bonding Company meeting the requirements of the Design/Build Contract.	
<p style="text-align: center;">Ability to Obtain Insurance</p> <p>[RFP Volume I, Section 3.3.5.2.2 and Proposal Volume I, Section 3.3].</p>	PASS/FAIL
Proposal is complete and includes a completed Proposal Form 1, Attachment 1-G, from an Insurance Company meeting the requirements of the Design/Build Contract	
<p style="text-align: center;">Guarantor’s Financial Capabilities</p> <p>[RFP Volume I, Section 3.3.5.2.3 and Proposal Volume I, Section 3.4].</p>	PASS/FAIL
Proposal is complete and includes a completed Proposal Form 1, Attachment 1-E, from a Project Guarantor meeting the requirements of the Agreements	

EVALUATION CRITERIA	POINTS
PROPOSAL TEAM EXPERIENCE	10
What experience do Proposal Team Members and major suppliers and subcontractors have in working with each other? Greater weight is to be given to experience on WTE projects of similar size, scope and technology as the New WTE Facility [RFP Volume I, Section 3.3.6 and Proposal Volume I, Section 4.2]	
TECHNICAL DESIGN AND MANAGEMENT APPROACH	
Proposed Facility Overall Design [RFP Volume I, Section 3.3.7.1 and Proposal Volume II, Section 5.1]	10
<ul style="list-style-type: none"> a) Proposer clearly presents its overall approach to the design of the New WTE Facility. b) Proposer provides a clear understanding of the proposed design, equipment configuration and operational characteristics of the New WTE Facility. c) Proposer presents design and construction elements which distinguish its technical design and management approach. d) References to Proposal Forms, drawings, equipment descriptions and specifications, diagrams, and other information and data support presentation. 	
Proposed Facility Aesthetics and Architectural Plan [RFP Volume I, Section 3.3.7.2 and Proposal Volume II, Section 5.2]	5
<ul style="list-style-type: none"> a) Proposer provides a clear narrative description of how it plans to meet the Authority's goal of having the New WTE be both functional and aesthetically pleasing in its base design. b) Proposer provides details on how it would utilize the allowance designated for additional aesthetic and architectural treatment. c) Proposer provides descriptive plans, elevations and other support drawings to clearly illustrate the Proposal [RFP Volume I, Section 3.3.7.4 Drawings and Proposal Volume II, Section 5.4.1]. 	
Proposed Facility Energy Efficiency and Sustainability Plan [RFP Volume I, Section 3.3.7.3 and Proposal Volume II, Section 5.3]	5
<ul style="list-style-type: none"> a) Administration Building and Visitors Center designed to qualify for LEED Platinum Certification. b) Proposal incorporates design practices and offsets in an innovative manner that adds little or no additional cost. c) Water harvesting, reflective roofing, landscaping, use of recycled or reuse materials and other sustainable elements have been incorporated into the base Proposal design. d) Waste generation will be minimized and recycling maximized in construction plans. e) The use of water, electricity, natural gas and other consumables will be minimized during operation. 	

EVALUATION CRITERIA	POINTS
Proposed Process Systems	20
<ul style="list-style-type: none"> a) Proposal provides a clear understanding of the design, equipment configurations and operational characteristics of the New WTE Facility. [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4] b) Proposer specifically addresses systems for waste receiving and storage including refuse cranes, combustion, steam and electrical generation, emission control and metals recovery. [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4] c) Required drawings illustrate the Proposer’s overall approach to design. [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4.1] d) Major equipment is described, specifications provided and Proposal Form 8 completed. [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4.2] e) Mass and Energy and Water Mass Balance Diagrams and written explanations illustrate conditions of a well designed and operated plant. [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4.3] f) Proposer provides information for evaluation of the proposed electrical and instrumentation systems including diagrams. [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4.4] 	
Proposed Emission Control Systems [RFP Volume I, Section 3.3.7.4 and Proposal Volume II, Section 5.4.5]	15
<ul style="list-style-type: none"> a) Proposer provides a clear description of its technical approach which is designed to minimizing the generation and maximizes the control of potential air pollutants. b) Proposed systems incorporate innovation with experience in allowing the proposed APC Systems to accommodate variations in inlet conditions which can reasonably be anticipated during operation. c) Systems are designed and configured to allow them to be flexible and adaptable to future changes in control requirements. Physical space is provided in layout plans for adding Selective Catalytic Reduction (SCR). d) APC Systems, CEMS, boiler controls and DCS are designed to operate as integrated systems. 	
Project Plan and Development Schedule	15
<ul style="list-style-type: none"> a) A clear detailed plan for development of the Project in narrative form is provided beginning with the first Notice to Proceed and going through design, construction, start up and acceptance testing. [RFP Volume I, Section 3.3.7.5 and Proposal Volume 2, Section 5.5] b) Long lead time items and schedule constraints are identified and potential problems mitigated. [RFP Volume I, Section 3.3.7.5 and Proposal Volume II, Section 5.5] c) Commercial Operation is achieved in 2015. Earlier achievement of Commercial Operation is preferred. [RFP Volume I, Section 3.3.7.5 and Proposal Volume II, Section 5.5] d) A Project schedule is provided which includes at a minimum the milestones listed in the RFP. Schedule is logical and achievable. Potential schedule constraints are mitigated. [RFP Volume I, Section 3.3.7.5 and Proposal Volume II, Section 5.5] e) Proposer’s plan for addressing safety of the staffs of the Proposal Team, subcontractors, suppliers, and Authority representatives during construction, start up and acceptance testing is comprehensive, clear and unambiguous. [RFP Volume I, Section 3.3.7.5 and Proposal Volume II, Section 5.5] 	

EVALUATION CRITERIA	POINTS
f) Proposer clearly presents how it intends to commission, start up and test the New WTE Facility and transition into operation. The roles of various Team Members and major equipment suppliers and subcontractors are well defined. Plan includes how punch lists will be prepared and completed as well as how Spare Parts Allowance would be spent clear and logical. [RFP Volume I, Section 3.3.7.6 and Proposal Volume 2, Section 5.6]	
Operation and Maintenance Plan [RFP Volume I, Section 3.3.7.7 and Proposal Volume 2, Section 5.7]	10
<ul style="list-style-type: none"> a) Proposer clearly presents its plan for the operation and maintenance of the New WTE Facility from Commercial Operation through the term of the Operation and Maintenance Agreement. b) Plan reflects the Authority’s objective to maintain the New WTE Facility at a high standard of care, minimizing its costs and protecting its investment. c) Facility staffing issues are addressed including certification of operators and safety of employees and Authority Staff and guests. 	
SUBTOTAL	80
TOTAL	100

4.4. Evaluation of Cost Proposals

Following the review and ranking of the non-cost portion of the Proposals by the Evaluation Committee, the Cost Proposals shall be opened. Each Proposal’s net present value will be calculated using an economic model developed by the Authority and provided for informational purposes only in Microsoft Excel format to each Proposer. Information provided on Proposal Form 10 – Cost Proposal and Performance Guarantees Summary and Proposal Form 11 – Fund Drawdown Schedule along with assumptions from Table 3-2 – Cost Proposal Summary Assumptions will be input into the model. The economic model reflects the terms and conditions contained in the Agreements.

The Authority plans to issue revenue bonds to finance the New WTE Facility. For the purposes of the economic evaluation, the capital cost of the project will be equal to the estimated bond proceeds dedicated to the New WTE Facility based on the Proposer’s quoted cost for design and construction and the Authority’s financing costs. Authority financing costs will include issuance costs, underwriter costs, insurance costs, and debt service reserve account requirements. The factors to be used in sizing the bond issue will be applied uniformly in evaluating each Proposal.

The Authority will consider proposed operation and maintenance costs for the term of the Operation and Maintenance Agreement, as described in the Operation and Maintenance Agreement, including operation fee, the cost of emission control commodities and electricity and recovered materials revenues.

The assumptions for financing, escalation and discount rates and other items to be used in the model are provided on Table 3-2 of this RFP. These assumptions are for evaluation purposes only, they do not represent the Authority's expectations. Neither the assumptions nor the calculated costs and revenues are to be relied upon by any Proposer.

4.5. Evaluation Committee Recommendation

The results of the Cost Proposal evaluations will be reported to the Evaluation Committee by the Consulting Engineer. The report will include the total calculated net present value cost along with the net present value cost of construction and operation and maintenance, the proposed total capital cost, Commercial Operation Date and proposed first year operation and maintenance cost. The Evaluation Committee will then prepare a report and recommendation for contract award to the Authority Board based upon its ranking of Non-Cost Proposals, the results of the Cost Proposal evaluation and a weighting of value represented by the Proposals. The Authority Board will make the ultimate contract award to the Proposer offering the Authority the Project which in the Board's sole discretion represents the best value for the Authority.

5. Proposal Forms

The following Proposal Forms are included in this section:

No.	Title
Proposal Form 1	Transmittal Letter
Attachment 1-A	Certification of Authorization
Attachment 1-B	Affidavit from Proposer
Attachment 1-C	Affidavit from the Design Team Member
Attachment 1-D	Affidavit from the Construction Team Member
Attachment 1-E	Affidavit from the Project Guarantor
Attachment 1-F	Affidavit from the Combustion Stoker Manufacturer
Attachment 1-G	Affidavit from the Bonding or Insurance Company
Proposal Form 2	Licenses
Proposal Form 3	Non-Collusion Affidavit
Proposal Form 4	Participation of M/W/SBE Firms
Proposal Form 5	Letter of Intent to Perform as a M/W/SBE Subcontractor/Supplier
Proposal Form 6	Statement of Good Faith Efforts
Proposal Form 7	Reference Facilities
Proposal Form 8	Detailed Facility and Equipment Data
Proposal Form 9	Performance Guarantees Summary
Proposal Form 10	Cost Proposal Summary
Proposal Form 11	Fund Drawdown Schedule

**PROPOSAL FORM 1
TRANSMITTAL LETTER**

(To be typed on Proposer's Letterhead)

[Date]

Ms. Sandra L. Brady, CPPB
Director of Purchasing
Solid Waste Authority of Palm Beach County
7501 North Jog Road
West Palm Beach, FL 33412

Dear Ms. Brady:

_____ (the "Proposer") hereby submits its Proposal in response to the Request for Proposals for Design, Build, and Operation of a New Waste-to-Energy Facility ("the RFP") issued by the Solid Waste Authority of Palm Beach County (the "Authority") on September __, 2010, as amended.

As a duly authorized representative of the Proposer, I hereby certify, represent and warrant, on behalf of the Proposer team, as follows in connection with the Proposal:

- 1. The Proposer acknowledges receipt of the RFP and the following addenda:

<u>No.</u>	<u>Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

- 2. The submittal of the Proposal has been duly authorized by, and in all respects is binding upon, the Proposer. Attachment 1-A to this Proposal Form is a Certificate of Authorization that evidences my authority to submit the Proposal and bind the Proposer.



3. The affidavits as required by the RFP are provided by _____ (Proposer), _____ (Design Team Member), _____ (Construction Team Member), _____ (Project Guarantor), and _____ (Combustion Stoker Manufacturer) as evidenced by such parties' letter of intent submitted as Attachments 1-B through 1-F to this Proposal Form.
4. The Proposal Bonding or Insurance as required by the RFP will be provided by _____, as evidenced by such Bonding or Insurance Company's Affidavit submitted as Attachment 1-G to this Proposal Form.
5. All information and statements contained in the Proposal are current, correct and complete, and are made with full knowledge that the Authority will rely on such information and statements in selecting the Selected Proposer for executing the Agreements.
6. The Proposer certifies under penalties of perjury that the Proposal has been prepared and is submitted in good faith without collusion, fraud or any other action with any other person taken in restraint of free and open competition for the services contemplated by the RFP. As used in this Proposal Form, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.
7. Neither the Proposer nor any Proposal Team member is currently suspended or debarred from doing business with any governmental entity.
8. The Proposer has reviewed all of the engagements and pending engagements of the Proposer, and no potential exists for any conflict of interest or unfair advantage.
9. No person or selling agency has been employed or retained to solicit the award of the Agreements under an arrangement for a commission, percentage, brokerage or contingency fee or on any other success fee basis, except bona fide employees of the Proposer.
10. The principal contact person who will serve as the interface between the Authority and the Proposer for all communications is:

Name: _____
Title: _____
Address: _____
Phone: _____
Fax: _____
E-mail: _____

11. The individuals who will be the Proposer's key technical and legal representatives are set forth below:

Technical Representative:

Name: _____
Title: _____
Address: _____
Phone: _____
Fax: _____
E-mail: _____

Legal Representative:

Name: _____
Title: _____
Address: _____
Phone: _____
Fax: _____
E-mail: _____



12. The Proposer has carefully examined all documents constituting the RFP and the addenda thereto and, being familiar with the work and the conditions affecting the work contemplated by the RFP and such addenda, offers to furnish all plant, labor, materials, supplies, equipment, facilities and services which are necessary, proper or incidental to carry out such work as required by and in strict accordance with the RFP and the Proposal, all for the price set forth in the Proposal Forms.

Name of Proposer

Name of Designated Signatory

Signature

Title

(Notary Public)

State of _____
County of _____

On this _____ day of _____, 2010, before me appeared _____, personally known to me to be the person described in and who executed this _____ and acknowledged that (she/he) signed the same freely and voluntarily for the uses and purposes therein described.

In witness thereof, I have hereunto set my hand and affixed my official seal the day and year last written above.

(Affix Seal here) _____
Notary Public in and for the State of _____

(Name printed)

Residing at _____

My commission expires _____



**ATTACHMENT 1-A
CERTIFICATION OF AUTHORIZATION***

I, _____, a resident of _____ in the State of _____, DO HEREBY CERTIFY that I am the Clerk/Secretary of _____, a corporation duly organized and existing under and by virtue of the laws of the State of _____; that I have custody of the records of the corporation; and that as of the date of this certification, _____ holds the title of _____ of the corporation, and is authorized to execute and deliver in the name and on behalf of the corporation the Proposal submitted by the corporation in response to the Request for Proposals for Design, Build, and Operation of a New Waste-to-Energy Facility (“the RFP”) issued by the Solid Waste Authority of Palm Beach County (“the Authority”) on September ____, 2010, as amended; and all documents, letters, certificates and other instruments which have been executed by such officer on behalf of the corporation in connection therewith.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the corporate seal of the corporation this _____ day of _____, 2010.

(Affix Seal Here)

Clerk/Secretary

** Note: Separate certifications shall be submitted if more than one corporate officer has executed documents as part of the Proposal. Proposers shall make appropriate conforming modifications to this Certificate in the event that the signatory’s address is outside of the United States.*



**ATTACHMENT 1-B
AFFIDAVIT FROM THE PROPOSER**

STATE OF FLORIDA
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

BEFORE ME, the undersigned authority, personally came and appeared _____, who after being by me duly sworn, deposed and said that he/she is a fully authorized representative of _____ (hereinafter referred to as “Proposer”) the party who has prepared the Proposal for the design, build and operation of a new waste-to-energy facility for the Solid Waste Authority of Palm Beach County (“Authority”), which Request for Proposals was issued by the Authority on September __, 2010 and said affiant further stated:

1. Said Proposal is genuine and the Proposer has not colluded, conspired, or agreed directly with any other Proposer to offer a sham or collusive Proposal. I understand that collusive bidding and all similar activity is a violation of city, county, state, and federal law, and can result in fines, prison sentences and civil damages. I agree to abide by all conditions of this procurement and our Proposal, and certify that I am authorized to sign for this Proposer.
2. Said Proposer holds, or has the legal right to use, the technology and equipment that the Proposer proposes for this project.
3. Said Proposal is not intended to secure an unfair advantage of benefit from the Authority or in favor of any person interested in the proposed contract.
4. All statements contained in said Proposal are to the best of my knowledge, information and belief, true, correct and complete.
5. Said Proposer hereby certifies that no officer of the companies comprising the Proposer, or any affiliates of the companies comprising the Proposer, has been convicted of fraud by the federal government or by any government entity in Florida or any other state within the last [three] years.
6. Said Proposer hereby certifies that the Proposer, or any affiliates of the companies comprising said Respondent, have not filed for bankruptcy within the previous [three] years.

7. Said Proposer hereby certifies the truth and accuracy of the above statements under the pains and penalties of perjury.

(Signature of Proposer)

(Printed Name and Title)

SWORN TO AND SUBSCRIBED

BEFORE ME THIS _____ DAY OF _____, 2010

(SEAL)

NOTARY PUBLIC IN AND FOR THE STATE OF _____



**ATTACHMENT 1-C
AFFIDAVIT FROM THE DESIGN TEAM MEMBER**

STATE OF FLORIDA
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

BEFORE ME, the undersigned authority, personally came and appeared _____, who after being by me duly sworn, deposed and said that he/she is a fully authorized representative of _____ (hereinafter referred to as "Design Team Member") and said affiant stated that:

1. The Design Team Member is familiar with _____ (hereinafter referred to as "Proposer"), the party who has prepared the Proposal for the design, build and operation of a new waste-to-energy facility for the Solid Waste Authority of Palm Beach County ("Authority"), which Request for Proposals was issued by the Authority on September __, 2010.
2. The Design Team Member has read the Proposal sections which refer to the Design Member and: (i) certifies that such statements are true and correct; and (ii) consents to the use of such statements in the Proposal.
3. The Design Team Member and the Proposer have agreed that if the Proposer is selected to design, build, and operate a new waste-to-energy facility, the Design Team Member will be the design engineer during the design and construction of the new waste-to-energy facility.
4. The Design Team Member holds a State of Florida Professional Engineer Certificate of Registration.
5. The Design Team Member hereby certifies the truth and accuracy of the above statements under the pains and penalties of perjury.

(Signature of Design Team Member)

(Printed Name and Title)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS _____ DAY OF _____, 2010.

(SEAL)

NOTARY PUBLIC IN AND FOR THE STATE OF _____



**ATTACHMENT 1-D
AFFIDAVIT FROM THE CONSTRUCTION TEAM MEMBER**

STATE OF FLORIDA
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

BEFORE ME, the undersigned authority, personally came and appeared _____, who after being by me duly sworn, deposed and said that he/she is a fully authorized representative of _____ (hereinafter referred to as "Construction Team Member") and said affiant stated that:

1. The Construction Team Member is familiar with _____ (hereinafter referred to as "Proposer"), the party who has prepared the Proposal for the design, build and operation of a new waste-to-energy facility for the Solid Waste Authority of Palm Beach County ("Authority"), which Request for Proposals was issued by the Authority on September __, 2010.
2. The Construction Team Member has read the Proposal sections which refer to the Construction Team Member and: (i) certifies that such statements are true and correct; and (ii) consents to the use of such statements in the Proposal.
3. The Construction Team Member and the Proposer have agreed that if the Proposer is selected to design, build, and operate a new waste-to-energy facility, the Construction Team Member will be responsible for the construction related activities during the design and construction of the new waste-to-energy facility.
4. The Construction Team Member is licensed as a General Contractor in the State of Florida.
5. The Construction Team Member hereby certifies the truth and accuracy of the above statements under the pains and penalties of perjury.

(Signature of Construction Team Member)

(Printed Name and Title)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS _____ DAY OF _____, 2010.

(SEAL)

NOTARY PUBLIC IN AND FOR THE STATE OF _____



**ATTACHMENT 1-E
AFFIDAVIT FROM THE PROJECT GUARANTOR**

STATE OF FLORIDA
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

BEFORE ME, the undersigned authority, personally came and appeared _____, who after being by me duly sworn, deposed and said that he/she is a fully authorized representative of _____ (hereinafter referred to as "Project Guarantor") and said affiant stated that:

- 1. The Project Guarantor is familiar with _____ (hereinafter referred to as "Proposer"), the party who has prepared the Proposal for the design, build and operation of a new waste-to-energy facility for the Solid Waste Authority of Palm Beach County ("Authority"), which Request for Proposals was issued by the Authority on September __, 2010.
- 2. The Project Guarantor has read the Proposal sections which refer to the Project Guarantor and: (i) certifies that such statements are true and correct; and (ii) consents to the use of such statements in the Proposal.
- 3. The Project Guarantor and the Proposer have agreed that if the Proposer is selected to design, build, and operate a new waste-to-energy facility, the Project Guarantor will execute the Agreement Project Guarantees and be financially responsible for guaranteeing the performance of the Proposer, and all sub-contractors and suppliers, pursuant to the Agreements related to the design, build and operation of the new waste-to-energy facility.
- 4. The Project Guarantor hereby certifies the truth and accuracy of the above statements under the pains and penalties of perjury.

(Signature of Project Guarantor)

(Printed Name and Title)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS _____ DAY OF _____, 2010.

(SEAL)

NOTARY PUBLIC IN AND FOR THE STATE OF _____



ATTACHMENT 1F
AFFIDAVIT FROM THE COMBUSTION STOKER MANUFACTURER

STATE OF FLORIDA
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

BEFORE ME, the undersigned authority, personally came and appeared _____, who after being by me duly sworn, deposed and said that he/she is a fully authorized representative of _____ (hereinafter referred to as “ Combustion Stoker Manufacturer”) and said affiant stated that:

1. The Combustion Stoker Manufacturer is familiar with _____ (hereinafter referred to as “Proposer”), the party who has prepared the Proposal for the design, build and operation of a new waste-to-energy facility for the Solid Waste Authority of Palm Beach County (“Authority”), which Request for Proposals was issued by the Authority on September __, 2010.
2. The Combustion Stoker Manufacturer has read the Proposal sections which refer to Combustion Stoker Manufacturer and: (i) certifies that such statements are true and correct; and (ii) consents to the use of such statements in the Proposal.
3. The Combustion Stoker Manufacturer and the Proposer have agreed that if the Proposer is selected to design, build, and operate a new waste-to-energy facility, the Combustion Stoker Manufacturer will be responsible for supplying all or part of the technologies for the design, build and operation of the new waste-to-energy facility.
4. The Combustion Stoker Manufacturer hereby certifies the truth and accuracy of the above statements under the pains and penalties of perjury.

(Signature of Combustion Stoker Manufacturer)

(Printed Name and Title)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS _____ DAY OF _____, 2010.

(SEAL)

NOTARY PUBLIC IN AND FOR THE STATE OF _____



**ATTACHMENT 1-G
AFFIDAVIT FROM THE BONDING OR INSURANCE COMPANY**

STATE OF FLORIDA
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

BEFORE ME, the undersigned authority, personally came and appeared _____, who after being by me duly sworn, deposed and said that he/she is a fully authorized representative of _____ (hereinafter referred to as “Bonding (or Insurance) Company”) and said affiant stated that:

1. The Bonding (or Insurance) Company is familiar with _____ (hereinafter referred to as “Proposer”), the party who has prepared the Proposal for the design, build and operation of a new waste-to-energy facility for the Solid Waste Authority of Palm Beach County (“Authority”), which Request for Proposals was issued by the Authority on September __, 2010.
2. The Bonding (or Insurance) Company has read the Proposal sections which refer to the Bonding (or Insurance) Company and: (i) certifies that such statements are true and correct; and (ii) consents to the use of such statements in the Proposal.
3. The Bonding (or Insurance) Company and the Proposer have agreed that if the Proposer is selected to design, build, and operate a new waste-to-energy facility, the Bonding (or Insurance) Company intends to provide the performance bonds (or insurance) required, pursuant to the Design/Build Contract supporting each Notice to Proceed following review of the final contract documents, evidence of project financing for work covered by each Notice to Proceed and conformation that the Proposer continues to meet underwriting criteria.

(Signature of Bonding (or Insurance) Company)

(Printed Name and Title)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS _____ DAY OF _____, 2010.

(SEAL)

NOTARY PUBLIC IN AND FOR THE STATE OF _____



**PROPOSAL FORM 3
NON-COLLUSION AFFIDAVIT**

State of _____

County of _____

being duly sworn, deposes and says:

That she/he is an officer of the party making the foregoing Proposal , that such Proposal is genuine and not collusive or sham; that said Proposer has not colluded, conspired, connived or agreed, directly or indirectly with any Proposer or person, to put in a sham bid or to refrain from bidding and has not in any manner, directly, or indirectly, sought by agreement or collusion or communication or conference with any person, to fix the price or affiant or any other Proposer, or to fix any overhead, profit or cost element of said price, or that of any other Proposer, or to secure any advantage against the Authority, or any person interested in the proposed Agreements and that all statements in said proposal are true.

Firm Name

By

Title

Subscribed and sworn to before me
this ___ day of _____
20__.

My commission expires _____
20__.



**PROPOSAL FORM 5
LETTER OF INTENT TO PERFORM AS A M/W/SBE
SUBCONTRACTOR/SUPPLIER**

RFP Name:	RFP Number:
To: (Name of Proposer)	

The undersigned intends to provide services in connection with the above as (✓ one)
An Individual <input type="checkbox"/> A Partnership <input type="checkbox"/> A Corporation <input type="checkbox"/> A Joint Venture <input type="checkbox"/>
The undersigned is prepared to provide the following services in connection with the above RFP (specify in detail particular work items or parts thereof to be performed):
at the following price: (amount must match Sub-Contractor's/Supplier's quote to prime as listed on Proposal Form 4)

(Signature of M/W/SBE Sub-Contractor or Supplier)

(Print name of M/W/SBE Sub-Contractor or Supplier)

Title Date

Corporate Seal
(if applicable)

(Make additional copies as necessary)



PROPOSAL FORM 6
STATEMENT OF GOOD FAITH EFFORTS

Good Faith efforts attempted by Proposer to achieve M/W/SBE participation through use of subcontractors/subconsultants or material suppliers. Good Faith efforts should include but are not limited to:

Select Two out of Three for A through C

- A. Letters sent to M/W/SBE subcontractors/subconsultants/suppliers advising of the need for bids/proposals (provide copies of letter(s) and response(s)). Note: solicitation letters must be sent to prospective M/W/SBE firms with reasonable lead times to allow proper responses.
- B. Proposer shall advertise in general circulation, trade association, and/or M/W/SBE focus media indicating the availability of subcontracting opportunities (provide copy of advertisement(s)).
- C. Proposer shall utilize services of available M/W/SBE community organizations, contractor groups, local/state/federal business assistance offices or other organizations (provide proof).

Select D or E

- D. List of M/W/SBE firms who have expressed interest in providing the service but who were not accepted by the Proposer. If no expressions of interest were received, please so indicate.
- E. Document past utilization of M/W/SBE's.

**PROPOSAL FORM 7
REFERENCE FACILITIES**

Project Name:	
Project Location:	
Client and Owner :	(Include contract name, title, organization, address, telephone, fax, e-mail for the following references) Client: Owner (if different from client):
Project Contact:	Name: Title: Organization: Address: Telephone: Facsimile: E-mail:
Project Description	



Size of Project:	Facility Design Capacity: _____ tons per day (tpd) Number of Units: _____ Unit Design Capacity: _____ tons per day (tpd) Electrical Generation Capacity: _____ MW		
Facility Start Date (commercial operation):			
Proposer Responsibility:	Design	Build	Operation and Maintenance
	Design/Build	Design/Build/Operate	Other
	Technology Suppliers		
Description of Proposer Role:			
Description of Team Member Role:			
Description of Technology Suppliers Role			
How Does Project Demonstrate Experience:			
How Does Project Demonstrate Innovative Approach:			
Additional Information:			

**PROPOSAL FORM 8
DETAILED FACILITY AND EQUIPMENT SPECIFICATION DATA SHEETS**

The Proposer should complete the data sheets which compose this Proposal Form 8 as fully as possible. The Proposer is not required to complete sections of Proposal Form 8 applicable to systems or equipment that are not proposed to be installed. For such systems or equipment, the Proposer shall clearly indicate “No Equipment Proposed” on the applicable space.

The Proposer must provide all of information on Data Sheet No. 3, Combustion/Steam Generation Units. All other data sheets shall be completed as fully as possible with information available to the Proposer at the time of the Proposal. The technical evaluation will be based in large part on the information provided on data sheets. Greater weight will be given to more complete information. The equipment specifications sheets will be attached to the Design/Build Agreement as Exhibit 4.

Please duplicate forms/equipment specification data sheets if additional space is needed.

Where requested, Proposer shall provide the name of the manufacture for each system or piece of equipment. Proposer may provide up to three manufacturer’s names for each piece of equipment where a name is requested, except for the stoker, boiler, refuse handling crane, turbine generator, air cooled condenser and APC equipment. Only one manufacturer’s name for the stoker and no more than two manufacturer’s names for the boiler, refuse handling crane, turbine generator, air cooled condenser and APC equipment shall be acceptable.

TABLE OF CONTENTS

Sheet No.	Item
1	General Facility and Supplemental Building Information
2	Refuse Handling Cranes
3	Combustion/Steam Generation Units
4	Underfire Air Fans
5	Overfire Air Fans
6	Residue Handling Equipment
7	Ferrous Removal Equipment
8	Non-Ferrous Removal Equipment
9	Selective Catalytic Reduction System Equipment
10	Carbon Injection System Equipment

11	Acid Gas Control System Equipment
12	Induced Draft Fans
13	Baghouses
14	Stack
15	Continuous Emission Monitoring System
16	Turbine-Generator
17	Condensate and Feedwater System
18	Air-Cooled Condenser
19	Distributed Control System
20	Electrical System Equipment
21	Fire Protection System
22	Miscellaneous Information
23	General Equipment Specifications Form

<p>d. Pit storage dimensions (to tipping floor) (length x width x depth at tipping floor)</p>	<p style="margin: 0;">x x ft</p>
	<p style="margin: 0;">cy tons</p>
<p>e. Refuse storage above tipping floor</p>	<p style="margin: 0;">cy</p>
<p>f. Depth of Pit (at charging floor)</p>	<p style="margin: 0;">ft</p>
<p>g. Total Pit storage capacity @ 500 lbs/cy</p>	<p style="margin: 0;">tons</p>

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 2**

REFUSE HANDLING CRANES

1. Basic Data (each):

Number of Units: Three

Type: _____

Location: _____

Crane Handling Capacity (ton/hr):
(Calculate based on 50 ft lift, 90 ft trolley travel and 100 ft bridge travel) _____

Bridge Crane Span (ft): _____

Maximum Lift Height (ft): _____

Grapple Capacity: cy tons

Grapple Manufacturer(s): _____

2. Speeds at full load:

Lift (ft/min): _____

Bridge Travel (ft/min): _____

Trolley Travel (ft/min): _____

Grapple Opening/Closing (seconds): _____

Maximum Hoist Lift (ft): _____

Controls (type): _____

3. Power Requirements (each):

Hoist (HP): _____

Bridge (HP): _____

Trolley (HP): _____



CMAA Rating:

4. Description of Motor Controls and Stationary Operator Pulpit:

5. Manufacturer(s) and Model(s):

PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 3

COMBUSTION/STEAM GENERATION UNITS

- 1. Number of Units: _____
- 2. Type: _____
- 3. MCR Per Unit (Btu/hr): _____

- a. Furnace Firing Diagram (Design Envelope) Attach a diagram showing the throughput vs. heat input performance capabilities of each furnace/boiler unit; any areas where the air preheater shall be in operation; any areas where continuous operation will be restricted (peaking or temporary overload). Proposer shall show lines of performance for 3,800, 4,300, 4,600, 5,000, and 6,000 Btu/lb waste.

- b. Temperature and Residence Time Profile Diagram @ MCR Attach a diagram showing the temperature and residence time profile for the furnace and the boiler.

- c. Maximum continuous throughput at MCR (lb/hr) _____
- d. Capacity per Unit (TPD): _____
- e. Peak Heat Input (or temporary overload) per Unit (Btu/hr): _____

- 4. Charging Hopper, Type and Size: _____

- 5. Excess Air at MCR at Normal Operation (%): _____

- 6. Average Gas Velocities and Temperatures @ 5,000 Btu/lb:
 - a. Furnace Section: _____ ft/sec _____ °F
 - b. Idle Passes: _____ ft/sec _____ °F
 - c. Convection Tube Section: _____ ft/sec _____ °F
 - d. Superheater Tube Section: _____ ft/sec _____ °F



- Tube Bank 1: _____ ft/sec _____ °F
- Tube Bank 2: _____ ft/sec _____ °F
- Tube Bank 3: _____ ft/sec _____ °F
- e. Economizer Tube Section: _____ ft/sec _____ °F
- g. Exit: _____ ft/sec _____ °F

7. Furnace Volume (cf): _____

a. Design Heat Release Rate (Btu/ft³/hr): _____

8. Furnace Emissions CO _____ ppm_{dv} @ 7% O₂
(uncontrolled) NO_x _____ ppm_{dv}
@ 7% O₂

9. Steam Output Per Unit at MCR with 5,000 Btu/lb Waste (lb/hr): _____

10. Steam Conditions at Superheater Outlet:

a. Temperature (°F): _____

b. Pressure (psig): _____

11. Feedwater Conditions at Economizer Inlet:

a. Temperature (°F): _____

b. Pressure (psig): _____

12. Equipment Design Pressure:

a. Boiler (psig): _____

b. Economizer (psig): _____

13. Economizer Description: _____

14. Tube Sizes, Spacing, Arrangement and Maximum Metal Temperature:

Nominal Size & Wall Thickness	Center to Center Spacing	Arrangement Staggered/ In Line	Maximum Metal Temp. °F	Min. Wall thickness at bends.	Membrane Section width-thickness	Material Type

	Nominal Size & Wall Thickness	Center to Center Spacing	Arrangement Staggered/ In Line	Maximum Metal Temp. °F	Min. Wall thickness at bends.	Membrane Section width-thickness	Material Type
a. Waterwalls:			In-line				
b. Superheater Section:			In-line			N/A	
c. Convective Section:			In-line				
d. Economizer:			In-line			N/A	

15. Description of Refractory including Location, Thickness, and Manufacturer:

16. Description of Protective Weld including Overlay, Location, and Thickness:

17. Description, Capacity, Manufacturer, Number, and Location of Auxiliary Fuel Burners (furnish a sketch showing location):

18. Tube Cleaning Description, Type, Number, Location:

19. Heat Loss Calculation Summary:

a. Heat Input:

b. Heat Output:

c. Losses:

1) Dry Gas:

2) Moisture:

3) Residue:

Loss	
Btu/lb	%
5,000	100

4) Convection and Radiation:

5) Manufacturer's Margin:

Total Heat Loss:

d. Boiler Efficiency:

20. Superheater Tube Material:

Diameter: Primary (in):

Diameter: Secondary (in):

Thickness: Primary (in):

Thickness: Secondary (in):

21. Superheater Outlet Temperature Control Description:

22. Steam Drum Description (Including internals, access manholes, and relief valves):

23. Storage in drum:

a. To normal water level:

min

gal

b. To hydro test:

min

gal

c. Low water trip:

min

gal

24. Boiler Trim and Accessories Description:

a. Safety valves as per ASME code (number and capacity):

	Set	Capacity
Drum Safeties	_____	_____
S/H Outlet Safety	_____	_____

b. Water column including: drum level compensator, gauge and glass drain valves, high and low alarm, low water cutoff, high water turbine trip:

c. Feedwater regulator, bypass, stop, and drain valves:

27. Stoker or Combustion:

- a. Type: _____
- b. Total Grate Area per Unit (sf): _____
- c. Total Grate Dimensions per Unit (ft):
 - Feedgrate/ram area (sf): _____
 - No. 1 Grate area (sf): _____
 - No. 2 Grate area (sf): _____
 - No. 3 Grate area (sf): _____
 - (Add as needed) _____
- d. Design Grate Loading (Btu/hr/ft²): _____
- e. Materials of Construction: _____
- f. Charging Description: _____
- g. Capacity Control Method: _____
- h. Siftings Handling Description: _____
- i. Combustion Air System Description:
 - 1) Underfire air _____
 - 2) Overfire air (including % of overfire air to total combustion) _____
- j. Manufacturer Ash Discharger Description, Size: _____
- k. Hydraulic System Description: _____
- l. Manufacturer: _____

Information about the major equipment components for the combustion/steam generation unit system as specified below:



- Steam Coil Air Preheater
- Sootblowers/Tube Cleaning System
- Auxiliary Fuel Burners

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 4**

UNDERFIRE AIR FANS

- 1. Number of Units: _____
- 2. Type: _____
- 3. Capacity (ACFM): _____
- 4. Excess Air Capacity (%): _____
- 5. Blading: _____
- 6. HP: _____
- 7. Manufacturer(s): _____

- 8. Dampers: _____
 - a. Type: _____
 - b. Manufacturer(s): _____

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 5**

OVERFIRE AIR FANS

- 1. Number of Units: _____
- 2. Type: _____
- 3. Capacity (ACFM): _____
- 4. Excess Air Capacity (%): _____
- 5. Blading: _____
- 6. HP: _____
- 7. Manufacturer(s): _____

- 8. Dampers: _____
 - a. Type: _____
 - b. Manufacturer(s): _____

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 6**

RESIDUE HANDLING EQUIPMENT

- 1. Bottom Ash Conveyors:
 - a. Type: _____
 - b. Qty / Capacity (per hour): _____
 - c. Description: _____
 - d. Size (LxWxH): _____
 - e. Density: _____
 - f. Gearbox: _____
 - g. HP: _____
 - h. Manufacturer(s): _____

- 2. Grizzly Scalper:
 - a. Type: _____
 - b. Qty / Capacity: _____
 - c. Description: _____
 - d. Size: _____
 - e. Type of Drive: _____
 - f. HP: _____
 - h. Manufacturer(s): _____



**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 7**

FERROUS REMOVAL EQUIPMENT

- 1. Type of Equipment: _____
- 2. Number of Units: _____
- 3. Capacity (lb/hr) (each): _____
- 4. Manufacturer(s): _____

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 8**

NON-FERROUS REMOVAL EQUIPMENT

- 1. Type of Equipment: _____
- 2. Number of Units: _____
- 3. Capacity (lb/hr) (each): _____
- 4. Manufacturer(s): _____



**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 9**

SELECTIVE CATALYTIC REDUCTION SYSTEM EQUIPMENT

- 1. Description of SCR NO_x Control System: _____

- 2. Number of Units: Three

- 3. Chemical Used for Reagent: _____

- 4. Reagent Chemical Use per Unit at MCR (lbs/hr): _____

- 5. a. Compressed Air Use per unit per hour: _____ cfm @ _____ psi
b. Water Consumption per unit per hour: _____ gpm @ _____ psi

- 6. Materials of Construction and Item Description: _____
 - a. Chemical Storage (indicate capacity): _____

 - b. Heat Exchanger _____

 - c. Flue Gas Heater _____

 - c. Reagent Injection & Mixing Section _____



d. SCR Reactor _____

7. Catalyst

a. Catalyst Material (support and catalyst) _____

b. Number of layers _____

c. Operating Temperature and Range (°F): _____

d. Catalyst Pitch/Area Velocity _____

e. Volume of Catalyst _____

f. Type and Percent of All Active Substances _____

8. Heating Steam Supply System

a. Primary Source (location/pounds per
hour/psi/ °F) _____

b. Secondary Source (location/pounds per
hour/psi/ °F) _____

9. Steam Heating Auxiliary Burner _____

a. Does the Proposal include an Auxiliary Burner? If Yes, provide burner capacity (Yes/No)
(minimum BTU/hr): _____

b. Will Auxiliary Burner be used during normal operating conditions? (Yes/No)

c. Will Auxiliary Burner be used for operational transients? If Yes, explain reason for doing so. (Yes/No)



- 10. Heating Natural Gas System
 - a) Minimum BTU/hr _____
 - b) Maximum BTU/hr _____
 - c) Estimated Gas Usage(therms/ton MSW) _____

- 11. Describe SCR Bypass Ducting & Damper

- 12. Flue Gas Data (Per Unit)
 - a. Maximum Flow (ACFM): _____
 - b. Maximum Velocity through Ducting (ft/sec): _____
 - c. Maximum Velocity through Catalyst Layers (ft/sec): _____
 - d. Inlet Gas Temperature Design/Maximum/Minimum (°F): _____
 - e. Outlet Gas Temperature Design/Maximum/Minimum (°F): _____
 - f. Flange to Flange Pressure Drop (In W.C.) _____

- 13. Overall Dimensions of Integrated SCR System
_____ x _____ per inch

- 14. Manufacturer(s) /Fabrication Shop Location(s) (& License if applicable): _____

- 15. Provide reference facility(ies) and years in service for the following key components:
 - a. SCR Reactor and Catalyst _____
 - b. Injection Systems and Mixing Chamber _____
 - c. Heat Exchanger _____



**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 10**

CARBON INJECTION SYSTEM EQUIPMENT

- 1. Description of Carbon Injection System:

- 2. Number of Blowers/Capacity:

- 3. Reagent Chemical Use (lbs/hr) (per unit):

- 4. Compressed Air Use (cfm):
Peak _____
Average _____

- 5. Method for monitoring reagent consumption:

- 6. PAC Storage Capacity

- 7. Manufacturer(s) (& License if applicable):



**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 11**

ACID GAS CONTROL SYSTEM EQUIPMENT

1. Type Supplied (Semi-Dry or Spray Dry Absorber): _____
2. Number of Spray Dryer/Absorber Units: _____
3. Flue Gas Data (Per Unit):
 - a. Maximum Flow (ACFM): _____
 - b. Maximum Velocity (ft/sec): _____
 - c. Maximum Temperature (°F): _____
 - d. Flange to Flange Pressure Drop (In W.C.): _____
 - e. Flue Gas Residence Time (s): _____
 - f. Outlet Gas Temperature Design / Maximum (°F): _____
4. Storage Capacity:
 - a. Number of Silos: _____
 - b. Capacity per Silo: _____
5. Overall Efficiencies:

<u>HCl</u>	<u>Eff.</u>	<u>Inlet Conc.</u>	<u>Outlet Conc. @ Stack</u> <u>7% O₂</u>
a. Design (5,000 Btu/lb) Waste	_____ %	_____ ppm _{dv}	_____ ppm _{dv}
b. 3,800 Btu/lb Waste	_____ %	_____ ppm _{dv}	_____ ppm _{dv}
c. 6,000 Btu/lb Waste	_____ %	_____ ppm _{dv}	_____ ppm _{dv}
<u>SO₂</u>			
d. Design (5,000 Btu/lb) Waste			
e. 3,800 Btu/lb Waste	_____ %	_____ ppm _{dv}	_____ ppm _{dv}
f. 6,000 Btu/lb Waste	_____ %	_____ ppm _{dv}	_____ ppm _{dv}
6. Chemical Used for Neutralization: _____
7. Neutralization Chemical Use per Unit (lbs/hr and lb/tons of waste): _____
8. Water Use per Unit (gpm):
 - a. Slaking Water Quantity / Quality Required gpm

b. Dilution Water Quantity / Quality Required gpm

c. Temperature Control Water Quantity / Quality Required gpm

9. Electric Power (Total):

a. Connected (kW):

b. Operating (kWh) (Annual Average)

10. Compressed Air Use (CFM):

a. Compressed Air Power Requirement:

b. Compressed Air Type, Size, Pressure:

11. Atomization System:

a. Type:

b. Number:

12. Spray Dryer / Absorber (or Recirculating Type Scrubber):

a. Description

b. Materials of Construction (including shell material & thickness):

13. Description of Instrumentation/Control System for HCl & SO₂ Emission Control:

14. Description of Control for Temperature of Outlet Gases from Dry Scrubber:

15. Manufacturer(s) (& License if applicable):

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 12**

INDUCED DRAFT FANS

- 1. Number of Units/Boiler: _____
- 2. Type: _____
- 3. ACFM/°F: _____
- 4. Static Pressure (inlet H₂O): _____
- 5. RPM: _____
- 6. Blading: _____
- 7. HP: _____
- 8. Dampers / Inlet Vane / VFD: _____
 - a. Type: _____
 - b. Manufacturer(s): _____
- 9. Dampers / Inlet Vane / VFD: _____
 - a. Manufacturer(s): _____
 - b. Horse Power: _____
 - c. Service Factor _____
- 10. Test Block Data: _____
- 11. Manufacturer(s): _____



**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 13**

BAGHOUSES

- 1. Number of Units and Type: _____
- 2. Flue Gas Data (per unit):
 - a. Maximum Flow (ACFM): _____
 - b. Maximum Temperature (°F): _____
 - c. Flange to Flange Pressure Drop (in W.C.): _____
 - d. Air-to-Cloth Ratio:
 - Full Mode Operation: _____
 - One Module Out of Service: _____
 - Two Modules Out of Service: _____
- 3. Number of Modules per Unit:
 - a. Number of Bags per Module: _____
- 4. Materials of Construction and Items Description:
 - a. Bags (including diameter & length of bag): _____
 - b. Bag Cages: _____
 - c. Plenum (Including Thickness): _____
 - d. Hoppers (Including Thickness): _____
- 5. Description of Bag Cleaning System: _____



**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 14**

STACK

- 1. Number of Flues: Three
- 2. Inside Diameter of Flues (ft): _____
- 3. Outside Dimensions of Stack: _____

 - a. Top (ft): _____
 - b. Base (ft): _____

- 4. Height of Stack (ft): _____
- 5. Design Flue Gas Outlet (at MCR): _____

 - a. Velocity (fpm): _____
 - b. Temperature (°F): _____

- 6. Materials of Construction and Thickness:
(including liner) _____

 - a. Flue Liner Insulation: _____
 - b. Flue Liner Drain: _____
 - c. Upper Part of Flue Liner: _____

- 7. Manufacturer(s): _____



PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 15
CONTINUOUS EMISSION MONITORING SYSTEM

- 1. Manufacturer(s):

- 2. Manufacturer(s) and Type of each analyzer:
 - a. Opacity:

 - b. SO₂:

 - c. NO_x:

 - d. CO:

 - e. Wet O₂:

 - f. Dry O₂:

 - g. NH₃:



h. CO₂:

Provide summary information about the major equipment components for the continuous emission monitoring system as specified below:

- CEMS Shelters
- Remote Data Acquisition System

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 16**

TURBINE-GENERATOR

1

- 1. Number of Units: _____
- 2. Rated Nameplate Capacity (MW): _____
- 3. Steam Throttle Flow at Nameplate Capacity: _____
 - a. Design Flow Rate (lb/hr): _____
 - b. VWO Flow Rate (lb/hr): _____
 - c. Pressure (psig): _____
 - d. Temperature (°F): _____
- 4. Number of Stages: _____
- 5. Number of Extraction Points (pressure and temperature to be provided in the Mass and Energy Balance): _____
- 6. Turbine Exhaust Pressure (in. Hg): _____
 - a. Dry Bulb Conditions: 80°F / 90°F
 - b. Design: _____
 - c. VWO: _____
- 7. Turbine Exhaust Flow (lb/hr): _____
 - a. Dry Bulb Conditions: 80°F / 90°F
 - b. Design: _____
 - c. VWO: _____
- 8. Steam Rate (lb/kWh): _____
 - a. Dry Bulb Conditions: 80°F / 90°F
 - b. Design: _____
 - c. VWO: _____



9. Turbine-Generator Heat Rates (BTU/kWh): _____
(Provide manufacturer's heat balance sheets)

a. Dry Bulb Conditions: 80°F / 90°F

b. Design: _____

c. VWO: _____

10. Speed Governing System Description: _____

11. Generator: _____

a. Type: _____

b. Rating (kVA): _____

c. Speed (rpm): _____

d. Voltage (kV): _____

e. Power Factor (pf): _____

f. Frequency (Hz): _____

g. Insulation Class: _____

h. Frequency/Short Circuit Ratio: _____

i. Overspeed Limitation: _____

j. Number of Terminal Leads: _____

12. Generator Output (kW): _____

a. Design: _____

b. VWO: _____

13. Generator Cooling Description: _____

14. Generator Protective Relays: _____

a. Type: _____

b. _____

c. _____

15. Turbine Lubrication System Description: _____

a. Lubrication System Auxiliary Power

Supply Description:

16. Excitation System Description:

17. Manufacturer(s), Model:

a. Turbine:

b. Generator:

c. Generator Protective Relays

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 17**

CONDENSATE AND FEEDWATER SYSTEM

1. Feedwater Heater (Provide data for each feedwater heater):

- a. Number of Units:
- b. Model: _____
- c. Steam Side Pressure (psig): _____
- d. Manufacturer(s): _____

2. Deaerator:

- a. Number of Units:
- b. Model: _____
- c. Storage Tank Capacity (lb/hr): _____
- d. Outlet Capacity (lb/hr): _____
- e. Operating Pressure (psig): _____
- f. Manufacturer(s): _____

3. Condensate Pumps:

- a. Number of Units:
- b. Model: _____
- c. Design Capacity (gpm): _____
- d. Design Total Head (ft): _____
- e. Efficiency at Design Conditions (%): _____
- f. Drive Horsepower (HP): _____
- g. Manufacturer(s): _____

4. Boiler Feed Pumps:



- a. Number of Units: _____
- b. Model: _____
- c. Design Capacity (gpm): _____
- d. Design Total Head (ft): _____
- e. Efficiency at Design Conditions (%): _____
- f. Drive Horsepower (HP): _____
- g. Manufacturer(s): _____

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 18**

AIR-COOLED CONDENSER

- 1. Main (Turbine) Condenser:
 - a. Number of Units: _____
 - b. Type / Material: _____
 - c. Number of Cells: _____
 - d. Power Use (kW):
 - a. Installed: _____
 - b. Operating: _____
 - e. Heat Exchange Surface Area: _____
 - f. Operating Pressure (Based on Ambient Dry Bulb Temperature of 80°F / 90°F):

Annual Avg:	Max. Operating:
_____	_____
 - g. Design Steam Flow (lb/hr): _____
 - h. Design Steam Enthalpy (Btu/lb): _____
 - i. Condenser Duty (Btu/hr): _____
 - j. Inlet Temperature (°F): _____
 - k. Outlet Temperature (°F): _____
- 2. Hot Well Capacity: _____
- 3. Air Removal System Description: _____
- 4. Turbine Maintenance Provision (i.e. Double Block Protection): _____
- 5. Attemperation Required in Full:
 - a. Bypass Mode: _____
 - b. Describe Attenuation System: _____
- 6. Split-System Operation Description: _____
- 7. Manufacturer(s): _____





**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 19**

DISTRIBUTED CONTROL SYSTEM

- 1. Description of System Configuration: _____
- 2. Block Diagram of Hardware Configuration: _____
- 3. Block Diagram of Software Configuration: _____
- 4. List of Previous Systems in Operation and an Individual to Contact to Evaluate its Performance: _____
- 5. Graphic Displays and Report Formats to be Supplied: _____
- 6. Description of Operator Process Interface: _____
- 7. Functional Description of the DCS: _____
- 8. Performance Description of the DCS: _____
- 9. Description of Software Languages Used in the DCS: _____
- 10. Description of Training Available at Plant and in the Field: _____
- 11. Description of Start-up and Maintenance Services Available: _____
- 12. Description of panel and local instrumentation and controls (manufacturers, types, logic).



13. Description of control logic, auto/manual controls, main and remote control stations, primary instrumentation and metering:

14. Description of data display and storage capabilities:

15. Description of compatibility with connectivity to the Authority's offices:

16. Manufacturer(s) of DCS:



**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 20**

ELECTRICAL SYSTEM EQUIPMENT

1. In Plant Electrical Demand

Provide supporting information to estimate the total in-plant estimate demand on a daily basis (i.e., identify loads used under normal operation versus installed loads for backup/redundancy applications), including the following parameters:

Total Estimated Maximum Demand: _____ kW
 Estimated Demand (Cold Start Condition): _____ kW
 Estimated Annual Inhouse Energy Usage: _____ kWh

2. Transformers

	<u>13.8 kV</u>	<u>4.16 kV</u>	<u>480 V</u>
a. Service	_____	_____	_____
b. Type, KVA Rating	_____	_____	_____
c. Taps	_____	_____	_____
d. Impedance	_____	_____	_____
e. Manufacturer(s)	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

3. Switchgear

	<u>13.8 kV</u>	<u>4.16 kV</u>	<u>480 V</u>
a. Service	_____	_____	_____
b. Description	_____	_____	_____
c. NEMA Rating	_____	_____	_____
d. Describe Arc Flash Protection Approach (13.8kV and 4.16kV Switchgear)	_____	_____	_____
e. Manufacturer(s)	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

4. Motor Control Center (MCC)

	<u>13.8 kV</u>	<u>4.16 kV</u>	<u>480 V</u>
a. Number	_____	_____	_____



b. Service	_____	_____	_____
c. Enclosure Rating	_____	_____	_____
d. Amperage Rating	_____	_____	_____
e. Manufacturer(s)	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

5. DC System

Batteries (Type, Manufacturer(s), Model) _____

Description _____

6. Uninterrupted Power Source

Inverter (Type, Manufacturer(s), Model) _____

Description _____

7. Diesel Fueled Engine Generator

Generator (Type, Manufacturer(s), Model) _____

Description _____

8. Synchronization and Paralleling Systems

Description of systems for generator synchronization and paralleling which allow all power sources to function either independently or in unison, using whatever generators are available. The requested description shall be written specifically for this Project. The manufacturer's standard description, which refer only to typical operation are not acceptable.

9. Control Hierarchy for Power Distribution Systems



Briefly describe the overall approach towards electrical systems reliability identifying major circuits and their priorities. Explain how the systems will respond to electrical failures by automatically shedding loads on a priority basis. Discuss the order by which alternate power sources will be activated. The requested description shall be written specifically for this project. The manufacturer's standard descriptions which refer only to typical operation are not acceptable.

Provide the outline, on a separate page, for a complete protective device and circuit study starting with utility incoming to the largest breaker in first downstream panel fed from switchgear 1.

Furnish composite one-line diagram of the power distribution systems, showing power sources, power transformers, disconnect switches, circuit breakers, fuses, potential transformers, current transformers, protective relays, metering and other essential devices.

10. Lighting

Describe any lighting that deviates from the Design Criteria specified in Tables S3-1 and S3-2 of Section 3 of the Design Criteria Package (Volume 3).

11. Temporary Electrical Service

Provide details of temporary electrical service arrangements required for construction including the points of connection and the sizes of the services.

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 21**

FIRE PROTECTION SYSTEM

1. Fire Water Storage Tank

- a. Design Capacity (gallons): _____
- b. Diameter (ft): _____
- c. Height (ft): _____
- d. Materials of Construction _____
- e. Manufacturer(s): _____

2. Diesel Fire Pump(s)

- a. Model: _____
- b. Design Capacity (gpm): _____
- c. Design Total Head (ft): _____
- d. Drive Horsepower (HP): _____
- e. Manufacturer(s): _____

3. Electric Fire Pump

- a. Model: _____
- b. Design Capacity (gpm): _____
- c. Design Total Head (ft): _____
- d. Drive Horsepower (HP): _____
- e. Manufacturer(s): _____



4. Fire Protection System Description:

5. Fire Alarm and Detection System Description:



**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 22**

MISCELLANEOUS INFORMATION

1. Spare Parts and Tools

- a. Provide your spare parts philosophy and how Spare Parts Allowance specified in Table 3-2 would be spent.
- b. Describe tools, furniture and maintenance equipment (a list from a similar sized facility is acceptable).

2. Vehicles and Mobile Equipment

Furnish a list of all rolling stock and other mobile equipment supplied by the Contractor.

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 23**

GENERAL EQUIPMENT SPECIFICATIONS FORM INSTRUCTIONS

General Instructions and Notes:

Duplicate, complete and submit this form for all major equipment/systems required as part of the Proposer's Proposal Form 8 and for all proposed major equipment/systems not covered elsewhere. Attach additional pages if necessary.

Any change to major equipment/systems after the Proposal Submittal Date shall be subject to the Authority's approval. The use of "or equal" is acceptable.

Notes:

1. Proposer shall include all additional parameters regarding the Design/Operational requirements that are applicable to the given system and/or equipment. This shall include items such as flow rates, ratios, or other appropriate measurements.
2. Proposer shall include all additional parameters regarding the Design/Operational requirements that are applicable to the given system and/or equipment. This shall include items such as flow rates, ratios, or other appropriate measurements. Include appropriate measurements and units (i.e., gpm, volts, ft², etc).
3. Proposer shall identify each major component of the equipment and system (i.e., tank walls, casings, enclosures, cores, etc) and identify the corresponding material of the listed component (i.e., concrete, type of metal, etc).

**PROPOSAL FORM 8
EQUIPMENT SPECIFICATION SHEET NO. 23**

GENERAL EQUIPMENT SPECIFICATIONS FORM

Name of Equipment/System:

General Information:

Number of Units: _____
Type: _____
Model: _____
Location: _____
Manufacturer(s): _____

Design/Operational Parameters⁽²⁾:

Capacity: _____
Size/Dimensions: _____
Power Requirement (Voltage, Current
Pressure, etc.): _____

Materials of Construction⁽³⁾:

Other Features



**PROPOSAL FORM 9
PERFORMANCE GUARANTEES SUMMARY**

DESIGN/BUILD PERIOD

Local Hiring

Percent Employment Hours

Local Hiring Non-Skilled

Local Hiring Skilled

Average Hourly Rate

Local Hiring Non-Skilled

Local Hiring Skilled

Proposed Schedule Date

**Proposal Unit
(Month/Year)**

Commercial Operations Date

_____/_____

**OPERATION AND
MAINTENANCE PERIOD**

Electrical Generation

**Proposal Unit
(as noted)**

Gross Electric Energy Generation Rate

_____ kWh/ton

Electric Energy Generation Guarantee

_____ kWh/ton

Electric Capacity Guarantee

_____ MW/month

Metals Recovery

**Proposal Unit
(Percent of Metal in Ash Recovered)**

Ferrous Recovery Rate

_____ percent recovered

Non-Ferrous Recovery Rate

_____ percent recovered

Reagent Usage

**Proposal Unit
(lbs or gal/ton processed)**

Not-to-Exceed Pebble Lime Usage Rate

_____ lbs/ton



Not-to-Exceed Hydrated Lime Usage Rate _____ lbs/ton

Not-to-Exceed Urea Usage Rate _____ gal/ton

Not-to-Exceed Ammonium Hydroxide Usage Rate _____ lbs NH₃/ton

Not-to-Exceed Carbon Usage Rate _____ lbs/ton



**PROPOSAL FORM 10
COST PROPOSAL SUMMARY**

DESIGN/BUILD CONTRACT

**Proposal Unit
(Dollars)**

Total Lump Sum Price \$ _____

Amount of Public Construction Bond \$ _____

OPERATION AND MAINTENANCE AGREEMENT

**Proposal Unit
(Dollars)**

Annual Operating Fee \$ _____

PROPOSAL FORM 11



FUND DRAWDOWN SCHEDULE

<u>MONTHS</u>	<u>CONSTRUCTION</u>	<u>MONTHS</u>	<u>CONSTRUCTION</u>
<u>PROPOSAL</u>		<u>PROPOSAL</u>	
1	\$ _____	32	\$ _____
2	\$ _____	33	\$ _____
3	\$ _____	34	\$ _____
4	\$ _____	35	\$ _____
5	\$ _____	36	\$ _____
6	\$ _____	37	\$ _____
7	\$ _____	38	\$ _____
8	\$ _____	39	\$ _____
9	\$ _____	40	\$ _____
10	\$ _____	41	\$ _____
11	\$ _____	42	\$ _____
12	\$ _____	43	\$ _____
13	\$ _____	44	\$ _____
14	\$ _____	45	\$ _____
15	\$ _____	46	\$ _____
16	\$ _____	47	\$ _____
17	\$ _____	48	\$ _____
18	\$ _____	49	\$ _____
19	\$ _____	50	\$ _____
20	\$ _____	51	\$ _____
21	\$ _____	52	\$ _____
22	\$ _____	53	\$ _____
23	\$ _____	54	\$ _____
24	\$ _____	55	\$ _____
25	\$ _____	56	\$ _____
26	\$ _____	57	\$ _____
27	\$ _____	58	\$ _____
28	\$ _____	59	\$ _____
29	\$ _____	60	\$ _____
30	\$ _____		
31	\$ _____	TOTAL	\$ _____



APPENDIX G

Design, Build, Construct Agreement

**WASTE TO ENERGY FACILITY OPERATOR
RFP NO. 134-0171-P (LN)**

SERVICE AGREEMENT

BETWEEN

PINELLAS COUNTY, FLORIDA

AND

Covanta Projects, LLC

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SERVICE AGREEMENT

THIS SERVICE AGREEMENT (this “Agreement” or this “Service Agreement”) is made and entered into as of this ____ Day of _____, 2014, by and between Covanta Projects, LLC, a Delaware Limited Liability Company, having its principal place of business at (formerly known as Covanta Projects, Inc.) 445 South Street and authorized to do business in the State (the “Contractor”), and **PINELLAS COUNTY, FLORIDA** (the “County”), a political subdivision of the State of Florida, acting by and through its Board of County Commissioners. The Contractor or the County or both may be referred to herein as the “Party” or the “Parties”, as the context of the usage of such term may require. Capitalized terms used in this Agreement shall have the respective meanings assigned to such terms in Section 2 of this Agreement.

RECITALS

WHEREAS, the County owns a mass burn, resource recovery Facility and currently contracts with a private operator to manage, operate and maintain the Facility pursuant to that certain Service Agreement dated January 23, 2007, as amended (the “Prior Agreement”), that is scheduled to expire on December 31, 2014, unless terminated earlier pursuant to its terms;

WHEREAS, the County issued a Request for Qualifications on March 14, 2014 (“RFQ”) for the purpose of soliciting companies possessing the qualifications and experience specified in such RFQ to receive and respond to a draft request for proposals for the management, operation, repair and maintenance of the Facility;

WHEREAS, the Contractor, in response to said RFQ, submitted a statement of qualifications describing, among other things, its experience and interest in being selected to perform such service;

WHEREAS, the Contractor was notified by the County that it was a Qualified Respondent and was invited to receive a draft request for proposals dated and issued on June 16, 2014 (“DRFP”), and participate in the procurement process, together with other Qualified Respondents;

WHEREAS, the Contractor, together with the other Qualified Respondents, participated in meetings and negotiations relative to the DRFP documents, including an attached draft service agreement relative to the management, operation, Repair or Replacement and maintenance of the Facility;

WHEREAS, pursuant to such meetings and negotiations, the DRFP documents and attached service agreement were finalized and a final RFP dated September 22 2014 (“FRFP”) was issued to the Qualified Respondents on September 22 2014, including the Contractor, for proposals based on such FRFP documents and the negotiated and attached Service Agreement;

WHEREAS, the Contractor, in response to the FRFP, submitted its pricing with respect to such negotiated and finalized Service Agreement;

WHEREAS, the County has selected the Contractor, in reliance on (a) the Contractor’s submissions and representations in response to the RFQ and (b) the Contractor’s proposal in response to the FRFP and the negotiated and finalized Service Agreement;

WHEREAS, the County desires to engage the services of the Contractor to perform management, operation, Repair or Replacement and maintenance of the Facility in accordance with the terms and conditions of this Service Agreement, and the Contractor desires to perform such services under such terms and conditions for the compensation provided herein; and

WHEREAS, on or prior to the Contract Date, the Guarantor shall have executed and delivered the Guaranty set forth in Schedule 10 (Guaranty) to the County's Authorized Representative to guaranty the Contractor's performance of its obligations under this Agreement.

NOW, THEREFORE, in consideration of the mutual promises and covenants of each to the other contained in this Agreement and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Contractor and the County do hereby covenant and agree as follows:

SECTION 1
THE SERVICE AGREEMENT

Section 1.1 Purpose.

The purpose of this Agreement is to define the terms and conditions by which the Contractor shall manage, operate, Repair or Replace and maintain the Facility commencing on the Commencement Date through the Term.

Section 1.2 Effective Date.

This Agreement shall be effective commencing on the Contract Date.

Section 1.3 Cooperation.

The Parties shall act in good faith, cooperate and exercise all reasonable efforts in the performance of their respective obligations and exercise of their respective rights under this Agreement to facilitate the timely and effective implementation of this Agreement. The Parties also agree in good faith to resolve disputes, if any, in an equitable and timely manner so as to avoid, where feasible, the need for more formal resolution.

Section 1.4 Entire Agreement.

The following Schedules are attached to and made a part of this Agreement:

SCHEDULES

Schedule 1	Description of the Facility and Facility Site
Schedule 2	Performance Guarantees
Schedule 3	Performance Calculations and Test Procedures
Schedule 4	Determination of Processible Waste Higher Heating Value
Schedule 5	Adjustment Factor
Schedule 6	Reporting Requirements

Schedule 7	Utility and Reagent Utilization Allowances
Schedule 8	Form of Performance Bond
Schedule 9	Form of Irrevocable Letter of Credit
Schedule 10	Guaranty
Schedule 11	Insurance
Schedule 12A	Form of Contractor's Monthly Invoice
Schedule 12B	Form of Contractor's Projects and Additional Services Invoice
Schedule 12C	Form of Contractor's Annual Reconciliation Invoice
Schedule 13	Staffing Plan
Schedule 14	County Permits
Schedule 15	Non-Process Maintenance and Customer Service Standards
Schedule 16A	Required Equipment and Spare Parts Inventory List
Schedule 16B	Critical Spare Parts
Schedule 17	Transition Plan
Schedule 18	Design and Construction Monitoring and Review
Schedule 19	Technical Recovery Plan
Schedule 20	County's Minimum Water Quality Delivery Standards
Schedule 21	Form of Affidavit and Release
Schedule 22	Codes and Standards
Schedule 23	Disclosures

This Agreement, including the recitals hereto and the foregoing Schedules, constitutes the entire Agreement, and the Parties agree that the terms, conditions and provisions of this Agreement, inclusive of the Schedules, and any amendments that may arise as a result of the terms and conditions of this Agreement, shall govern the obligations of the Parties with respect to the management, operation, Repair or Replacement and maintenance of the Facility and the Facility Site. To the extent that there is any conflict or inconsistency between the provisions of

the body of this Agreement and the provisions of any Schedule, the body of this Agreement shall govern and control.

To the extent the RFQ or the FRFP, or both, or any attachments thereto, including the draft service agreement, are inconsistent with this Agreement, including all Schedules thereto and any amendments to this Agreement or the Schedules, or both, this Agreement, including all Schedules thereto and any amendments to the same shall govern and control.

SECTION 2
DEFINITIONS

Section 2.1 Definitions.

The following are definitions of certain terms used in this Agreement:

“Acceptable Operating Condition” shall mean Equipment that (a) is functional, (b) meets applicable industry minimum Codes and Standards, or is normally grandfathered in because it does not meet Codes and Standards that were updated but it did not need to be replaced at such time, (c) is not beyond the OEM’s stipulated useful life, (d) is supported either by the OEM or after-market suppliers, and (e) may or may not be in need of current Repair or Replacement; provided, that if such Equipment is in need of current Repair or Replacement, the expected Maximum Project Price of such Repair or Replacement does not exceed twenty thousand dollars (\$20,000.00).

“Adjustment(s)” shall have the meaning attributed to such term pursuant to Sections 8.4.

“Adjustment Factor” has the meaning specified in Schedule 5 (Adjustment Factor).

“Administrative Permit Requirement(s)” shall have the meaning specified in Section 3.7.1.

“Affiliate” means a corporation or other business entity controlled by, controlling or under common control, directly or indirectly with, the Contractor.

“Agreement” shall have the meaning set forth in the opening paragraph of Service Agreement identifying the Parties hereto which includes all Schedules and properly authorized written amendments, if any, thereto.

“Allowance” or “Allowances” shall mean, collectively, all Utility and Reagent allowances defined in Schedule 7 (Utility and Reagent Utilization Allowances).

“Annual Processing Guarantee” means the quantity of Processible Waste that the Facility is guaranteed by the Contractor to accept and Process in any Billing Year as specified in Schedule 2 (Performance Guarantee), pro rata for a Billing Year less than a full twelve (12) Months.

“Applicable Law(s)” means every applicable federal, State, County, or local law, code (including Codes and Standards), rule, constitution, mandate, statute, regulation, ordinance, municipal charter provision, order, decree, Permit, license, judgment, or other governmental requirement or resolution, the common law arising from final, non-appealable decisions of Governmental Authorities in the United States, and any interpretation or administration of any of the foregoing by any Governmental Authority, which applies to the services or obligations, or both, of either Party under this Agreement, whether now or hereafter in effect.

“Approved Outage Work” means the scope of work scheduled to be performed during the Facility outages occurring in November and December 2014 that has been prepared by the Prior Contractor and approved by the County, as the same shall be provided by the County to the Contractor’s Authorized Representative.

“As-Built Drawings” means the as-built or record drawings that reflect the actual conditions of the Work as constructed or installed (a) as part of any Project implemented under this Agreement, (b) as a Repair or Replacement or (c) as a change to the Facility pursuant to Section 10, as the same are performed by or through the Contractor pursuant to this Agreement.

“Audited Financial Statements” means a balance sheet, income statement and statement of changes in financial position for the Guarantor’s applicable fiscal year, in each case prepared in accordance with generally accepted accounting principles (“GAAP”), consistently applied or any internationally accepted principles or standards replacing or intending to replace GAAP, and

audited by a nationally or regionally recognized firm of independent certified public accountants in accordance with generally accepted auditing standards (“GAAS”) in the United States and accompanied by such firm’s written audit opinion to the effect that such statements fairly present the Guarantor’s financial position and the results of operations set forth therein.

“Authorized Representative(s)” means the County’s Authorized Representative and/or the Contractor’s Authorized Representative as the context of the usage of such term may require, as such Authorized Representative is designated pursuant to Section 15.8.

“Average Recovered Materials Revenues” shall mean the quotient determined by dividing (a) the aggregate amount of all Net Revenues for Recovered Materials recovered and sold by the Contractor during the preceding twelve (12) consecutive Billing Months on a rolling basis (or such shorter time period if less than twelve (12) Billing Months) by (b) the number of Tons of Recovered Materials recovered and sold by the Contractor during the preceding twelve (12) consecutive Billing Months on a rolling basis (or such shorter time period if less than twelve (12) Billing Months).

“Base Delivery Amount” means, with respect to a full Billing Year, eight hundred ten thousand (810,000) Tons of Processible Waste and, with respect to a Billing Year that is less than a full twelve (12) Months, a pro rata portion of such amount based on the number of Months in the Billing Year.

“Best Evaluated Bidder” means a bidder that the Contractor and the County or its Consulting Engineer, each acting reasonably, has determined (a) is willing to perform the work with respect to which such bidder has competitively bid, (b) is capable and qualified to perform such work through demonstrated experience, (c) has a proven record of producing a quality product and delivering the same in a timely manner, (d) whose price is competitive, if not the

lowest evaluated price bid, and (e) whose terms and conditions for contract are reasonably acceptable to the Contractor and the County or its Consulting Engineer.

“Bid Evaluation Report” shall have the meaning specified in Section 10.6.3.3.

“Billing Month” means each calendar month in each Billing Year, except that (a) the first Billing Month shall begin on the Commencement Date and end at the end of the last Day of the month in which such Commencement Date occurs and (b) the last Billing Month shall end concurrently with the end of the Term, or, as applicable, the date of termination of this Agreement.

“Billing Year” means a Fiscal Year, except that (a) the first Billing Year shall commence on the Commencement Date and end at the end of the Fiscal Year in which the Commencement Date occurred and (b) the last Billing Year shall end concurrently with the end of the Term or, as applicable, the date of termination of this Agreement.

“Board of County Commissioners” means the Board of County Commissioners of Pinellas County, Florida, which is the governing body of the County.

“Boiler Availability” means the percentage of on-line availability of each of the three (3) Facility boiler units as determined and reported to the County on a Monthly basis but applied, for purposes of the application of this definition, on the basis of a twelve (12) Month rolling average, which shall be calculated for the previous twelve (12) Month period as follows: (a) the total number of hours in the previous twelve (12) Month period the boiler either (1) operated, (2) was capable of being operated or (3) if incapable of being operated, could be returned to service and be capable of being operated within one (1) hour, divided by (b) the total number of hours in the previous twelve (12) Months, with the quotient calculated pursuant to (a) and (b), multiplied by (c) one hundred (100). The foregoing calculation shall be performed on a boiler unit by boiler

unit basis. The three boiler unit percentages shall then be averaged to determine the Facility's on-line boiler percentage availability for such previous twelve (12) Month period. Boiler availability measurement and calculation shall be regardless of whether Processible Waste is received and available to be Processed. For purposes of Section 8.4.1 and 12.2.9, the minimum Boiler Availability percentage to be achieved shall be eighty-five percent (85%).

For clarity purposes: (a) a boiler unit undergoing maintenance that cannot be completed within one (1) hour is not considered to be available and (b) the number of hours in a Month during which there is a major turbine generator outage which turbine generator is fed steam generated by the particular boiler shall not be counted.

"Btu" means British thermal unit.

"Business Day" means each Monday, Tuesday, Wednesday, Thursday and Friday, which is not a Legal Holiday.

"Capacity Maintenance Credit" means the applicable amount payable, if at all, by the County to the Contractor relative to the achievement of certain Electric Capacity factor requirements, all as more specifically addressed in Sections 8.2.4 and 8.3.4.

"Carbon Utilization Allowance" shall have the meaning specified in Schedule 7 (Utility and Reagent Utilization Allowances).

"Change(s) in Law" means either (a) the enactment, adoption, promulgation, modification or repeal, after the Proposal Date, of any Applicable Law or any change in interpretation thereof by any Governmental Authority or (b) the imposition, after the Proposal Date, of any conditions on the issuance, modification or renewal of any Permit that, in the case of either (a) or (b), (1) affects the Contractor's performance of the Work, (2) increases the Contractor's costs to perform the Work, (3) affects the County's performance of its obligations

hereunder or (4) increases the County's costs to perform such obligations, by establishing, in the case of (1), (2), (3) or (4), requirements that are more burdensome than the most stringent requirements:

- (i) in effect on the Proposal Date; or
- (ii) agreed to by the County and the Contractor in any applications for Permits, other than any requirements set forth in said applications to comply with Applicable Laws.

For purposes of part (a) of this definition, no enactment, adoption, promulgation or modification of any Applicable Law shall be considered a Change in Law if, as of the Proposal Date, such Applicable Law was (x) officially proposed by the responsible Governmental Authority and published in final form in the Federal Register or equivalent federal, State or local publication and thereafter becomes effective without further action or (y) enacted into law or promulgated by the appropriate Governmental Authority before the Proposal Date, and the comment period with respect to which expired on or before the Proposal Date and any required hearings concluded on or before the Proposal Date in accordance with applicable administrative procedures and which thereafter becomes effective without further action.

The enactment into law of (a) any Discriminatory Tax law or (b) any federal, State or local, user fee or assessment, or both, after the Proposal Date, and with respect to clause (b), having application to the Contractor as the operator of the Facility, shall be considered a Change in Law. In no event, however, shall any other change in tax law (other than the enactment into law of a Discriminatory Tax law), federal, state, local or otherwise, be considered a Change in Law.

“Codes and Standards” means (a) those applicable technical or numerical codes and standards referenced in this Agreement, including Schedule 22 (Codes and Standards), (b) those applicable codes and standards of technical societies, organizations or associations not otherwise referenced in Schedule 22 (Codes and Standards), and (c) all applicable provisions of all national, state or local established rules for the Work that, in each case, must be adhered to by Contractor by Applicable Law in the performance of the Work. Changes to Codes and Standards after the Proposal Date shall constitute a Change in Law provided such changes meet the requirements of the Change in Law definition.

“Commencement Date” means the date the Contractor commences operation of the Facility, which date shall be the earlier to occur of (a) the date provided by the County in the Notice given to the Contractor to commence operations and maintenance of the Facility, which shall be no sooner than thirty (30) Days following the date of the Notice, or (b) 12:00am, January 1, 2015.

“Committed Capacity” shall have the meaning specified in the Power Purchase Agreement.

“Communication Plan” shall have the meaning specified in Section 3.33.

“Confidential Information” shall have the meaning set forth in Section 15.6.

“Consulting Engineer(s)” means one or more nationally recognized consulting engineering company(ies) selected and retained by the County with demonstrated experience in the area of waste-to-energy, resource recovery facility construction, operation and maintenance. The County’s Authorized Representative shall give the Contractor’s Authorized Representative Notice of the name of the County’s consulting engineering company(ies) on or about the

Contract Date and the name of any replacement consulting engineering company(ies) on or about the time such replacement shall occur during the Term.

“Contract Date” means the date on which this Agreement is executed and delivered by both of the Parties as set forth in the opening paragraph of this Agreement identifying the Parties hereto.

“Contractor” shall have the meaning ascribed to it in the opening paragraph of this Agreement identifying the Parties hereto.

“Contractor’s Authorized Representative” means the Contractor’s representative designated pursuant to Section 15.8.

“Contractor Fault” means (a) any breach, failure, nonperformance or noncompliance by the Contractor (including the acts or omissions of a Subcontractor) with the terms and provisions of this Agreement for any reason except to the extent such breach, failure, nonperformance or noncompliance is caused by the occurrence or continuing effect of a Force Majeure or County Fault or (b) any negligence or willful misconduct of the Contractor or any agent, officer, employee or Subcontractor (at any tier) of or to the Contractor, or any or all of the foregoing, which, in the case of (a) or (b) of this definition, (1) prevents or, individually or cumulatively, materially interferes with or materially delays the Contractor’s or the County’s performance of its obligations, (2) deprives the County of any of its material rights or (3) increases the County’s costs of performing its obligations or reduces its revenues, in any case, under this Agreement; provided, however, to the extent such breach, failure, nonperformance or noncompliance by the Contractor with the terms and provisions of this Agreement is addressed in this Agreement, the remedies in this Agreement shall govern.

“Contractor Permit(s)” shall have the meaning specified in Section 3.6.

“Control” or “Controlling” means the possession, direct or indirect, of the power to direct or cause the direction of the management or policies, or both, of the Contractor, the Guarantor, any Affiliate or other Entity relative to the Facility or the Facility Site, or both, or the Contractor’s management, operation or maintenance (or any or all of the foregoing of the Facility or the Facility Site, or both,) whether through the ownership of voting securities, or a member or partnership interest, by contract or otherwise.

“Cost Records” shall have the meaning specified in Section 3.15.2.

“Cost Substantiation” means documentation reasonably acceptable to the County provided by the Contractor’s Authorized Representative to support any Direct Cost incurred or to be incurred by the Contractor resulting from the implementation of a Project, Pass Through Cost or other cost identified under this Agreement for which Cost Substantiation must be supplied. Such documentation shall describe the Direct Costs, and shall include a statement identifying in reasonable detail (a) the reason for incurring such Direct Costs, (b) the amount of such Direct Cost, (c) the act, event or condition and Section under this Agreement giving rise to the Contractor’s right to incur such Direct Cost and (d) that such Direct Cost is at a fair market value price for the service provided or materials supplied (it being understood that such services or materials may be provided or supplied by an Affiliate). If the County’s Authorized Representative does not object, in writing, to any such documentation provided by the Contractor’s Authorized Representative within the applicable time period prescribed by the Local Government Prompt Payment Act, such Direct Costs shall be deemed accepted by the County and shall be payable in accordance with the terms of this Agreement. With respect to Direct Costs incurred by the Contractor, the amount shall be increased to provide for the payment of a Markup only when expressly authorized pursuant to the terms of this Agreement

(by the addition of the term “inclusive of Markup”). Any documentation provided by the Contractor’s Authorized Representative shall include copies of all invoices or charges, together with any additional documentation of such costs or expenses incurred which the County deems reasonably necessary, in accordance with GAAP, to verify the amount of such costs and expenses and to demonstrate the basis for the amount claimed. The County reserves the right to have such documentation audited by the County or a third party auditing firm, in either case, at the County’s sole cost and expense.

“Cost to Cure” has the meaning set forth in Section 6.4.

“County” shall have the meaning ascribed to it in the opening paragraph of this Agreement identifying the Parties hereto.

“County Administrator” shall have the meaning specified in the Pinellas County Charter.

“County’s Authorized Representative” means the County’s representative designated pursuant to Section 15.8.

“County Fault” means (a) any breach, failure, nonperformance or noncompliance by the County with the terms and provisions of this Agreement for any reason except to the extent such breach, failure, nonperformance or noncompliance is caused by the occurrence or continuing effect of a Force Majeure or Contractor Fault or (b) any negligence or willful misconduct of the County or any agent, officer, commissioner, employee, contractor, subcontractor at any tier or independent contractor (including, without limitation, the Consulting Engineer) of the County which, in the case of (a) or (b) of this definition, (1) prevents or, individually or collectively, materially interferes with or materially delays the County’s or the Contractor’s performance of its obligations, (2) deprives the Contractor of any of its material rights or (3) increases the Contractor’s costs of performing the Work or reduces its revenues, in any case, under this

Agreement; provided, however, to the extent such breach, failure, nonperformance or noncompliance by the County with the terms and provisions of this Agreement is addressed in this Agreement, the remedies in this Agreement shall govern.

“County’s Director of Risk Management” means the director of risk management for the County and his or her successor as such successor, including any successor position or title, is determined by the County Administrator.

“County Permits” shall have the meaning specified in Section 3.6 and Schedule 14 (County Permits).

“County Plan(s)” means those Solid Waste Operations Hurricane Preparedness Plan and the All Hazards Emergency Response Plans, as the same may be amended, modified or supplemented from time to time by the County.

“Critical Spare Parts” means those Spare Parts required to be maintained at the Facility at all times, as specified on the list attached hereto as Schedule 16B (Critical Spare Parts).

“Cure,” “Cures,” “Cured” or “Curing” means any Repair or Replacement, change, modification, reconstruction, cure, remedy or correction to or on the Facility.

“Customer Service Standards” means those standards specified in Schedule 15 (Non-Process Maintenance and Customer Service Standards).

“Day” means a calendar day of time, beginning at midnight in the eastern time zone of the United States coinciding with the calendar day, whether or not a Sunday or Legal Holiday.

“Deductible Amount” shall have the meaning specified in Section 3.22.1(i).

“Demobilization” means, upon the Contractor’s termination pursuant to Sections 13.2.1 and 13.4, the removal of the Contractor’s personal equipment (as opposed to Equipment) from the Facility Site. In no event shall “Demobilization” include any activities associated with the

termination, transfer, travel, meals, lodging or similar activities regarding the Contractor's employees, the employees of the Guarantor or any affiliate, or both or any subcontractor.

"DEP" means the Florida Department of Environmental Protection and any successor.

"Direct Costs" means, in connection with any cost or expense incurred by the Contractor, the sum of:

(a) the incremental costs for each of the Contractor's or its Affiliates' employees whose work location for any Day is not the Facility Site but for such Day it is changed to the Facility Site, the incremental costs of the Contractor's or Affiliates' payroll for such Contractor's or Affiliates' employees based on the hours worked on the services directly related to the performance of the Work for which Direct Costs are to be applied pursuant to this Agreement; plus

(b) for each of the Contractor's or its Affiliates' employees whose daily work location is the Facility Site, the incremental costs of the Contractor's or Affiliates' payroll for such Contractor's or Affiliates' employees based on the hours worked on the services directly related to the performance of the Work for which Direct Costs are to be applied pursuant to the terms of this Agreement; plus

(c) the sum of payments of reasonable costs to Subcontractors necessary to and in connection with the performance of the Contractor's Work for which Direct Costs are to be applied; plus

(d) the actually incurred costs of Equipment, equipment (other than Equipment), materials, direct rental costs and supplies purchased by the Contractor relative to the Contractor's Work for which Direct Costs are to be applied pursuant to this Agreement (Equipment and equipment [other than Equipment] manufactured or furnished by and services,

materials and supplies furnished by the Contractor or its Affiliates [to the extent permitted under this Agreement] shall be considered purchased materials at their actual invoice cost, provided such cost is an arm's length fair market value cost for incorporation into or exclusive use at or relative to the Facility); plus

(e) subject to Applicable Law, the actual costs of travel and subsistence reasonably incurred by any employee of the Contractor performing the Contractor's Work for which Direct Costs are to be applied.

In the case of the preceding clauses (a) and (b) of the definition of "Direct Costs", the costs of the Contractor's payroll shall consist of (i) the incremental or allocable portion of compensation and fringe benefits, including vacation, sick leave, holidays, retirement, worker's compensation insurance and employer's liability insurance, in each case, not otherwise provided by the Contractor pursuant to the provisions of Section 11.3 and Schedule 11 (Insurance), (ii) federal and State unemployment taxes, and (iii) all medical and health insurance benefits excluding retirees medical and health benefits. Direct Costs shall be based on actual costs or a County approved rate schedule.

This definition shall be applicable whenever this term is identified in this Agreement unless the Parties shall otherwise agree in writing. Further, in no event shall the Contractor's Direct Costs be duplicative of any other definition or provision for payment by the County of any of the itemized costs specified in this definition. Finally, notwithstanding any provision in this Agreement that may be construed to the contrary, Direct Costs shall neither be paid to the Contractor nor applied under this Agreement to the extent such Direct Costs otherwise qualify for inclusion as part of the Technical Recovery Plan Management Fee.

“Director” means the Director of the Solid Waste Division of the Pinellas County Department of Environment and Infrastructure and his or her successor.

“Discriminatory Tax(es)” shall mean a tax imposed on the Contractor by any federal, State or local Governmental Authority having taxing jurisdiction over the Contractor which tax is imposed on the Contractor because of the Contractor’s operation of the Facility which tax is not levied consistently on other businesses based on operation.

“Diverted Waste” means Processible Waste delivered by or on behalf of the County, or attempted to be delivered by or on behalf of the County, for Processing which Processible Waste is not accepted or Processed due to Contractor Fault in accordance with Section 7.1.1.

“Draft Request for Proposals” or “DRFP” means the draft request for proposal and service agreement provided to Qualified Respondents to the RFQ for their review and comments which will be used to develop the FRFP.

“Early Award Period” means the period between the Commencement Date and January 1, 2015 if the Commencement Date occurs prior to January 1, 2015..

“Economic Benefit” means the financial value to an Entity relating to an Emission Purchase and Sale Transaction, whether taking the form of cash, credits or other financial instruments, less any and all actual and verifiable costs incurred by such Entity to the extent such costs are directly attributable to the administration of reasonable activities associated with, and necessary for, the realization and receipt of such financial value.

“Electric Capacity” means electric capacity as may be expressed in terms of KW or MW.

“Electric Capacity Payment(s)” means the Electric Capacity payments that the County receives from the Electric Utility pursuant to the Power Purchase Agreement.

“Electric Capacity Payment Damages” shall have the meaning specified in Section 8.4.1.1.

“Electric Energy” means electric energy as may be expressed in terms of kWh or MWh.

“Electric Energy Recovery Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantee).

“Electric Utility” means Duke Energy of Florida, and its successor, under the Power Purchase Agreement, and such other electric utilities, power marketers or other Entities with whom the County contracts or makes arrangements for the provision or purchase, or both, of (a) electricity to or for the Facility, (b) Environmental Attributes, (c) Renewable Energy Benefits, (d) Renewable Energy Production Incentives, (e) Production Tax Credits, (f) Economic Benefits or (g) other similar benefits, credits, subsidies, incentives or payments.

“Emergency” or “Emergencies” means an incident requiring immediate action on the part of the Contractor, or as necessary and appropriate, the County or other Entity, that if not immediately addressed and Cured, may reasonably be expected to result in: (a) imminent and substantial damage, injury or loss (1) on or to the Facility or (2) to the safety, health or welfare of Entities on, or in the vicinity of, the Facility or (b) a potential violation of a Permit.

“Emergency Plan” shall have the meaning identified in Section 3.8.

“Emission Purchase and Sale Transaction(s)” means the purchase, sale, lease, forward sale, option, derivative, swap or other arrangement of any kind for (a) the transfer of title and ownership of any amount of Environmental Attributes or Renewable Energy Benefits or (b) the exchange, hedge, purchase, sale or transfer of any financial instrument whose underlying leases are Environmental Attributes or Renewable Energy Benefits.

“Entity” or “Entities” means without limitation, any individual, person, firm, corporation, company (including limited liability), partnership (including general and limited), joint venture, association, joint-stock company, trust (including business trusts), unincorporated organization, Governmental Authority, and other entities.

“Environmental Attributes” shall mean any existing or future certificate, offset, credit, allowance, permit, green tag, derivative or other tradable and transferable indicia, howsoever entitled, created, represented, registered, generated, issued, allocated or otherwise required or recognized (or both) by any Entity under Applicable Law, representing, on a per unit CO₂e basis, any measurable aspect, claim, characteristic or benefit identified, attributed to, required for, or associated with (a) the collection, sorting, Processing or incineration of Solid Waste at the Facility (or any or all of the foregoing) or (b) the generation of a quantity of Electric Energy by the Facility using Solid Waste as a generation feedstock. An Environmental Attribute includes one or more of the following: (1) the right to emit one (1) CO₂e Ton of a Greenhouse Gas; (2) the direct or avoided reduction in any Greenhouse Gas, chemical, or other substance; (3) avoided water use; (4) improved air quality; (5) as otherwise defined by any Entity; or (6) as agreed to in writing by the Parties.

“Environmental Market Management Services” shall have the meaning identified in Section 3.30.

“Environmental Regulations Performance Guarantee” means the environmental compliance guarantee specified in Schedule 2 (Performance Guarantees).

“EPA” means the United States Environmental Protection Agency and any successor.

“Equipment” means all equipment and property constituting part of the Facility, including operating and Processing equipment, communication devices, and computer hardware

and software in use as of the Commencement Date, or procured or provided on or after the Commencement Date through the Term by the Contractor or the County pursuant to this Agreement for use at, on or associated with the Facility. Equipment shall not include Rolling Stock, hand tools, office equipment or stand alone, personal computer hardware or software, or both, to the extent that such personal computer hardware or software, or both, is not necessary for the management, operation and maintenance of the Facility.

“Estimated Value” shall have the meaning specified in Section 3.14.

“Event of Default” shall have the meaning specified in Section 12.

“FAC” means the Florida Administrative Code, as the same may be amended, supplemented, replaced or superseded.

“Facility” means the Facility as described in Schedule 1 (Description of the Facility and Facility Site) and all Repairs or Replacements, improvements and changes thereto.

“Facility Equipment List” shall have the meaning specified in Section 3.14.

“Facility Manager” means that individual designated by the Contractor pursuant to the Staffing Plan who shall manage and supervise the Work and shall serve as a Contractor liaison with the County.

“Facility Site” means the area as defined and depicted in Schedule 1 (Description of the Facility and Facility Site).

“Ferrous Metal(s)” means magnetic metals contained in Residue.

“Ferrous Metal Recovery Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantees).

“Ferrous Metal Recovery System Availability Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantees).

"Final Punch List Items" shall have the meaning specified in Section 6.3.

"Final Request for Proposals" or "FRFP" means the requests for proposals issued for bid on September 22 2014, including the final Service Agreement.

"Final Scope of Work" shall have the meaning specified in Section 10.6.3.3.

"Final Value" shall have the meaning specified in Section 3.14.

"Fiscal Year" means the County's fiscal year commencing on October 1 and ending on the immediately succeeding September 30.

"Force Majeure" means any act, event or condition that (a) prevents or individually or in the aggregate, delays the Contractor or the County from meeting, (b) increases the cost of performing or (c) decreases the revenue from so performing, in the case of (a), (b), or (c), the applicable Party's obligations under this Agreement, to the extent such act, event or condition is due to circumstances beyond the reasonable control of the Party asserting a Force Majeure as justification for being prevented from meeting such obligations or the cause of such increased costs or decreased revenue; provided, however, with respect to the asserting Party, such act, event or condition is not the result of such Party's failure to perform its obligations hereunder in accordance with the terms and conditions of this Agreement and provided further, any decrease in revenues shall not be recognized as a Force Majeure under this Agreement unless a reimbursement of such revenues, in whole or in part, is expressly recognized under this Agreement.

(1) Subject to the terms and conditions of the immediately preceding paragraph of this definition, the following acts, events or conditions are examples, but not limitations, of what qualifies as a Force Majeure:

(A) an act of God (except normal weather conditions for the geographic area of the Facility Site), hurricane, tornado, epidemic, landslide, earthquake, flood, or similar occurrence, fire or explosion (only if the fire or explosion is the result of sabotage), an act of the public enemy, terrorism, war, blockade, insurrection, riot, restraint of government and people, civil disturbance, sabotage or similar occurrence;

(B) the order, injunction or judgment of any Governmental Authority, including any exercise of the power of eminent domain, police power, condemnation or other taking by or on behalf of any public, quasi-public or private entity; excepting decisions interpreting federal, State and local tax laws; provided, that such order, injunction or judgment shall not arise in connection with or be related to the negligence or wrongful action or inaction of the Party relying thereon and that neither the contesting in good faith of any such order, injunction or judgment nor the reasonable failure in good faith to so contest shall constitute or be construed as a wrongful or negligence or the willful or wrongful action or inaction of such Party;

(C) the suspension, termination, interruption, denial, failure to issue, modification, or failure of renewal of any Permit, if such act or event shall not arise in connection with or be related to the negligence or wrongful action or inaction of the Party relying thereon, and that neither the contesting in good faith of any such order nor the reasonable failure to so contest shall be construed as a negligence or wrongful action or inaction of such Party;

(D) a Change in Law;

(E) the loss or inability to obtain any Utility services from any federal, State, County or city public agency or private utility (Electric Energy, natural gas, water, wastewater, fuel oil) having operational jurisdiction in the area in which the Facility is located meeting the applicable standards specified in this Agreement and necessary for the operation and

maintenance of the Facility, directly resulting in the partial or total curtailment of operations of the Facility or the Work for reasons other than, as applicable, Contractor Fault or County Fault;

(F) the failure of any Subcontractor, exclusive of any Affiliate, to furnish services, materials, chemicals, Reagents, Utilities or Equipment on the dates agreed to; provided, (i) such failure is the result of an act, event or condition outside of the Subcontractor's reasonable control, (ii) such failure materially and adversely affects the Contractor's ability to perform the Work, and (iii) the Contractor is not able reasonably to obtain substitute services, materials, chemicals, Reagents, Utilities or Equipment on the agreed upon dates;

(G) the condemnation, taking, seizure, involuntary conversion or requisition of title to or use of the Facility or Facility Site, or any material portion or part thereof by action of a Governmental Authority;

(H) any labor strike, work stoppage or slowdown or similar industrial or labor action by the employees of the Contractor or its Affiliates performing Work at the Facility which directly results in a material reduction or curtailment of Processing exceeding, for each such event, thirty (30) continuous Days, it being agreed and understood by the Parties that up to and including the first thirty (30) continuous Days of each such event shall be deemed to be the result of Contractor Fault; provided, however, if the final adjudication by a court of competent jurisdiction finds that such event was principally caused by the Contractor's breach of any applicable collective bargaining agreement the Contractor may have with its employees or its employees' collective bargaining or unit or the Contractor's failure or refusal to negotiate with its employees or unit in good faith, or both, such event shall be deemed as having arisen as a result of Contractor Fault; and

(1) any labor strike, work stoppage or slowdown or similar industrial or labor action by a Subcontractor performing Work at the Facility, provided that the Contractor is not reasonably able to obtain in a timely manner substitute qualified labor to perform the applicable services or to obtain substitute materials, chemicals, Reagents, Utilities or Equipment.

(2) None of the following acts, events or conditions shall constitute a Force Majeure under this Agreement:

(A) an act, event or condition which to the extent caused by the negligence, error, omission or wrongful or intentional action or inaction of (i) the Contractor, the Guarantor, any of their Affiliates, any of their respective Subcontractors or any of their Affiliates or (ii) the County, its subcontractors, agents and employees; provided, however, a Change in Law resulting from the intentional act of the County shall nevertheless constitute a Force Majeure.

(B) any act, event or condition reasonably foreseeable prior to the occurrence of such act, event or condition, which a diligent Party could reasonably have been expected to (i) take into account in a reasonably timely manner prior to such occurrence and (ii) prevent or adequately protect against using commercially reasonable efforts;

(C) economic infeasibility, general economic conditions, interest or inflation rates or currency fluctuations;

(D) Equipment failure, except when due to acts, events or conditions specifically enumerated herein as a Force Majeure.

(E) any order, injunction or judgment of any Governmental Authority interpreting (as opposed to the enactment of) federal, State or local tax laws;

(F) reasonably anticipated weather conditions in the geographic area of the Facility, other than those listed in (1) (A) of this definition;

(G) changes in the financial condition of the County, the Contractor, the Guarantor, Affiliates or any subcontractor (or, as applicable, any Subcontractor) or supplier affecting the affected Party's ability to perform its obligations under this Agreement;

(H) any impact of prevailing wage or similar law, customs or practices on the Work, except to the extent any impact is due to a Change in Law;

(I) any replacement of any Subcontractor or Affiliate that results in increased costs for any service, material, supply or chemical provided or to be provided under this Agreement, except as provided in clause 1(F) above; and

(J) the failure of the County or any contracted hauler to deliver Processible Waste (in any amount) to the Facility which affects, either directly or indirectly, the Contractor's performance of the Work.

"FRCC" means the Florida Reliability Coordinating Council and its successor.

"Governmental Authority(ies)" means any federal, State, regional, city, county (including the County), or local government, any political subdivision thereof, or any other governmental, quasi-governmental (including NERC), judicial, public or statutory instrumentality, authority, body, agency, commission, administration, bureau or court having jurisdiction over, as applicable, (a) the Facility, (b) the Facility Site, (c) the transactions relative to the Facility, (d) the performance of the Work, (e) obligations or the rights, or both, of the Parties under this Agreement, (f) leases or property rights relative to the Facility Site or (g) the sale, purchase or other disposition of commodities consumed, produced or generated by the Facility.

"Greenhouse Gas" or "GHG" shall mean the greenhouse gases defined by Applicable Law.

"Guarantor" means Covanta Holding Corporation, a Delaware corporation.

“Guaranty” means that certain Guaranty executed by the Guarantor in favor of the County wherein the Guarantor guarantees the obligations of the Contractor, as set forth in Schedule 10 (Guaranty).

“Hazardous Waste” means any material or substance which by reason of its composition or characteristics is (a) hazardous waste as defined in the Solid Waste Disposal Act, 42 USC §6901 et seq., as amended, replaced or superseded, and the regulations implementing same, (b) material the disposal of which is regulated by the Toxic Substances Control Act, 15 USC §2601, et seq., as amended, replaced or superseded, and the regulations implementing same, (c) special nuclear or by-products material within the meaning of the Atomic Energy Act of 1954, or (d) treated as hazardous waste under Applicable Law. If any Governmental Authority shall determine that substances are hazardous or harmful to health when Processed at the Facility, then any such substances or materials shall be Hazardous Waste for purposes of this Agreement.

“Hazardous Waste Contingency Plan” or “HWCP” shall have the meaning set forth in Section 7.3.2.2.

“Higher Heating Value” or “HHV” means the Btu content or higher heating value of Processible Waste as determined in accordance with Schedule 4 (Determination of Processible Waste Higher Heating Value) as such Schedule may be revised by mutual agreement of the Authorized Representatives.

“HHV Adjustment Factor” for a Billing Year means the adjustment to the Annual Processing Guarantee as calculated in accordance with the formulas provided in Schedule 3 (Performance Calculations and Test Procedures).

“Indemnified Parties” shall have the meaning specified in Section 11.1.

“Independent Engineer(s)” means one or more nationally recognized independent consulting engineer(s) or firm(s) with demonstrated expertise in Solid Waste disposal and mass burn resource recovery facilities, selected in accordance with the procedure set forth in Section 14.3.2.

“Industrial Water Treatment Facility” means the process equipment, chemicals, pumps and storage tanks designed to treat the water from Pond A for use in the Facility, located immediately to the east of the Facility, including the pump station and all transmission lines from Pond A to the Industrial Water Treatment Facility, all of which is owned, operated and maintained by the County.

“Initial Operating Period” shall have the meaning specified in Section 3.18.1.

“Initial Service Fee” shall have the meaning specified in Section 8.2.1.

“Inspection Period” shall have the meaning specified in Section 10.6.1.

“Interconnection Agreement” means that certain Interconnection Agreement dated November 9, 1988 between the County and Florida Power Corporation addressing the electrical interconnection requirements, as the same may be amended or replaced.

“KW” means a kilowatt of Electric Capacity.

“kWh(s)” means a kilowatt hour(s) of Electric Energy.

“Landfill” means the County’s landfill, or any other landfill or landfills as the County may lease, own, operate, contract with or designate during the Term, provided that the County’s landfill or other landfill(s) shall always be permitted in accordance with all Applicable Laws and shall be permitted to accept the particular Residue, Processible Waste, Recovered Materials and Prohibited Waste (exclusive of Hazardous Waste) delivered to it in accordance with all Applicable Laws.

“LDC Projects” shall have the meaning specified in Section 10.6.1.

“LDC Testing Period” shall have the meaning specified in Section 10.6.2.2.

“Legal Holiday” means such Day(s) as may be designated from time to time by the Director.

“Legal Proceeding” means every judicial, regulatory or administrative action, suit, litigation, arbitration, mediation, administrative proceeding, or other legal or equitable proceeding (including appeals).

“Letter(s) of Credit” shall have the meaning given to such term in Section 11.4.3.

“Local Government Prompt Payment Act” means the Local Government Prompt Payment Act, codified in Section 218.70 et seq., Florida Statutes, as the same may be amended. If such Local Government Prompt Payment Act is repealed, in whole or in part, such repealed portions shall continue to apply to this Agreement unless such portions are a violation of Applicable Law.

“Loss” or “Losses” means individually or collectively, any and all losses, liabilities, damages, actions, actual debts, forfeitures, obligations, liens, claims, delays, fines, penalties, recoveries, judgments, payments, demands, allegations, forfeitures, obligations, demands, costs, fees and expenses (including amounts paid in settlement, interest, court costs, reasonable costs of investigation, reasonable fees and expenses of attorneys, accountants, financial advisors, expert witnesses, consultants and other Entities, and costs of transcripts, printing of briefs and records on appeal, copying and other reimbursed expenses, and other expenses of every kind and

character reasonably incurred in connection with any Legal Proceeding, suits and causes of action) and with respect to the County, any and all out-of-pocket costs incurred by the County for the purchase or contracting of similar services to cover any default by the Contractor.

“Lost Electric Energy Revenues” means:

(a) when either the Contractor owes the County Lost Electric Energy Revenues based upon a shortfall in meeting the Annual Processing Guarantee, or the County owes the Contractor Lost Electric Energy Revenues based upon a shortfall in delivering the Base Delivery Amount, the Lost Electric Energy Revenues for the Billing Year in which such shortfall occurred shall be equal to the product of:

- (1) the Electric Energy Recovery Guarantee, times
- (2) the quantity of the actual shortfall of Processible Waste Tons, times
- (3) the average price paid per kWh from both Facility turbine-generators for such Billing Year which is equal to: (A) the total amount of Electric Energy revenues received pursuant to the Power Purchase Agreement for the Electric Energy sold in such Billing Year divided by (B) the total kWhs sold from both Facility turbine-generators for such Billing Year, times
- (4) the applicable Electric Energy share percentage pursuant to, as applicable, Section 8.2.3 or Section 8.3.3.

(b) when at the end of the Billing Year, the Facility has been demonstrated to have failed to achieve the Electric Energy Recovery Guarantee, the Lost Electric Energy Revenues for the Billing Year in which such shortfall occurred shall be equal to the product of:

(1) the Electric Energy Recovery Guarantee, minus the actual number of kWhs/Ton that were sold in such Billing Year as calculated pursuant to Schedule 3, Part A, Section 3, times

(2) the total number of Processible Waste Tons Processed in such Billing Year, minus the number of Tons of Processible Waste that were Processed in such Billing Year when a turbine generator (A) was down or (B) generated a reduced amount of Electric Energy due, in either case, to an order or other affirmative action by the Electric Utility or a Governmental Authority and such number of Tons shall be the same as used in the calculation of the actual number of kWhs/Ton that were sold in such Billing Year pursuant to Schedule 3, Part A, Section 3, times

(3) the average price paid per kWh from both Facility turbine-generators for such Billing Year which is equal to: (A) the total amount of Electric Energy revenues received pursuant to the Power Purchase Agreement for the Electric Energy sold in such Billing Year divided by (B) the total kWhs sold from both Facility turbine-generators for such Billing Year, times

(4) the applicable Electric Energy share percentage pursuant to, as applicable, Section 8.2.3 or Section 8.3.3.

“Lost Recovered Materials Revenues” shall mean an amount equal to the product of (a)(1) the Base Delivery Amount minus (2) the actual amount of Processible Waste delivered to and accepted at the Facility during such Billing Year, multiplied by (b)(1) the Average Recovered Materials Revenues recovered per Ton of Processible Waste Processed during the preceding twelve (12) consecutive Billing Months, multiplied by (2) the Average Recovered

Materials Revenues, multiplied by (3) fifty percent (50%). To the extent that some or all of the shortfall in Tons of Processible Waste delivered to the Facility is due to Force Majeure or Contractor Fault, the amount of the shortfall that was attributable to Force Majeure or Contractor Fault shall not be included in the above calculations.

“Maintenance Standards for Non-Process Facilities” shall mean those standards set forth in Schedule 15 (Non-Process Maintenance and Customer Service Standards).

“Major Equipment” shall mean Equipment, the Direct Costs of which to Repair or Replace, including all costs to design, construct, install and test, is equal to or greater than fifty thousand dollars (\$50,000.00).

“Markup” means, wherever such term is used, overhead and profit equal to ten percent (10%) of Direct Costs. For purposes of clarity, there shall be no markup of costs or fees of any kind unless the phrase “inclusive of Markup” is specifically recognized as added to such costs or fees in this Agreement.

“Maximum Project Price” shall mean, with respect to the relevant Project, an amount equal to the sum of (a) the Direct Cost of Equipment, materials, supplies, Subcontractors and reasonable contingency for the same, and (b) the Contractor’s Markup based on the sum of (a) above.

“Maximum Reagent Utilization Allowance(s)” means collectively, but measured on an individual basis for purposes of compliance, the Carbon Utilization Allowance, the Pebble Lime Utilization Allowance and the Urea Utilization Allowance.

“Maximum Utility Utilization Allowance(s)” means collectively, but measured on an individual basis for purposes of compliance, the Process Wastewater Utilization Allowance, the Purchased Electricity Utilization Allowance and the Natural Gas Utilization Allowance.

“Member Entity(ies)” shall have the meaning specified in Section 14.1.

“Monthly” or “Months” means a calendar month.

“Monthly Processing Fee” shall have the meaning specified in, as applicable, Section 8.2.2 or Section 8.3.2.

“Monthly TRP Management Fee” shall have the meaning specified in Section 8.2.5.

“Monthly Report(s)” means those monthly reporting requirements specified in Schedule 6 (Reporting Requirements).

“MW” means a megawatt of Electric Capacity.

“MWH(s)” means a megawatt hour(s) of Electric Energy.

“Native Electronic Format” means the electronic means in which an electronic record was originally created. For purposes of clarity, if an electronic Record was originally created using Microsoft Word, its native format would be a Microsoft Word file; if an electronic Record was originally created using Microsoft Excel, its native format would be a Microsoft Excel file. “Native Electronic Format” shall be in a form that can be edited by the County.

“Natural Gas Utilization Allowance” shall have the meaning specified in Schedule 7 (Utility and Reagent Utilization Allowances).

“NERC” means the North American Electric Reliability Corporation and its successor.

“Net Revenue(s)” means with respect to the sale of (a) Electric Energy pursuant to the Power Purchase Agreement, the gross payments to be paid to the County by the Electric Utility for Electric Energy, minus utility administration costs, line losses, the line maintenance charges, wheeling charges, if any, all third party commissions or charges, demand, standby fees and charges, gross electric taxes, and any other charges, cost, fees, or tax imposed by the Electric Utility under the Power Purchase Agreement and (b) Recovered Materials, the actual revenues

received by the Contractor pursuant to the contracts or arrangements entered into by the Contractor with the purchasing Entities and net of all third party handling, commission and/or freight/transportation costs.

“Non-Ferrous Metal(s)” means non-magnetic metal contained in Residue.

“Non-Ferrous Metal Recovery Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantees).

“Non-Ferrous Metal Recovery System Availability Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantees).

“Nonprocessable Waste” means that portion of Solid Waste that is not Processible Waste (a) due to its size, (b) because it is predominately non-combustible, (c) due to its physical or chemical composition or (d) because it is inappropriate to Process such Solid Waste using Prudent Industry Practices as determined by the Contractor’s Authorized Representative in consultation with the County’s Authorized Representative.

“Notice(s)” means written notice from the Authorized Representative of the applicable Party to the other, all in accordance with Section 15.9 and the timeframes and other requirements of this Agreement.

“Notice to Proceed” shall have the meaning specified in Section 10.6.4.

“OEM” means original equipment manufacturer.

“On-Peak Capacity Factor” has the meaning specified in the Power Purchase Agreement.

“Operation and Maintenance Manuals” means the manual(s) and/or related computer programs prepared by or on behalf of (a) the Prior Contractor, as those manual(s) are updated or replaced by the Contractor, and (b) the Contractor, its Affiliates and Subcontractors, in each case, containing detailed operating and maintenance procedures and other specific instructions,

policies, directories, drawings, diagrams, schematics, parts list and other literature provided by Equipment suppliers, Subcontractors, or developed by the Contractor, during the Term of this Agreement, for the purpose of providing guidance in operating, maintaining, repairing and replacing all mechanical, electrical and control instrumentation systems installed in the Facility.

“Party” or “Parties” means either the County or the Contractor or both, as the context of the usage of such term may require.

“Pass Through Costs” means those cost items to be reimbursed to the Contractor by the County specified in Section 8.3.6 and paid as a component of the Service Fee pursuant to, as applicable, Sections 8.2.7 or 8.3.6.

“Pass Through Taxes and Fees” shall have the meaning specified in Section 3.17.

“Pebble Lime Utilization Allowance” shall have the meaning specified in Schedule 7 (Utility and Reagent Utilization Allowances).

“Performance Bond” shall have the meaning provided in Section 11.4.2.

“Performance Guarantees” means all of the guarantees specified in Schedule 2 (Performance Guarantees).

“Performance Test(s),” “Performance Tested” and “Performance Testing” means those tests specified in Part B of Schedule 3 (Performance Calculations and Test Procedures) and performed pursuant to Section 3.26.

“Performance Test Plan” shall have the meaning specified in Section 3.26.

“Permanent Service Fee” shall have the meaning specified in Section 8.3.1.

“Permit(s)” means all actions, reviews, approvals, leases, property rights, consents, waivers, exemptions, variances, franchises, orders, permits, authorizations, rights, licenses, filings, zoning changes or variances, and entitlements, of whatever kind and however described,

which are required under Applicable Law or by any Governmental Authority to be obtained or maintained, or both, by any Entity, including the Contractor or the County, with respect to either or both of the Facility Site or the Work, inclusive of Environmental Attributes regardless of whether the County approves any Contractor proposal to provide Environmental Market Management Services pursuant to Section 3.30.

“Pit” means that portion of the Facility containing the refuse storage pit at which Processible Waste is deposited from haulers delivering Processible Waste by or on behalf of the County to the Facility for Processing.

“Plus Five Separation System Availability Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantees).

“Pond A” means the body of water located in the northwest corner of the County’s landfill.

“Potable Water” means water delivered by the County to the Facility that meets drinking water quality standards under Applicable Law.

“Power Purchase Agreement” means the “Amended and Restated Electrical Power Purchase Agreement” dated February 21, 1989 between the County and the Electric Utility, providing for the sale of Electric Energy and Electric Capacity generated and made available, respectively, by the Facility, as such agreement has been or may be amended, modified or supplemented from time to time.

“Prior Agreement” has the meaning specified in the first WHEREAS clause herein.

“Prior Contractor” means the Entity that operated and maintained the Facility pursuant to the Prior Agreement.

“Process,” “Processed” or “Processing” means the combustion of Processible Waste through the Facility.

“Process Wastewater” means wastewater discharged from the Facility after Process use.

“Process Wastewater Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantees).

“Process Wastewater Utilization Allowance” shall have the meaning specified in Schedule 7 (Utility and Reagent Utilization Allowance).

“Process Water” means the water consumed by the Facility for (a) boiler water makeup, (b) cooling tower makeup, (c) wash down and (d) other non-sanitary uses.

“Processible Waste” means that portion of Solid Waste that is not Prohibited Waste.

“Processing Fee” means the amount of nineteen dollars and ^{forty-nine} ^ cents (\$19.49) per Ton stated in June 2014 dollars, as adjusted pursuant to Schedule 5 (Adjustment Factor).

“Production Tax Credits” means those tax credits under Section 45 of the Internal Revenue Code (26 U.S.C. § 45 (1994)), as amended and in effect from time-to-time during the Term, and any successor or other Applicable Law providing for a federal or State tax credit or other tax benefit determined by reference to renewable energy production for which generation of electricity from the Facility is eligible.

“Prohibited Waste” means that portion of Solid Waste that is not permitted to be Processed because it is (a) Nonprocessible Waste, (b) Hazardous Waste, (c) prohibited by Permit or other Applicable Law or (d) deemed to be an operational, health or safety issue or hazard, all as determined by the Contractor’s Authorized Representative in consultation with the County’s Authorized Representative.

“Project” means any project of any kind or nature authorized under this Agreement.

“Project/Additional Service Costs” shall have the meaning specified in Section 8.7.

“Project Package” shall have the meaning specified in Section 10.6.4.

“Property” shall have the meaning specified in Section 3.13.

“Proposal Date” means the date that the Contractor submitted its pricing proposal pursuant to the FRFP.

“Proposed Scope of Work” shall mean a written scope of Work prepared by the Contractor for a Project, the required components of which are specified in Schedule 19 (Technical Recovery Plan).

“Prudent Industry Practices” means those practices, methods, techniques, specifications and standards of safety, maintenance, housekeeping, Repair or Replacement and performance, as the same may change from time to time, as are commonly performed by competent, qualified operators performing management, operation, maintenance, Repair or Replacement services on Solid Waste and power generation facilities of the type similar to the Facility, which in the exercise of reasonable judgment and in light of the facts known at the time the decision was made, are (a) considered good, safe and prudent practice in connection with such services and (b) commensurate with a prudent standard of safety, performance, dependability and efficiency.

“Punch List Item(s)” shall have the meaning specified in Section 6.1.

“Purchased Electricity Utilization Allowance” shall have the meaning specified in Schedule 7 (Utility and Reagent Utilization Allowances).

“Qualified Financial Institution” means any depository institution incorporated under the laws of the United States or any state thereof (or domestic branches of any foreign bank) meeting the following criteria: (a) such depository institution is subject to supervision and regular examination by federal or State banking or depository institution authorities; (b) such depository

institution has a combined capital and surplus not less than one hundred million dollars (\$100,000,000.00) and (c) the commercial paper or other short-term debt obligations of such depository institution (or, in the case of a depository institution which is the principal subsidiary of a holding company, the commercial paper or other short-term debt or deposit obligation of such holding company or depository institution, as the case may be) has a short-term rating of at least “P-1” by Moody’s Investors Service (“Moody’s”) and a short-term rating of at least “A-1” by Standard & Poor’s, a division of the McGraw-Hill Companies, Inc., or any successor in interest (“S&P”), or a long-term rating by S&P of at least “AA.”

“Qualified Respondent” means each of the Entities deemed by the County to possess the necessary qualifications and experience specified in the RFQ.

“Reagent(s)” means individually or collectively, as applicable, pebble lime, urea and powdered activated carbon.

“Receiving Time” means the period of operation for the Facility during which the Facility shall be open and available for the receipt and delivery of Processible Waste from all vehicles passing through the gate to the Facility Site for Processing which shall be open from (a) 6:00 a.m. to 6:00 p.m. each Business Day and (b) 7:00 a.m. to 5:00 p.m. each Saturday; provided, however, the County, in its sole discretion and upon fourteen (14) Days prior Notice to the Contractor’s Authorized Representative, may change the Receiving Time (but not the Days), provided the total number of hours per Day or Days per Week, or both, are not increased; provided, further, however, that the County shall not be required to provide fourteen (14) Days prior Notice to the Contractor in the event of a Force Majeure or Emergency event. In the case of a Force Majeure or Emergency event, the County shall, however, provide as much Notice as possible.

“Reclaimed Water” means the treated effluent discharged from wastewater treatment plants and supplied to the Facility Site by the County for use as Process Water.

“Records” shall have the meaning specified in Section 3.15.2.

“Recovered Materials” means Ferrous Metal and Non-Ferrous Metal recovered from Residue.

“Renewable Energy Benefits” means any existing or future certificate, credit, green tag, or other tradable and transferable indicia, howsoever, entitled, created, allocated, registered or recognized by any Entity, representing any aspect, claim, characteristic or benefit identified, attributed to, or associated with the generation of a quantity of MWhs by the Facility and the corresponding displacement of a quantity of electricity from conventional fossil fuel generation resources. Renewable Energy Benefits are separate from the MWhs produced from the Facility and Environmental Attributes, if any, and may be separately allocated, collected, sold, transferred or conveyed during the Term to the extent of the Parties rights under this Agreement.

“Renewable Energy Production Incentives” means any and all financial incentive payments made or available under Section 202 of the Energy Policy Act of 2005, and any successor or other Applicable Law during the Term providing for direct financial incentive payment for which generation of electricity from the Facility is eligible.

“Repair(s) or Replacement(s)”, “Repaired or Replaced”, “Repair or Replace” or “Repairing or Replacing” means any repair or replacement to the Facility, whether capital or maintenance in nature.

“Request for Qualifications” or “RFQ” means the first phase of the procurement process for the FRFP wherein potential proposers submitted a qualifications package.

“Required Contractor Insurance” shall have the meaning specified in Section 11.3.1.1.

“Required County Insurance” shall have the meaning specified in Section 11.3.1.2.

“Required Equipment List” means the Equipment Inventory List prepared in accordance with Section 3.14 and attached hereto as Schedule 16A (Required Equipment and Spare Parts List).

“Required Insurance” shall have the meaning specified in Section 11.3.1.3.

“Required Spare Parts Inventory List” means the Spare Parts Inventory List prepared in accordance with Section 3.14 and attached hereto as Schedule 16A (Required Equipment and Spare Parts List).

“Residue” means the material remaining after Processible Waste is Processed, including fly ash, bottom ash and Spent Reagent, both prior to and after the recovery of Recovered Materials.

“Residue and Recovered Materials Management Plan” means the Residue and Recovered Materials Management Plan prepared in accordance with the Transition Plan and Section 3.21 of this Agreement.

“Residue Particle Size Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantees).

“Residue Quality Guarantee” shall have the meaning specified in Schedule 2 (Performance Guarantees).

“Returned Processible Waste” means Processible Waste that was placed in the County’s Bridgeway Acres Landfill (and covered with combustible material) for the purpose of future recovery, which has been recovered and delivered by or on behalf of the County to the Facility for Processing.

“Revenue from Recovered Materials” means Net Revenues received by the Contractor from the sale of Recovered Materials.

“Rolling Stock” means mobile equipment such as, but not limited to, front-end loaders, trucks, transport vehicles, fork lifts and replacements thereto and any other mobile equipment owned (whether purchased by the Contractor or transferred, including title, by the County to the Contractor) or leased and used by the Contractor or any Subcontractor relative to the Work.

“Schedule(s)” means a schedule attached hereto and which is hereby incorporated herein and made a part of this Agreement, unless the context or usage of such term clearly indicates a reference to another amendment or agreement.

“Security Instrument(s)” shall have the meaning specified in Section 11.4.1.

“Section” means a section of this Agreement, unless the context or usage of such term clearly indicates a reference to another agreement or statute.

“Section 10.6 Notice” means, with respect to each proposed TRP Project and LDC Project, a Notice describing, in reasonable detail, (a) the particular Equipment or Facility system(s) proposed to be Repaired or Replaced, (b) whether the particular Project is a TRP Project or LDC Project, (c) the reason or justification for the proposed Repair or Replacement, including general description of the test(s), evaluation or assessment performed by or on behalf of the Contractor and the results therefrom, (d) a statement of Project, (e) a preliminary estimate of the Maximum Project Price for such Project, and (f) a preliminary Statement of Consequences for such Project.

“Service Agreement” or “Agreement” means this Agreement, which includes all Schedules, and any properly authorized written amendments.

“Service Fee” means (a) the Initial Service Fee or the Permanent Service Fee, as applicable, and, in either case, (b) the amount payable to the Contractor by the County, calculated in accordance with Section 8.

“Solid Waste” shall have the meaning ascribed to such term pursuant to Applicable Law in the State.

“Solid Waste Operations” or “SWO” means that department of the County responsible for Solid Waste disposal and Facility operations in the County, and its successor.

“Spare Parts” means those component parts and repair or replacement items relative to the Facility that (a) were onsite and provided to the Contractor by the County upon the Commencement Date and (b) are procured or secured by the Contractor during the Term and are listed on the Required Spare Parts Inventory List that, in the case of either (a) or (b), are (1) stored on or in close proximity to the Facility Site or (2)(A) with the exception of (2)(B) herein, readily available within forty-eight (48) hours for Repair and Replacement of Equipment in conformance with Prudent Industry Practices or (B) relative to the Residue processing facilities for the separation of plus and minus 5 inch material, readily available within twenty-four (24) hours for Repair or Replacement of Equipment in conformance with Prudent Industry Practices.

“Spare Parts Inventory List” shall have the meaning specified in Section 3.14.

“Special Waste” means Processible Waste that requires special handling as determined by the County’s Authorized Representative (a) in consultation with the Contractor’s Authorized Representative and (b) taking into account Prudent Industry Practices and the requirements of this Agreement.

“Spent Reagent” means reacted and unreacted Reagents remaining after passing through the Facility that are entrained in the Residue.

“Staffing Plan” shall have the meaning set forth in Schedule 13 (Staffing Plan).

“Standard(s) of Maintenance” shall have the meaning specified in Section 3.10.

“State” means the State of Florida and all of its appropriate administrative, contracting and regulatory agencies and offices.

“Statement of Consequences” means a statement describing, in reasonably specific detail, the probable consequences on the Work, the Performance Guarantees or the Contractor’s cost to perform the Work that can reasonably be expected to directly result from the failure to make the Repair or Replacement to the particular Facility system or Equipment and any other provisions of this Agreement.

“Subcontractor(s)” means every Entity, other than the Contractor or its employees, who or which directly or indirectly contracts with the Contractor to provide labor, services, materials, supplies, Equipment or Spare Parts for or with respect to the Facility.

“System” means all of the facilities operated and maintained by or for the County, the principal facility of which is located at 3001 – 110th Avenue North, St. Petersburg, Florida, for the disposal of garbage and other waste matter, including incinerators or other disposal means, transfer stations and resource recovery systems, constructed, acquired or contracted for by the County.

“Technical Issue(s)” means any issue primarily of a technical or engineering nature and which concerns whether the applicable Party’s obligations are being provided in accordance with this Agreement.

“Technical Recovery Plan Management Fee” means the amount of ten million dollars (\$10,000,000.00) in payment of the Contractor’s

management, coordination and implementation of the Projects and the Work specified on Schedule 19 (Technical Recovery Plan) during the Initial Operating Period.

“Technical Recovery Plan” has the meaning specified in Schedule 19 (Technical Recovery Plan).

“Technical Recovery Project(s)” shall mean those capital and other projects identified in and to be, as applicable, designed, constructed, installed and tested in accordance with the terms, conditions and timeframes specified in Schedule 19 (Technical Recovery Plan) and Section 10.6.

“Term” means the term of this Agreement which term shall, subject to the proviso in Section 15.1, commence on the Contract Date and, unless sooner terminated or extended in accordance with its terms, end at midnight on December 31, 2024.

“Timeframe” shall have the meaning set forth in Section 6.2.

“Total Capacity Factor” has the meaning specified in the Power Purchase Agreement.

“Ton(s)” means two thousand (2,000) pounds.

“Transition Period” means the period from the Contract Date to the Commencement Date, as the same may be extended by mutual agreement.

“Transition Plan” shall have the meaning specified in Schedule 17 (Transition Plan).

“TRP Inspection Period” shall have the meaning specified in Section 10.6.2.1.

“TRP Notice” shall have the meaning specified in Section 10.6.1.

“TRP Projects” shall have the meaning specified in Section 10.6.1.

“Turbine Generator Availability” means the percentage of on-line availability of each of the two (2) turbine generators as determined and reported to the County on a Monthly basis but applied, for purposes of the application of this definition, on the basis of a twelve (12) Month rolling average, shall be calculated for the previous twelve (12) Month period as follows: (a) the

total number of hours in the previous twelve (12) Month period that the turbine generator either (1) operated, (2) was capable of being operated or (3) if incapable of being operated, was incapable of operation only because one or more boiler units were out of operation and the turbine generator received no steam from such boiler(s), divided by (b) the total hours in the previous twelve (12) Months, with the quotient calculated pursuant to (a) and (b) multiplied by (c) one hundred (100). The foregoing calculation shall be performed for each turbine generator and the resulting availabilities shall be averaged. For purposes of clarity, the number of hours in a Month during which there is a major turbine generator outage shall not be included in any calculation. For purposes of Sections 8.4.1 and 12.2.9, the minimum Turbine Generator Availability percentage to be achieved shall be ninety-five percent (95%).

“Unaudited Financial Statements” means an unaudited balance sheet, income statement and statement of changes in financial position for the Guarantor’s applicable fiscal year, in each case, prepared in accordance with GAAP, consistently applied or any internationally accepted principles or standards replacing or intending to replace GAAP, and presenting fairly the Guarantor’s financial position and the results of operations set forth therein.

“Urea Utilization Allowance” shall have the meaning specified in Schedule 7 (Utility and Reagent Utilization Allowance).

“Utility” or “Utilities” means individually or collectively, as applicable, electric, water (including Process Water), wastewater and natural gas.

“Week” or “Weekly” means a calendar week commencing at 12:00 a.m. on Monday and end at midnight on the immediately following Sunday.

“Weighted Average Annual Higher Heating Value” means for each Billing Year, an amount equal to the sum of the following calculated for each Billing Month in such Billing Year

(a) the product of the following: (1) the average monthly HHV for Processible Waste Processed by the Contractor at the Facility for such Billing Month, as calculated in accordance with Schedule 4, and contained in the Monthly Report provided by the Contractor in accordance with Section 5.3, times (2) the number of Tons of Processible Waste Processed by the Contractor at the Facility for each such Billing Month, divided by (b) the total Tons of Processible Waste Processed by the Contractor at the Facility for such Billing Year.

“Withholding(s)” or “Withhold” shall have the meaning specified in Section 8.4.7.

“Work” means all obligations, duties, responsibilities and activities which the Contractor is responsible for performing or causing to be performed pursuant to the requirements of this Agreement.

Section 2.2 Terms Generally.

Whenever the context may require any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include,” “includes” and “including” shall be deemed to be followed by the phrase “without limitation,” except as the context may otherwise require. The words “agree,” “agreement,” “approve,” “approval” and “consent” shall be deemed to be followed by the phrases (a) “without limitation,” except as the context may otherwise require and (b) “which shall not be unreasonably withheld or unduly delayed” except as the context may otherwise require. The word “or” is not exclusive. Words in the singular number include words in the plural and vice versa unless the context of the usage of such term clearly indicates otherwise. “Written” shall mean any commercially acceptable form of writing, including handwriting, typewriting, printing, photocopying, facsimile transmitting, and every other means of recording, including electronic media, letters, drawings and similar forms of communication. Accounting terms that are used, but not otherwise defined herein, are to be

construed and interpreted in accordance with GAAP (as defined in the definition of “Audited Financial Statements” in Section 2.1) or any internationally accepted principles or standards replacing or intended to replace such GAAP.

SECTION 3

OBLIGATIONS OF THE CONTRACTOR

On and after the Commencement Date and through the Term, the Contractor shall perform the following in return for the Processing Fee and such other compensation as may be provided for pursuant to Section 8 unless otherwise specifically stated.

Section 3.1 Performance Guarantees and Utility and Reagent Utilization Allowances.

The Contractor shall manage, operate, Repair or Replace and maintain the Facility to meet Schedule 2 (Performance Guarantees) and Schedule 7 (Utility and Reagent Utilization Allowances), except to the extent relieved from such Work during the Initial Operating Period only, pursuant to Section 10.6. Other than to the extent relief is recognized under this Agreement due to the occurrence and continuance of a Force Majeure or County Fault, the Contractor shall only be relieved from its obligations to meet Schedule 2 (Performance Guarantees), Schedule 7 (Utility and Reagent Utilization Allowances) or other obligations to the extent expressly recognized in Section 10.6. Relief, if any, regarding the Contractor's other obligations under this Agreement shall be provided only to the extent expressly recognized in this Agreement or in any Final Scope of Work.

Section 3.2 Management, Operation, Repair or Replace and Maintenance.

Subject to the more specific requirements and exceptions set forth in this Agreement or in any Final Scope of Work, including as specifically identified, provided and limited, if at all, pursuant to Section 10.6 and Schedule 19 (Technical Recovery Plan) applicable during the Initial Operating Period, the Contractor shall:

(a) Receive and Process Processible Waste in an amount at least equal to the Annual Processing Guarantee.

(b) Produce steam from the Processing of Processible Waste and convert such steam to Electric Energy in an efficient manner so as to reasonably maximize Electric Energy generation and, in any event, at least a level equal to the Electric Energy Recovery Guarantee that meets the requirements for sale to the Electric Utility pursuant to the terms of the Power Purchase Agreement.

(c) (1) Maximize the Facility's availability of Electric Capacity to the Electric Utility consistent with the Contractor's obligations under this Agreement, and, commencing one calendar year following the end of the Initial Operating Period, provide and make available Electric Capacity to the Electric Utility on at least a seventy-five percent (75%) On-Peak Capacity Factor basis and on at least a seventy-five percent (75%) Total Capacity Factor basis as measured against the Committed Capacity.

(d) Recover Ferrous Metals and Non-Ferrous Metals from the Residue and market such Recovered Metals as further described in the Residue and Recovered Materials Management Plan prepared in accordance with Section 3.21.

(e) Handle, process and load Residue onto trucks provided by the County or its agents for transport by the County or its agents to the Landfill for disposal or other uses in accordance with Applicable Law and as further described in the Residue and Recovered Materials Management Plan prepared in accordance with Section 3.21. The hauling and Landfill disposal charge for Residue shall be at the County's cost and expense.

(f) Comply with all Permits and Administrative Permit Requirements, including operating and maintaining the air pollution control systems, to ensure compliance with all applicable Permits.

(g) Perform maintenance to the Facility, including Repairs or Replacements, to maintain the Facility in a good physical and operational condition and appearance consistent with the Standards of Maintenance and Schedule 15 (Non-Process Maintenance and Customer Service Standards).

(h) Maintain the Facility Site, including roads, grounds and other appurtenances in good repair and in a neat, orderly and litter-free condition consistent with Schedule 15 (Non-Process Maintenance and Customer Service Standards).

(i) Perform all testing, prepare all reports and plans and submit the same timely to the referenced Entity herein as required by this Agreement.

(j) Pay and be exclusively liable for the costs and expenses relative to servicing, using and consuming all Utilities, Reagents, materials, supplies, chemicals and lubricants, including the cost of all commodities, unless otherwise expressly recognized in this Agreement. The Contractor recognizes and agrees that a portion (or all, depending on usage) of the Utility and Reagent costs and expenses will be a Pass Through Cost.

(k) Deposit all spent fabric filters (air bags) in the Pit and Process the same; provided, however, the Contractor may manage, transport and dispose (or cause the transportation and disposal) of spent fabric filters by alternative means, subject to Applicable Law, at its sole risk and cost, including, without limitation, all capital, maintenance, staffing, transportation and disposal costs and all costs associated with a change in status to a large quantity generator. The Contractor shall also be responsible for and bear all costs pertaining to compliance with all Applicable Lawas with respect to such change in status, including the preparation and filing of all reporting requirements. The Contractor shall further indemnify the County in accordance with Section 11.1 of this Agreement for any loss or potential loss to which the County may be exposed as a result of the implementation of such alternative means.

The Contractor shall be solely responsible for all means, methods, techniques, sequences, procedures and safety programs in connection with the performance of the Work.

Section 3.3 Compliance with Law.

The Contractor shall perform all Work contemplated under this Agreement in compliance with at least all Applicable Laws and the Contractor shall ensure that all Subcontractors performing services relative to the Facility or the Facility Site, or both, shall comply with at least all Applicable Laws in the performance of such services. For purposes of clarity, the Contractor (and the Contractor shall insure that all Subcontractors performing services relative to the Facility or the Facility Site, or both) shall comply with the more stringent of (a) Applicable Laws or (b) the obligations, requirements and standards of this Agreement; provided, however, compliance with the foregoing in (b) shall not be a violation of Applicable Laws.

The Contractor shall protect, indemnify and hold harmless the Indemnified Parties from and against all Losses and shall defend the Indemnified Parties in any Legal Proceeding for Losses incurred or assessed against the County pursuant to any Applicable Law arising from or caused by the Contractor's breach of such covenant and agreement.

Section 3.4 Facility Labor.

Section 3.4.1 Staffing.

The Parties agree that the retainage and assignment of qualified, experienced management, technical and supervisory personnel by the Contractor is of foremost importance to the successful implementation, development and completion of the Work. The Contractor shall secure and provide appropriate personnel skilled in all aspects of the Work for which they are responsible. The Contractor shall also staff the Facility consistent with Prudent Industry Practices to enable the Contractor to perform all of its obligations and duties under this Agreement in a timely and efficient manner. The Contractor warrants that as of the Commencement Date, it has the experience and capability, including sufficient competent,

professional, technical, supervisory and other personnel, to perform the Work and shall continually furnish such personnel during the Term. The Contractor's employees and personnel performing services relative to the Facility or the Facility Site, or both, shall be experienced, fully qualified, trained and, to the extent required by Governmental Authorities, validly licensed to perform such Work. The Contractor shall require that all of its employees and personnel performing Work maintain and keep current all personnel training, licenses and certifications, as applicable.

The Contractor has, prior to the Contract Date, submitted its Staffing Plan to the County and such Staffing Plan is attached hereto as Schedule 13 (Staffing Plan). Such Staffing Plan sets forth the Contractor's organizational structure for its Work force and its minimum staffing requirements (by position) relative to its performance of the Work. The Contractor shall comply with such Staffing Plan, and any reductions to such Staffing Plan may only be made upon the prior written approval of the County's Authorized Representative. The Staffing Plan shall recognize that the actual number of employees may, at the Contractor's option, increase from that number shown in the Staffing Plan. The Contractor may increase the number of its employees and it shall notify the County's Authorized Representative in writing of any such proposed increase. The Contractor shall not charge the County any additional fee or charge for any such increase unless such fee or charge is expressly recognized and provided for in this Agreement and the process or condition for payment thereof has been complied with under this Agreement. Notwithstanding the immediately preceding sentence of this paragraph, the Contractor shall have no obligation under this Agreement to perform an increase in the Contractor's scope of duties or Work, including an increase that results from the occurrence and effect of a Force Majeure or County Fault, unless and until the Parties have executed an

appropriate amendment. Any such amendment shall recognize an increase of the Contractor's cost, if any, on the basis of the Contractor's Direct Costs, subject to Cost Substantiation, inclusive of Markup. Such increase, at the County's election, shall be in the form of an adjustment to the Processing Fee or a one-time, lump sum payment. Any increase in compensation to the Contractor under this Section 3.4.1 as a result of such increase in the Contractor's duties or Work shall not be duplicated under any other Section of this Agreement.

Section 3.4.2 Facility Manager.

The County has selected the Contractor to perform the services contemplated under this Agreement based, in part, on the past successful experience and expertise of the designated Facility Manager. Accordingly, the Contractor shall not, absent good cause, replace or remove the Facility Manager during the Term without the prior written approval of the County's Authorized Representative. The Parties agree that "good cause" shall be interpreted to include a transfer or promotion to and with an Affiliate; provided that the Facility Manager has served in that role at the Facility for at least three (3) years. If the Facility Manager shall retire, resign his or her position as Facility Manager, be transferred or promoted to and with an Affiliate consistent with this Section 3.4.2 or otherwise cease his or her employment with the Contractor, the Contractor shall appoint a successor qualified Facility Manager, which successor shall be subject to the prior written approval of the County's Authorized Representative.

The County's Authorized Representative shall have the right to request the removal of the Facility Manager at any time provided that the County's Authorized Representative presents the Contractor with reasonable justification therefor and, in such event, the Contractor shall promptly remove and replace such Facility Manager, which replacement shall be subject to the prior written approval of the County's Authorized Representative.

The Facility Manager shall be empowered to make day-to-day decisions on behalf of Contractor which are related to the Work and shall serve as the Contractor's primary interface with the County in all such matters unless the Contractor, by Notice from the Contractor's Authorized Representative to the County's Authorized Representative, specifies otherwise. The Contractor shall make the Facility Manager, or his or her designee, available to the County twenty-four (24) hours per Day. The Facility Manager shall be located at and dedicated exclusively to the Facility and shall not perform other services for the Guarantor, any Affiliate or any other waste-to-energy facility without the prior written approval of the County's Authorized Representative. The Facility Manager shall be responsible for all obligations, requirements and standards in this Agreement, including responsibility for all personnel performing services at the Facility relative thereto, whether such personnel be full-time or part-time employees or Subcontractors, and for compliance with all Applicable Laws pertaining to Facility operations.

Section 3.4.3 Designated Staff Assignments.

The Contractor shall designate and appoint full time, on-site employees to fill the positions described in Sections 3.4.3.1 – 3.4.3.7 below, each of which shall be trained, skilled and qualified pursuant to Applicable Law to serve in the role and perform the function to which such employee is assigned. Only one of the foregoing employees shall be assigned to each function; provided, however, one employee may serve in each of the roles described in Section 3.4.3.1 and Section 3.4.3.2 below; and, provided further, each such employee, other than the traffic control director(s) whose duties are described in Section 3.4.3.4 below, may have and perform duties in addition to one of those specified in Sections 3.4.3.1 – 3.4.3.7 below.

The staff assignment requirements provided herein shall be included in the Staffing Plan required to be prepared and complied with pursuant to Section 3.4.1.

The Contractor shall cause such employees (exclusive of the traffic control director and the receptionist), as requested by the County's Authorized Representative from time-to-time, to attend periodic meetings of the Contractor's and the County's representatives and to deliver oral or written reports and associated information and data as may be requested by the County's Authorized Representative relative to such employee's performance of his or her duties.

Section 3.4.3.1 Environmental Compliance Manager.

Such person shall be responsible for monitoring the environmental compliance of the Facility and all personnel performing services at the Facility relative thereto, whether such personnel be full-time or part-time employees or Subcontractors, with all Applicable Laws pertaining to the environment and shall be responsible for the implementation of and compliance with Section 3.6 and 3.7.

Section 3.4.3.2 Health and Safety Director.

Such person shall be responsible for compliance of the Facility and all personnel performing services at the Facility relative thereto, whether such personnel be full-time or part-time employees or Subcontractors, with all Applicable Laws pertaining to health and safety and shall be responsible for the implementation of Section 3.5.

Section 3.4.3.3 Operations Manager.

Such person shall be responsible for day-to-day management of operational requirements at the Facility, and serves as a secondary contact to the County's Authorized Representative in the absence of the Facility Manager. The Facility Manager may act as the Operations Manager, but where a separate position of Operations Manager is identified in the Staffing Plan, then that position shall not be later combined with the Facility Manager.

Section 3.4.3.4 Traffic Control Director.

Such person(s) shall be responsible for directing traffic, including Rolling Stock, on or about the Facility tipping floor during all Receiving Time hours and shall be trained in accordance with Section 7.7.3 and be responsible for all site specific matters, conditions or issues that may arise on or about the tipping floor, including (a) inspections of all incoming waste delivered to the Facility, and filling out County supplied forms, as may be changed from time-to-time by the County, documenting the results of such inspections; (b) notification to the County's Authorized Representative or designee of deliveries of Prohibited Waste; (c) performance of the Contractor's obligations under Sections 7.3.2 and 7.7.2; (d) tipping floor safety; and (e) carry a working County radio for continuous communication with County Solid Waste personnel. Such person(s) shall perform his or her services on foot.

Section 3.4.3.5 Technical Recovery Plan Manager.

Such person shall be responsible for the management, implementation and coordination of all Work associated with the Technical Recovery Plan. This position shall be required during (a) the Initial Operating Period and (b) to the extent such services are required for any Technical Recovery Plan Projects that have not been completed and accepted prior to termination of the Initial Operating Period, until such time as all Technical Recovery Plan Projects are completed and accepted by the County.

Section 3.4.3.6 Maintenance Manager.

Such person shall be responsible for planning, scheduling, managing and monitoring Facility maintenance staff, requirements and Work, and shall be responsible for ensuring that the computerized maintenance management system is current at all times.

Section 3.4.3.7 Receptionist.

Such person shall be located continuously at and be responsible for the reception area at the administration building for the Facility during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday each Week.

Section 3.4.4 Contractor Relationships.

The Contractor, the Contractor's Authorized Representative and the Facility Manager (if such Entity is not also the Contractor's Authorized Representative) shall (a) establish, actively pursue and maintain during the Term, business-like, responsible and responsive working relationships with the County's Authorized Representative, the Director (if such Entity is not also the County's Authorized Representative), the County's Solid Waste Division's staff, the Landfill contractor's operations manager and staff, and other officials and representatives of the County and all Governmental Authorities and their representatives with whom the Contractor has dealings regarding the Facility or this Agreement; (b) prior to initiating contact and pursuing dialogue with Governmental Authorities regarding the Contractor's obligations under this Agreement, (1) except as otherwise (A) authorized in writing by the County's Authorized Representative or (B) required by Applicable Law, meet with and coordinate all such activities with the County's Authorized Representative and (2) in conjunction with the County's Authorized Representative, develop protocols as part of the Transition Plan for Contractor contact, meetings and dialogue with such agencies as may be established and directed by the County's Authorized Representative; and (c) coordinate and conduct meetings with County staff and consultants and neighboring jurisdictions, as requested by the County's Authorized Representative.

Section 3.5 Safety Program.

The Contractor shall (a) ensure that all of its employees and Subcontractors comply with Applicable Laws and to the extent available to the Contractor, manufacturer's procedures and recommendations concerning safety related issues, (b) develop safety manuals for the Facility and assure that all employees and Subcontractors are trained in the safety, health and environmental regulations and procedures specific to the Facility, (c) take all reasonable precautions, in accordance with Prudent Industry Practices, to prevent damage, injury or loss, by reason of or related to the operation and maintenance of the Facility, to any persons or property on the Facility Site or adjacent property thereto, including trees, shrubs, lawns, walks, pavements, roadways, equipment, structures and utilities, (d) establish and maintain safety procedures for the Facility for the protection of employees of the Contractor and all other Entities at the Facility in connection with the operation and maintenance thereof, at a level consistent with Applicable Law, Prudent Industry Practices and insurance carrier recommendations (i.e., insurance policies secured and maintained by either Party with respect to this Agreement) relative to the Facility, (e) participate in Facility safety inspections and respond to any findings from such inspections, (f) prepare reports required by Applicable Law or the County's insurance carrier, and (g) comply with all Applicable Laws relating to the safety of third parties or property at the Facility or their protection at the Facility from damage, injury or loss.

Section 3.6 Administrative Permits Requirements.

The Contractor shall use reasonable efforts to (a) secure and pay for the acquisition of, maintain and, as applicable, renew all such Permits that are not County Permits (such Permits, the "Contractor Permits") required for either or both of the Facility or the Work, (b) be liable for

the cost and expense of all regulatory fees, levies and charges pertaining to such Contractor Permits and (c) provide copies of all Contractor Permits, including amended, modified or renewed Contractor Permits, to the County's Authorized Representative promptly upon receipt. The County's Authorized Representative shall, upon the request of the Contractor's Authorized Representative, assist the Contractor in the Contractor's efforts to obtain Contractor Permits; provided, in no event, except in cases when participation of the County, as owner of the Facility, is required, shall the County's Authorized Representative's level of assistance be (i) used or relied on by the Contractor or (ii) interpreted or construed as County Fault, in either case, for the failure of the Contractor to secure Contractor Permits. The Parties agree that the obligation to obtain Contractor Permits is solely vested with the Contractor.

Similarly, the Contractor's Authorized Representative shall provide the County's Authorized Representative such assistance as the County's Authorized Representative may reasonably require in its efforts to obtain County Permits and to coordinate its efforts and activities as required by the County's Authorized Representative with Governmental Authorities as the owner of the Facility and Facility Site, including (A) operational data, (B) maintenance records, (C) assistance relative to evaluating the impact of changes and modifications to legislation or regulations, and (D) as may be reasonably requested by the County's Authorized Representative, the attendance at hearings and meetings by informed representatives of the Contractor with County and Governmental Authority(ies); provided, in no event shall the Contractor's Authorized Representative's level of assistance be (1) used or relied on by the County, except for the provision of information required by the County Permit or in this Agreement, or (2) interpreted or construed as Contractor Fault, in either case, for failure of the County to successfully coordinate or perform, or both, such action or activities. Except as

provided in the immediately preceding sentence, the Parties agree that the obligation to obtain County Permits are solely vested with the County.

The County shall use all reasonable efforts to secure, obtain, maintain, revise, amend and renew and pay for all Permits in connection with the Facility that are specifically identified in Schedule 14 (County Permits) and similar Permits that may be required by a Change in Law (such Permits, the “County Permits”), unless the Parties mutually agree in writing that such similar Permits shall be considered Contractor Permits. For purposes of clarity, all fees and costs, including all Governmental Authority fees associated with applying for, securing, obtaining, maintaining, revising and amending or renewing, or any one or more of the foregoing, County Permits, shall be borne by the County. Governmental Authority fees and costs for a County Permit required of the Contractor or a County Permit, or both, associated with an additional service or a Project shall be borne by the County consistent with the limitations on such increase specified in Section 10, unless such service or Project is the result of Contractor Fault, in which case the Contractor shall be liable for such increased fees or costs. The County’s Authorized Representative shall provide a copy of all County Permits to the Contractor’s Authorized Representative prior to the Commencement Date. Thereafter, the County’s Authorized Representative shall promptly provide a copy of any County Permit to the Contractor’s Authorized Representative after any renewal or modification of the same.

If the signature of the operator of the Facility is required under Applicable Law relative to such County Permits, the appropriate Contractor representative shall sign such County Permits as proposed by the County. If the Contractor or its appropriate representative shall disagree with the information and data contained in such County Permits, the County’s appropriate

representative shall revise and amend the same as may be necessary and appropriate and then the Contractor's appropriate representative shall sign such County Permits.

Section 3.7 Regulatory Reports.

Section 3.7.1 Reports Required By Governmental Authorities.

The Contractor shall, in a timely manner, generate, file in an organized and readily retrievable manner, store, sign as the Facility operator and provide to all Governmental Authorities having appropriate jurisdiction over the Work, the County Permits and other Permits, all information, applications, renewals and modifications of Permits, including County Permits, notices and reports, including operational data and reports, maintenance records and continuance of historical record keeping activities required to establish and document the impact of operation activities and sampling and testing results (which sampling and testing shall be conducted by or through the Contractor, in each case, in accordance with Applicable Law) (the "Administrative Permit Requirements") as may be required of the Contractor pursuant to and in form and substance specified by Applicable Law. If the signature of the owner of the Facility or the Facility Site, or both, is required under Applicable Law relative to such Administrative Permit Requirements, the appropriate County representative shall sign such Administrative Permit Requirements as proposed in a timely fashion by the Contractor. If the County or its appropriate representative shall disagree with the information and data contained in such Administrative Permit Requirements, the Contractor's appropriate representative shall revise and amend the same as may be necessary and appropriate and then the County's appropriate representative shall sign such Administrative Permit Requirements.

The Contractor's Authorized Representative shall provide Notice to the County's Authorized Representative as each Administrative Permit Requirement is being prepared and, if

the County's Authorized Representative so desires, the Contractor's Authorized Representative shall provide a review copy of the same to the County's Authorized Representative sufficiently in advance of the submission date to the applicable Governmental Authority to allow the County's Authorized Representative to review and comment on the same. The County's Authorized Representative shall have approval rights over Administrative Permit Requirements requiring County signature as the owner of the Facility and, as applicable, the Facility Site; provided, however, that the Contractor shall not be deemed to be in default or subject to any applicable Withholding hereunder if the Contractor is unable to obtain, timely attain or maintain any Permit as a direct result of the County's failure to cause such Permit to be signed timely by an authorized representative of the County. Simultaneously with the Contractor's filing of any such Administrative Permit Requirements with a Governmental Authority, the Contractor's Authorized Representative shall also provide a copy of the executed original to the County's Authorized Representative that was filed with the Governmental Authority.

Section 3.7.2 Sampling And Testing Reports.

The Contractor shall, unless the County, by Notice from the County's Authorized Representative, directs the Contractor's Authorized Representative otherwise, generate, file, store, sign as operator, provide and deliver to the County's Authorized Representative, all Administrative Permit Requirements relative to the Facility or the Facility Site, or both, as may be required of the County to generate, file, store, provide and deliver to all Governmental Authorities having appropriate jurisdiction over the Facility or the Facility Site, or both, (a) by Applicable Law, (b) by any court having appropriate jurisdiction, (c) by this Agreement and (d) of the Contractor pursuant to Section 3.7.1, in each case, after the requisite information is made or could be made available to the Contractor, but in no event later than the earlier to occur of (1)

the applicable dates specified in the Applicable Law, (2) the applicable dates, other than dates specified in Applicable Law, specified in this Agreement or (3) at such time as may be necessary or reasonably required by the County's Authorized Representative to make all appropriate filings, deliver all appropriate reports or give all appropriate notices in a timely manner in conformance with Applicable Law or other requirement.

Section 3.7.3 Reporting Problems.

The Contractor shall immediately notify and provide the County's Authorized Representative and the Consulting Engineer with any and all information as the same becomes available relative to any activity, problem, event or circumstance that is an abnormal condition that threatens or may threaten compliance with the requirements of this Agreement or the requirements of any applicable Required Insurance, or disrupts Facility operations or requires notifications to Governmental Authorities.

The words "immediately notify" shall be construed to mean no later than the earlier to occur of (a) that required in the Emergency plan under Section 3.8 or (b) that required by Applicable Law. To the extent the Contractor, as the manager, operator and maintainer of the Facility, is required by Applicable Law to notify the applicable Governmental Authorities, it shall do so in compliance with the timeframe required by Applicable Law; provided, however, the Contractor shall always endeavor to notify the County's Authorized Representative of such abnormal condition before it notifies the applicable Governmental Authorities, if required, of such condition. The Contractor shall continue to update and provide any and all information regarding such act or event to the County's Authorized Representative, and to the extent required of the Contractor by Applicable Law, to the applicable Governmental Authorities, as such information becomes available. The Contractor shall take all reasonable steps necessary under

the circumstances to develop and provide to the County's Authorized Representative within twenty-four (24) hours after becoming aware of the abnormal condition, the reasons or events giving rise to the abnormal condition, a full and complete assessment of the situation based on such available information, provide recommendations as to the responses that are or should be undertaken by the Contractor to address and Cure the abnormal condition and continually update the County's Authorized Representative of the same as information become available. Further, the Contractor shall immediately, but in no event later than that period of time prescribed, as applicable, in (a) or (b) above, commence (1) all necessary investigative, corrective and mitigative actions required by Applicable Law, (2) implementation of the Emergency plan specified in Section 3.8 to the extent it is applicable to the situation, (3) implementation of the activities required by this Agreement to the extent applicable to the situation and (4) physical inspection and gathering of information and other data from field locations as may be reasonably necessary and appropriate to assess the range of responses that may be available and appropriate to the situation, including that information and data as may be requested by the County's Authorized Representative pursuant to this Agreement.

Section 3.7.4 Failure to Comply.

Failure of the Contractor to comply with the requirements of Section 3.7 shall subject the Contractor to the Withholding in accordance with Section 8.4.7.1.

Section 3.8 Emergency Procedures Planning.

As part of the Transition Plan, the Contractor shall provide the County's Authorized Representative with a plan of action to be implemented by the Contractor in the event an Emergency shall occur (the "Emergency Plan"). The Emergency Plan shall specify the Emergency procedures to be followed as required by Applicable Law and to the extent not

inconsistent with Applicable Law, conform such plan with the existing County Solid Waste Division and County-Wide Emergency Plans (together, the "County Plans") as well as with such modifications thereto as the County may make from time-to-time after notifying the Contractor thereof in writing. Upon conforming its Emergency Plan to any modifications to the County Plans, the Contractor shall file its modified Emergency Plan with the County's Authorized Representative for review and approval within thirty (30) Days after the County's adoption of any amendment to the County Plans. Within thirty (30) Days following the Contract Date and, as applicable, within thirty (30) Days following the County's Authorized Representative's receipt of the Contractor's Emergency Plan and any amendments to the same as required by this Section 3.8, the County's Authorized Representative shall, by Notice to the Contractor's Authorized Representative, approve or disapprove of such plan. If the County's Authorized Representative by such Notice disapproves of the Contractor's Emergency Plan, the County's Authorized Representative shall specify in reasonable detail in such notice its reasons for its disapproval. The Contractor shall, upon receipt of such Notice, amend its Emergency Plan accordingly and resubmit it to the County's Authorized Representative for approval. The foregoing procedures and timeframes shall be applicable to the preparation, filing and approval of any Contractor Emergency Plan. If the County's Authorized Representative does not, by Notice, disagree with the Contractor's Emergency Plan within thirty (30) Days following the Contract Date or, as applicable, such other thirty (30) Day period following the receipt of the same, such Contractor plan shall be deemed to have been approved by the County's Authorized Representative. The Contractor is not permitted to modify its approved Emergency Plan without providing the County's Authorized Representative with prior Notice of such proposed

modification and no such modification shall be effective without the County's Authorized Representative's approval pursuant to the procedures of this Section 3.8.

The Emergency Plan shall provide that (a) the County may, at its election, intercede and take, or direct the Contractor to take, any and all actions reasonably necessary or appropriate to respond to an Emergency, (b) the Authorized Representatives shall coordinate with one another prior to and after the occurrence of a hurricane or similar event, including (i) the planning and implementation of actions designed to prevent or mitigate, or both, damage to the Facility and the Facility Site and (ii) the attendance at all meetings relative to such planning and implementation, (c) the Contractor shall interact and cooperate with appropriate departments of the County and other jurisdictions and (d) the Contractor shall supply standby employees from normal Facility staff ready to address any Emergency in an expeditious manner. The Emergency Plan shall be reviewed and updated by the Parties as frequently as necessary, but at least annually and no later than April 1. All Contractor obligations under the Emergency Plan in effect as of the Contract Date shall be performed as part of the Processing Fee.

To the extent changes to the Contractor's Emergency Plan, as modified pursuant to modifications to County Plans as specified in this Section 3.8, increases the Contractor's cost to comply with its obligations under this Agreement, the Contractor's Authorized Representative shall, together with its filing of its modified plan, include its proposed cost increase. As part of such filing, the Contractor shall also provide to the County's Authorized Representative documentation and other evidence purporting to support such cost increase. Failure of the Contractor's Authorized Representative to include its proposed cost increase and to provide such documentation and other supporting evidence as part of its modified Emergency Plan filing shall be deemed a waiver of the Contractor's right to seek reimbursement for such increased costs

unless the County's Authorized Representative, in his or her sole discretion, waives such period by Notice to the Contractor's Authorized Representative. If such documentation and other evidence reasonably supports the Contractor's contention of increased costs, the Authorized Representatives shall prepare an amendment to this Agreement, for the Board of County Commissioners' review, consideration and possible execution, identifying the cost increase relative to performing the requirements associated with the modification of the Contractor's Emergency Plan and the method to be employed for reimbursing such costs. Any such cost increase shall be limited to Direct Costs, subject to Cost Substantiation, inclusive of Markup. Reimbursement, at the County's election, shall be in the form of an adjustment to the Processing Fee or a one-time, lump sum payment.

Notwithstanding any provision in this Section 3.8 to the contrary, the Contractor shall have no obligation under this Agreement to comply with changes to its Emergency Plan consistent with the County's modification to the County Plans if such changes increase the Contractor's costs to comply with such changes unless and until the Parties have executed an appropriate amendment to this Agreement, except, in any case, to the extent necessary to protect human life and the environment and mitigate potential damage in accordance with Section 9.

Section 3.9 Housekeeping, Maintenance of Buildings and Grounds and Customer Service.

The Contractor shall continually and on a daily basis maintain the Facility and the Facility Site in an aesthetically attractive, clean, neat, orderly, and litter free condition, and shall implement and maintain appropriate dust control measures in and around the Facility. Without limiting the generality of the foregoing, the Contractor shall maintain within the Facility Site all grounds, landscaping and drainage systems, including, but not limited to, storm water drainage systems, manholes, inlets, headwalls, flared-end sections, cleanouts and rip-raps, except that the

County shall be responsible for maintaining the landscaping around the Contractor's administration building located on the South side of 110th Avenue. The Contractor shall also comply with the non-process maintenance and customer service standards provided in Schedule 15 (Non-Process Maintenance and Customer Service Standards). In furtherance of assuring the Contractor's compliance with its obligations under this Section 3.9, the County shall have the right to Withhold amounts against the Contractor pursuant to, as applicable, Sections 8.4.7.4.

Section 3.10 Repairs and Maintenance.

The Contractor shall perform all maintenance and Repairs or Replacements to the Facility at a level adequate for the reliable, efficient, long-term dependability and preservation of the Facility and the Facility Site such that (a) the normal useful life of the Equipment shall be achieved, (b) operational readiness of the same will be assured and (c) existing redundant Equipment and an adequate level of Spare Parts (consistent with the requirements of this Agreement) shall be maintained to remain available for installation and operation at all times, in accordance with the Standards of Maintenance; provided, however, during the Initial Operating Period, the level or standard(s) of maintenance specified in Section 10.6 shall be substituted for that specified in this Section 3.10 to the extent specifically recognized and made applicable pursuant to such Section 10.6. Failure of the Contractor to comply with this obligation shall subject the Contractor to retainage and Withholdings and the County's implementation of its rights and remedies pursuant to Section 6.

In furtherance of the Contractor's obligations under Section 3.2 and 3.9 and the previous paragraph of this Section 3.10, the Contractor shall perform maintenance, Repairs or Replacements to the Facility and perform each and every component of the Work in accordance with the more stringent of (i) the Operation and Maintenance Manuals, except that the Contractor

shall not be required to perform such activities in accordance with the Prior Contractor's Operation and Maintenance Manuals to the extent that such Operation and Maintenance Manuals are in conflict with the Contractor's Operation and Maintenance Manuals, and other operating instructions produced, generated or modified by the Contractor relating to the Facility and consistent with Prudent Industry Practices, (ii) manufacturer's recommendations, as modified by the Contractor; provided, such modifications are consistent with (A) Prudent Industry Practices and (B) the requirements necessary to maintain the Facility's warranties (to the extent such warranties are available to the Contractor), (iii) the applicable terms and conditions of this Agreement, (iv) Prudent Industry Practice and (v) Applicable Laws, (collectively, the "Standards of Maintenance"); provided, however, that compliance with the foregoing shall not be a violation of Applicable Laws. Notwithstanding the foregoing in this Section 3.10, the Contractor shall cause each turbine-generator to undergo major maintenance overhaul at least every five (5) years as measured against each such turbine-generator's most recent major maintenance overhaul unless the Parties otherwise agree on an alternative timeframe for such periodic maintenance. If a major maintenance overhaul is performed for both turbine-generators in the same year, prior to the Commencement Date or in the first full or partial Billing Year, the Contractor will be allowed a one year extension on the five (5) year required frequency for one of the turbine-generators such that both turbine-generator major overhauls will not be required in the same year. If the Contractor proposes to undertake one or more major maintenance overhauls of a turbine-generator earlier than such five (5) year periodic interval and the County's Authorized Representative disagrees with such alternative timeframe(s), the Contractor may undertake such major maintenance overhaul(s) and any dispute resolution resulting from such disagreement shall be limited to whether the Contractor should be afforded relief under the applicable circumstances

from its obligation to comply with the Performance Guarantees, as such relief for such major maintenance is calculated pursuant to Schedule 3 (Performance Calculations and Test Procedures).

The Contractor shall be obligated to comply with those Standards of Maintenance which are applicable in any particular circumstance. Where more than one Standard of Maintenance applies to any particular obligation under this Agreement, the Contractor shall comply with each applicable Standard of Maintenance. Where one or more Standards of Maintenance may be in conflict with one another, the Contractor shall comply with the most stringent, or applicable portion, of such Standards of Maintenance.

Section 3.11 Replacement of Unsupported Equipment.

In furtherance of the Contractor's responsibilities under Section 3.10, if Equipment to be replaced is no longer supported by the applicable Equipment manufacturer or aftermarket supplier, then replacement Equipment that is new, current, proven and commercially available Equipment of its type shall be procured, installed and used by the Contractor. The fact that such replacement Equipment may be an improvement or upgrade over that Equipment that is being replaced shall not give rise to additional compensation, Pass Through Cost or other remuneration to the Contractor under this Agreement. The cost and expense associated with the procurement, administration, installation and any other fee or cost associated therewith and the maintenance thereof and the purchase of Spare Parts for such Equipment as well as the retirement of obsolete Spare Parts for the unsupported Equipment was contemplated by the Contractor in establishing the Processing Fee hereunder, and the County shall have no liability relative to such replacement Equipment.

Section 3.12 Certain Warranties Regarding Workmanship, Parts, Equipment and Consumable Supplies.

The Contractor shall maintain, on behalf of the County, all third party warranties and guarantees on Equipment, and shall enforce all warranties and guarantees relative thereto. These warranties include: (a) all existing warranties on Equipment and components thereof that the County's Authorized Representative provides to the Contractor, (b) warranties and guarantees on Equipment and components thereof provided by the contractors and vendors selected by the County, and (c) warranties and guarantees on Equipment and components thereof provided by or through the Contractor. The County shall provide, in a timely manner, copies of all warranties to the Contractor for the Equipment and components thereof provided by the contractors and vendors selected by the County. Upon the request of the County's Authorized Representative, the Contractor's Authorized Representative shall provide the County's Authorized Representative a current list and copies of all warranties and guarantees with respect to Equipment and components thereof. To the extent that warranties for Equipment are in, or come into, the County's name for its use and benefit are assignable, the County shall transfer and assign to the Contractor all such warranties (a) in its possession as of the Commencement Date, within thirty (30) Days after such date, and (b) that come into the possession of the County after the Commencement Date, within thirty (30) Days after the date the County comes into such possession.

Section 3.13 Ownership and Title.

The Facility is titled in the name of and owned by the County. Subject to the Contractor's rights pursuant to Section 3.14.2, title to all Equipment (other than equipment temporarily [not more than sixty (60) Days] brought onto the Facility Site to perform the Work

and then removed after the Work has been performed, and it being further understood and agreed between the Parties that the Contractor shall not store equipment on the Facility Site that is not necessary for the performance of the Work), Reagents, Spare Parts, Utilities, chemicals, supplies, materials and other items of a similar nature (collectively, "Property") shall vest in and be deemed owned by the County upon the earlier to occur of (a) payment for such item by the County, if applicable, or (b) delivery to the Facility Site, and in all events, free and clear of all liens, security interests and encumbrances.

Title to drawings, Operation and Maintenance Manuals and other manuals, reports, As-Built Drawings, specifications, operating data, maintenance records, analyses of the data, maps, photographs, meeting records, communications records, County Permit applications, County Permits, studies and similar items, licenses, including software licenses and industrial property rights to the extent such are transferable to the County and, except as provided by Applicable Law, all Records, (1) owned or acquired by the County prior to the Contract Date and relative to the Facility shall be deemed to be owned and titled in the name of the County and (2) purchased, supplied or prepared by the Contractor on and after the Contract Date for, or in connection with, the Work, with the exception of (i) those items qualifying as Confidential Information under Applicable Law, (ii) the Contractor's Records to the extent protected from disclosure by Applicable Law, (iii) Records for which title is not transferable from the Subcontractor having title to such Records and (iv) corporate or partnership records of the Contractor (if the Contractor is a partnership), personnel records of the Contractor's employees and the Contractor's financial records, including tax returns and financial statements, shall from the inception, vest in and be deemed owned by the County free and clear of all liens, security interests and encumbrances. All items referenced in this paragraph that are owned by the County shall remain a part of the

Facility upon the termination or expiration of this Agreement. The Contractor's records shall remain its property and shall be accessible by the County to the extent permitted by Applicable Law.

The Contractor further warrants and guarantees and shall require all Subcontractors performing Work on the Facility Site to warrant and guarantee that, except as provided in the preceding paragraph of this Section 3.13, no Property which is to be owned by the County will have been acquired by the Contractor, any Subcontractor or other Entity performing Work or Property which is subject to an agreement under which an interest therein or encumbrance thereon will be retained by the seller or otherwise imposed on the Contractor, any Subcontractor or other Entity. In the event of any claim affecting such titles, the Contractor and the applicable Subcontractors shall, at no cost to the County, protect, indemnify and hold the County harmless from and against all Losses and shall defend the Indemnified Parties in any Legal Proceeding or in connection with the title to all such Work, Property and shall obtain good and marketable title to the same on behalf of the County.

Section 3.14 Facility Equipment and Spare Parts.

Within fifteen (15) Business Days after the Commencement Date, the County's Authorized Representative and the Consulting Engineer, or his or her representatives, or both, at the County's cost and expense, and the Contractor's Authorized Representative, or his or her representative, at the Contractor's sole cost and expense, shall jointly conduct a physical inventory and initial listing or provide documentation, reasonably satisfactory to the Parties, to verify the presence of Facility Equipment and Spare Parts as provided on the Facility Equipment List and the Spare Parts List, as both are attached hereto as Schedule 16 ("Initial Facility Equipment List" and "Initial Spare Parts List"). The Initial Facility Equipment List and the

Initial Spare Parts List shall, to the extent applicable to each such item, include (a) the number or units of all such Equipment and Spare Parts, (b) a reasonably detailed description, to the extent known or can reasonably be determined, including photographs of all such items, the physical and operating condition of the Equipment and Spare Parts, to the extent known or as can reasonably be determined (identifying and listing any defects existing at the time of such inventory), the date of purchase, if available, the identification number, if any, and the manufacturer's name, if available.

The Contractor shall, within sixty (60) Days after completing the inventory, initial listing or documentation (or any or all of the foregoing) provide to the County's Authorized Representative a report, relative to the Initial Facility Equipment List and the Initial Spare Parts List, identifying (a) obsolete Equipment or Spare Parts, or both, recommended to be removed from the inventory and such lists, (b) Equipment and Spare Parts that either (1) are not on either inventory list and are recommended to be added to the applicable list, (2) were not present in the physical inventory, or (3) were not present in the recommended quantity, (c) items whose description or condition do not match the Initial Equipment List or Initial Spare Parts List, and (d) the estimated value of the Spare Parts, which cost shall be based on the purchase price for the Spare Parts for new Spare Parts and the fair market value for used or rebuilt Spare Parts (the "Estimated Value"). The County and the Consulting Engineer will review the Contractor's recommendations, and upon agreement, revise the Initial Facility Equipment List and the Initial Spare Parts List to reflect the agreed upon changes, which revised lists shall list the Equipment and Spare Parts which are required to be in inventory at the Facility at the earlier to occur of the expiration or termination of this Agreement (the "Required Facility Equipment List") and (the

“Required Spare Parts List”). The Required Facility Equipment List and the Required Spare Parts List shall be approved in writing by the Parties and upon such approval, shall be attached hereto as Schedule 16A (Required Facility Equipment List and Required Spare Parts List) and made a part of this Agreement. With respect to (b) above, the Contractor shall procure all Equipment and Spare Parts that the Parties have agreed are required Equipment or required Spare Parts, or both, and the County shall reimburse the costs for such purchases as a Pass Through Cost. Such Pass Through Costs for required Spare Parts shall be included in the Estimated Values.

The County’s Authorized Representative shall maintain possession of the Required Facility Equipment List and the Required Spare Parts List and shall provide free of charge to the Contractor’s Authorized Representative a copy of such lists, as such lists may be revised during the Term.

Effective on the Commencement Date, the Contractor shall assume custody of the Facility, all Equipment and Spare Parts, and shall be responsible for maintaining the same to at least the physical inventory and listing in the Required Facility Equipment List and the Required Spare Parts List during the Term. At all times during the Term, the Contractor shall replenish and maintain at the Facility the quantity and types of Critical Spare Parts specified on Schedule 16B (Critical Spare Parts). Each Billing Year, the County’s Authorized Representative and the Consulting Engineer, or his or her representatives, or both, at the County’s sole cost and expense, and the Contractor’s Authorized Representative, or his or her representative, at the Contractor’s sole cost and expense, shall jointly conduct a physical inventory of the Required Spare Parts not later than October 31 of each Billing Year.

To the extent the Parties, each acting reasonably, agree that items of Equipment or Spare Parts are obsolete, (i) such item(s) shall be deleted from the Required Facility Equipment List or the Required Spare Parts List, or both, as applicable, (ii) the Estimated Value shall be adjusted accordingly, and (iii) a revised Schedule 16A (Required Facility Equipment List and Required Spare Parts List) hereto shall be agreed upon in writing by the Authorized Representatives, and such changes, if any, shall not constitute an amendment to this Agreement.

If, upon the earlier to occur of the expiration of the Term or termination of this Agreement, the value of the then-existing inventory of Spare Parts at the Facility (the “Final Value”) is less than the Estimated Value, as adjusted by the Adjustment Factor, the Parties shall reconcile such shortfall in accordance with the following two paragraphs in this Section 3.14.

To determine or verify the physical inventory and current listing of the Facility, including Property, upon the earlier to occur of expiration of the Term or termination of this Agreement, the County’s Authorized Representative and the Consulting Engineer may, on or about the date of such expiration or termination date, as applicable, conduct a physical inventory and current listing of the Facility, including Property. This physical inventory may be witnessed or the results verified, or both, by the Contractor’s Authorized Representative. If the County’s Authorized Representative and the Consulting Engineer determine that the Final Value is less than the Estimated Value, as adjusted by the Adjustment Factor, the County shall request by Notice to the Contractor’s Authorized Representative, that the Contractor (a) deliver to the County’s Authorized Representative payment equal to the difference between the Estimated Value and the Final Value and (b) if the number and type of Spare Parts is less than the quantity specified on the Required Spare Parts List, a procurement specification, including recommended

vendor pricing, to purchase such missing Facility item(s), and in the case of either (a) or (b), the Contractor shall perform the same within thirty (30) Days after receipt of the County's Notice.

With respect to chemicals, Reagents, supplies, including lubricants, the Contractor shall, upon the earlier to occur of termination of this Agreement or expiration of the Term, provide and leave on the Facility Site a quantity or amount of such chemicals, Reagents and supplies as shall be (a) sufficient for normal Facility operations and maintenance for a period of three (3) Months or (b) at least one full container (i.e., drum, tube, carton, pod, pallet, etc.) of each such chemicals, Reagents, and supplies, including lubricants, in the size normally purchased by the Contractor, whichever is less. If any such chemicals, Reagents or supplies, including lubricants, are normally stored in fixed vessels, silos or bins at the Facility, each fixed vessel, silo or bin shall be at least fifty percent (50%) full.

Section 3.14.1 No Security Interest in Facility Assets.

The Contractor hereby covenants and warrants that notwithstanding anything in this Agreement that may be construed or interpreted to the contrary, the Contractor does not and shall not have any encumbrance, security or other ownership interest in the Facility, including Property. Moreover, the Contractor hereby waives, now and forever, any encumbrance, security or other ownership interest it may or could otherwise have or allege to have under any Applicable Law to the Facility, including Property.

Section 3.14.2 Disposition of County Property.

Equipment or Spare Parts, or both, that is replaced, refurbished, exchanged or otherwise disposed by the Contractor may serve as a credit to the Contractor's purchase of, as applicable, replacement Equipment or Spare Parts; provided, however, if the replacement Equipment or Spare Parts, or both, arose as a result of an insurable event for which insurance

proceeds have, are or will be paid for such replacement Equipment or Spare Parts, or both, the applicable insurance company shall have the right to the salvage value to, as applicable, the Equipment or Spare Parts, being replaced or, if the applicable insurance company does not claim the Equipment or Spare Parts being replaced for its salvage value, the Contractor shall dispose of such Equipment or Spare Parts being replaced and shall have the right to claim and enjoy the any benefits associated with such Equipment's or Spare Parts' disposition. Subject to the proviso in the immediately preceding sentence, the Parties agree that such disposition of Equipment or Spare Parts that is replaced, refurbished, exchanged or otherwise disposed is in the best interest of the County, and the salvage value, exchange value, cost of disposal or cost of other disposition of such Equipment or Spare Parts, or both, was taken into account by the Contractor in establishing the Processing Fee. Subject to the proviso in this Section 3.14.2, the Contractor may sell, exchange or dispose of the foregoing and retain the proceeds of such disposition.

Section 3.14.3 Use or Removal of Equipment.

To the extent the Contractor has a regional maintenance structure and procedures, the County recognizes the benefit it receives from the same and accepts on a temporary basis that Spare Parts, other than Critical Spare Parts, may be shared with other waste-to-energy facilities in the region that the Contractor operates and maintains without compromising the Contractor's obligations under this Agreement. Notwithstanding the foregoing of this Section 3.14.3, the Contractor shall not remove Equipment from the Facility Site or share the use thereof on a temporary basis with other facilities the Contractor operates and maintains to the extent that such removal or use is restricted or otherwise prohibited by any Equipment financing covenants or security agreements that the County may enter into relative to the Facility or the System. If the Contractor is unsure of the applicability of such restrictions or covenants, the Contractor's

Authorized Representative may contact and secure a determination thereon from the County's Authorized Representative. If such a determination is sought, the Contractor shall not remove the Equipment in question unless and until the County's Authorized Representative approves such removal in writing and delivers the same to the Contractor's Authorized Representative.

Section 3.14.4 Rolling Stock.

Rolling Stock shall not be considered Facility Equipment. Rolling Stock located on or intended to be located on the Facility Site, if any, for exclusive use on the Facility Site and owned and titled in the name of the County as of the Commencement Date shall be, to the extent the Contractor agrees to accept all or a portion of such Rolling Stock, transferred by the County on an "as is" basis, including title thereto, at no cost and expense to the Contractor on or promptly following the Commencement Date for exclusive use by Contractor, and its authorized personnel, on the Facility Site during the Term. To the extent such Rolling Stock, if any, is transferred from the County, the County does not warrant any such Rolling Stock or the condition thereof. If the Contractor accepts such Rolling Stock consistent with the foregoing, it shall thereafter be the Contractor's responsibility to maintain, Repair or Replace such Rolling Stock, when and if needed, at the Contractor's sole cost and expense. Rolling Stock referenced above whose transfer to the Contractor is not accepted by the Contractor shall be removed from the Facility Site by the County on or promptly following the Commencement Date. The Contractor shall cooperate with the County in such removal effort. Taking into account the transfer of all or a portion of the County's Rolling Stock, if any, to the Contractor pursuant to this Section 3.14.4, it shall be the Contractor's responsibility to furnish and maintain Rolling Stock during the Term as required to perform the Work, including the purchase, rental or other method of securing Rolling Stock.

Section 3.15 Access to the Facility.

Section 3.15.1 Access to the Facility.

The Contractor shall provide the County's Authorized Representative and his or her agents (including the Consulting Engineer) on a twenty-four (24) hour per Day basis and with the full cooperation of the Contractor, unlimited access to and unlimited rights to visit and inspect the Facility and the Facility Site, at any time for any reason, including photography, sampling and testing; provided, however, any such sampling or testing shall be conducted in accordance with Applicable Law (if any governs the same) and protocols established in writing therefor by the Parties or deemed established therefor by dispute resolution pursuant to Section 14 and provided further, that the frequency of such sampling and testing does not unreasonably interfere with the Contractor's operation and maintenance of the Facility.

Section 3.15.2 Access to Data and Records.

The County's Authorized Representative, the Consulting Engineer and the County's employees, representatives and agents, with the full cooperation of the Contractor, shall have, during normal business hours and upon reasonable notice to the Contractor, access to review or copy, or both, in accordance with Applicable Law, including Chapter 119, Florida Statutes, all documents, papers and letters, in Native Electronic Format (including metadata) or otherwise, and all other records, books, accounts, documents, papers, letters and invoices to verify costs incurred or payments by the County pursuant to this Agreement or in connection with the Work or that are made or received by the Contractor in connection with this Agreement; provided, however, the foregoing costs and expenses shall not apply to payments of the Processing Fee and fixed or lump sum costs. The aforesaid documents, papers and letters (collectively, "Records") will be made available by the Contractor for audit or inspection

purposes by the County consistent with the foregoing proviso. Subject to the proviso above, the County's, and its agents' and representatives', access shall include verification or audits of costs and payments to any Subcontractor, any purchase order and any service or Project, or both, performed by or through the Contractor, any amendment increasing, decreasing or providing for payments under this Agreement that are made or received by the Contractor in connection with this Agreement (all financial, cost, fee or money records or transaction referenced in this Section 3.15.2 being hereafter referred to herein as "Cost Records"); provided, however, that any Entity(ies) with any access provided for under this Section 3.15.2 shall be bound by the County's confidentiality obligations pursuant to this Section 3.15 and Section 15.6, provided that to the extent the Contractor, by Notice to the County within forty-eight (48) hours after such County's confidentiality obligations would otherwise be binding, identifies Applicable Law that permits such applicable Entity to not be so bound, such Entity shall not be so bound provided that within seven (7) Days following the Contractor's receipt of Notice, the County concurs that such Applicable Law permits the applicable Entity to not be so bound. The Contractor shall have the right to deny access to the County, the County's Authorized Representative, the Consulting Engineer and the County's employees, representatives and agents to review and copy Records to the extent Records are protected from disclosure by Applicable Law. The Contractor shall retain for such inspection purposes all Records and Cost Records in compliance with Chapter 119, Florida Statutes. This Section shall survive the termination or expiration of this Agreement for the period specified in Chapter 119, Florida Statutes.

Section 3.15.3 Compliance with Contractor's Rules.

Relative to the County's inspections and visits as described in this Section 3.15, the County's Authorized Representative, the Consulting Engineer and the County's

representatives and agents and representatives of Governmental Authorities shall comply with all of the Contractor's safety rules and regulations with respect to their inspections or visits to the Facility or Facility Site, or both, and shall not unreasonably interfere with Facility operations; provided, however, such compliance shall only be applicable to the extent such rules and regulations are applicable to the Contractor's employees and Subcontractors. The Contractor agrees that its rules and regulations regarding access to the Facility Site shall be designed not to restrict access, but rather to address appropriate security, operational or safety issues that may be reasonably encountered on such visits.

Section 3.15.4 Tours of the Facility.

The Contractor shall schedule and provide tours of the Facility and Facility Site upon reasonable notice by the County's Authorized Representative. The County's Authorized Representative may schedule and conduct as many tours as desired upon reasonable notice to the Contractor's Authorized Representative, provided that any such tours shall not unreasonably interfere with Facility operations. Literature describing the Facility and its operation, if provided by the County's Authorized Representative, shall be distributed during the tour and to the general public. All literature distributed must receive prior approval by the County's Authorized Representative. The Contractor shall also secure, maintain and supply a sufficient number of clean hardhats, safety glasses and other protective equipment or requirement required by Applicable Law for use by tour groups when touring the Facility and the Facility Site. The Contractor shall replace such hardhats, safety glasses and other protective equipment as appropriate or as required by Applicable Law, or both.

Section 3.16 Security at the Facility; Confidentiality of Security Measures.

The Contractor shall be responsible for Facility security, including the administration and implementation of the security procedures for the Facility, except as otherwise specifically provided in this Section. Without limiting the generality of the foregoing, access to the Facility and the Facility Site shall only be given to its employees, Subcontractors, Affiliates, Contractor's invitees, Solid Waste haulers, Governmental Authorities and those Entities permitted by Section 3.15 and as mutually determined by the County's Authorized Representative and the Contractor's Authorized Representative. The access gates to the Facility Site shall remain closed except when admitting such employees, Subcontractors, Affiliates, Contractor's invitees, haulers, Governmental Authorities and Entities. Contractor staff and, as approved by the County, Subcontractor staff, shall be assigned card access for specified gates and buildings on the Facility Site, with such access specific to the work being performed by such staff. Access cards and all card readers and associated access and security devices shall be provided, programmed and maintained by the County. It shall be the Contractor's responsibility to issue access cards, provide information required by the County for staff to whom cards are issued, and to recover such cards at the termination of employment by Contractor or Subcontractor staff that have been issued access cards. Replacement of lost cards shall be at the Contractor's sole, cost and expense. The Contractor shall also provide all additional security measures as directed by the County; provided that if any such additional measures increase the Contractor's costs, the County's Authorized Representative and the Contractor's Authorized Representative shall negotiate an appropriate amendment to this Agreement and the County's Authorized Representative shall present such amendment to the Board of County Commissioners for possible execution. Notwithstanding the foregoing of this Section 3.16 to the contrary, the Contractor shall have no

obligation under this Agreement to comply with such additional security measures as directed by the County that increase the Contractor's costs unless and until the Parties execute an appropriate amendment to this Agreement. Any such increase in costs shall be limited to Direct Costs, subject to Cost Substantiation, inclusive of Markup. Such increase, at the County's election, shall be in the form of an adjustment to the Processing Fee, an Adjustment or on a one-time lump sum payment.

The Contractor shall cooperate and participate by attending meetings and supplying Facility specific information, in the development of such additional security measures as requested by the County. It is understood and agreed by the Contractor that things such as vulnerability analyses of the Facility and various security measures used to make the Facility and the Facility Site less vulnerable to sabotage are not to be disseminated outside of the Facility Site nor disclosed to other Entities, all in accordance with Section 119.07, Florida Statutes, as amended. If the Contractor receives any request by any Entity for such information, the Contractor shall not disclose such information and the Contractor shall immediately notify the County's Authorized Representative in writing of such request.

Section 3.17 Taxes and Contributions.

The Contractor shall pay when due all taxes, duties, fees and similar impositions of Governmental Authorities imposed on the Contractor under Applicable Law by reason of the Contractor's performance of the Work including sales, excise, storage, consumption taxes, license and registration fees, income, profit, franchise, Contractor's real and personal property taxes (but not taxes on the County or the real or personal property of the County, including the Facility and Facility Site); employment taxes and contributions imposed by Applicable Law or trade union contracts with respect to or measured by compensation (wages, salaries, benefits or

other) paid to employees of the Contractor, including taxes and contributions for unemployment compensation insurance, retirement benefits, health and welfare funds, pensions and annuities and disability insurances. The County shall neither be liable for the payment of any such taxes or any other taxes, duties, fees, charges, levies, assessments or similar impositions of Governmental Authorities, including all those enumerated in the immediately preceding sentence of this Section 3.17 nor shall the County have any reimbursement obligation of any or all of the same to the Contractor under this Agreement; provided, however, the County shall be liable for (a) Discriminatory Taxes, (b) any federal, State or local user fees or assessments but only to the extent expressly recognized as qualifying as a Change in Law pursuant to such definition and (c) sales taxes to the extent such taxes apply directly to (1) Reagents purchased for use at the Facility, (2) parts, materials and equipment (including Equipment) purchased by the Contractor prior to or during the Initial Operating Period, provided such parts, materials and equipment (including Equipment) are to be used at or on the Facility as part of the implementation of Schedule 19 (Technical Recovery Plan) and (3) Projects (other than those in Section 10.6 which is addressed in clause (2) above) and additional services pursuant to Section 10; provided, that the County shall not be liable for any of the foregoing to the extent clause (c) above are performed on the basis of a lump sum or fixed price which Contractor pricing therefore shall include, or shall be deemed to include, sales taxes. To the extent the County is liable for any reimbursement with respect to clauses (a), (b) or (c) above, the Contractor shall invoice the County for the applicable amount in the Billing Month after the Billing Month in which the Contractor paid such amount and the County shall reimburse the applicable amount to the Contractor as a Pass Through Cost (such amount, "Pass Through Taxes and Fees"). The Contractor shall protect, indemnify and hold harmless the County from and against all Losses

and shall defend the Indemnified Parties in any Legal Proceeding resulting from or arising out of or in connection with Contractor's or its Subcontractor's, or both, failure to make timely payment or comply with the reporting, filing or other procedural requirements under Applicable Law with respect to payments required under this Section 3.17.

The County's Authorized Representative shall supply the Contractor's Authorized Representative with the County's tax exempt information for the Contractor's use to the extent permitted by Applicable Law.

Section 3.18 Acceptance of Facility As-Is.

Section 3.18.1 Acceptance.

The Contractor understands and agrees that (a) the Work and (b) the Processing Fee and such other compensation as may be provided for pursuant to, as applicable, Sections 8.2 or 8.3 for its performance of such Work as of the Contract Date, is based on, among other factors, the Contractor's (1) acceptance of the Facility on an "as is" basis on the Commencement Date except for Work to be performed during the Initial Operating Period,, including the then current state of repair and maintenance of the Facility, except as otherwise provided in a Final Scope of Work and (2) schedule for and completion of all Work with respect to Schedule 19 (Technical Recovery Plan) in accordance with Section 10.6. Contractor shall be relieved from the Work, to the extent relief, if at all, is expressly recognized under this Agreement or in a Final Scope of Work.

On and after the Commencement Date and through the earlier to occur of (a) the date on which Work relative to Schedule 19 (Technical Recovery Plan) (Projects or services identified or defined in the Technical Recovery Plan plus those added pursuant to Section 10.6) and implemented pursuant to Section 10.6 and Schedule 19 (Technical Recovery Plan) has been

completed or (b) December 31, 2016 (the “Initial Operating Period”), failure of the Contractor to comply with that portion of its obligations hereunder specifically identified in this Agreement shall be governed by the provisions in this Agreement expressly addressing such matter, including Sections 3.1, 3.2, 3.10, 10.6 and Schedule 19 (Technical Recovery Plan).

Following the Initial Operating Period and except with respect to any Technical Recovery Projects to be completed after the Initial Operating Period, the Contractor shall be deemed to have accepted the Facility on an “as is” basis and all of the Contractor’s obligations that the Contractor may have been relieved from meeting pursuant to the terms of this Agreement during such Initial Operating Period shall thereafter be in full force and effect. Failure of the Contractor to comply with all of its obligations under this Agreement following the Initial Operating Period, except as otherwise agreed in the Final Scope of work for Technical Recovery Project to be completed after the Initial Operating Period, shall subject the Contractor to the consequences and remedies recognized under this Agreement.

Section 3.18.2 Technical Recovery Plan.

During the Transition Period and the Initial Operating Period, the Contractor shall implement, manage and perform the Work specified on Schedule 19 (Technical Recovery Plan) and as may be added to Schedule 19 (Technical Recovery Plan), in each case, in accordance with the terms and conditions of Section 10.6.

Section 3.18.3 Affidavit and Release.

Together with each invoice submitted by the Contractor to the County for payment for Work performed and completed relative to Schedule 19 (Technical Recovery Plan) and in accordance with the terms and conditions of Section 10.6 and Schedule 19 (Technical Recovery Plan), the Contractor shall include an executed affidavit and release in form and

substance attached hereto as Schedule 21 (Form of Affidavit and Release). The County shall have no obligation to make any payment relative to any such invoice unless and until such affidavit and release executed by the Contractor has been provided to the County.

Section 3.18.4 Contractor Investigation of Facility and Facility Site.

The Contractor represents that relative to its acceptance of the Facility's condition on an "as is" basis (except for Work to be performed pursuant to Schedule 19 (Technical Recovery Plan) pursuant to Section 3.18.1, it has investigated the Facility and is familiar with it and with the conditions relating thereto. The Contractor further represents that subject to Section 3.18.1, the Facility is satisfactory for the performance of the Work, that Contractor has satisfied itself as to the nature and location of the Work, the specific local site conditions, the environmental and physical conditions at the Facility, the character of the Facility and labor conditions and all matters that may affect the performance of the Work and the cost thereof. Any failure by the Contractor to make such determinations shall not relieve it of responsibility for performing the Work in accordance with this Agreement without claim for additional compensation or any other issues, except as otherwise expressly recognized in this Agreement.

The County also accepts the Facility's condition on an "as is" basis as of the Commencement Date, except for the Work to be performed pursuant to Section 10.6 and Schedule 19 (Technical Recovery Plan).

Section 3.19 Process Water Supply Priorities and Non-Compliant Process Wastewater.

Section 3.19.1 Supply Priorities.

The Contractor shall operate the Facility to minimize the use of Reclaimed Water for Processing by using treated water from Pond A to supply the Facility's Process Water requirements up to the maximum availability of treated water from Pond A. The use of Potable

Water for Processing is prohibited except for use for boiler water makeup, which use must receive prior approval from the County.

Pond A water shall undergo treatment through the County's Industrial Water Treatment Facility to meet the requirements of Schedule 20 (County's Minimum Water Quality Delivery Standards) and shall be supplied to the Facility by the County for use by the Contractor.

If the Facility's Process Water demand is greater than the available treated water from Pond A, the Contractor shall next use Reclaimed Water to supply the Facility's Process Water requirements up to the maximum availability of the Reclaimed Water. If the Facility's Process Water demand is greater than the available treated water from the combined treated Pond A water and Reclaimed Water, then the Contractor shall next use Potable Water, except that Potable Water shall only be used for boiler make-up water and such use must be approved in writing by the County's Authorized Representative.

Except as provided in the immediately preceding paragraph of this Section 3.19, Potable Water shall be used only for drinking, personnel sanitary use and certain laboratory Equipment and cleaning uses, as approved by the County's Authorized Representative. Potable Water shall not be used for Process area or Process Equipment wash down. Use of Potable Water for other purposes where use of potable water is allowed or is identified as an alternate source of supply shall be allowed only in the event of unavailability of non-Potable Water suitable for such activity due to the occurrence of a Force Majeure or County Fault, and in either case, the Contractor's Authorized Representative shall give the County's Authorized Representative Notice prior to commencing such use and such use must be approved in writing by the County's Authorized Representative.

Section 3.19.2 Non-Compliant Process Wastewater.

If the quality of Process Wastewater discharged from the Facility fails to meet the standards specified in Schedule 2 (Performance Guarantees), Table 2, as the same may be amended, the Contractor shall cease discharge of Process Wastewater to the sanitary sewer until the cause of such non-compliance is identified and Cured. The Contractor shall be responsible for payment of any penalties or damages resulting from such discharge in accordance with Section 8.4.6.1. If the quality of Process Wastewater discharged from the Facility fails to meet the standards specified in Schedule 2 (Performance Guarantees), Table 2, as the same may be amended, due to the quality of the incoming Process Water not meeting such standards, the Contractor shall not be liable for penalties and damages, and the Parties shall cooperate and pursue expeditiously to identify (a) the cause for such noncompliance and (b) the appropriate Cure.

Section 3.20 Media Relations; Signage.

Section 3.20.1 Media Relations.

The Contractor's Authorized Representative shall consult with and receive the approval of the County's Authorized Representative prior to the Contractor responding to any inquiry from, or initiating any contact with, the press or other media regarding any event, circumstance or condition with respect to the management, operation or maintenance of the Facility or any other activities of the County or the Contractor with respect to the Facility or the Facility Site. The Contractor shall not use the name or logo of the County, its facilities, employees or officers in any advertising, brochures, public relations documents or news releases without the prior written consent of the County's Authorized Representative; provided, however, the Contractor may use or furnish the name, address and telephone number of the County's

Authorized Representative as a client reference and make such press or media releases as expressly required by Applicable Law. This Section 3.20.1 shall not be construed to limit the Contractor's right to make any and all required filings or disclosures to Governmental Authorities, stock exchanges or similar Entities.

Section 3.20.2 Signage.

The Contractor shall not provide, hang, apply, fix, paint or otherwise display at or on the Facility or Facility Site, or both, in areas generally visible to the public, any signage, logos or other identifications unless required by Applicable Law or approved in writing by the County's Authorized Representative. To the extent the Contractor violates this obligation specified in the immediately preceding sentence of this Section 3.20.2, the County shall have the right to remove such signage, logos or other identifications and dispose of the same at the Contractor's cost and expense. The Contractor shall, at the County's cost and expense, which shall be limited to the Contractor's Direct Costs, subject to Cost Substantiation, exclusive of Markup, provide, hang, apply, fix, paint or otherwise display at or on the Facility or the Facility Site, or both, as the County's Authorized Representative may direct, signage, logos and other identification as determined by the County's Authorized Representative.

Section 3.21 Residue Processing.

The Contractor shall operate and maintain the Residue processing facilities to separate plus five (5) inch material and recover Ferrous Metals, Non-Ferrous Metals and minus five (5) inch material, all as specified in Schedule 2 (Performance Guarantees). The Contractor shall separately store the above materials in the Residue storage and processing building; provided, however, once such materials are separated, the Contractor may mix the plus five (5) inch Ferrous Metal and minus five (5) inch Ferrous Metal. The Contractor's Authorized

Representative shall immediately notify the County's Authorized Representative whenever the plus five (5) inch particle size separation system, the Ferrous Metal recovery system or the Non-Ferrous Metal recovery system (a)(1) is reasonably anticipated to stop operating for four (4) hours or (2) has stopped for four (4) hours and (b) is placed back into operation after such four (4) hour stoppage. The Contractor agrees to not conduct scheduled maintenance of the Residue processing facilities that requires a shutdown of the Residue processing facilities during any period of a scheduled boiler unit outage, except when all boiler units are shutdown simultaneously.

Whenever the plus five (5) inch particle size separation system is not operational, the Contractor shall separately store the Residue that has not been size-separated in the Residue storage and processing building and shall promptly give notice to and coordinate with the County's Authorized Representative so that such Residue can be loaded separately onto Residue hauling trucks provided by the County and disposed of at the Landfill by the County rather than used by the County as cover material at the Landfill by the County. Alternatively, the Contractor may introduce the Residue back into the Residue processing facility at an entry point prior to the plus five (5) inch particle size separation system. The Contractor shall operate and maintain the Residue storage and processing building at the Facility so as to ensure that all Residue, water and any other material resulting from Residue handling, storage and processing only leaves the Residue storage and processing building in hauling trucks.

The Contractor shall, during the first sixty (60) Days following the Contract Date, prepare and submit to the County's Authorized Representative for County review and approval, a Residue and Recovered Materials Management Plan addressing how the Contractor proposes to manage and implement processes and procedures with respect to Residue and Recovered

Material generation, size separation and treatment; Ferrous Metals and Non-Ferrous Metals recovery from Residue; Residue testing; Residue and Recovered Materials load out and transport; and management of collected or Residue contaminated material, if any, all in accordance with Applicable Law and Prudent Industry Practices. Within thirty (30) Days following the County's Authorized Representative's receipt of the proposed Residue and Recovered Materials Management Plan, the County's Authorized Representative shall review and by Notice to the Contractor's Authorized Representative, either approve or disapprove of such proposed plan. If the County's Authorized Representative by such notice disapproves of the proposed Residue and Recovered Materials Management Plan, the County's Authorized Representative shall specify in reasonable detail in such notice his or her reasons for such disapproval. The Contractor's Authorized Representative shall, upon receipt of such notice, revise the proposed Residue and Recovered Materials Management Plan accordingly and resubmit it to the County's Authorized Representative for approval within fifteen (15) Business Days after his or her receipt of the County's Authorized Representative's disapproval notice. If the revised and resubmitted Residue and Recovered Materials Management Plan does not fully correct, address and conform such plan to the County's Authorized Representative's disapproval Notice, the foregoing procedure and timeframes for Notice and resubmission(s) or a revised Residue and Recovered Materials Management Plan shall apply. If the County's Authorized Representative does not, by Notice, disapprove of the proposed Residue and Recovered Materials Management Plan or, as applicable, any revised Residue and Recovered Materials Management Plan, within the thirty (30) Day period following the County's Authorized Representative's receipt of such plan, such Residue and Recovered Materials Management Plan shall be deemed to have been approved by the County's Authorized Representative. Once the

Residue and Recovered Materials Management Plan is approved or deemed approved by the County's Authorized Representative, such plan shall be binding on the Parties with respect to the Residue and Recovered Materials Management under this Agreement.

A County approved or, as applicable, deemed approved, Residue and Recovered Materials Management Plan may be changed or amended unilaterally by the County, provided that any Contractor incurred increased costs and expenses directly relating to such change shall be paid to the Contractor in accordance with the procedures and other requirements of the immediately succeeding paragraph; provided, however, unless the Parties negotiate and execute an amendment to this Agreement, the County shall not make any change to the Residue and Recovered Materials Management Plan that will (a) require that the Contractor transport and dispose of Residue or (b) directly delay or prevent Contractor's performance of its obligations hereunder.

If County changes to the Residue and Recovered Materials Management Plan increase the Contractor's cost to comply with its obligations under this Agreement, the Contractor's Authorized Representative shall, within sixty (60) Days following the County's Authorized Representative's Notice to the Contractor's Authorized Representative of such change, provide the County's Authorized Representative with documentation and other evidence purporting to support such cost increase. Failure of the Contractor's Authorized Representative to provide such documentation and other supporting evidence within such sixty (60) Day period shall be deemed a waiver of the Contractor's right to seek reimbursement for increased costs unless the County's Authorized Representative, in his or her sole discretion, waives such period by Notice to the Contractor's Authorized Representative. If documentation and other evidence reasonably supports the Contractor's contention of increased costs, the Authorized Representative shall

prepare an amendment to this Agreement, for the Board of County Commissioners' review, consideration and possible execution, identifying the cost increase relative to performing the requirements associated with the County's changes to the Residue and Recovered Materials Management Plan and the method to be employed for reimbursing such costs. Any such cost increase shall be limited to Direct Costs, subject to Cost Substantiation, inclusive of Markup. Reimbursement shall, at the County's election, be in the form of an adjustment to the Processing Fee or a one-time, lump sum payment. Notwithstanding the foregoing of this Section 3.21 to the contrary, if County changes to the Residue and Recovered Materials Management Plan increases the Contractor's costs to comply, the Contractor shall not be obligated under this Agreement to comply with such changes unless and until an amendment to this Agreement is executed by the Parties.

Subject to the provision in the last sentence of the paragraph immediately preceding the immediately preceding paragraph and the last sentence of the immediately preceding paragraph of this Section 3.21, failure of the Contractor to comply with the approved Residue and Recovered Materials Management Plan shall subject the Contractor to Withholding or liquidated damages pursuant to Sections 8.4.1.2, 8.4.1.3, 8.4.1.4, 8.4.5 or 8.4.7.1, respectively.

Section 3.22 Ferrous and Non-Ferrous Metals Recovery and Marketing.

Section 3.22.1 Marketing.

The Contractor shall manage, operate and maintain the Ferrous Metal and Non-Ferrous Metal recovery systems in accordance with the Ferrous Metal Recovery System Availability Guarantee and the Non-Ferrous Metal Recovery System Availability Guarantee during the Term, market all Recovered Materials and deliver, or cause to be delivered, Recovered Materials to the purchasing Entities. Transportation of Recovered Materials shall

occur during and be limited to the Receiving Time. No Residue or Recovered Materials shall be stored, maintained, stockpiled or otherwise exist outside of any enclosed building or conveyance except as specifically provided herein. The Contractor shall abide by the procedures set forth in the Residue and Recovered Management Plan with respect to Residue and Recovered Materials. Subject to Section 3.22.3, the Contractor shall exercise reasonable efforts to market and sell all Recovered Materials produced by the Residue processing system and deliver, or cause to be delivered, within a time frame necessary to ensure the continuous operation of Residue processing system, to the purchaser or its broker or representative of such Recovered Materials. As part of such marketing, delivery and sale obligation, the Contractor shall:

(a) Sell Recovered Materials to markets or into markets wherein the Recovered Materials will, consistent with Applicable Law, be recycled, reused, refabricated or reconstituted.

(b) Load Recovered Materials (1) onto trucks or vehicles provided by the Recovered Materials purchaser, or its broker or representative, for transport and delivery to the Recovered Materials purchaser, or its broker or representative, or (2) if necessary, onto trucks and vehicles arranged through and contracted for by the Contractor for transport and delivery to the Recovered Materials purchaser, or its broker or representative.

(c) Identify available markets for the sale of Recovered Materials and be responsible for and exercise reasonable efforts to market and sell Recovered Materials. In implementing such obligation, the Contractor shall endeavor to secure the highest Net Revenues reasonably available for each type of Recovered Materials in the marketplace

taking into account the credit status and ability to pay timely of the purchasing Entity, or its broker or representative.

(d) As a condition precedent to any contract, purchase order or other arrangement the Contractor may propose to enter into with any purchaser, or its broker or representative, the Contractor shall provide the County the name and address of the proposed disposal site or sites for the disposal of any Residue remaining on the Recovered Materials proposed to be delivered and sold to such purchaser, or its broker or representative, and confirmation that such disposal site is permitted under all Applicable Laws to receive and dispose of such Residue. Upon the provision of all such information in such form and in such reasonable particulars acceptable to the County, the County will, by Notice to the Contractor within five (5) Days following receipt of all such information, approve or disapprove of such disposal site or sites. Failure of the County to provide such Notice within such five (5) Day period shall be deemed County approval of such disposal site.

(e) Provide to the County the information and data relative to the recovery and sale of Recovery Materials and at such times as specified in Schedule 6 (Reporting Requirements).

(f) Exercise reasonable efforts to (1) maximize the quality and quantity of Recovered Materials and (2) minimize contamination and other incidences adversely affecting the quality of Recovered Materials to be delivered and sold in the marketplace so as to facilitate optimal pricing and receipt of Net Revenues in the marketplace. In any and all cases, the Contractor shall not operate the Facility in a manner the Contractor knows or reasonably should know could generate Recovered Materials and Residue that

is Hazardous Waste.

(g) Promptly invoice all purchasers of Recovered Materials generated by the Residue processing system and exercise all reasonable efforts to insure timely payment and collection of all invoiced amounts.

(h) Upon receipt of payment by any purchaser, or its broker or representative, for Recovered Materials delivered and sold to such purchaser, or its broker or representative, provide a copy of the check, wire transfer notification or other payment evidence to the County within two (2) Business Days of receipt by the Contractor of such payment. The Contractor's Monthly invoice and statement to the County shall reflect all payments received by any purchaser, or its broker or representative, during the previous Billing Month, clearly reflect the transportation costs, if any, for the delivery, on a delivery-by-delivery basis, of Recovered Materials to the purchaser, or its broker or representative and other deducted or subtracted amounts in calculating Net Revenues for such Billing Month, and allocate the County's percentage share of Net Revenues to the County.

(i) To the extent any Recovered Materials purchaser, or its broker or representative, is past due or delinquent in its payments to the Contractor, the Contractor shall pursue such payment collection and enforcement remedies as it, in its sole discretion, determines appropriate. To the extent the Contractor pursues Legal Proceedings(s), the Contractor may settle any such Legal Proceedings(s) or reduce any past due or delinquent accounts for any amount less than the full balance owed and payable without the prior written consent of the County.

Failure of the Contractor to comply with its obligation under this Section 3.22.1(e) shall subject the Contractor to Withholdings pursuant to Section 8.4.7.1.

Section 3.22.2 Sharing Percentage in Marketed Recovered Materials.

The Contractor and the County shall share in the Net Revenues received, if any, by the Contractor from the sale of Recovered Materials, on the basis of fifty percent (50%) to the Contractor and fifty percent (50%) to the County. The resulting amounts shall be included in the calculation of the Service Fee pursuant to Section 8.2.6 or Section 8.3.5, as applicable.

Section 3.22.3 No Market for Recovered Materials.

If no market or purchasers for such Recovered Materials can be identified by the Contractor or the County or if Ferrous Metals or Non-Ferrous Metals, or both, can only be sold or otherwise disposed of at a loss, the Contractor's Authorized Representative shall promptly notify the County's Authorized Representative of such circumstance and the County shall elect to treat such circumstance as an uneconomic marketplace in which case, the County shall (a) direct that the Contractor cease marketing activities but not Facility operations, Processing and Residue processing or (b) instruct the Contractor to market such Ferrous Metals or Non-Ferrous Metals, or both, in which case the County shall pay the cost of such market loss, i.e., the amount by which the cost to transport and sell or provide the Ferrous Metals or the Non-Ferrous Metals, or both, to the marketplace is an economic loss, in an amount not to exceed fifty thousand dollars (\$50,000.00) per Billing Year, pro rata for a Billing Year less than a full calendar year, adjusted by the Adjustment Factor, which amount shall be applicable to an economic loss for Ferrous Metals or Non-Ferrous Metals, or both if both such metals markets are an economic loss. To the extent the loss exceeds such capped amount on a Billing Year basis, the Contractor shall have no obligation to market Ferrous Metals or Non-Ferrous Metals or, as applicable, both, unless and

until the Parties negotiate and execute an amendment to this Agreement. If Recovered Materials exceed the capacity of the storage bunker provided inside the Residue storage and processing building for such Recovered Materials due to the foregoing sentence or clause (a) of this paragraph, then the County shall, at its cost and expense, transport or shall arrange for the transport of such Recovered Materials to the Landfill or such other storage or disposal location as the County shall determine.

Section 3.23 Competitive Procurement of Reagents.

Section 3.23.1 Competitive Procurement by Contractor.

The Contractor shall exercise all reasonable efforts to purchase Reagents at the lowest price available in the marketplace consistent with Reagent delivery reliability and the quality of Reagent necessary for the efficient and effective operation of the Facility. With respect to any such purchase or contractual arrangement, the Contractor shall exercise all reasonable efforts to minimize cancellation charges, if any. The County's Authorized Representative may, from time-to-time, by Notice to the Contractor's Authorized Representative, direct that the Contractor prepare one or more bid packages and competitively bid one or more Reagents. In such case, the Contractor shall thereafter solicit bids from at least three (3) qualified and responsible vendors for each applicable Reagent. Upon receipt of such bids, the Contractor shall evaluate and recommend the Best Evaluated Bidder for selection. The selection, bids, evaluation and recommendation shall all be forwarded to the County's Authorized Representative for review and approval. If three qualified and responsible vendors are not reasonably available or if three qualified and responsible bidders are available but less than three bids are received, the County's Authorized Representative (a) shall, with respect to three qualified and responsible vendors not being reasonably available, waive the requirement that the

three bids be received and evaluated and (b) may, with respect to three qualified and responsible bidders being available but less than three bids being received, waive such requirement. Any waiver must be given in writing. The Contractor's evaluation shall be based on the Best Evaluated Bidder and the Contractor shall rank the bids in accordance with such standard. The Contractor shall consult with and shall receive written approval from the County's Authorized Representative before awarding any bid. After such consultation, the Contractor may award the bid to the Best Evaluated Bidder or as otherwise directed by the County. Any contractual arrangement the Contractor may have with the awarded bidder for the provision of Reagent(s) shall include a provision recognizing and authorizing the County, at its election, to pay the awarded bidder directly for the applicable Reagent(s) by purchase order

To the extent the Contractor's procurement under this Section 3.23.1 results in the termination of a Contractor Reagent purchase or contractual arrangement, the County shall pay the Contractor its Reagent cancellation charges, if any, that are actually incurred by the Contractor and result directly from such termination, subject to Cost Substantiation, provided that such procurement was directed by the County.

Notwithstanding the Contractor's purchase obligations pursuant to this Section 3.23.1, the County's Authorized Representative, upon Notice to the Contractor consistent with Section 3.23.2, purchase Reagents required by the Contractor for use and application at the Facility in accordance with Section 3.23.2. If the County exercises such purchase right, it shall nevertheless remain liable for the Contractor's cancellation charges, if any, pursuant to this Section 3.23.1.

Section 3.23.2 County Purchase of Reagents.

The County, upon thirty (30) Days Notice to the Contractor's Authorized Representative, may, in lieu of the Contractor's otherwise applicable obligations pursuant to

Section 3.23.1, elect to procure and purchase any or all Reagents to be used and applied by the Contractor to meet its obligations under this Agreement. If the County so elects, the Contractor shall promptly coordinate with and, within five (5) Days following the County's Notice, provide the County with data and information addressing the Contractor's Reagent usage rate at the Facility for the Reagents the County proposes to procure and purchase for the Contractor's usage at the Facility; the quantity of such Reagents on-hand at the Facility Site; the amount of such Reagents on order by the Contractor; the sources of such Reagents; such Reagent specifications; the Contractor's timeframe requirements for the delivery thereof to the Facility; and other pertinent data and information requested by the County. Thereafter, the Contractor shall, as part Monthly Reporting Requirements pursuant to Section 5.3 and Schedule 6 (Reporting Requirements), provide such data and information to the County so that the County can perform its procurement and purchase of such Reagents in a timely manner. To the extent the Contractor's Reagent usage for such Reagents exceed the Maximum Reagent Utilization Allowance, the Contractor shall be liable for and pay to the County pursuant to Section 8.6.2.5.

The County shall not be liable to the Contractor for any Reagents used at the Facility that are procured and purchased by the County for such purpose if such Reagents meet the specifications provided by the Contractor to the County. However, if such Reagents are not delivered to the Facility Site for such Contractor usage in a timely manner which would, if the Facility were continued to be operated absent such usage (which continued Facility operation shall be deemed Contractor Fault if such operation would result in a Permit violation), such untimely delivery that results in a cessation of Facility operations so as not to have a Permit violation, shall be deemed to have occurred due to County Fault unless the County or the

provider of such Reagents experienced a Force Majeure in which case, Section 9 shall be applicable.

To the extent the County subsequently determines that it no longer desires to procure and purchase some or all such Reagents for use at the Facility, it shall provide the Contractor with at least thirty (30) Days Notice of such determination and the Contractor shall, following such thirty (30) Days Notice, be responsible for resuming the procurement, purchase and timely delivery of such Reagents, and the provisions of Section 3.23.1 shall be applicable.

Section 3.24 Prohibition of Use of Facility and Facility Site for Other Business Purposes.

The Contractor shall not use the Facility and/or the Facility Site to conduct any service or activity other than those relating directly to the Work without written authorization from the County's Authorized Representative; provided, however, the County recognizes that the Contractor may provide or perform a service or activity not directly related to the Work that may, for a period of time, be an additional service of benefit to the County. In such event, the County's Authorized Representative may, in his or her sole discretion and on terms and conditions specified in writing by the County's Authorized Representative, permit the Contractor to provide or perform such service or activity for a specified period of time not to exceed one year.

Section 3.25 Operation and Maintenance Manuals, Drawings and Other Facility Records.

The Contractor shall update or replace, maintain and keep current all Operation and Maintenance Manuals, As-Built Drawings, maintenance records and logs of the Facility and Facility Site and other Facility records in both hard copy and in electronic format reasonably acceptable to the County's Authorized Representative, if feasible. The baseline against which

the Contractor shall be responsible for updates shall be (a) those Operation and Maintenance Manuals, As-Built Drawings, maintenance records and logs of the Facility and Facility Site, and other Facility records in existence and in the County's possession as of the Commencement Date, and to the extent such are in the County's possession as of the Commencement Date, it shall be the County's responsibility to provide to the Contractor all of the same which shall be included as Records that the Parties agree will not be Confidential Information, and (b) any such documents that are prepared or modified as part of and as required by Section 10.6 or Schedule 19 (Technical Recovery Plan), or both. If the Operation and Maintenance Manual prepared by the Prior Contractor has been replaced by the Contractor, thereafter the Contractor's Operation and Maintenance Manual shall be the baseline for purposes of this Section 3.25. With respect to the Equipment or any materials worked on by the Contractor prior to the first anniversary of the Commencement Date, the Contractor shall, prior to first anniversary of the Commencement Date, deliver one set each in hard copy and, if feasible, in electronic format acceptable to the County's Authorized Representative of such updated manuals, drawings, and other records to the County's Authorized Representative. Thereafter, by October 1 of each Billing Year, the Contractor shall deliver one set each in hard copy and, if feasible, in electronic format acceptable to the County's Authorized Representative of such updated manuals, drawings and other records to the County's Authorized Representative for any Equipment or materials worked on by the Contractor during such Billing Year. If, however, there are no updates from the previous Billing Year of such manuals, drawings and other records, or such updates have been previously provided during the Billing Year, the Contractor shall, by Notice to the County's Authorized Representative, so advise the County each October. Failure of the Contractor to comply with this Section 3.25 shall subject it to Withholding in accordance with Section 8.4.7.1.

As projects are completed pursuant to Section 10, including those pursuant to Section 10.6 and Schedule 19 (Technical Recovery Plan), the Contractor shall promptly incorporate the operation and maintenance manual for each such projects (if any) into the Operation and Maintenance Manual for the Facility, and shall promptly provide updated Operation and Maintenance Manuals, As-Built Drawings and other records pertaining to the projects to the County, and thereafter pursuant to the immediately preceding paragraph of this Section 3.25.

Section 3.26 Performance Test Plan and Performance Tests.

The Contractor shall, within three (3) Months after the Commencement Date, prepare and deliver for review and approval by the County's Authorized Representative and the Consulting Engineer, a performance test plan ("Performance Test Plan") incorporating the elements contained in the outline set forth in Part B of Schedule 3 (Performance Calculations and Test Procedures) and providing additional details that may be necessary or appropriate to bring clarity to such plan. Within thirty (30) Days after the County's Authorized Representative's receipt of such proposed plan, the County's Authorized Representative shall, by Notice to the Contractor's Authorized Representative, either approve or disapprove of such plan. If the County's Authorized Representative, in such Notice, disapproves of such plan, he or she shall describe, in reasonable detail, how such proposed plan is deficient, and the Contractor's Authorized Representative shall revise the plan consistent with the County's Authorized Representative's deficiency comments and submit such revised plan to the County's Authorized Representative for review and approval within fifteen (15) Days following his or her receipt of the County's Authorized Representative's Notice. The Authorized Representatives shall continue such procedure until the plan is approved by the County's Authorized Representative or until either Authorized Representative submits the matter to dispute resolution pursuant to Section 14. If the

County's Authorized Representative fails to approve or disapprove a submitted plan within thirty (30) Days following his or her receipt of such plan, such submitted plan shall be deemed approved. Upon such plan's approval, deemed approval or approval by resolution pursuant to dispute resolution in accordance with Section 14, the approved Performance Test Plan shall thereafter be binding on the Parties under this Agreement.

At any time after the Initial Operating Period and during the remainder of the Term, at the County's sole cost and expense, the County's Authorized Representative may request in writing to the Contractor's Authorized Representative, a Performance Test of any or all of those portions of the Facility subject to Performance Testing as set forth in Schedule 3 (Performance Calculations and Test Procedures) and in accordance with the Performance Test Plan; provided, however, that the County shall not request Performance Tests with such frequency as will unreasonably interfere with the Contractor's Work; provided, further, quarterly Performance Tests requested by the County's Authorized Representative shall not be considered unreasonable interference with the Contractor's Work; provided, further, however, that Performance Tests shall only be required more frequently than one time each Billing Year if the County has reason to believe the Contractor is not meeting one or more applicable Performance Guarantees. The Contractor may also provide Notice to the County's Authorized Representative of a Performance Test at the Contractor's sole cost and expense, with such Contractor cost and expense to include those of the Consulting Engineer. Such Performance Test shall be conducted by the Contractor in accordance with Schedule 3 (Performance Calculations and Test Procedures) and the provisions of the approved Performance Test Plan. If there is an inconsistency or conflict between the Performance Test procedures between Schedule 3 (Performance Calculations and Test Procedures) and the approved Performance Test Plan, the approved Performance Test Plan

shall govern and control. All Performance Testing conducted pursuant to this paragraph shall commence within fifteen (15) Days (twenty-four [24] hours in the case of the Residue Particle Size Guarantee test specified in Part B of Schedule 3 [Performance Calculations and Test Procedures]) after receipt of the County's request therefor or the Contractor's Notice thereof, provided that with the exception of a Performance Test for the Residue Particle Size Guarantee, the County shall not require any Performance Test during any turbine-generator or boiler outage. If the results of any such Performance Test are below the applicable Performance Guarantee, an Adjustment shall be made in accordance with Sections 8.4.1, 8.4.5 or 8.4.7 starting on and after the Day that the pertinent Performance Test evidencing noncompliance with the particular Performance Guarantee was completed.

Such Adjustments(s) shall continue to be made monthly until such time as the Contractor elects to perform a subsequent Performance Test with respect to the particular Performance Guarantee which (a) evidences that compliance with such Performance Guarantee has been achieved, in which case the Adjustment shall cease as of the date such subsequent Performance Test was completed or (b) compliance with such Performance Guarantee was not achieved in which case such Adjustment shall continue. Each subsequent Performance Test for a particular Performance Guarantee on which Adjustments were being made immediately prior to the conduct of such subsequent Performance Test shall be at the sole cost and expense of the Contractor and shall be conducted by the Contractor. The County shall be given at least five (5) Business Days prior Notice of each such subsequent Performance Test and the County and the Consulting Engineer shall have the right to be present during such Performance Test to observe and to receive promptly the results of each such subsequent Performance Test.

Section 3.27 Power Purchase Agreement.

Section 3.27.1 Compliance.

The Contractor shall comply in all respects with the County's obligations under the Power Purchase Agreement, the Interconnection Agreement and NERC and FRCC submittals and requirements. In furtherance of such compliance, the Contractor shall, within sixty (60) Days following the Contract Date and thereafter within thirty (30) Days after the delivery of any subsequent power purchase agreement or interconnection agreement to the Contractor's Authorized Representative, prepare for the County's Authorized Representative's review and approval, written protocols addressing the means, methods, procedures and notices for (a) securing and maintaining such compliance, (b) communications between the Parties and the Electric Utility, and, as applicable, NERC and FRCC, and (c) the circumstances and mechanisms for securing authorizations from the County's Authorized Representative relative to the Contractor's fulfillment of its obligations under this Section 3.27. Such written protocols shall be delivered by the Contractor's Authorized Representative to the County's Authorized Representative prior to the Commencement Date or in the case of any subsequent power purchase agreement or interconnection agreement, within thirty (30) Days after delivery of a subsequent power purchase agreement or interconnection agreement to the Contractor's Authorized Representative. The County's Authorized Representative shall, within thirty (30) Days of the County's Authorized Representative's receipt of such protocols, either approve such protocols or provide written comments thereon. If the County's Authorized Representative approves such protocols, he or she shall provide Notice to the Contractor's Authorized Representative of such approval. If the County's Authorized Representative provides written comments on such protocols to the Contractor's Authorized Representative, the Contractor's

Authorized Representative shall revise the protocols consistent with such comments and resubmit the revised protocols to the County's Authorized Representative within fifteen (15) Days of the Contractor's Authorized Representative's receipt of such comments. The County's Authorized Representative shall again have thirty (30) Days after its receipt of such revised protocols to approve the same, or provide written comments thereon. Such process shall continue until such protocols are approved. Failure of the County's Authorized Representative to approve or provide written comments on the applicable protocols within said thirty (30) Day period after receipt of such protocols shall be deemed an acceptance of such protocols.

Section 3.27.2 Annual Provision of Electric Generation and Related Information.

No earlier than September 15 and no later than October 1 of each Billing Year, and for the first Billing Year, no later than thirty (30) Days following the Contract Date, the Contractor shall provide to the County's Authorized Representative Notice applicable to the immediately succeeding calendar year, and with respect to the calendar year in which the Contract Date occurs, for the then current calendar year, the following information:

(a) The anticipated schedule for each planned boiler unit and each planned turbine-generator outage, including the start date of each outage and the scheduled duration of each such outage; and

(b) A forecast for the applicable calendar year of (1) the number of Tons of Processible Waste estimated to be Processed each Billing Month and (2) Electric Energy estimated to be generated and sold to the Electric Utility each Billing Month.

If the Contractor becomes aware of any actual or potential change to the schedules referenced in paragraphs (a) or (b), or both, above, the Contractor shall promptly

provide Notice to the County's Authorized Representative of such actual or potential change and provide updated schedules with respect to the same.

Section 3.27.3 Modification.

The County shall not take any action that will (a) result in a reduction of the Electric Energy payment rates under and pursuant to the terms of the Power Purchase Agreement in existence on the Contract Date, during the term of the Power Purchase Agreement term, (b) modify, in each case, the Power Purchase Agreement or the Interconnection Agreement, or both, during the Power Purchase Agreement's or Interconnection Agreement's, or both, term in such a manner so as to likely result in an increase in the Contractor's risk of default under and pursuant to Section 12.2.9, or (c) increase the Contractor's cost of compliance with the Power Purchase Agreement or the Interconnection Agreement, or both, in all cases, unless the Parties execute an amendment to this Agreement providing the Contractor, in the case of (a) above, compensation designed to place the Contractor in the same economic and risk position as if the Electric Energy payment rates had remained as calculated under the Power Purchase Agreement prior to any such County action, and in the case of (b) or (c) above an equitable adjustment to this Agreement that would reasonably compensate the Contractor for such increased risk or place the Contractor in the same or reasonably similar risk or cost position the Contractor occupied under the Power Purchase Agreement or the Interconnection Agreement, or both, prior to any such County action.

Section 3.27.4 NERC and FRCC Compliance and Liability.

The Parties acknowledge that as of the Contract Date, NERC and FRCC have, as a matter of Applicable Law, promulgated and implemented certain reliability standards requirements applicable to the Facility. These standards and requirements also require the preparation and filing of certain reports with and the provision of certain information to NERC,

FRCC and potentially other Governmental Authorities, including balancing authority requirements imposed by the Electric Utility and transmission owner and operator reliability coordination requirements, all relative to Facility operations. The Contractor shall comply with all such NERC and FRCC standards and requirements, including all applicable generator-owner and generator-operator standards, and shall be liable for any fines, penalties, damages or other consequences for failure to so comply on and after the Commencement Date and through the Term if the failure to so comply arose as a result of Contractor Fault; provided, however, to the extent the Contractor's failure to comply is the direct result of County Fault, which shall include any actions taken or failure to meet conditions or requirements for periods prior to the Commencement Date, or Force Majeure, the County shall be liable for such fines, penalties, damages or other consequences, all in accordance with Section 9. With respect to the preparation and filing of certain reports with and the provision of certain information to NERC, FRCC, the Electric Utility and potentially other Governmental Authorities, the Contractor shall comply with its obligation under Section 3.7 on the basis that the NERC or FRCC, or both, requirements are a Permit and failure to so comply shall subject the Contractor to Withholdings as provided in such Section 3.7. The Contractor shall provide the County within three (3) Business Days following the filing or submittal of all of the above-referenced reports and information to the Electric Utility, NERC, FRCC and other Governmental Authorities, a copy of all such reports and information.

Section 3.28 Compliance with Schedules.

The Contractor shall comply with each and every provision of the Schedules. Unless a damage, retainage, liquidated damage or Withholding is otherwise expressly recognized under

this Agreement, failure of the Contractor to comply with the Schedules shall subject the Contractor to Withholdings pursuant to Section 8.4.7.4.

Section 3.29 Permit Modifications.

The Contractor acknowledges that it has read and understands that the Facility is operating under Construction Permit 1030117-011-AC and Consent Order OGC File No. 12-1610, each of which contain requirements that differ from Operating Permit 1030117-009-AV, and that the requirements of such Construction Permit, the Operating Permit and the Consent Order are all applicable and are considered County Permits. Construction Permit 1030117-009-AC added a requirement to monitor PM 2.5 and established an emissions limit for PM 2.5. If it is determined that the Facility cannot comply with the PM 2.5 emissions standard through utilization of proper operation and maintenance, any project necessary to allow the Facility to comply with the PM 2.5 emissions standard shall be considered to be due to a Change-in-Law, notwithstanding that the emissions limit was effective as of Contract Date.

Section 3.30 Environmental Market Management Services.

The Parties acknowledge and agree that opportunities or obligations, or both, may arise during the Term for either Party to obtain, generate, register, receive, secure, hold, report, transfer or sell (or any one or more of the foregoing) Environmental Attributes or Renewable Energy Benefits, or both, created or recognized under existing or future Applicable Law. Notwithstanding any obligation of the Contractor under this Agreement, to the extent that the County has original right, title and interest in any Environmental Attributes or Renewable Energy Benefits, and except as otherwise specifically provided under the terms and conditions of this Agreement, the County shall have the option, but not the obligation, to authorize the

Contractor to act as the County's agent to perform any or all of the following limited activities on the terms and conditions specified in this Section 3.30: (a) obtain, create, generate, register, secure or manage Environmental Attributes or Renewable Energy Benefits on behalf of the County in amounts necessary to comply with Applicable Law or maximize the corresponding Economic Benefit, or both, (b) calculate, monitor (on a continuous basis) or report (or any one or more of the foregoing) any Greenhouse Gas inventories for or at the Facility (where and in the amounts required under Applicable Law), (c) identify and evaluate potential investments, Projects or emission reduction or sequestration technologies that could provide Greenhouse Gas emission savings, reductions or offsets to or for (or both) the Facility, (d) establish, maintain and administer all necessary proprietary Environmental Attribute or Renewable Energy Benefit tracking or registry accounts, or both, on behalf of the County, (e) commercialize and market Environmental Attributes or Renewable Energy Benefits, or both, to third Entities, (f) negotiate and engage in Emission Purchase and Sale Transactions binding upon the County, provided the Contractor obtains prior written approval from the County's Authorized Representative to negotiate and execute such Emission Purchase and Sale Transactions, or (g) any additional and relevant services identified by the County in a direct written request for service proposal pursuant to Sections 10.2 or 3.30.1 (collectively, "Environmental Market Management Services").

Section 3.30.1 Provision of Environmental Market Management Services.

At any time during the Term, the County shall have the option to submit a written request from the County's Authorized Representative to the Contractor's Authorized Representative identifying specific Environmental Market Management Services the County seeks to receive. Upon receipt of any written request pursuant to this Section 3.30.1 the

Contractor shall have the option to develop and submit, at its sole cost and expense, a written proposal to the County to provide the requested Environmental Market Management Services requested by the County. To the extent the Contractor decides, in its sole discretion, to submit a written proposal, such proposal must be received by the County's Authorized Representative no more than thirty (30) Days after the Contractor's Authorized Representative's receipt of any written request from the County's Authorized Representative. If the Contractor submits a proposal, decides not to submit a proposal, fails to submit its proposal within such thirty (30) Day period or fails to submit a timely proposal acceptable to the County, the County, in any and all events, shall have no obligation to accept any Contractor proposal. The County, in any case, shall be free to solicit proposals and engage any Entity to provide any Environmental Market Management Services in amounts and at costs determined appropriate by the County in its sole discretion.

Any proposal submitted by the Contractor pursuant to the immediately foregoing paragraph, if any, shall identify and explain in detail the discrete scope of services being offered by the Contractor for the provision of Environmental Market Management Services requested by the County, if any, and shall provide itemized estimates of all costs the Contractor anticipates to incur in the performance of such requested Environmental Market Management Services.

The County's Authorized Representative shall have ninety (90) Days after receipt of the Contractor's submission (if any) to approve or reject the Contractor's written proposal. If the County's Authorized Representative does not approve the written proposal for any reason within such ninety (90) Day period, the Contractor's written proposal shall be automatically deemed rejected. If the Contractor's proposal is approved the County's Authorized Representative, the Parties shall prepare an amendment to the Agreement reflecting the

Contractor's proposal, as the same may be modified by mutual agreement of the Parties for the Board of County Commissioner's consideration and possible execution. If the amendment is executed by the Parties, the Contractor agrees to perform, in continuous consultation with the County, the Environmental Market Management Services pursuant to such amendment. If rejected, the Contractor shall have a continuing obligation to facilitate the provision of Environmental Market Management Services by the County or other Entity designated by the County and the County, for any material obligation performed not reasonably part of the Contractor's normal scope of business and requiring (a) additional Work by the Contractor's permanent employees performing services on-Facility Site or (b) Affiliates or Subcontractors to perform such additional Work, shall pay the reasonable Direct Costs incurred by the Contractor relative to the performance of such material obligation, subject to Cost Substantiation, inclusive of Markup.

Notwithstanding anything else in this Agreement to the contrary, at no time shall the Contractor be entitled to sell, assign, transfer or pool any amount of Environmental Attributes or Renewable Energy Benefits encumbered under any other agreement involving the County or required by any Governmental Authority to be retained by the County and the County shall be solely liable for any monetary Losses related to any Emission Purchase and Sale Transaction. If the Contractor attempts to and does enter into any Emission Purchase and Sale Transaction without securing the prior written approval and authorization of the County's Authorized Representative, such Emission Purchase and Sale Transaction shall be null and void at inception and of no force and effect relative to this Agreement.

Section 3.30.2 Compensation Calculation for Provision of Environmental Market Management Services.

If an amendment to this Agreement is entered into by the Parties pursuant to Section 3.30.1, the County shall agree to reimburse to the Contractor, as a Pass Through Cost beginning on the date the amendment to this Agreement is executed, all reasonable Direct Costs incurred by the Contractor relative to the performance of such approved Environmental Market Management Services, subject to Cost Substantiation and inclusive of Markup, except as otherwise agreed upon by amendment to this Agreement.

Notwithstanding the immediately foregoing paragraph of this Section 3.30.2, if the County requests that the Contractor execute or administer, or both, an Emission Purchase and Sale Transaction on behalf of the County, and if such Emission Purchase and Sale Transaction results in Economic Benefit taking into account the County's funding or financing costs, management and administrative expenses and any other costs, the County shall receive and enjoy exclusively one hundred percent (100%) of such Economic Benefit, except as otherwise agreed upon by amendment to this Agreement.

Any agreed upon sharing, if at all, of the Economic Benefit derived from such Emission Purchase and Sale Transaction(s) under this Section 3.30.2 shall be given effect as an Adjustment pursuant to, as applicable, Section 8.2.7 or Section 8.3.6.

Section 3.30.3 Assurances.

The Contractor shall retain all Records relating to any Emission Purchase and Sale Transaction to which (a) it is a party or (b) a contract is entered into by a Person relating to such Emission Purchase and Sale Transaction and the Contractor has or may reasonably obtain possession of such contract. The Contractor shall deliver to the County on a Monthly basis

attestation of all Environmental Attributes or Renewable Energy Benefits, or both, (a) held or otherwise secured in the County's proprietary emissions registry account which the County manages through the Contractor as an Environmental Market Management Service and (b) sold, purchased, assigned, transferred, conveyed, encumbered or otherwise disposed of during the immediately preceding Monthly period pursuant to any Emission Purchase and Sale Transaction carried out, administered or management by the Contractor as an Environmental Market Management Service. Such attestation shall be signed by the Contractor's Authorized Representative and include a detailed statement identifying all forecasted gross economic benefit and actual economic benefit received during the immediately preceding Monthly period.

Section 3.31 Tax Incentives or Subsidies.

The Parties acknowledge and agree that opportunities may arise during the Term to realize, receive or monetize (or any one or more of the foregoing) Production Tax Credits, Renewable Energy Production Incentives, or other related tax benefits or subsidies relating to the operation of the Facility or the generation of Electric Energy therefrom that may be made available by a Governmental Authority to either Party pursuant to any existing or future Applicable Law. To the extent the County qualifies for such Production Tax Credits or Renewable Energy Production Incentives or other related tax benefits or subsidies as the owner of the Facility and Contractor incurs no material obligation other than that which it already has under this Agreement, the County shall have no obligation to share the same with the Contractor. To the extent the Contractor in its capacity as Facility operator qualifies or may qualify for such Production Tax Credits or Renewable Energy Production Incentives or other related tax benefits or subsidies, the Parties shall share in savings or, as applicable, net revenues realized from the same on the basis of seventy percent (70%) to the County and thirty percent (30%) to the

Contractor unless the Parties shall otherwise agree. The Contractor shall exercise reasonable efforts during the Term to maximize the Economic Benefit available and received from any Production Tax Credits or Renewable Energy Production Incentives or other related tax benefits or subsidies for which the Parties or the Facility, or both, may be eligible to realize, receive or monetize. The Contractor shall reasonably pursue and conduct all activities required to qualify for, realize, receive or monetize any Production Tax Credits or Renewable Energy Production Incentives or other related tax benefits or subsidies, or any or all of the foregoing, for no additional compensation under this Agreement. The Contractor agrees that it priced the Processing Fee taking such into account, and that in no event shall the Contractor's services in pursuing and conducting such activities be construed or interpreted as the provision of additional or changed services under this Agreement.

Section 3.32 Computerized Management, Data and Information System.

Effective on and after the Commencement Date and through the Term, the Contractor shall, at its sole cost and expense as part of the Processing Fee, employ a computerized maintenance management system for scheduling and tracking the performance of preventive, predictive and corrective maintenance or Repair and Replacement Work.

Section 3.32.1 Operation of Computerized Management System.

The Contractor shall, in his or her sole discretion, (a) use and employ the computerized maintenance management system used and employed by the Prior Contractor as of the Commencement Date if such system is made available by the Prior Contractor through the County to the Contractor, or (b) procure, provide, install, manage and maintain a substitute or alternative computerized maintenance management system that incorporates those items listed in clauses "a" through "h" in the last paragraph of this Section 3.32.1 and is reasonably acceptable

to the County's Authorized Representative, which substitute or alternative system shall not serve to increase the Processing Fee or provide the Contractor with any other additional compensation under this Agreement.

With respect to (b) above, the County's Authorized Representative's approval, if any, shall include consideration of the following factors: the proposed computerized system's model, program, installation, reliability, the interface and integration of such system and its adaptability to and compatibility with the County's system and the timeframe for placing such system into commercial operations. If the Contractor installs such a substituted or alternative computerized maintenance management system, the Contractor shall be responsible for converting and importing all data made available through the County from the Prior Contractor's computer system, if any, into such substitute or alternative system. The Contractor's procurement, provision and installation of a substitute or alternative computerized maintenance management system referenced in clause (b) above, including the conversion and importation of all data from the Prior Contractor's computer system, if any, shall be at the sole cost and expense of the Contractor.

The Contractor shall, at its sole cost and expense, update and install twice during the Term, as directed by the County's Authorized Representative, one of the two most recent market releases of the computerized maintenance management system if there are new releases for such system. All costs and expenses associated with securing updated versions, hardware modifications, replacement or upgrades and installation and maintenance of all of the foregoing in this paragraph shall be at the sole cost and expense of the Contractor as part of its Processing Fee and shall be considered a Project to which Section 10.4, as applicable.

The County shall take reasonable actions to make available for consultation with the Contractor, during the installation of the computerized maintenance management system, one or more employees of the County who are reasonably familiar with the County's computerized maintenance management system in order to facilitate as efficiently as possible the integration of such systems. Within one hundred eighty (180) Days after the County's approval of such system, the Contractor, at its sole cost and expense, through purchase, lease or otherwise, shall provide, program, install, test and maintain the computerized maintenance management and system for the Facility. The Contractor shall ensure that the programming, connection and integration of such system will be adaptable to and compatible with the County's computing network system on the date of such installation. The County's Authorized Representative shall provide the Contractor with reasonable access to the County's computing network infrastructure for the purposes provided in the immediately preceding sentence in this Section 3.32.1. The Contractor's system shall be capable of and shall perform in a timely fashion and as reasonably specified by the County the following functions with respect to the Facility through the Term:

- (a) establish and schedule a maintenance program that accurately records such maintenance and failure modes related to an asset at the lowest level of detail;
- (b) establish a program to monitor for and to schedule a Repair or Replacement program, including a schedule for Repairs or Replacements;
- (c) maintain and continuously update the Spare Parts inventory;
- (d) establish, maintain and update schedules prioritizing necessary and appropriate Repairs or Replacements;

(e) provide adequate information for Facility operational planning, current Equipment and Rolling Stock status, maintenance and repair history, including out-of-service information for any Equipment and Rolling Stock;

(f) provide status reports and export maintenance records to the County's computerized maintenance management system in order to efficiently permit the County to monitor compliance by the Contractor with this Agreement;

(g) provide a comprehensive capital and management, data and information program that includes all of the assets of the Facility; and

(h) record the results of maintenance and Repairs or Replacements performed on the Facility at the lowest level of asset detail.

The County's review, comment and approval rights specified in this Section 3.32, or any similar provision contained in this Agreement, shall not be construed or read to imply that the County is in any way responsible for the management, operation or maintenance of the computerized maintenance management system during the Term.

Section 3.32.2 Modification of Computerized Management, Data and Information System.

The Parties agree and understand that during the Term, changes to the Facility and Equipment may have the result of increasing, decreasing or otherwise modifying maintenance, Repair or Replacement procedures, schedules or programs and, accordingly, the computerized maintenance management, data and information program and system. To the extent that the computerized management system is modified to address the impact of such incorporation, the Parties shall have the same rights and obligations specified in Section 3.32.1 as if the Contractor were just providing, programming and installing the initial computerized maintenance

management system. Any modification of the computerized maintenance management system shall not serve to increase the Contractor's Processing Fee or provide the Contractor with any other additional compensation under this Agreement.

Section 3.32.3 County Access to the Computerized Management System.

The Contractor shall provide the County with access to the computerized maintenance management system by way of the County's computers and the County's offices in the County and at the County's offices in the administration building adjacent to the Facility, or shall electronically transfer data from the Contractor's computerized maintenance management system to the County's computerized maintenance management system on a monthly or more frequent basis.

Section 3.32.4 Computer Maintenance Management System.

All costs of hardware, software and license fees for hardware and software (including any upgrades thereto) relative to the computerized maintenance management system shall be a part of the Processing Fee. Within ten (10) Days after the earlier to occur of termination or expiration of this Agreement, the Contractor shall provide, at no cost or expense, the County with the computerized maintenance management system software, hardware and the data in written and electronic form on such system currently in place at the time of such termination or expiration, together with any applicable Permit, effective as of such termination or expiration date; provided, with the exception of software licensing costs (for which the County shall be liable), such software license(s) can be transferred to the County at no cost or expense to the Contractor. The County shall be responsible for maintaining any third party Permit after such termination or expiration.

Section 3.33 Electronic Communications.

The Contractor shall, within sixty (60) Days following the Contract Date, prepare an electronic communication system operating plan (to include use of computers, telephone, the Contractor or County radios, or both, audible alarms, facsimile and handheld wireless devices) (the "Communication Plan") for the County's review and approval. Such plan shall feature a coordinated electronic communication system whereby the Parties and their respective employees and personnel can and will stay in constant communication with one another relative to their respective obligations under this Agreement. The Contractor shall purchase such additional electronic communication devices and system needed to implement the Communication Plan (except that the County's radio system and the radios used by County personnel shall be maintained by the County), the cost of which shall be a Pass Through Cost to the County, and the Contractor shall bear and shall pay for the cost and expense of all license and user fees with respect thereto. All such devices and systems to be used on or relative to the Facility and the Facility Site shall be subject to the prior written approval of the County's Authorized Representative. The electronic communication system and devices shall be (a) compatible with the County's electronic communication system, including radio wave frequency, (b) operated and maintained at the sole cost and expense of the Contractor (except for County radios used by County personnel) in compliance with all Applicable Laws and this Agreement, and (c) in working order and shall not be turned-off during periods when Work is being performed.

Within thirty (30) Days after the County's receipt of such proposed Communication Plan, the County's Authorized Representative shall, by Notice to the Contractor's Authorized Representative, either approve or disapprove of such plan. If the County's Authorized

Representative, in such Notice, disapproves of such plan, he or she shall describe, in reasonable detail, how such proposed plan is deficient, and the Contractor's Authorized Representative shall revise the plan consistent with the County's Authorized Representative's deficiency comments and submit such revised plan to the County's Authorized Representative for review and approval within fifteen (15) Days following his or her receipt of the County's Authorized Representative's Notice. The Authorized Representatives shall continue such procedure until the plan is approved by the County's Authorized Representative or until either Authorized Representative submits the matter to dispute resolution pursuant to Section 14. If the County's Authorized Representative fails to approve or disapprove a submitted plan within thirty (30) Days following his or her receipt of such plan, such submitted plan shall be deemed approved. Upon such plan's approval, deemed approval or approval by resolution pursuant to dispute resolution in accordance with Section 14, the approved Communication Plan shall thereafter be binding on the Parties under this Agreement.

SECTION 4

OBLIGATIONS OF THE COUNTY

On and after the Commencement Date and through the Term and subject to the more specific requirements and exceptions specified in this Agreement, the County shall perform the following at its sole cost and expense unless otherwise specifically stated:

Section 4.1 Delivery of Processible Waste.

The County shall exercise reasonable efforts to deliver, or to cause to be delivered, the Base Delivery Amount to the Facility during the Receiving Time.

Section 4.2 Payment of Service Fee.

The County shall pay, or cause to be paid, the Service Fee and such other compensation and amounts due to the Contractor at such times and in such amounts as specified in this Agreement.

Section 4.3 Sell Electricity.

The County shall make arrangements for the sale of the Electric Energy generated by the Facility, net of Facility use, including all interconnection agreements.

Section 4.4 Maintenance of Permits, Licenses and Approvals.

The County shall pursue and exercise reasonable efforts to maintain, revise, amend and renew, as applicable, the County Permits. With the cooperation and assistance of the Contractor, the County shall keep in force all warranties, easements, licenses and Permits applicable to the County as the owner of the Facility and Facility Site or otherwise required of the County for the Contractor to perform its obligations under this Agreement.

Section 4.5 Landfill Disposal Capacity.

The County shall make available, or cause to be made available, hauling vehicles for transport from the Facility to the Landfill for the disposal of Processible Waste not Processed at the Facility, Nonprocessible Waste, Recovered Materials and Residue, all as set forth in Section 7. Nothing herein shall be construed or interpreted as restricting the County's right to provide for the beneficial use of Residue, including its disposal or other disposition at a location other than or including the Landfill in accordance with Applicable Law.

Section 4.6 Provision of Utility Services to the Facility Site.

The County shall be responsible for the provision of potable water, Reclaimed Water, treated Pond A water meeting the standards of Schedule 20 (County's Minimum Water Quality Delivery Standards), natural gas, electricity and a connection for wastewater disposal to the boundary of the Facility Site for the Contractor's provision of the Work.

Section 4.7 Provision and Access to Information.

The County made available to the Contractor and shall continue to make available to the Contractor all historical information in the possession of the County and that is reasonably available and retrievable relative to the Facility and the Facility Site, including, Equipment warranty information, engineering drawings (including As-Built Drawings), calculations, maintenance manuals, operational records, logs, reports, submittals, Repair or Replacement records, audits, electric usage and water and wastewater treatment information, all relating to the design, condition, management, operation or maintenance of the Facility and the Facility Site.

Section 4.8 Access to Facility and Use of Equipment, Chemicals, Materials, Supplies and Spare Parts.

The County shall provide the Contractor unrestricted access and egress rights to the Facility and Facility Site and the right to perform the Work. The County shall make available for use and consumption at or by the Facility all Equipment, Spare Parts, chemicals, materials, supplies, Reagents, lubricants and other items of inventory on the Facility Site as of the Commencement Date.

Section 4.9 Industrial Water Treatment Facility.

The County shall be obligated, at its sole cost and expense, to operate, maintain, treat water from Pond A to at least the standards contained in Schedule 20 (County's Minimum Water Quality Delivery Standards) using the Industrial Water Treatment Facility and transmit such treated water to the Facility for the Contractor's use.

SECTION 5
REPORTING REQUIREMENTS

Section 5.1 Daily Data Submissions.

On or before 9:00 a.m. each Day, the Contractor's Authorized Representative shall deliver in electronic format (in Native Electronic Format) acceptable to the County's Authorized Representative, the operating data and information specified in Schedule 6 (Reporting Requirements) and such other operating data and information as the County's Authorized Representative may reasonably request for such Day.

Section 5.2 Weekly Data Submissions.

On or before the close of business each Monday that is not a Legal Holiday or the next Business Day if Monday is a Legal Holiday, the Contractor's Authorized Representative shall deliver the operating data and other information specified in Schedule 6 (Reporting Requirements) and such other operating data and information as the County's Authorized Representative may reasonably request for the previous Week to the County's Authorized Representative in electronic format (in Native Electronic Format) reasonably acceptable to the County's Authorized Representative.

Section 5.3 Monthly Reports.

On or before the fifteenth (15th) Day of each Billing Month, the Contractor's Authorized Representative shall deliver a draft Monthly Report to the County's Authorized Representative in electronic format (in Native Electronic Format), including that information and data specified in Schedule 6 (Reporting Requirements) and such other information and data as the County may reasonably request.

Once each Billing Month, after the County's receipt of the Monthly Report, the Contractor's Authorized Representative shall promptly contact by electronic communication the County's Authorized Representative for purposes of establishing a meeting during such Billing Month to review and discuss the Monthly Report and such other information and data the County's Authorized Representative may reasonably request, including that identified in this Section 5. Any such other information and data (including that identified in this Section 5) shall be provided in such reasonable number of copies as the County's Authorized Representative may request sufficiently in advance of any such meeting such that the County's Authorized Representative and his or her representatives (including the Consulting Engineer) will have a reasonable opportunity to review and analyze such information and data prior to such meeting. The Contractor's Authorized Representative and his or her appropriate staff shall thereafter meet at the appointed date and time with the County's Authorized Representative, County staff and other representatives and agents, including the Consulting Engineer, to review such Monthly Report, operations and maintenance as may be requested by the County's Authorized Representative, including any other information and data reports, project updates and on-going items relating to the Parties' obligations under this Agreement. The Contractor shall be responsible for preparing the agenda and minutes for the Monthly meeting, and submitting them to the attendees sufficiently in advance of such scheduled Monthly meeting to facilitate the County's review and comment, and incorporating any agreed upon changes to such agenda and minutes, as applicable.

Within ten (10) Days following the Monthly meeting, the Contractor shall submit a final Monthly Report, incorporating any changes as discussed at the Monthly meeting. Such final

Monthly Report shall be submitted electronically in PDF Format (and in Native Electronic Format) to the County's Authorized Representative.

Section 5.4 Failure to Comply.

Failure of the Contractor's Authorized Representative to provide the reports containing the information and data by the due dates specified in this Section 5 shall subject the Contractor to Withholdings in accordance with Section 8.4.7.1.

SECTION 6

MAINTENANCE, INSPECTIONS AND COUNTY RIGHTS

Section 6.1 Consulting Engineer Inspections and Reports.

To give effect to Section 3.10, the Consulting Engineer shall have the right, commencing on the Commencement Date and as frequently thereafter as the County's Authorized Representative shall determine during the Term, to conduct an inspection, over one or more Days, of the Facility, or the Facility Site, or both, and with the full cooperation of the Contractor to determine if the Facility and the Facility Site is or as applicable, being Repaired or Replaced, and maintained in accordance with Section 3.10. This inspection may include inspection of the Facility and of the Records. Within fifteen (15) Business Days following the completion of such inspection, the Consulting Engineer shall file a written report with the County's Authorized Representative and the Contractor's Authorized Representative of his or her findings. To the extent that the Facility or the Facility Site, or both, does not comply with the Standards of Maintenance, such written report shall so identify such items and specify in reasonable detail as to how such items are not in compliance (the "Punch List Items"). The report shall further identify the Cure that the Contractor shall pursue to bring such Punch List Items into compliance with the Standards of Maintenance and Section 3.10, on an item-by-item basis, including the proposed timeframe, by which each Punch List Item must achieve compliance. In establishing such proposed timeframe(s), the Consulting Engineer shall take into account the time necessary to purchase or acquire the material, equipment and services, or any one or more of the foregoing, needed to Cure each such Punch List Item, the Work necessary to bring each and every such Punch List Item into compliance, the priority of such Work relative to maintaining the Performance Guarantees and Utilization Allowances and the Contractor's other obligations under

this Agreement, the availability of Equipment or Subcontractors, or both, to perform the Work, the time for review pursuant to Section 6.2, the potential for coordination of such Work with scheduled outages relative to applicable portions of the Facility and other relevant factors. Notwithstanding anything to the contrary contained in this Section 6.1, if, during the Initial Operating Period, a Punch List Item is already included as an item to be addressed as part of a Technical Recovery Project or a Latent Defect Cure Project in an approved Final Scope of Work, then such Punch List Item shall be addressed as part of such Technical Recovery Project or Latent Defect Cure Project and not pursuant to this Section 6.1.

Section 6.2 Resolution of Disagreements.

Upon receipt of the Consulting Engineer's findings report, the Contractor's Authorized Representative shall have ten (10) Business Days thereafter to provide the County's Authorized Representative with Notice of his or her disagreement, if any, on an item-by-item basis, with the reported findings of the Consulting Engineer. Such Notice shall specify, in reasonable detail, the basis for the Contractor's Authorized Representative's disagreement with each contested Punch List Item or timeframe to Cure each Punch List Item. Failure of the Contractor's Authorized Representative to give such notice within such ten (10) Business Day period shall be deemed acceptance or approval of the Consulting Engineer's report's finding. If the Contractor's Authorized Representative gives such notice to the County's Authorized Representative, the Authorized Representatives and the Consulting Engineer shall meet either in person or by teleconference, at the Consulting Engineer's discretion, within ten (10) Business Days after the delivery of such notice by the Contractor's Authorized Representative in an effort to resolve the disputed portions of the Consulting Engineer's report and agree on a final Cure and schedule pursuant to which the agreed Cure shall be implemented and completed with respect to each

Punch List Item (the "Timeframe"). If the Authorized Representatives and the Consulting Engineer resolve some or all such disputed portions of the report, such report will be amended accordingly, redelivered by the Consulting Engineer to the Authorized Representatives within five (5) Business Days after such resolution and the Contractor shall diligently pursue the necessary Cures identified in the amended report that are no longer in dispute. If, within ten (10) Business Days after the initial meeting of the Consulting Engineer and the Authorized Representatives to resolve the disputed portions of the Consulting Engineer's report, resolution is not achieved as to all contested items, the Contractor may refer the remaining disputed items to dispute resolution pursuant to Section 14. Failure of the Contractor to refer the matter to dispute resolution within thirty (30) Days shall be deemed a waiver of its objections and its right to so refer the matter to dispute resolution and the Consulting Engineer's findings report and proposed Cure and Timeframe for each Punch List Item not disputed within such time period shall be deemed final, the Timeframe shall immediately commence and the Contractor shall comply with the same. Failure to Cure any of the items included on the Consultant's Inspection Report within the Timeframe shall subject the Contractor to the Withholding in accordance with Section 8.4.7.2.

Section 6.3 Retainage for Uncorrected Work.

If the Contractor does not achieve compliance within the Timeframe relative to all Punch List Items (a) identified in the Consulting Engineer's report that have not been referred to dispute resolution or (b) determined in accordance with the dispute resolution process pursuant to Section 14 (such Punch List Items, the "Final Punch List Items"), then the County's Authorized Representative, upon Notice to the Contractor's Authorized Representative, may direct that the Consulting Engineer prepare a cost estimate to complete the compliance Work with respect to

each Final Punch List Item not brought into compliance within the Timeframe for such Final Punch List Item. In preparing such cost estimate, the Consulting Engineer may be required to inspect the Facility or the Facility Site, or both, regarding such Final Punch List Item(s) and the Contractor shall be fully cooperative in such inspection. Upon completion of such cost estimate, the Consulting Engineer shall file its written cost estimate with the Authorized Representatives, and the County's Authorized Representative may determine that the County payment of the Contractor's current invoice and, as necessary, future Monthly invoices for Work performed, be set-off in accordance with Section 6.4.

Section 6.4 County Completion of Work.

The County may, after the County's Authorized Representative provides Notice to the Contractor's Authorized Representative, cause the Final Punch List Items referenced in Section 6.3 to be completed. After such Notice is delivered, the County may proceed to cause such uncompleted Punch List Items to be Cured and completed by its reasonably qualified employees or one or more reasonably qualified third parties. The County's Authorized Representative may also then direct that the difference, if any, between (a) the aggregate amount of the cost estimate of such Final Punch List Items developed by the Consulting Engineer pursuant to Section 6.3 and (b) the aggregate amount retained by the County pursuant to Section 6.5, be credited and retained against the amounts due under the Contractor's current invoice and, as necessary, future Monthly invoices pursuant to Section 8.4.7.7. Amounts retained by the County pursuant to this Section 6.4 and Section 6.5 shall be used pursuant to Section 8.4.7.7 by the County to pay for the Work necessary to complete each such Final Punch List Items. If the actual cost to pay for the Work necessary to complete such Final Punch List Items exceeds such amount retained by the County, the Contractor shall be liable for such excess amount. If the actual cost to pay for the Work

necessary to complete such Final Punch List Items is less than such amount retained by the County, the County shall refund each excess amount to the Contractor. Any excess amount due to the County shall be paid by the Contractor to the County, at the County's election, either as (1) a direct payment of the County's invoiced amount within thirty (30) Days following the Contractor's receipt of the County's invoice or (2) a credit against the amounts otherwise due and owing with respect to the Contractor's next Monthly invoice(s) for Work performed pursuant to Section 8.4.7.7. The aggregate amount of the cost estimate pursuant to (a) above and the excess amount to complete the Final Punch List Items pursuant to the immediately preceding two sentences of this Section 6.4 shall be referred to as the County's "Cost to Cure" for purposes of Section 8.4.7.7. The Contractor shall fully cooperate with the County in its effort to complete, or to cause to be Cured and completed, each of the Final Punch List Items not achieving compliance by the due date set forth in the Consulting Engineer's report, and once each such item is Cured and completed, the Contractor shall comply with Section 6.6. Until such time as the County delivers a Notice to the Contractor that its reasonably qualified employees or one or more reasonably qualified third parties (whether or not procured at the time of such Notice) shall perform the Work to Cure and complete the Final Punch List Items referenced in Section 6.3, the Contractor retains the right to Cure and complete, or to cause to be Cured and completed, such uncured and uncompleted Work. If the Contractor Cures and completes, or causes to be Cured and completed, one or more such Final Punch List Items prior to its receipt of County Notice that the County's reasonably qualified employees or one or more reasonably qualified third parties shall perform the requisite Work, all retainage relative to the Final Punch List Items that were Cured and completed prior to the County's Notice shall be reimbursed to the Contractor by the County as part of the Contractor's next Monthly invoice.

Section 6.5 Additional Retainage and Payment of Retained Amounts.

To encourage the Contractor to effect a Cure within the Timeframe for each Final Punch List Item, the County's Authorized Representative, effective on (a) the first Day following the last Day in the Timeframe for such Punch List Item or (b) at any time thereafter, may retain and set-off pursuant to Section 8.4.7.7 up to one thousand dollars (\$1,000.00) per Day for each such non-compliant Final Punch List Item, adjusted pursuant to the Adjustment Factor, from payment of the Contractor's Monthly invoice until the non-compliant item(s) are Cured and completed; provided, however, such continued per Day retainage shall cease effective on the date either (1) that the County's Authorized Representative gives Notice to the Contractor's Authorized Representative that the County has commenced a Cure of the outstanding non-compliant Final Punch List Item(s) on an item-by-item basis pursuant to Section 6.4 or (2) the Contractor Cures and completes corrective or curative action of the outstanding non-compliant Final Punch List Item(s) on an item-by-item basis. The County's Authorized Representative shall give the Contractor's Authorized Representative seven (7) Days prior Notice of the per Day retainage to be applied prior to implementing such retainage. Upon the Cure and completion of the non-compliant Final Punch List Item(s) on an item-by-item basis, the County shall release any remaining retainage on an item-by-item basis collected pursuant to Section 6.4 or Section 6.5, and shall pay the Contractor, pursuant to Section 8.4.7.7, any such remaining retainage amount on such item-by-item basis as part of the Contractor's next Monthly invoice for Work performed. No interest shall be paid by the County on such retainage and any such interest shall accrue to the benefit of the County.

To the extent the County has set-off and retained the Consulting Engineer's aggregate cost estimate pursuant to Section 6.3 and the Contractor effects a Cure of one or more Final

Punch List Items identified pursuant to Sections 6.4 or 6.5, the County shall pay to the Contractor, pursuant to Section 8.4.7.7, such amount as it has set-off and retained for each such Final Punch List Item on an item-by-item basis, without interest, on the Contractor's next Monthly invoice for Work performed under this Agreement, less any costs and expenses incurred or to be incurred by the County in its effort to effect a Cure of each such Final Punch List Item. In no event shall the County pay or be required to pay the Contractor any amount in excess of the total amount set-off and retained by the County pursuant to Section 6.4 or 6.5, and the Contractor waives any and all claims it could have or assert to any payment from the County in excess of such amount set-off and retained.

Section 6.6 Contractor Operation and Maintenance of County Completed Work.

To the extent the County, through its reasonably qualified employees or one or more reasonably qualified third parties, effects a Cure of an out-of-compliance Final Punch List Item in accordance with Section 6.4, the Contractor shall thereafter operate and maintain each such item in accordance with this Agreement, and the Contractor hereby waives any claim it may assert against the County that, as a result of such Cure, it can no longer operate the Facility in accordance with the Performance Guarantees, Utilization Allowances and the other obligations of the Contractor under this Agreement, but shall be entitled to the benefits of any rights that the County may have against the County's third party contractors relative to defective Work.

SECTION 7

DELIVERY AND PROCESSING OF PROCESSIBLE WASTE; REJECTION RIGHTS; PROCESSIBLE WASTE COMPOSITION; STORAGE

Section 7.1 Delivery and Receipt of Processible Waste.

Section 7.1.1 Base Delivery Amount.

Subject to the terms and conditions of this Agreement, beginning on the Commencement Date through the Term, the County shall exercise reasonable efforts to deliver, or to cause to be delivered, to the Facility, at least the Base Delivery Amount of Processible Waste, in accordance with this Agreement. With respect to such deliveries, the County shall exercise reasonable efforts to deliver, or cause to be delivered, Processible Waste on a relatively equal and consistent basis over each Billing Year subject to normal seasonal Solid Waste quantity variations and other factors. In addition, the County shall exercise reasonable efforts to deliver or to cause to be delivered, if all of the following conditions apply, such additional Processible Waste in excess of the Base Delivery Amount as (a) the Contractor has requested, (b) the Contractor has available Facility capacity for storage and Processing as demonstrated by the line of vehicles waiting to deliver Processible Waste not extending past the beginning of the ramp leading to the Facility tipping floor and (c) the County has reasonably available to it to so deliver or to cause to be delivered. Notwithstanding the foregoing in this Section 7.1.1, the County shall have no obligation to exercise reasonable efforts to deliver, or to cause to be delivered, Processible Waste in circumstances where the queue for vehicles hauling Processible Waste to the Facility extends beyond the beginning of the ramp leading to the Facility tipping floor. Processible Waste that is directed to the Landfill for disposal as a consequence of the immediately preceding sentence in this Section 7.1.1 shall, for purposes of the second sentence

of Section 7.1.2.2, be Processible Waste delivered to the Facility that the Contractor did not accept due to Contractor Fault, unless it is clear under the circumstances that the queue for the line of vehicles that extends beyond the beginning of the ramp leading to the Facility tipping floor is (a) due to a mechanical breakdown of vehicles or vehicle accident on the ramp to the Facility or on the tipping floor or (b) the result of the Contractor's discovery that Prohibited Waste or bio-medical waste has been delivered to the tipping floor and the requirements associated with managing such events, then the Tons of Processible Waste directed to the Landfill as a result of the occurrence of (a) or (b), or both, shall not be credited towards the County's delivery of the Base Delivery Amount.

Section 7.1.2 Rejection of Deliveries.

Section 7.1.2.1 Contractor's Rejection Rights.

The Contractor may reject tenders of (a) Processible Waste delivered at hours other than the Receiving Time; (b) Processible Waste delivered to the Facility in excess of twenty one thousand (21,000) Tons per Week, or in excess of eighty four thousand (84,000) Tons in any consecutive four (4) Week period; provided that the Contractor shall not have the right to reject tenders of Processible Waste if there is available capacity to receive and store such Processible Waste to the fullest extent possible and consistent with Prudent Industry Practices (including stacking); (c) Processible Waste which the Facility is unable to accept as a result of (1) a Force Majeure, (2) County Fault or (3) the application of pertinent provisions of this Agreement excusing or modifying the Contractor's obligation to Process Processible Waste; (d) Prohibited Waste; (e) Processible Waste which cannot be accepted at the Facility due to a mechanical breakdown of vehicles or vehicle accident on the ramp to the Facility or the tipping floor, provided that such event unreasonably delays deliveries of Processible Waste to the

Facility; (f) Processible Waste under circumstances wherein the Contractor discovers that Hazardous Waste or bio-medical waste has been delivered to the tipping floor and the requirements associated with the loading, transport or disposition of such Hazardous Waste or bio-medical waste from the tipping floor unreasonably delays the delivery of Processible Waste to the Facility; and (g) Processible Waste under circumstances wherein the Contractor requests that the County divert Processible Waste when, based on current Pit inventory and boiler status, the Contractor projects that the Pit capacity will be exceeded if deliveries are not rejected.

Section 7.1.2.2 Effect of Contractor's Rejection Rights on Base Delivery Amount.

All Processible Waste which is not accepted by the Contractor as a result of the application of Section 7.1.2.1(a), (b) (subject to the proviso), (c)(2), (d), (e) and (f) shall not be credited to the Base Delivery Amount. All other Processible Waste which is delivered or caused to be delivered to the Facility and not accepted by the Contractor shall be credited to the Base Delivery Amount, including Processible Waste not accepted by the Contractor (x) pursuant to Section 7.1.2.1(c)(1), 7.1.2.1(g) or (y) due to Contractor Fault; provided, however, with respect to (y), the amount credited to the Base Delivery Amount shall be subject to adjustment for purposes of annual reconciliation to the extent there is Diverted Waste and Returned Processible Waste during the Billing Year, all pursuant to Section 8.6.2.2.3.

Section 7.1.3 Refuse Storage Pit and Tipping Floor Management.

The Contractor shall manage the Pit such that all Processible Waste in the Pit is turned over at least as frequently as once every three (3) months. Such Processible Waste removal may occur on a rotational basis whereby individual bays of the Pit are emptied each Week or other frequency so as to achieve the requirements in the first sentence of this paragraph. Further, the Contractor shall remove standing water from the Pit, if present, and treat, dilute or

blend such water as necessary and discharge such water into a sewer manhole on the Facility Site such that the wastewater discharged from the Facility Site meets the applicable pretreatment standards of Applicable Law, all as frequently as may be necessary in order to limit the amount of water in the Pit to no more than three (3) feet at any time. Notwithstanding the foregoing Pit turnover requirements, if the Processible Waste level in a bay of the Pit is five (5) feet or less in height, such Pit bay shall be deemed to have been turned-over for purposes of this Section 7.1.3.

The tipping floor and Pit shall be managed by the Contractor so as to maximize the receiving and storage of Processible Waste and to minimize refuse truck turnaround times. If temporary storage of Processible Waste on the tipping floor is required, the Contractor shall store Processible Waste on the tipping floor so as not to impede deliveries. All Processible Waste stored on the tipping floor shall be moved into the Pit as soon as space and Pit turnover and Pit water removal permits. The Contractor shall coordinate the need for bypassing of Processible Waste with the County on an as needed basis.

The Contractor shall maintain written records of when Processible Waste in each bay was turned over in accordance with the reporting requirements in Schedule 6 (Reporting Requirements).

Section 7.2 Annual Processing Guarantee, County Processible Waste.

Section 7.2.1 Annual Processing Guarantee.

During each Billing Year, but subject to Contractor's rejection rights during any Billing Month specified in Section 7.1.2.1, the Contractor shall accept and Process Processible Waste delivered to the Facility by or on behalf of the County in an amount at least equal to the Annual Processing Guarantee.

Section 7.2.2 County Controls Waste and Fees.

Only Processible Waste which the County authorizes or delivers, or causes to be delivered to the Facility, may be Processed by the Contractor. The County shall, at its expense, be solely responsible for providing for the delivery of all Processible Waste to the Facility. The Direct Costs, if any, actually incurred and paid or payable by the Contractor, subject to Cost Substantiation, of all required special handling performed by the Contractor to the extent directly related to the Processing of Special Waste will be reimbursed by the County to the Contractor as a Pass Through Cost in accordance with Section 8.3.6.9. The County shall also, at its sole cost and expense, be solely responsible for the administration of the delivery of all Special Waste to the Facility. All tipping or disposal fees, if any, or, if applicable, disposal assessments, for the System, shall be established by the County, in its sole discretion, and shall inure to the exclusive enjoyment and benefit of the County.

Section 7.3 Inadvertent Deliveries of Prohibited Waste.

Section 7.3.1 Inadvertent Deliveries.

The County shall exercise reasonable efforts to deliver, or to cause to be delivered, only Processible Waste to the Facility and to minimize the quantities of Prohibited Waste delivered to the Facility. However, the Contractor and the County agree that inadvertent deliveries to or acceptance or Processing of other than Processible Waste at the Facility shall not constitute a breach of the County's or the Contractor's obligations hereunder and shall not be deemed to be a County Fault or Contractor Fault.

Section 7.3.2 Segregation and Removal of Nonprocessable Waste, Hazardous Waste and other Prohibited Waste.

Section 7.3.2.1 Nonprocessable Waste.

Nonprocessable Waste which is delivered to the Facility shall be removed by the Contractor and placed by the Contractor in one of two roll-off containers provided by the County and located in the vicinity of the tipping floor building. The Contractor shall separate the metals contained in Nonprocessable Waste and place such metals in one of the roll-off containers, and the remaining Nonprocessable Waste shall be placed in the other roll-off container. Metals which are classified as white goods and that may contain refrigerants (e.g., refrigerators, freezers, air conditioning units and the like) shall be stored upright in a segregated location on the tipping floor until the refrigerants have been removed by a licensed contractor who shall be provided by the County at the County's sole cost and expense, and then shall be placed in the designated roll-off container for metals. The County shall clearly label which container is for metals. The traffic control director shall give notice to the County's Authorized Representative as to when a roll-off container needs to be emptied, and the County shall provide, at its sole cost and expense, for the removal and disposal of all such metals and Nonprocessable Waste, and the amount of such metals and Nonprocessable Waste shall not be credited toward the Base Delivery Amount or the Annual Processing Guarantee. The Contractor shall not share in any revenue received by the County from the sale or other disposition of such metals.

Section 7.3.2.2 Hazardous Waste Contingency Plan.

As part of the Transition Plan, the Contractor shall provide a HWCP to the County for its review and approval. The HWCP shall address procedures to be followed in the event solid, liquid or gaseous Hazardous Waste materials or suspected Hazardous Waste

materials are detected on the Facility Site and contain those requirements specified in Section 7.7.2.

Upon receipt of the HWCP, the County's Authorized Representative shall review the same and shall approve or disapprove the HWCP by Notice to the Contractor's Authorized Representative. If the County's Authorized Representative shall disapprove the HWCP, it shall, in such Notice, specify in reasonable detail the reasons therefor. Upon receipt of such notice, the Contractor's Authorized Representative shall conform the HWCP and make such modifications to the HWCP as necessary to address fully the County's Authorized Representative's reasons for disapproving the Contractor's Authorized Representative's proposed HWCP and resubmit the modified HWCP to the County's Authorized Representative for approval. Upon such submission, the review and approval process shall begin anew consistent with the foregoing procedure. If the County's Authorized Representative shall not respond within thirty (30) Days following the Contract Date or, as applicable, after thirty (30) Days following its receipt of any modified HWCP thereafter, such HWCP shall be deemed approved by the County. A copy of the approved HWCP shall be on file with the County. The Contractor's employees shall be trained and equipped to implement and perform the procedures in the HWCP.

Section 7.3.2.3 Hazardous Waste.

Hazardous Waste shall not be intentionally delivered by or on behalf of the County or accepted at the Facility by the Contractor. In the event that Hazardous Waste is deposited on the tipping floor or in the Pit at the Facility, the traffic control director and the Contractor's Authorized Representative shall immediately follow the procedures in the HWCP and comply with the requirements of Section 7.7.2. If Hazardous Waste is inadvertently

accepted by the Facility, the Contractor shall immediately (a) close off the affected area, (b) provide the County's Authorized Representative notice of such event and (c) if the hauler delivering such Hazardous Waste can be identified, such hauler shall be responsible for its removal and disposal. If such hauler cannot be identified, the County shall provide for the clean-up, transportation and disposal of the waste at a permitted Hazardous Waste management facility with the clean-up, transportation and disposal charge to be paid by the County.

Section 7.3.2.4 Other Prohibited Waste.

Prohibited Waste that is not Hazardous Waste or Nonprocessable Waste shall be handled in accordance with the provisions of Section 7.3.2.1 if the material is permitted to be disposed of at the Landfill. If such Prohibited Waste is not permitted to be accepted at the Landfill, it shall not be accepted at the Facility or the Landfill and the hauler delivering such Prohibited Waste shall be responsible for its disposal. If the hauler delivering the Prohibited Waste cannot be identified, the HWCP shall be applicable and the Parties shall perform their respective obligations pursuant to the last two sentences of Section 7.3.2.3 as if such Prohibited Waste is Hazardous Waste except that such Prohibited Waste shall be disposed of at a waste management facility permitted to accept such Prohibited Waste.

Section 7.4 Weighing of Processible Waste, County Data, Operation of the Scale House, Invoicing of System Revenues, Calibration of Scales.

Section 7.4.1 Weighing.

The County shall operate and maintain the weigh scales and associated computer equipment and weigh scales records, for the purpose of determining the total Tons of Processible Waste and Returned Processible Waste delivered to the Facility, and the Tons of Residue, Processible Waste and Nonprocessable Waste delivered to the Landfill, as well as the Tons of

Recovered Materials and Prohibited Waste which leave the Facility Site. The County shall periodically check the tare weight of vehicles delivering or removing, or both, Solid Waste to or from the Facility, or both. The Contractor shall have the right to have an employee present from time to time in the scale house during the Receiving Time to observe scale house operations, provided that such observation time must be scheduled in advance with the County's Authorized Representative and that such employee shall not unreasonably interfere with scale house operations.

Section 7.4.2 County Delivery of Data and Information to Contractor.

The County shall provide the Contractor with the following data and information necessary for preparation of the Contractor's invoice for each Billing Month no later than seven (7) Days after the first Day of each Billing Month: (a) the total quantity of Processible Waste delivered to the Facility for Processing during the preceding Billing Month, which shall include the total amount of Returned Processible Waste; (b) the total quantity of Residue delivered to the Landfill during the preceding Billing Month; (c) the quantity of Diverted Waste delivered to the Landfill by or on behalf of the County during the preceding Billing Month; (d) the quantity of Prohibited Waste that was delivered to and accepted by the Facility and that was not Processed and was transferred to either the Landfill or some other location during the preceding Billing Month; (e) a copy of the statement from the Electric Utility showing the Net Revenue received by the County for Electric Energy sold and the calculation of the Total Capacity Factor and the On-Peak Capacity Factor on a twelve (12) Month rolling average basis inclusive of the preceding Billing Month as each such statement becomes available pursuant to the Power Purchase Agreement; (f) a copy of the Utility invoices for the most recent month for all Utilities paid by the County and for which the Contractor has a Maximum Utility Utilization Allowance; (g) the

quantity of Ferrous Metals and Non-Ferrous Metals transported off of the Facility Site; (h) the amount of treated water delivered from the Industrial Waste Treatment Facility; and (i) the Adjustments for the previous Billing Month pursuant to Section 8.4.7.5. If requested by the Contractor's Authorized Representative, the County shall make copies of all weigh scale records available to the Contractor.

Section 7.4.3 Unavailability of Scale Records.

In the event that actual data for the preceding Billing Month is not available to the County, the County shall estimate the quantity of Processible Waste delivered to the Facility and such estimates shall be the basis for the Contractor's invoice for the Billing Month. Any estimate of such weight data shall be adjusted in any succeeding Billing Month if and when such information becomes available to the County, and shall be included in the Service Fee as an Adjustment pursuant to Section 8.4.5.

Section 7.4.4 System Revenues.

The County shall be responsible for the preparation, mailing and collection of all invoices or assessments for users of the System, including the Facility, and the collection of System revenues.

Section 7.4.5 Calibration of Weigh Scales.

The County, at its sole cost and expense, shall cause the Facility weigh scales to be tested and calibrated by an independent third party experienced in the testing and calibration of these types of weigh scales, as often as is required by Applicable Law. The Parties agree that the State is an experienced, independent third party for purposes of the preceding sentence. Either Party may request more frequent testing of the weigh scales at the requesting Party's sole cost and expense; provided, that if the Contractor requests such testing and the weigh scales are

found to not meet the accuracy requirements of Applicable Law, the County shall pay the Direct Costs, subject to Cost Substantiation, incurred by the Contractor associated with such testing. If, at any time, testing of the weigh scales indicates that the scales do not meet the accuracy requirements of Applicable Law, the Parties shall estimate the quantity of Processible Waste, Nonprocessible Waste, Residue, Ferrous Metals and Non-Ferrous Metals on the basis of truck data and by assuming, for purposes of such estimate, that the weigh scale inaccuracy occurred on a linear basis from the test date most recently preceding the test demonstrating such inaccuracy. These estimates shall take the place of actual weighing records until correction of the weigh scales is completed.

Section 7.4.6 Residue Haul and Disposal.

The County shall provide, at its sole cost and expense, (a) trucks and containers to haul Residue and Nonprocessible Waste and (b) hauling and disposal of Residue during the Receiving Time and, on an as-needed basis, Nonprocessible Waste from the Facility and the Facility Site to the Landfill or such other location as determined by the County that is permitted to receive or dispose, or both, of Residue or Nonprocessible Waste, or both, under Applicable Law. If required pursuant to Section 3.22.3, the County shall provide for the transport and disposal of Recovered Materials. The County shall provide sufficient vehicles for the hauling of Residue and Nonprocessible Waste from the Facility and the Facility Site and at a rate such that Facility operations will not be adversely affected. The Contractor shall be responsible for providing equipment and labor necessary for and shall load Residue at specified delivery points on the Facility Site onto trucks provided by, or on behalf of, the County for the hauling of the Residue but shall have no responsibility for such Residue after it is loaded onto such trucks. The hours for loading and hauling of Residue shall be the same as the Receiving Time, except as

otherwise agreed upon by the Parties. The Contractor shall abide by the procedures set forth in the Residue and Recovered Materials Management Plan with respect to Residue and Recovered Materials. If the Contractor shall manage, operate and maintain the Facility in violation of the Residue and Recovered Materials Management Plan, the Contractor shall be subject to the payment of liquidated damages as specified in Section 8.4.2.

The County shall accept and dispose of all Residue in accordance with Applicable Law. Any change to the regulatory characterization of Residue (even if such changes result from changes to the waste stream and not from regulatory changes) shall constitute a Change in Law. The County shall be responsible, at its cost and expense, for characterizing the Residue in accordance with Applicable Law. The Contractor shall be entitled to review and comment on the County's proposed Residue characterization plan and the County shall provide access to the Contractor to review the results thereto.

Section 7.5 Storage.

The Contractor shall store Processible Waste in the Pit at the Facility designed for that purpose. No Processible Waste, Prohibited Waste, Recovered Materials or Residue may be stored or retained outside of the walls of the Facility structure; provided, that the Contractor may temporarily store Recovered Materials in totally enclosed vehicles or trailers located on the Facility Site prior to their removal for disposal or sale as approved by the County's Authorized Representative.

Section 7.6 Composition of Processible Waste.

Section 7.6.1 Composition Not Guaranteed.

Nothing in this Agreement shall be construed to mean, and the Contractor understands and agrees that the County does not in any manner guarantee the composition of any

Processible Waste, including the proportion of any material contained therein, the energy value contained therein, or any other physical or chemical property of Processible Waste nor shall the Contractor be required to guarantee the composition of Residue except as provided in Schedule 2 (Performance Guarantees).

Section 7.6.2 Impact of Recycling.

The Parties expressly recognize that changes to the provisions of Applicable Law which mandate recycling or changes in County policy that encourage recycling, whether in effect on the Contract Date, or as a result of a Change in Law, may reduce the total Processible Waste available for delivery to the Facility and that such reduction in available Processible Waste may adversely affect the ability of either Party to meet its obligations under this Agreement. The Parties agree that to the extent that any public or private recycling program or activity, conducted in compliance with and pursuant to any recycling plan, materially and adversely affects the ability of either Party to meet any obligation or guarantee set forth in this Agreement, that either Party's obligation or guarantee shall be deemed to have been impacted by the occurrence of a Force Majeure.

Section 7.6.3 Ownership.

Nothing in this Agreement shall be construed to mean that receiving Processible Waste, or the inadvertent receipt of Prohibited Waste at the Facility Site, creates on the part of the County or the Contractor, any ownership interest in, or confers on the County or the Contractor any title to, such Processible Waste or Prohibited Waste.

Section 7.6.4 Scavenging of Solid Waste.

The Contractor shall not permit scavenging of any Solid Waste at the Facility or the Facility Site by the Contractor's staff, the County staff or any customer or Subcontractor.

The County shall, as necessary and appropriate, cooperate with the Contractor in such Contractor obligation.

Section 7.7 Screening of Delivered Waste.

Section 7.7.1 Load Checking Program.

Any deliveries of Prohibited Waste shall be rejected if discovered at the Facility. The Contractor shall develop and implement a load-checking program consistent with at least Prudent Industry Practices to (a) detect and discourage attempts to dispose of Prohibited Waste at the Facility and (b) handle Prohibited Waste which may have been accepted inadvertently. At a minimum, the Contractor shall, through its traffic control director, perform and fulfill its obligations set forth in Section 3.4.3.4.

Section 7.7.2 Refusal or Rejection.

Should the Contractor discover that any Prohibited Waste has been delivered to the Facility, the Contractor shall:

(a) Comply with the specific requirements provided in Section 7.3.2 for inadvertent deliveries of Prohibited Waste.

(b) For deliveries of Hazardous Waste and Prohibited Waste, immediately provide oral notification to the County of the delivery and include in such notification all available information concerning the generator, hauler, or other Entity responsible for generating or delivering, or both, the Hazardous Waste to the Facility, including the vehicle license number, physical description, waste description and other information that is available on the form or in the format requested by the County. The Contractor shall make every reasonable attempt to identify (1) the Entity known to have deposited such material and (2) the source of such waste. The Contractor shall provide written

notification to the County's Authorized Representative of such delivery and such relevant information (to the extent known) within three (3) hours following the Contractor's discovery of such delivery.

(c) For deliveries of Prohibited Waste that are not Hazardous Waste and for which the hauler is identified and is still on the Facility Site, subject to the requirements of Applicable Law, immediately order and direct the hauler to leave the Facility Site with the hauler's entire load of waste or, at the discretion of the traffic control director, the hauler may remove only the Prohibited Waste if the Prohibited Waste can be removed from the Processible Waste and loaded into the hauler's vehicle without impact on Facility operations. The hauler will be required to reweigh at the weigh scales upon exiting the Facility so as to accurately determine the amount of Processible Waste delivered to the Facility; and

(d) In the case of subsection (c) above, the hauler shall (1) be redirected to the Landfill if the Prohibited Waste is not Hazardous Waste and the Prohibited Waste is permitted to be accepted at the Landfill, or (2) be directed to deliver the waste to an appropriately permitted disposal site if the waste is not permitted to be accepted at the Landfill, and in either case, the scale house shall be notified and in the case of this subsection (d)(2), the County's inspector shall be notified.

Section 7.7.3 Training.

The Contractor's equipment and crane operators and traffic control directors shall be trained to identify Prohibited Waste, and shall possess DEP spotter certifications or the equivalent as well as site-specific training relative to acceptable fuel. The training program shall emphasize familiarity with containers and labels typically used for Prohibited Waste.

Section 7.8 Landfill Operations.

The County shall be responsible, at its sole cost and expense including all applicable fees and other payments to third parties, for providing landfill capacity at the Landfill, and shall use reasonable efforts to cause the Landfill to be made available during the Receiving Time during the Term for the disposal of Residue, Processible Waste not Processed at the Facility by the Contractor, Recovered Materials to the extent required under Section 3.22.3, Prohibited Waste, exclusive of Hazardous Waste, and any other material contained in Prohibited Waste which is not permitted to be disposed of therein by Applicable Law or County policy.

SECTION 8
SERVICE FEE

Section 8.1 General.

Commencing with the first Billing Month and for each Billing Month thereafter, the Contractor shall be paid a Service Fee by the County for Work properly performed pursuant to the terms of this Agreement, as further detailed in this Section 8. The Service Fee during the Initial Operating Period is calculated differently for certain elements than it is for the balance of the Term. The Service Fee (a) set forth in Section 8.2 shall be applicable during the Initial Operating Period (the “Initial Service Fee”), and (b) set forth in Section 8.3 shall be applicable immediately following the Initial Operating Period and through the remainder of the Term (the “Permanent Service Fee”). Each of the Initial Service Fee and the Permanent Service Fee shall include common components applicable to their respective periods of applicability (Section 8.4 *et. seq.*), except as expressly identified therein as only applicable to the Initial Service Fee or the Permanent Service Fee. Payment of the Initial Service Fee and the Permanent Service Fee shall be for Work performed during the periods prescribed in the third sentence of this paragraph.

During the Transition Period, the Contractor understands and agrees that it shall receive no compensation, and no compensation shall accrue, including any Pass Through Costs, it being understood and agreed by the Parties that the Contractor’s pricing of its Processing Fee takes into account Work performed and all liability incurred by the Contractor during the Transition Period. Notwithstanding the foregoing sentence, the Contractor may begin ordering the necessary parts, materials and supplies during the Transition Period to facilitate the Technical Recovery Plan Work scheduled to be performed during the Transition Period, if any, and during the Initial Operating Period. Invoices for such necessary parts, materials and supplies shall be provided by

the Contractor to the County after the Commencement Date in accordance with Section 8.5.1; provided, however, to the extent there is a down payment, deposit or similar payment required by the manufacturer or supplier of such parts, materials or supplies, to effect an order for the same, or if Technical Recovery Plan Work is completed and accepted by the County, the Contractor may invoice the County during the Transition Period for the Contractor's payment of the same during such period, all in accordance with Section 8.8 with such Section deemed to be applicable during the Transition Period for such limited purpose.

All revenues from Electric Energy and Recovered Materials, generated by the Facility prior to the Commencement Date shall be excluded from the definition of Net Revenues for all purposes of this Agreement and the Contractor shall not be entitled to receive or be paid any amounts thereof.

Section 8.2 Payments During the Initial Operating Period.

Section 8.2.1 Monthly Initial Service Fee Formula.

The Monthly Initial Service Fee payment per Billing Month during the Initial Operating Period shall be calculated as follows:

$$\text{ISF} = \text{MPF} + \text{EENR} + \text{CMC} + \text{MMF} + \text{RMNR} + \text{PTC} \pm \text{ADJ}$$

Where:

- ISF = Initial Service Fee
- MPF = Monthly Processing Fee (Section 8.2.2)
- EENR = Electric Energy Net Revenues (Section 8.2.3)
- CMC = Capacity Maintenance Credit (Section 8.2.4)
- MMF = Monthly TRP Management Fee (Section 8.2.5)
- RMNR = Recovered Materials Net Revenues (Section 8.2.6)
- PTC = Pass Through Costs (Section 8.2.7)
- ADJ = Adjustments (Section 8.4)

Section 8.2.2 Monthly Processing Fee.

During the Initial Operating Period, the Monthly Processing Fee shall be determined in accordance with Sections 8.2.2.1 and 8.2.2.2, if applicable. The Processing Fee covers all Work required by this Agreement except as otherwise specifically provided for in this Section. For purposes of clarity, no Processing Fee shall be paid to the Contractor for Processing the number of Tons of Processible Waste existing in the Pit as of the Commencement Date.

Section 8.2.2.1 Processing Fee for Base Delivery Amount.

For Tons of Processible Waste up to and including the Base Delivery Amount for each Billing Year during the Initial Operating Period, the Monthly Processing Fee shall be (a) the product of (i) the Processing Fee, as adjusted by the Adjustment Factor, multiplied by (ii) the Base Delivery Amount, divided by (b) twelve (12) Billing Months, pro rata for a Billing Month less than a full Billing Month.

Section 8.2.2.2 Processing Fee for Excess Tonnage Amount.

For Tons of Processible Waste delivered in excess of the Base Delivery Amount, if any, for each Billing Year during the Initial Operating Period, the Monthly Processing Fee for the Billing Month shall be (a) the number of Tons of Processible Waste in excess of the Base Delivery Amount delivered by or on behalf of the County and accepted for Processing by the Contractor at the Facility for the Billing Month, multiplied by the product of (b)(1) forty percent (40%), multiplied by (2) the Processing Fee, as adjusted by the Adjustment Factor.

Section 8.2.3 Electric Energy Net Revenues.

The Contractor shall be paid its percentage share of Electric Energy Net Revenues in accordance with Section 8.3.3.

Section 8.2.4 Capacity Maintenance Credit.

If, on the first Day immediately following the Early Award Period, (a) either or both of the On-Peak Capacity Factor and the Total Capacity Factor are below seventy-five percent (75%), the Contractor may be entitled to receive a Capacity Maintenance Credit for the attainment of specified levels in a Billing Month commencing January, 2015 and through the Initial Operating Period in accordance with Section 8.2.4.1, or (b) the On-Peak Capacity Factor and the Total Capacity Factor are both equal to or greater than seventy-five percent (75%), the Contractor may be entitled to receive a Capacity Maintenance Credit for attainment of such levels for each Billing Month commencing January, 2015 and through the Initial Operating Period in accordance with Section 8.2.4.2. Unless otherwise specified in this Section 8.2.4, the On-Peak Capacity Factor and Total Capacity Factor shall be measured on a twelve (12) Month rolling average basis, as determined pursuant to the Power Purchase Agreement. For purposes of clarity and notwithstanding any provision in this Agreement to the contrary, no Capacity Maintenance Credit shall accrue, be earned or paid during the Early Award Period; provided, however, Billing Months occurring during the Early Award Period shall be included for purposes of calculating the twelve (12) Month rolling average capacity factors under the Power Purchase Agreement.

Section 8.2.4.1 Capacity Maintenance Credit During Initial Operating Period if Minimum Capacity Factors Are Not Met.

If, on the first Day immediately following the end of the Early Award Period, either or both of the On-Peak Capacity Factor or the Total Capacity Factor are below seventy-five percent (75%) as measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, then if, in any Billing Month commencing January, 2015 and

through the Initial Operating Period, the On-Peak Capacity Factor and the Total Capacity Factor are both at least seventy percent (70%), as measured for a Billing Month commencing January, 2015 (as opposed to a twelve (12) Month rolling average basis), the County shall pay the Contractor a Capacity Maintenance Credit equal to (a) three hundred thirty thousand dollars (\$330,000.00) for each such Billing Month occurring during the first twelve (12) Billing Months commencing January, 2015 during the Initial Operating Period, or (b) two hundred forty-seven thousand five hundred dollars (\$247,500.00) for each such Billing Month occurring during the remainder of the Initial Operating Period (i.e., beginning on February, 2016). For avoidance of doubt, the Contractor shall not be entitled to receive any Capacity Maintenance Credit in accordance with this Section 8.2.4.1 in any Billing Month commencing January, 2015 through the Initial Operating Period in which the On-Peak Capacity Factor or the Total Capacity Factor, or both, are less than seventy percent (70%), as measured for such Billing Month (as opposed to on a twelve (12) Month rolling average basis).

Section 8.2.4.2 Capacity Maintenance Credit During Initial Operating Period if Minimum Capacity Factors are Achieved.

If, on the first Day immediately following the end of the Early Award Period, both of the On-Peak Capacity Factor and the Total Capacity Factor are at or above seventy-five percent (75%), then if, in any Billing Month commencing January, 2015 and through the Initial Operating Period, the On-Peak Capacity Factor and the Total Capacity Factor are both at least seventy percent (70%), as measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, the County shall pay the Contractor a Capacity Maintenance Credit equal to (a) three hundred thirty thousand dollars (\$330,000.00), if such Billing Month occurs during the first twelve (12) Billing Months commencing January, 2015 of

the Initial Operating Period, or (b) two hundred forty-seven thousand five hundred dollars (\$247,500.00), if such Billing Month occurs during the remainder of the Initial Operating Period (i.e., beginning February, 2016). For avoidance of doubt, the Contractor shall not be entitled to receive any Capacity Maintenance Credit in accordance with this Section 8.2.4.2 in any Billing Month commencing January, 2015 and through the Initial Operating Period in which the On-Peak Capacity Factor or the Total Capacity Factor, or both, are less than seventy percent (70%), as measured on a twelve (12) Month rolling average basis. Once the On-Peak Capacity Factor and the Total Capacity Factor after January 1, 2015, each as measured on a twelve (12) Month rolling average basis, are both above seventy percent (70%), the Contractor shall be entitled to receive the applicable Capacity Maintenance Credit, unless one or both such capacity factors fall below seventy percent (70%) again.

Section 8.2.4.3 No Escalation of Capacity Maintenance Credit.

The Capacity Maintenance Credit specified in this Section 8.2.4 shall not be escalated.

Section 8.2.5 Technical Recovery Plan Management Fee.

In performance of the management and supervisory services being performed by Contractor in accordance with Section 10.6 and the other services identified in Schedule 19 (Technical Recovery Plan) commencing January 1, 2015 and through December 31, 2016 (irrespective whether the Permanent Service Fee becomes applicable prior to December 31, 2016 in which case Section 8.4.9 shall become applicable), the Contractor shall be entitled to receive a monthly fee (the "Monthly TRP Management Fee") in an amount equal to (a) the Technical Recovery Plan Management Fee divided by (b) twenty-four (24). The Monthly TRP

Management Fee shall be included on the summary sheet cost of Schedule 12A (Form of Contractor's Monthly Invoice).

To the extent there is an Early Award Period, the County will pay to the Contractor an amount equal to the Monthly TRP Management Fee, which fee shall be pro rata for a partial Billing Month. For purposes of clarity, payments of Monthly TRP Management Fees, or pro rata portion thereof, during the Early Award Period, are in addition to, not a part of, the Technical Recovery Plan Management Fee that is payable in increments over twenty-four (24) Months with the first Billing Month for such Monthly TRP Management Fee being January, 2015.

Section 8.2.6 Revenue from Recovered Materials.

The Contractor shall be paid its percentage share, as the same may be adjusted pursuant to Section 8.3.5, of Recovered Materials Net Revenues in accordance with Section 8.3.5.

Section 8.2.7 Pass Through Costs.

The Contractor shall be paid Pass Through Costs in accordance with Section 8.3.6.

Section 8.3 Monthly Permanent Service Fee Calculation.

Section 8.3.1 Monthly Permanent Service Fee Formula.

The Monthly Permanent Service Fee payment for each Billing Month after the Initial Operating Period shall be calculated as follows:

$$\text{PSF} = \text{MPF} + \text{EENR} + \text{CMC} + \text{RMNR} + \text{PTC} \pm \text{ADJ}$$

Where:

$$\text{PSF} = \text{Permanent Service Fee}$$

$$\text{MPF} = \text{Monthly Processing Fee (Section 8.3.2)}$$

EENR	=	Electric Energy Net Revenues (Section 8.3.3)
CMC	=	Capacity Maintenance Credit (Section 8.3.4)
RMNR	=	Recovered Materials Net Revenues (Section 8.3.5)
PTC	=	Pass Through Costs (Section 8.3.6)
ADJ	=	Adjustments (Section 8.4)

Section 8.3.2 Monthly Processing Fee.

After the Initial Operating Period, the Monthly Processing Fee shall be calculated based on the amount of Processible Waste delivered by or on behalf of the County and accepted by the Contractor at the Facility for Processing in the relevant Billing Month, as follows:

Section 8.3.2.1 Processing Fee for Base Delivery Amount.

For Tons of Processible Waste up to and including the Base Delivery Amount for the Billing Year, the Monthly Processing Fee for the Billing Month shall be product equal to (a) the number of Tons of Processible Waste delivered by or on behalf of the County and accepted for Processing by the Contractor at the Facility for the Billing Month, multiplied by (b) the Processing Fee, as adjusted by the Adjustment Factor.

Section 8.3.2.2 Processing Fee for Excess Tonnage Amount.

For Tons of Processible Waste in excess of the Base Delivery Amount for the Billing Year, the Monthly Processing Fee for the Billing Month shall be (a) the number of Tons of Processible Waste in excess of the Base Delivery Amount delivered by or on behalf of the County and accepted for Processing at the Facility for the Billing Month, multiplied by the product of (b)(1) forty percent (40%), multiplied by (2) the Processing Fee, as adjusted by the Adjustment Factor.

Section 8.3.3 Electric Energy Net Revenues.

The Contractor shall be paid ten percent (10%) of the Net Revenues (the County shall retain and exclusively enjoy ninety percent [90%] of such Net Revenues) received by the County from the generation and sale of Electric Energy to the Electric Utility. The Contractor shall not receive any portion of the Electric Capacity Payments due to the County for Electric Capacity made available to the Electric Utility under the Power Purchase Agreement, or any other product or commodity generated, produced or otherwise recognized under the Power Purchase Agreement or any separate or other agreement with the Electric Utility, if any (including Environmental Attributes, emission credits, Renewable Energy Benefits, Renewable Energy Production Incentives, Production Tax Credits, or Economic Benefit or other benefits, credits, subsidies, incentives or payments that now or in the future may be paid pursuant to the Power Purchase Agreement or any separate or other agreement with the Electric Utility), except as otherwise expressly provided in this Agreement; provided, however, the Contractor shall be paid the Capacity Maintenance Credit specified in Section 8.3.4, to the extent the Contractor qualifies to be paid such amount.

Section 8.3.4 Capacity Maintenance Credit.

Section 8.3.4.1 Failure to Meet Capacity Factor.

If, as of the first Day following the end of the Initial Operating Period, either or both the On-Peak Capacity Factor and the Total Capacity Factor, as both are measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, are below seventy percent (70%), no Capacity Maintenance Credit shall be paid to the Contractor until such time as both the On-Peak Capacity Factor and Total Capacity Factor are at least seventy percent (70%) as measured on a twelve (12) Month rolling average. Notwithstanding

the foregoing, if such failure to attain either or both of the seventy percent (70%) levels as of such date was due to the occurrence of a Force Majeure or County Fault occurring during the Initial Operating Period, then until such time as both the On-Peak Capacity Factor and Total Capacity Factor are both at least seventy percent (70%), as measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, but such period not to exceed twelve (12) Billing Months following the later to occur of the cessation or Cure, if applicable, of the Force Majeure or County Fault, the County shall nevertheless pay to the Contractor a Capacity Maintenance Credit in the amount of one hundred sixty-five thousand dollars (\$165,000.00) for each Billing Month during which the Contractor achieves at least a seventy percent (70%) level for both the On-Peak Capacity Factor and the Total Capacity for a Billing Month (as opposed to a twelve (12) Month rolling average basis).

Section 8.3.4.2 Attainment of Capacity Factor.

If, as of the first Day following the end of the Initial Operating Period, both the On-Peak Capacity Factor and the Total Capacity Factor, as both are measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, are seventy percent (70%) or higher, then for each Billing Month thereafter during the Term in which such seventy percent (70%) levels are attained on such twelve (12) Month rolling average basis, the County shall pay the Contractor a Capacity Maintenance Credit in the amount of one hundred sixty-five thousand dollars (\$165,000.00); provided, however, if after the first Day following the end of the Initial Operating Period, either or both of the On-Peak Capacity Factor or the Total Capacity Factor, or both, as both are measured on such twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, fall(s) below such seventy percent (70%) level, no

Capacity Maintenance Credit shall be paid to the Contractor, until such time as both the On-Peak Capacity Factor and the Total Capacity Factor are at least seventy percent (70%).

Section 8.3.4.3 Capacity Maintenance Credit Upon Expiration of the Power Purchase Agreement.

Upon the expiration of the Power Purchase Agreement, the On-Peak Capacity Factor and the Total Capacity Factor prescribed therein shall continue to be calculated by the County in the same manner and under the same terms and conditions as if the Power Purchase Agreement continued to be in effect. If, upon the expiration of the Power Purchase Agreement, the Contractor maintains an On-Peak Capacity Factor and a Total Capacity Factor of seventy percent (70%) or higher, as measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, the County shall continue to pay to the Contractor for each Billing Month that such seventy (70%) levels are attained on such rolling average basis, a Capacity Maintenance Credit of one hundred sixty-five thousand dollars (\$165,000.00). For purposes of clarity, if the County should enter into a power purchase agreement with an Electric Utility after the expiration of the Power Purchase Agreement, and such power purchase agreement recognizes and pays Electric Capacity Payments to the County, the County shall exclusively retain and enjoy the benefit of all such Electric Capacity Payments and the Contractor shall have no right, title to or interest in such Electric Capacity Payments, but the County shall continue to pay to the Contractor the Capacity Maintenance Credit of one hundred sixty-five thousand dollars (\$165,000.00) for each Billing Month that the Contractor maintains both the seventy percent (70%) On-Peak Capacity Factor and Total Capacity Factor on a twelve (12) Month rolling average basis as more specifically addressed in this Section 8.3.4.

Section 8.3.4.4 No Escalation of Capacity Maintenance Credit.

For avoidance of doubt, the Capacity Maintenance Credit specified in this Section 8.4.3 shall not be escalated.

Section 8.3.5 Revenue from Recovered Materials.

The Contractor shall retain fifty percent (50%) of all Net Revenues received by the Contractor from sale of Recovered Materials during a Billing Month, and the other fifty percent (50%) of all such Net Revenues shall be credited to and be paid to the County in the form of a reduction to the Service Fee invoice to the County. Notwithstanding the sharing percentages specified in the immediately preceding sentence, such percentages shall be adjusted, to the extent applicable, in accordance with Sections 3.22 and 3.26. If the Net Revenue is negative, the County shall pay such cost and direct the Contractor as to the final disposition of the Recovered Materials going forward, all in accordance with and as limited by Sections 3.22.3 and 8.3.6.3. The Contractor shall provide the County with its monthly invoice and statement, all supporting documentation, Tons of Ferrous Metals and Non-Ferrous Metals leaving the Facility Site for sale to the market place which tonnage shall be based on the County's scale records, Cost Substantiation, copies of all checks or electronic deposits relative to the Net Revenues received from such sales and other backup materials and information reasonably requested by the County to substantiate such Net Revenues, consistent with and, as applicable, in addition to, that required and specified in Section 3.22.1.

Section 8.3.6 Pass Through Costs.

The costs and expenses for the items listed in Sections 8.3.6.1 through 8.3.6.10 (collectively, the "Pass Through Costs") shall not be included in the Processing Fee and shall be paid by the Contractor and such Pass Through Costs shall then be invoiced to the County at cost

as part of the Contractor's invoice for services rendered each Billing Month upon the Contractor's provision of Cost Substantiation to the County. The County shall thereafter reimburse such Pass Through Costs to the Contractor, all in accordance with the requirements of this Agreement. The Contractor shall exercise all reasonable efforts to obtain good faith estimates for all Pass Through Costs reasonably anticipated for the next Billing Year and the Contractor shall supply those estimates to the County at least nine (9) Months prior to the beginning of the next Billing Year.

Section 8.3.6.1 Utilities.

Utility costs (not directly paid by the County) incurred and paid or payable by the Contractor in operating and maintaining the Facility, not to exceed the Maximum Utility Utilization Allowance, except as specifically provided pursuant to Sections 3.1 and 10.6.

Section 8.3.6.2 Reagents.

Reagent costs (not directly paid by the County) incurred and paid or payable by the Contractor in operating and maintaining the Facility, not to exceed the Maximum Reagent Utilization Allowance, except as specifically provided pursuant to Section 3.1.

Section 8.3.6.3 Loss of Recovered Materials Market.

The Contractor's cost to market Ferrous Metal or Non-Ferrous Metal, or both, at a Net Revenue loss pursuant to Section 3.22.3 in an amount not to exceed that amount specified in Section 3.22.3 per Billing Year.

Section 8.3.6.4 Fees.

The County shall pay application, renewal, maintenance and inspection fees for the County Permits as may be required by the DEP for the ownership, operation and maintenance of the Facility. The County shall also pay fees and costs relative to Contractor

Permits to the extent such fees and costs are recognized as a Pass Through Cost in Section 3.6. The County shall reimburse the Contractor for any such fees paid by the Contractor on behalf of the County as a Pass Through Cost, subject to Cost Substantiation.

Section 8.3.6.5 Economic Benefit from Emission Purchase and Sale Transactions and Sharing of Tax Incentives or Subsidies.

The Contractor shall retain or be paid or credited each Billing Month, as applicable, (a) administrative costs or Economic Benefit, or both, or (b) its share of tax incentives or subsidies, or both (a) and (b), pursuant to the terms and conditions of Sections 3.30 or 3.31, or both. The Contractor shall provide the County with its Monthly invoice and statement pursuant to Section 8.5.1, all supporting documentation, Direct Costs, Cost Substantiation and Markup (to the extent expressly recognized in such Sections), or applicable, or both, copies of all checks relative to any Economic Benefit received from such Emission Purchase and sales Transactions, if any, and other backup materials and information reasonably requested by the County to substantiate (i) the Contractor's administrative costs and Economic Benefit, as applicable, or (ii) tax incentives or subsidies, or both.

Section 8.3.6.6 Pass Through Taxes and Fees.

The County shall pay to the Contractor as a Pass Through Cost all Pass Through Taxes and Fees.

Section 8.3.6.7 County Required Insurance Obligation Transfer.

If, pursuant to Section 11.3.1.1, the Contractor, at the County's request, secures and maintains one or more policies of what was Required County Insurance, the premiums and reasonable broker fees regarding such policy(ies) that are thereafter Required Contractor Insurance shall be a Pass Through Cost to the County.

Section 8.3.6.8 Additional Electronic Communication Items.

Additional electronic communication devices and systems needed to implement the Communication Plan pursuant to Section 3.33 shall be a Pass Through Cost to the County.

Section 8.3.6.9 Special Handling Costs for Special Waste Processing.

The Contractor's Direct Costs, subject to Cost Substantiation, of all required special handling performed by the Contractor directly related to Processing Special Waste delivered at the direction of the County to the Facility in accordance with Section 7.2.2 shall be a Pass Through Cost to the County.

Section 8.3.6.10 Shortfall in Initial Equipment or Spare Parts.

If as a result of the conduct of a physical inventory by the Parties during the fifteen (15) Business Day period following the Commencement Date pursuant to Section 3.14, there is a shortfall in required Equipment or required Spare Parts, or both, the County shall reimburse the Contractor for such shortfall (cost of the missing Equipment or Spare Parts, or both) as a Pass Through Cost consistent with Section 3.14.

Section 8.4 Adjustments.

The following Adjustments shall be applicable from and after the Commencement Date and through the Term and therefor applicable to the Initial Service Fee and the Permanent Service Fee, unless expressly specified otherwise.

Section 8.4.1 Liquidated Damages, Penalties and other Fees and Costs.

Section 8.4.1.1 Electric Capacity Payment Damages.

Except to the extent relief is granted to the Contractor pursuant to Sections 3.1 and 10, if, in any Billing Month, the Electric Capacity Payments due to the County under the

Power Purchase Agreement are reduced because (a)(1) the Contractor requested the County in writing to reduce the Committed Capacity on a temporary or permanent basis and (2) the County and the Electric Utility both agree to such requested reduction and have jointly executed a letter of understanding or other contractually binding document to that effect or (b) the Facility does not maintain both a seventy percent (70%) On-Peak Capacity Factor and a seventy percent (70%) Total Capacity Factor, as both are measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, and if such shortfall in Electric Capacity Payments was not due to the occurrence of (1) a Force Majeure, (2) County Fault, (3) a Weighted Average Annual Higher Heating Value below four thousand (4000) Btu per pound, or (4) the failure of the County to deliver the Base Delivery Amount to the Facility as such amount is measured or calculated on a twelve (12) Month rolling average basis to the Billing Month in which the Electric Capacity Payments were reduced; provided, that, the Electric Energy Recovery Guarantee and the Boiler Availability and Turbine Generator Availability percentages were met during the twelve (12) Month period prior to the Billing Month in which such Electric Capacity Payment(s) are reduced, then the Contractor shall, after accounting for insurance proceeds, if any, pay to the County, as the Contractor's damages relative to the reductions referenced in (a) or (b), or both, above (except that the County may nevertheless exercise its rights pursuant to Section 12.2.9), an amount (the "Electric Capacity Payment Damages") equal to the sum of (A) the difference between (i) the Electric Capacity Payments the County should have received for such Billing Month had (x) with respect to (a) above, the Committed Capacity not been reduced pursuant to the Contractor's request as referenced therein and (y) with respect to both (a) and (b) above, the Facility had attained and maintained both such seventy percent (70%) On-Peak Capacity Factor and seventy percent (70%) Total Capacity Factor, as both are measured on a

twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, and (ii) the amount of Electric Capacity Payments the County actually received for such Billing Month (with business interruption insurance proceeds relative to Electric Capacity received by the County, if any, deemed to be Electric Capacity Payments), plus (B) any damages, charges or liabilities, or any one or more of the foregoing, and interest thereon, if any, incurred by the County if the requested Committed Capacity reduction change to the Power Purchase Agreement must, by Applicable Law or Electric Utility policy as a condition subsequent to agreeing to amend the Power Purchase Agreement, be approved by the State Public Service Commission for flow through to the ratepayers or for other purposes (and which approval is acceptable to the Electric Utility in its sole discretion) and the State Public Service Commission does not approve such reduction change to the Power Purchase Agreement.

Notwithstanding the foregoing relief from Electric Capacity Payment Damages during the Initial Operating Period, Electric Capacity Payment Damages shall be as described herein, except that such damages shall only become effective if either or both the On-Peak Capacity Factor or the Total Capacity Factor, as measured on a twelve (12) Month rolling average basis, falls below sixty percent (60%).

To the extent that the Facility did not attain and maintain such seventy percent (70%) On-Peak Capacity Factor and seventy percent (70%) Total Capacity Factor, or sixty percent (60%) On-Peak Capacity Factor or Total Capacity Factor, or both, during the Initial Operating Period, in each case, as measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement due to the occurrence of (1) a Force Majeure, (2) County Fault, (3) a Weighted Average Annual Higher Heating Value below four thousand (4000) Btu per pound, or (4) the failure of the County to deliver the Base Delivery Amount to the

Facility as such amount is measured or calculated on a twelve (12) Month rolling basis to the Billing Month in which the Electric Capacity Payments were reduced; provided, that, the Boiler Availability and Turbine Generator Availability percentages were met for the twelve (12) Month period prior to the Billing Month in which Electric Capacity Payment(s) were reduced, then the amount of the reduction in Electric Capacity Payments that was attributable to (1), (2), (3) or (4) above shall not be included in the calculation of such reduction.

Section 8.4.1.2 Residue Particle Size Guarantee Adjustment.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6, for each Day, or portion thereof, within a Billing Month (whether such Days are consecutive or non-consecutive) that Residue does not meet the Residue Particle Size Guarantee as determined pursuant to Performance Tests, the Contractor shall pay to the County one thousand dollars (\$1,000.00), adjusted by the Adjustment Factor, as liquidated damages, until such time as a subsequent Performance Test evidences that the Residue meets the Residue Particle Size Guarantee.

Section 8.4.1.3 Plus Five Separation System Availability Guarantee Adjustment.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6, for each consecutive Day, after the first Day, within a Billing Month that the Plus Five Separation System Availability Guarantee is not met, the Contractor shall pay to the County one thousand dollars (\$1,000.00), adjusted by the Adjustment Factor, as liquidated damages, until such time as the plus five separation system again becomes available.

Section 8.4.1.4 Residue Quality Guarantee Adjustment.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10, if, in any Billing Month, the Residue, as determined pursuant to a Performance Test,

does not meet the Residue Quality Guarantee, the Contractor shall pay to the County one thousand dollars (\$1,000.00), as such amount is adjusted by the Adjustment Factor, as liquidated damages, until such time as a subsequent Performance Test evidences that the Residue meets the Residue Quality Guarantee.

Section 8.4.1.5 Liquidated Damages - Generally.

The Parties agree that it would be impossible, impractical or extremely difficult to fix the actual damages suffered by the County resulting from the failure of the Contractor to satisfy any of its obligations or guarantees described in this Section 8.4.1. Accordingly, the Parties hereby agree that the liquidated damage amounts specified in this Section 8.4.1 are reasonable and do not constitute a penalty.

Section 8.4.2 Violation of Residue and Recovered Materials Management Plan.

The County may assess liquidated damages in the amount of two thousand dollars (\$2,000.00), adjusted by the Adjustment Factor, for each violation of the Contractor's obligation to comply with the approved Residue and Recovered Materials Management Plan pursuant to Section 3.21 in the Billing Month in which such violation occurred. Each Day of violation shall constitute a separate violation.

Section 8.4.3 County's Cost to Cure.

The County's "Cost to Cure" Work in accordance with Section 6.4 shall be credited against the Monthly invoice amount. Any retainage withheld by the County in accordance with Section 6.5 to encourage the Contractor to effect a Cure of the Work or in excess of the Cost to Cure remaining after the Cure is completed shall be reimbursed to the Contractor, in each case, consistent with Sections 6.4 and 6.5.

Section 8.4.4 Inventory Settlement.

Upon the earlier to occur of the expiration of the Term or termination of this Agreement, the Parties shall, in accordance with Section 3.14, determine if the Final Value is less than the Estimated Value, and the Contractor shall pay to the County any such difference in the value of the Required Spare Parts List.

Section 8.4.5 Failure to Meet Ferrous Metal Recovery Guarantee or the Non-Ferrous Metal Recovery Guarantee, or both, as a result of a Performance Test.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6, the County shall assess actual damages each Billing Month for failure of the Contractor or the Facility, or both, to meet the Ferrous Metal Recovery Guarantee or the Non-Ferrous Metal Recovery Guarantee, or both, as demonstrated by a Performance Test, all in accordance with the Performance Test Plan and other requirements specified in Section 3.26. Actual damages shall be measured in terms of the actual reduction in County Net Revenues as calculated by the difference between the Net Revenues that should have been received if the applicable Ferrous Metal Recovery Guarantee or the Non-Ferrous Metal Recovery Guarantee, or both, were met for the applicable period minus the actual Net Revenues received as a result of the Contractor's or the Facility's, or both, actual performance for the applicable period.

Section 8.4.6 DEP Fees, Fines, Administrative Actions, Notices of Violations and Lawsuits.

Section 8.4.6.1 Fines and Penalties Caused by The Contractor.

Except as otherwise specified in Section 10.6, the Contractor shall pay any fines or penalties imposed by any Governmental Authority for a violation of Applicable Law that was not caused by the occurrence of a Force Majeure or County Fault, and the Contractor shall

reimburse the County for the same to the extent paid by the County. Additionally, the Contractor shall pay the costs of performing all work included in administrative orders, notices or similar directives of violation that were the result of the Contractor Fault.

If the Contractor is required to pay any fine or penalty imposed by any Governmental Authority for any violation of Applicable Law that was not caused by the occurrence of a Force Majeure or County Fault the amount of which totals (a) at least twenty-five thousand dollars (\$25,000.00) per violation or (b) on an accumulated basis to date for a Billing Year, fifty thousand dollars (\$50,000.00) or more, the County shall have the right to request, by giving at least five (5) Business Days prior Notice to the Contractor's Authorized Representative, that either or both the senior executive officers of the Contractor and the Guarantor appear before the Board of County Commissioners to explain why such current or accumulated payments was or is necessary. If, after the Contractor's Authorized Representative's receipt of such Notice and the passing of at least such five (5) Business Days thereafter, the senior executive officers of the Contractor or the Guarantor, or both, fail to schedule an appearance before the Board of County Commissioners at one of the next three (3) regularly scheduled meetings of such Board of County Commissioners, or fail to appear at such scheduled meeting, it shall be a Contractor Event of Default. In the event the Contractor believes the regulatory fine or penalty is unjustified, the Contractor's shall have the right to contest the regulatory fine or penalty at its sole cost and expense.

Section 8.4.6.2 Fines and Penalties Caused By Force Majeure or County Fault.

Any fines or penalties imposed by any Governmental Authority for a violation of Applicable Law that was or were, as applicable, caused by the occurrence of a Force Majeure or County Fault, shall be paid by the County. Additionally, the County shall pay the

costs of Work performed pursuant to administrative orders or notices of violation that were the result of the occurrence of a Force Majeure or County Fault. In the event the County believes the regulatory fine is unjustified, it shall be the County's responsibility to contest the regulatory fine at its sole cost and expense.

Section 8.4.7 Withholding.

The County shall withhold ("Withhold" or "Withholding") the following, in either case, as an Adjustment to the monthly invoice. Any reimbursement of Withholdings pursuant to this Section 8.4.7 that may be due and owing to the Contractor pursuant to the terms of this Agreement shall be paid by the County as part of the Contractor's invoice for the second Billing Month following the Billing Month in which the Withholding rights of the County ended relative to the Contractor's failure to comply with its applicable obligation under this Agreement.

Section 8.4.7.1 Failure to Make Submittals.

If the Contractor fails to file and submit by the due dates (a) the reports, submittals, notices and documents required by Section 3.7, (b) the Residue and Recovered Materials Management Plan, (c) updated Operation and Maintenance Manuals, drawings and records required by Section 3.25, (d) the written protocols specified in Section 3.27.1, (e) the Communication Plan pursuant to Section 3.33, (f) those reports required to be filed and submitted pursuant to Section 5, (g) the Contractor's invoices pursuant to Sections 8.5.1 and 8.6.2.7, and (h) all other reports, submittals and plans identified in and required to be filed and submitted under this Agreement, the County may provide Notice of noncompliance to the Contractor's Authorized Representative. If the Contractor fails to Cure such noncompliance within two (2) Business Days after receipt of the County's Notice, the County may thereafter Withhold for every five (5) Business Days that such filings and submittals are late, five thousand

dollars (\$5,000.00), adjusted by the Adjustment Factor, until such date as the Contractor makes the required filings and submittals.

Section 8.4.7.2 Failure to Timely Cure items identified on the Consultant Inspection Report.

If the Contractor fails to Cure any Final Punch List Item within the Timeframe specified in accordance with Section 6.2 the County's Authorized Representative may provide Notice of such noncompliance to the Contractor's Authorized Representative. If the Contractor fails to Cure such noncompliance specified in such Notice within five (5) Business Days after the County's Authorized Representative provided the Contractor's Authorized Representative with such Notice, the County may thereafter Withhold one thousand dollars (\$1,000.00) per Day, adjusted by the Adjustment Factor, for each such non-compliant item, until such noncompliance had been Cured by the Contractor to the reasonable satisfaction of the County, provided that the Contractor's Authorized Representative has provided to the County's Authorized Representative reasonable evidence of such Cure.

The County may also withhold the estimated Cost to Cure, as determined by the Consulting Engineer, for such non-compliant item, should the County provide Notice to the Contractor of the County's intent to proceed with such Cure in accordance with Section 6.4.

Section 8.4.7.3 Failure to Timely Complete the Technical Recovery Plan.

Provided such failure is not due to Force Majeure or County Fault, if the Contractor fails to complete all of the Work identified in the Technical Recovery Plan within the timeframe specified in the Final Scope of Work for such Projects, as the same may be extended by mutual written agreement by the Parties, the County's Authorized Representative may provide Notice of such noncompliance to the Contractor's Authorized Representative. If the

Contractor fails to Cure such noncompliance specified in such Notice within thirty (30) Days after the County's Authorized Representative provided the Contractor's Authorized Representative with such Notice, the County may thereafter Withhold five thousand dollars (\$5,000.00) per Day for each noncompliant item, adjusted by the Adjustment Factor, until such noncompliance had been Cured by the Contractor, provided that the Contractor's Authorized Representative has provided to the County's Authorized Representative reasonable evidence of such Cure.

Section 8.4.7.4 Failure to Comply With Schedules.

If the Contractor fails to comply with the requirements of the Schedules as provided in Section 3.28 and the Service Fee is not otherwise undergoing an Adjustment pursuant to this Section 8.4.7 for the same failure to comply with its obligation under this Agreement, the County's Authorized Representative may provide Notice of such noncompliance to the Contractor's Authorized Representative. If the Contractor fails to Cure such noncompliance specified in such Notice within two (2) Business Days after the County's Authorized Representative has provided the Contractor's Authorized Representative with such Notice, the County may thereafter Withhold one thousand dollars (\$1,000.00) per Day, adjusted by the Adjustment Factor, until such noncompliance has been Cured by the Contractor, provided that the Contractor's Authorized Representative has provided to the County's Authorized Representative reasonable evidence of such Cure.

Section 8.4.8 Scale Record True-Up.

If, pursuant to Section 7.4.3, the County had to estimate the Tons of Processible Waste delivered to the Facility in a prior Billing Month due to the unavailability of actual data, and actual data or information becomes available to the County relative to such deliveries for

such Billing Month, the Service Fee for the Billing Month in which such actual data was received shall be adjusted to reflect the corrected billing amount by subtracting the actual Tons of Processible Waste delivered to the Facility for such prior Billing Month when actual data was not available from the estimated Tons of Processible Waste used in calculating the Processing Fee for such prior Billing Month multiplied by the Processing Fee in effect during that prior Billing Month, and crediting or debiting the resulting value on Attachment A of the current Billing Month invoice.

Section 8.4.9 Payment of Remaining Monthly TRP Management Fee Due to Early Completion of TRP Projects.

If the Initial Operating Period, due to the early completion of all TRP Projects, expires prior to December 31, 2016 with the result that all of the Monthly TRP Management Fees have not been paid to the Contractor (i.e., twenty-four [24] Monthly installments) pursuant to Section 8.2.5 as part of the Initial Service Fee, payment of the remaining Monthly TRP Management Fees shall continue each Billing Month as part of the Permanent Service Fee until paid in full.

Section 8.5 Service Fee Invoices; Method of Payment.

Section 8.5.1 Monthly Invoice.

The Contractor shall submit its invoice for payment of the Service Fee to the County on or after the end of the Billing Month for which payment is requested. In preparing its invoice for payment of the Service Fee, the Contractor shall use and comply with the form and content of the Contractor's invoice attached hereto as Schedule 12A (Form of Contractor's Monthly Invoice). The Parties may, by mutual agreement, revise the form and content of the invoice form in Schedule 12A (Form of Contractor's Monthly Invoice). The Contractor shall

attach all documentation and information necessary to justify payment by the County to the Contractor or credit from the Contractor to the County.

Section 8.5.2 Payment to Contractor.

The County shall pay the Contractor the Service Fee in accordance with the applicable provisions of the Local Government Prompt Payment Act after the date of receipt by the County of a properly formatted invoice, consistent with Schedule 12A (Form of Contractor's Monthly Invoice) containing the required documentation and free of errors. If the County disputes any item in an invoice the Contractor submits for any reason, including lack of supporting documentation or data, the County's Authorized Representative shall delete the amount of the disputed item and pay the remainder of the invoice. The County's Authorized Representative shall promptly notify the Contractor's Authorized Representative of the disputed items and request resubmittal on the next monthly invoice, if applicable. If the County fails to remit the full amount payable when due, interest on the unpaid portion shall accrue at the rate prescribed under the Local Government Prompt Payment Act. If the due date for payment is not a Business Day, payment is due on the next Business Day following that date.

Section 8.5.3 Payment to County.

In the event any payments are due the County hereunder, the County may deduct the same from the amount due to Contractor using a credit or offsetting invoice which shall be presented to Contractor on or before the time for payment specified in Section 8.5.2 hereof, or the County may invoice Contractor in accordance with the procedures under Section 8.5.1.

Section 8.5.4 Dispute.

Notwithstanding anything in this Agreement to the contrary, if a good faith dispute arises between the Parties concerning any invoice, the Parties shall comply with the

applicable provisions of the Local Government Prompt Payment Act, including dispute resolution. Moreover, if the resolution of any good faith dispute determines that one Party has overpaid the other Party, then such overpaid amount shall be refunded promptly with interest accruing at the rate calculated pursuant to the Local Government Prompt Payment Act from the date that the overpaid amount was paid until the date of refund of the resolved amount.

Section 8.5.5 Reasonable Estimate of the Aggregate Service Fee.

No later than December 1 of each Billing Year, the Contractor shall provide the County with a written statement, which statement shall not be binding on the Contractor, setting forth its reasonable estimate of the aggregate Service Fee for the immediately succeeding Billing Year, and the calculations upon which said statement were based.

Section 8.5.6 Limitation on County Payments to the Contractor.

Subject to the rights, restrictions and limitations on County payments and other liability to the Contractor recognized under this Agreement, the Parties additionally agree that the County shall not be liable for payments of any kind or nature to the Contractor under the terms of this Agreement exceeding the amount budgeted by the Board of the County Commissioners each Billing Year relative to the County's payment obligations under this Agreement without formal authorization by the Board of County Commissioners or by an amendment to this Agreement duly authorized and executed by the Parties. The Parties recognize and agree that it is the intention of this Section 8.5.6 to establish a maximum, discernable budget and limitation on County payments and liability each Billing Year under this Agreement. If and to the extent that the Contractor shall be entitled to payment under this Agreement of amounts in excess of the annual budgeted amount, the Contractor shall be relieved

of directly related performance obligations until such time as the County budgets additional funds.

Section 8.6 Annual True-Up; Reconciliation.

Section 8.6.1 True-Up of the Adjustment Factor.

At the commencement of each Billing Year, current indices used for calculating and applying the Adjustment Factor may not be available. In such event, an estimate, using the most recent published value of each non-current index, shall be used each Billing Month of the Billing Year until all applicable indices are current and available. At such time, the County shall adjust the Service Fee in accordance with Schedule 5 (Adjustment Factor) and shall use the current indices and apply the same to all invoices previously received by the County for such Billing Year to determine the aggregate adjustment necessary. The resulting calculated amount shall be included as an Adjustment to the invoice for the next Billing Month.

Section 8.6.2 Annual Reconciliation.

Section 8.6.2.1 Annual Processing Guarantee Shortfall Damages.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6, if, in a Billing Year, the amount of Processible Waste Processed by the Facility is below the Annual Processing Guarantee and the County met its Base Delivery Amount, then the Contractor shall pay to the County its Lost Electric Energy Revenues and Lost Recovered Materials Revenues. If, in a Billing Year, the County did not meet the Base Delivery Amount, then solely for the purpose of calculating the Lost Electric Energy Revenues and Lost Recovered Materials Revenues specified in the previous sentence, the Annual Processing Guarantee for such Billing Year shall be equal to the amount of Processible Waste credited towards the Base Delivery Amount pursuant to Sections 7.1.1, 7.1.2 and 8.6.2.2.4 of this Agreement for such

Billing Year. To the extent that some or all of the shortfall is due to the occurrence of a Force Majeure or County Fault, the amount of the shortfall that was attributable to either or both of the Force Majeure or County Fault shall not be included in the above calculation.

Section 8.6.2.2 Base Delivery Amount Shortfall Damages.

Section 8.6.2.2.1 Lost Processing Fees.

If in a Billing Year the amount of Processible Waste delivered to the Facility is below the Base Delivery Amount, as such amount is calculated pursuant to Sections 7.1.1, 7.1.2 and 8.6.2.2.4, then the County shall pay to the Contractor the product of: (a) (1) the Base Delivery Amount minus (2) the actual amount of Processible Waste delivered to the Facility during such Billing Year, multiplied by (b) the Processing Fee that was in effect during the Billing Year that such shortfall occurred.

To the extent that some or all of the shortfall is due to the occurrence of a Force Majeure or Contractor Fault, the amount of the shortfall that was attributable to such Force Majeure or Contractor Fault shall not be included in the above calculations, except as otherwise provided in Section 9.2.

Section 8.6.2.2.2 Lost Electric Energy Revenues.

If, in a Billing Year, the amount of Processible Waste delivered to the Facility is below the Base Delivery Amount, as such amount is calculated pursuant to Sections 7.1.1, 7.1.2 and 8.6.2.2.4, then the County shall pay to the Contractor its Lost Electric Energy Revenues.

To the extent that some or all of the shortfall is due to Force Majeure or Contractor Fault, the amount of the shortfall that was attributable to Force Majeure or Contractor Fault, as applicable, shall not be included in the above calculations.

Section 8.6.2.2.3 Lost Recovered Materials Revenues.

If, in a Billing Year, the amount of Processible Waste delivered to the Facility is below the Base Delivery Amount, as such amount is calculated pursuant to Sections 7.1.1, 7.1.2 and 8.6.2.2.4, then the County shall pay to the Contractor its Lost Recovered Materials Revenues.

To the extent that some or all of the shortfall is due to Force Majeure or Contractor Fault, the amount of the shortfall that was attributable to Force Majeure or Contractor Fault shall not be included in the above calculations.

Section 8.6.2.2.4 Returned Processible Waste Credit.

For purposes of the calculations of the Base Delivery Amount in Sections 8.6.2.1, 8.6.2.2 and 8.6.2.3, if there is Diverted Waste during the Billing Year and the County delivers Returned Processible Waste to the Facility for Processing in an amount that does not exceed the aggregate amount of Diverted Waste for such Billing Year, sixty percent (60%) of such amount of Returned Processible Waste shall be credited towards the delivery of the Base Delivery Amount. To the extent Returned Processible Waste delivered to the Facility for Processing in a Billing Year exceeds the aggregate amount of Diverted Waste for such Billing Year, one hundred percent (100%) of such excess Returned Processible Waste shall be credited towards the delivery of the Base Delivery Amount. The Parties agree and understand that while Diverted Waste is credited to the delivery of the Base Delivery Amount under this Agreement and that sixty percent (60%) of the amount of Returned Processible Waste up to the aggregate amount of Diverted Waste for the Billing Year is additionally credited to the Base Delivery Amount under this Section 8.6.2.2.4, the Parties agree that such crediting achieves a balancing of interests between the Parties in that (a) the Contractor will (1) receive a Processing Fee for

Processing Returned Processible Waste and (2) the Contractor's obligation to pay the County's Lost Electric Energy Revenues and Lost Recovered Materials Revenues is reduced to the extent the Contractor accepts and Processes Returned Processible Waste, plus the Contractor will receive its share of Net Revenues relative to Electric Energy and Recovered Materials generated from the Processing of Returned Processible Waste, and (b) the County will (1) enjoy a set-off to the transportation, Landfill and recovery of Returned Processible Waste costs associated with Diverted Waste, (2) will receive its share of Electric Energy Net Revenues and Recovered Materials Net Revenues generated from the Processing of Returned Processible Waste, and (3) preserve Landfill capacity.

Section 8.6.2.3 Annual Electric Energy Recovery Guarantee Damages.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6, if, in a Billing Year, the amount of Electric Energy generated for sale by the Facility does not meet or exceed the Electric Energy Recovery Guarantee, then the Contractor shall pay to the County its Lost Electric Energy Revenues.

Section 8.6.2.4 Annual Ferrous Metal and Non-Ferrous Metal Recovery System Availability Guarantee Damages.

Section 8.6.2.4.1 Ferrous Metal Recovery System Availability Guarantee Damages.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6, if, in a Billing Year, the Ferrous Metal recovery system, does not meet the Ferrous Metal Recovery System Availability Guarantee, then the Contractor shall pay to the County as a liquidated damage five thousand dollars (\$5,000.00), adjusted by the Adjustment

Factor, for each one percent (1%) or portion thereof that the actual availability is below the Ferrous Metal Recovery System Availability Guarantee for such Billing Year.

Section 8.6.2.4.2 Non-Ferrous Metal Recovery System Availability Guarantee Damages.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6, if, in a Billing Year, the Non-Ferrous recovery system, on and after such system becomes operational, does not meet the Non-Ferrous Metal Recovery System Availability Guarantee, then the Contractor shall pay to the County as liquidated damages, ten thousand dollars (\$10,000.00), adjusted by the Adjustment Factor, for each one percent (1%) or portion thereof that the actual availability is below the Non-Ferrous Metal Recovery System Availability Guarantee for such Billing Year.

Section 8.6.2.5 Excess Reagent and/or Utility Usage.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6, if, in a Billing Year, the quantity of any Reagents or Utilities, or both, consumed by the Facility exceeds the Maximum Reagent Utilization Allowance or the Maximum Utility Utilization Allowance, or both, the Contractor shall be liable for and pay to the County the costs for all such excess Reagent or Utility usage, or both. The cost for any excess Reagent or Utility, or both, usage shall be the product of (a) the actual amount of any Reagent or Utility, or both, usage consumed in excess of the Maximum Reagent Utilization Allowance or Maximum Utility Utilization Allowance, or both, times (b) the average unit cost invoiced for the Reagent or Utility, or both, as applicable, during the Billing Year.

Section 8.6.2.6 HHV Adjustment Amount.

If, for any Billing Year, the Weighted Average Annual Higher Heating Value is (a) equal to or greater than four thousand (4000) Btu per pound and equal to or less than five thousand (5000) Btu per pound, then there shall be no HHV Adjustment Amount owed by either Party to the other, or (b) is less than four thousand (4000) Btu per pound or more than five thousand (5000) Btu per pound, then the County shall pay the Contractor an amount equal to the HHV Adjustment Amount.

Section 8.6.2.7 Invoicing And Payment of Annual Reconciliation.

Within sixty (60) Days following the end of each Billing Year, the Contractor shall prepare an annual settlement statement setting forth any amounts due either Party in accordance with this Section 8.6.2.7. The annual reconciliation invoice shall be prepared in accordance with Schedule 12C (Form of Contractor's Annual Reconciliation Invoice) and shall include documentation sufficient to justify payment by the County to the Contractor or payment by the Contractor to the County. The annual reconciliation invoice form may be modified from time-to-time by mutual agreement of the Parties. Payment of the annual reconciliation shall be made pursuant to the procedures set forth in Section 8.5.

Section 8.7 Projects and Additional Services.

Attachments A and B of Schedule 12B (Form of Contractor's Project and Additional Service Invoice) will be used for each Project or additional service. The County shall identify and determine which form will be applicable in accordance with this Section 8.7 and shall direct the Contractor accordingly upon Project approval. For each Project with an approved estimated cost greater than one million dollars (\$1,000,000.00), the County shall be entitled to retain, and not pay to the Contractor, an amount equal to ten percent (10%) of its estimated cost until

completion and acceptance by the County of such Project. Such retainage shall be withheld from the final ten percent (10%) of the Maximum Project Price less any allowance for contingency.

Payments pursuant to this Section 8.7 shall include (collectively, the “Project/Additional Service Costs”):

Section 8.7.1 Proposal Costs.

The Contractor’s Direct Costs, subject to Cost Substantiation, to prepare a proposal requested by the County’s Authorized Representative pursuant to Sections 10.1 or 10.2, or both, but expressly excluding the preparation of proposals or Scope(s) of Work (both Proposed and Final Scope(s) or Work) pursuant to Section 10.6, to the extent authorized pursuant to such applicable Section and subject to the proposal cost limitation amount specified in such applicable Section.

Section 8.7.2 Payment for Costs of Projects and Additional Services.

The Contractor’s Direct Costs, subject to Cost Substantiation, inclusive of Markup or such other amount as approved in writing by the County under circumstances where the Contractor’s pricing is in the form of a fixed price or lump sum payment, for all Work properly performed relative to such Project(s) or additional service(s) pursuant to and as may be limited by, as applicable, Sections 10.1, 10.2 or 10.6, upon completion of the agreed upon milestone progress payments or completion of such Work, as applicable.

Section 8.8 Project and Additional Service Invoices; Method of Payment.

Section 8.8.1 Invoice.

The Contractor shall submit its invoice for payment of the applicable Project/Additional Service Costs on or after the end of the Billing Month for which payment is requested and, in the case of a milestone progress payment for a Project, in accordance with the applicable milestone

performance and payment schedule specified in the Final Scope of Work for such Project. In preparing its invoice for payment of such applicable Project/Additional Service Costs, the Contractor shall use and comply with the form and content of the Contractor's invoice attached hereto as Schedule 12B (Form of Contractor's Projects and Additional Services Invoice) in accordance with Section 8.7. The Parties may, by mutual agreement, revise the form and content of the invoice form in Schedule 12B (Form of Contractor's Projects and Additional Services Invoice). The Contractor shall attach all documentation and information necessary to justify payment by the County to the Contractor, and shall clearly indicate which approved Project or Projects applicable to each such payment.

Section 8.8.2 Payment to Contractor.

The County shall pay the Contractor the applicable Project/Additional Service Costs in accordance with this Section 8.8 and the applicable provisions of the Local Government Prompt Payment Act after the date of receipt by the County of a properly formatted invoice, consistent with Schedule 12B (Form of Contractor's Projects and Additional Services Invoice) containing the required documentation and free of errors. The County may decline to approve the Contractor's request for payment and shall withhold its approval, in whole or in part, if, based on the written opinion of the Independent Engineer in the exercise of its reasonable engineering judgment, (a) the relevant Work has not been completed to the level of progress claimed in the invoice, (b) the quality of the Work on such Project is not in accordance with the technical requirements or specifications set forth in the Final Scope of Work or other technical requirements or specifications agreed upon by the Parties for such Project, (c) for specified reasons, the Contractor is not entitled to all or any portion of the payment sought because the Work performed is outside the scope of Work for the corresponding Project or additional

services, or (d) the Contractor has failed to make uncontested payments to Subcontractors or Affiliates (or failed to obtain necessary payment documentation from them), all in accordance with the Contractor's contracts with such Entity(ies). The County's Authorized Representative may also decline to approve an invoice submitted pursuant to this Section 8.8 or, because of subsequently discovered evidence or subsequent inspections or audits by the County's Authorized Representative, may reduce in whole or in part any future payment to the extent the County reasonably believes it has overpaid the Contractor under any prior invoice because of (i) defective or incomplete Work, (ii) improper or unsupported invoice calculations or (iii) lack of appropriate and supporting documentation. In such case, the County's Authorized Representative shall give Notice to the Contractor's Authorized Representative describing the Work in question and the basis for reducing its payment. When grounds for withholding or rescinding approval for payment have been Cured or removed by the Contractor, an invoice of the amount withheld (together with documentation supporting the Contractor's claim that the grounds for withholding or rescinding approval for payment have been Cured or removed) shall be included by the Contractor as part of the Contractor's next invoice pursuant to Section 8.8, and shall be processed in accordance with this Section 8.8.

Following (A) completion and acceptance by the County of a Project, in the County's reasonable discretion, and (B) delivery to the County of an affidavit and release in form and substance attached hereto as Schedule 21 (Form of Affidavit and Release), the Contractor may submit its invoice for final payment (including retainage, if any, under Section 8.7) following the procedure for invoice pursuant to this Section 8.8. The County shall not be required to make final payment unless and until the invoice for final payment contains all the required items contained in this Section 8.8.2 and otherwise specified in this Agreement.

SECTION 9

FORCE MAJEURE AND COUNTY FAULT

Section 9.1 Force Majeure.

Either Party shall be excused from the performance or its applicable obligations under this Agreement to the extent it is prevented or, individually, or in the aggregate, delayed from performing such obligations due to the occurrence of the Force Majeure. If either Party claims the occurrence of a Force Majeure as a basis for not performing its obligations under this Agreement, then the Party making such claim shall (a) promptly upon discovery thereof, provide telephone or oral, or both, initial notice thereof to the other Party of the occurrence of the Force Majeure (for purposes of this clause (a), “promptly” shall mean within twenty-four (24) hours of the Party becoming aware of such Force Majeure); (b) provide Notice to the other Party as soon as reasonably possible after the occurrence of the Force Majeure (i) describing, in reasonable detail, its probable effect on the performance of its obligations hereunder and (ii) providing an estimate of its expected duration and cost impact on the relevant provisions of this Agreement; (c) exercise all reasonable efforts to continue to perform its obligations hereunder to the extent (i) not prevented by the Force Majeure and (ii) there is no increase in cost or decrease in revenues to the affected Party to perform its obligations not prevented by the Force Majeure and if there is an asserted increase in such costs or a decrease in such revenues, or both, this Section 9.1, Section 9.1.1 or Section 9.1.2 shall be applicable; (d) subject to and in accordance with Section 10, expeditiously take action to Cure the Force Majeure; (e) exercise all reasonable efforts to mitigate or limit damages to the other Party; and (f) provide prompt notice, including Notice, to the other Party of the cessation of the Force Majeure which gave rise to its inability to perform.

Subject to Section 9.1.1, the Contractor shall not be required to perform any obligation not prevented by the Force Majeure or mitigate the effects of the Force Majeure to the extent the Contractor's costs to so perform or to mitigate are in excess of the normal costs of having its employees that are normally stationed at the Facility Site perform such obligations or mitigate such effects (which normal costs shall include (i) reasonable overtime hours by Contractor's employees, (ii) the temporary, insubstantial and additional use and consumption of materials, supplies and Equipment or (iii) consistent with (ii), the costs for Repair(s) or Replacement(s) reasonably anticipated to be performed from time to time for temporary periods arising as a result of the occurrence of a Force Majeure than can be reasonably performed by the Contractor's employees usually stationed on the Facility Site). Examples of costs that may be considered in excess of such normal costs may include (A) the costs of Subcontractors to so perform or to so mitigate to the extent such Subcontractors are necessary, (B) the costs of securing necessary and substantially additional materials, supplies, Equipment or personnel to so perform or to so mitigate as they are required, (C) the costs for additional testing, cancellation or rescheduling fees or other additional costs arising from the Force Majeure, (D) the costs for Repair(s) or Replacement(s) performed by necessary Subcontractors, provided such Repair(s) or Replacement(s) cannot be performed by the Contractor's employees in a timely manner, to the Facility resulting from the occurrence and continuance of a Force Majeure and (E) costs associated to comply with a Change in Law.

Notwithstanding any provision in this Agreement that may be interpreted to the contrary, neither Party shall be relieved from any payment obligation under and pursuant to the term and conditions of this Agreement during the occurrence and continuance of a Force Majeure.

Section 9.1.1 Contractor Declared Force Majeure.

Unless otherwise expressly recognized in this Agreement, if the Contractor declares or asserts that a Force Majeure shall have occurred and such Force Majeure resulted in increasing its costs to perform the Work or that its revenues have decreased, it shall nevertheless continue to perform its management, operation and maintenance obligations under this Agreement that it is not prevented from performing by the Force Majeure regardless of its increased costs or decreased revenues, or both, relative to such performance.

If, after ten (10) Business Days following the Contractor's Authorized Representative's Notice to the County's Authorized Representative of the occurrence of the Force Majeure as required under Section 9.1, the County's Authorized Representative does not either (a) recognize by Notice to the Contractor's Authorized Representative that a Force Majeure has (i) occurred and (ii) the effect of increasing the Contractor's costs to perform or decreasing the Contractor's revenues, or both, under this Agreement or (b) dispute (i) the occurrence of the Force Majeure or (ii) any such level of increased costs or decreased revenues, or both, that purportedly resulted from such Force Majeure occurrence by proceeding to dispute resolution pursuant to Section 14, the Contractor shall be relieved from performing the Work that it is prevented from performing due to the occurrence of the Force Majeure. If, however, the County's Authorized Representative, by Notice to the Contractor's Authorized Representative, recognizes that (a) above has occurred, the Contractor shall not be relieved from its management, operation and maintenance obligations not prevented by the Force Majeure on the basis that its costs have increased or that its revenues have decreased, provided that the County proceeds with reasonable due diligence to resolve the monetary impacts of the Force Majeure on the Contractor's performance of the Work. Such monetary impacts shall include any monetary

impacts on the Contractor on or after the date that the Force Majeure occurred, provided that the Contractor's Authorized Representative's provides prompt Notice, as prompt is defined herein, to the County's Authorized Representative that a Force Majeure has occurred. If the County's Authorized Representative shall have referred the matter to dispute resolution pursuant to (b) above, the Contractor shall not be relieved of its management, operation and maintenance obligations not prevented by the Force Majeure on the basis of increased costs or decreased revenues, or both, during the pendency of such dispute resolution.

Any resolution of the monetary impact of the Force Majeure on the Contractor's Work shall, relative to increased costs, be based on the Contractor's Direct Costs, subject to Cost Substantiation, inclusive of Markup, from and after the date of the Contractor's Authorized Representative's Notice to the County's Authorized Representative that a Force Majeure has occurred and relative to decreased revenues, only be recognized to the extent that this Agreement expressly recognizes an obligation on the part of the County to reimburse the Contractor for its loss of any or all of its revenues.

Section 9.1.2 County Declared Force Majeure.

If the County declares or asserts that a Force Majeure shall have occurred on the basis that its costs to perform its obligations under this Agreement have increased or that its revenues have decreased, or both, it shall nevertheless continue to perform its obligations under this Agreement that it is not prevented from performing by the Force Majeure, including its payment obligations pursuant to terms and conditions of this Agreement, regardless of its increased costs or decreased revenues, or both, relative to such performance, provided that the County shall nevertheless have its rights that are provided to it under this Agreement.

Section 9.2 Curtailment of Deliveries of Processible Waste due to Force Majeure.

If deliveries of Processible Waste to the Facility or Processing at the Facility, or both, is curtailed due to the occurrence and continuance of a Force Majeure, then the Monthly Processing Fee to be paid pursuant to, as applicable, Section 8.2.2 or Section 8.3.2 shall be calculated each Billing Month during such curtailment as an amount equal to the sum of (a)(1) the Processing Fee for the current Billing Year multiplied by (2) the number of Tons of Processible Waste accepted at the Facility during the applicable Billing Month in which the curtailment occurred, plus (b)(1) seventy-five (75%) of the Processing Fee for the current Billing Year multiplied by (2)(A) the average number of Tons of Processible Waste Processed per Billing Month over the most recent six (6) Billing Months when there was no curtailment, cold iron outage exceeding forty-eight (48) hours or turbine generator overhaul less (B) the number of Tons of Processible Waste accepted at the Facility during the applicable Billing Month in which the curtailment occurred. Relative to (2) (A) above, if at the time of such Force Majeure curtailment there have not been six (6) Billing Months during which a Force Majeure curtailment, cold iron outage exceeding forty-eight (48) hours or turbine generator overhaul did not occur, then the County shall use the most recent six (6) calendar Month period during which there was no occurrence of a Force Majeure curtailment, cold iron outage exceeding forty-eight (48) hours or turbine generator overhaul comprised of (a) Billing Months, if any, and (b) calendar Months of Facility operations by the Prior Contractor. As consideration for such payment during any such curtailment due to the occurrence and continuance of a Force Majeure, the Contractor shall retain and maintain its employees who are not performing services at the Facility in a standby, readily available mode to perform services when all or part of such curtailment is no longer applicable.

Nothing herein, however, shall be read or construed to limit or otherwise infringe on the County's rights pursuant to Section 13.3.

For purposes of making the calculations in Sections 8.6.2.1 and 8.6.2.2, the delivery Base Delivery Amount and the Annual Processing Guarantee shall be prorated to account for reductions in Processing during the duration of a Force Majeure. Such proration adjustment shall be based on an hourly boiler throughput calculated by dividing the Base Delivery Amount by the total boiler operating hours for the Billing Year and then multiplying the resulting product by the number of boiler hours when each applicable boiler unit could not Process Processible Waste due to the Force Majeure.

Notwithstanding any provision in this Agreement that may be interpreted to the contrary, for purposes of this Agreement, no Lost Electric Energy Revenues, Lost Recovered Materials Revenues or Capacity Maintenance Credits shall be due and owing to either Party to the extent of a reduction or curtailment in Processible Waste deliveries due to the occurrence of a Force Majeure; provided, however, to the extent the Force Majeure is an insurable event and the County actually recovers all or a portion of the Net Revenues from the generation and sale of Electric Energy, Recovered Materials or the value of the Capacity Maintenance Credit, then the Contractor shall share with the Contractor its proportionate share of such Net Revenues and Capacity Maintenance Credit in accordance with Sections 8.2.3, 8.2.4, 8.2.6, 8.3.3, 8.3.4 and 8.3.5..

Section 9.3 County Fault.

The Contractor shall be excused for failure or delay in performance of any act or obligation under this Agreement to the extent the Contractor is prevented from performing such act or obligation by reason of County Fault. If the Contractor claims the occurrence of County

Fault as a basis for not performing its obligations under this Agreement, then the Contractor's Authorized Representative shall (a) promptly upon discovery thereof, provide telephone or oral, or both, initial notice thereof to the County's Authorized Representative of the occurrence of the County Fault; (b) provide Notice to the County's Authorized Representative as soon as reasonably possible after the occurrence of the County Fault (i) describing, in reasonable detail, its probably effect on the performance of the Work and (ii) providing an estimate of its expected duration and cost impact on the relevant provisions of this Agreement; (c) exercise reasonable efforts to continue to perform the affected Work to the extent not prevented by the impact of the County Fault; (d) subject to and in accordance with Section 10, expeditiously take such action(s) approved by the Director in writing to Cure the County Fault; (e) exercise reasonable efforts to mitigate or limit damages to the County; and (f) provide prompt notice, including Notice, to the County of the cessation of the impact of the County Fault which gave rise to the inability to perform. If the Contractor declares or asserts that a County Fault shall have occurred which caused its costs to perform the Work to increase and/or its revenues to decrease, or both, it shall nevertheless continue to perform its management, operation and maintenance obligations under this Agreement that it is not prevented from performing by the occurrence and impact of the County Fault regardless of its increased costs or reduction in revenues, or both, if the provisions of this Agreement, by way of performance damages payable by the County, Pass Through Costs, the execution of an amendment to this Agreement or by other mechanism, have addressed the Contractor's increased costs or reduction in revenues under this Agreement.

To the extent the provisions of this Agreement do not provide for specific remedies to address any such Contractor increase in costs or reduction in revenues or the County does not abide by or implement a remedy under this Agreement as a result of the County Fault, then, to

the extent such costs or reduction in revenues are not limited or mitigated, by way of liquidated damages, the County's limitation of liability or other limiting or restrictive provision under this Agreement, the Contractor, upon the expiration of ten (10) Business Days following the Contractor's Authorized Representative's Notice to the County's Authorized Representative of the occurrence of the County Fault as required under this Section 9.3, shall be relieved from performing the Work that is adversely affected by the occurrence of the County Fault unless within such ten (10) Business Day period, the County's Authorized Representative either (1) recognizes by Notice to the Contractor's Authorized Representative that a County Fault has (A) occurred and (B) the effect of increasing the Contractor's costs to perform or decrease the Contractor's revenues to so perform, or both, under this Agreement and thereafter proceeds with reasonable due diligence to resolve the monetary impacts of the County Fault on the Contractor's performance of the Work or (2) disputes (A) the occurrence of the County Fault or (B) any increase in costs or decrease in revenues, or both, has resulted from the impact of the County Fault by proceeding to dispute resolution pursuant to Section 14.

If the County's Authorized Representative has referred the matter to dispute resolution pursuant to (2) above in the immediately preceding paragraph, the Contractor shall not be relieved of its management, operation and maintenance obligations not prevented by the County Fault on the basis of increased costs or decreased revenues, or both, during the pendency of such dispute resolution. Any resolution of the monetary impact of the County Fault on the Contractor's Work shall, relative to increased costs, be based on the Contractor's Direct Costs, subject to Cost Substantiation, inclusive of Markups from and after the date of the Contractor's Authorized Representative's Notice to the County's Authorized Representative that a County

Fault has occurred, unless a different monetary calculation is expressly recognized under this Agreement.

SECTION 10

FACILITY RECOVERY AND PROJECTS

Section 10.1 Removal of the Impact of a Force Majeure or County Fault.

Section 10.1.1 Contractor Work Relative to the Removal of the Impact of a Force Majeure or County Fault.

If a Force Majeure or County Fault occurs, the Authorized Representatives shall promptly meet to discuss the applicable items set forth in Section 9. As a result of the meeting, the County's Authorized Representative may request that the Contractor submit a proposal for a proposed action or actions to remove or mitigate the effect or cost, or both, of the Force Majeure or County Fault, including its proposed Projects or additional services, or both, and cost estimates for implementing and completing the same and any required changes to this Agreement. Alternatively or additionally, the County's Authorized Representative may provide the Contractor's Authorized Representative with a proposed scope of services (including design plans and specifications) for such purposes and the Contractor shall provide a firm fixed price or cost estimate, or both, (as requested by the County) and any required changes to this Agreement. In either case, the Authorized Representatives shall, prior to the Contractor's performance of any Work relative to the preparation of such proposal, agree in writing on the Contractor's fees and costs to prepare and deliver the same to the County's Authorized Representative. Subject to the immediately succeeding paragraph of this Section 10.1, the Director is hereby authorized to authorize and approve such Contractor Work relative to the preparation of any such proposals in an amount not to exceed one hundred thousand dollars (\$100,000.00) per Billing Year, which limitation on proposal costs shall apply to proposals prepared for this Section 10.1 and Section 10.2, but shall not include costs for any proposal prepared in accordance with Section 10.6. If

the Contractor's fees and costs, in the aggregate for such proposal development in a Billing Year, are anticipated to exceed one hundred thousand dollars (\$100,000.00), any authorization by the County to proceed and pay for such proposal Work exceeding such amount shall be expressly conditioned on the approval and execution by the Parties of an amendment to this Agreement. Upon approval of such Contractor Work relative to the preparation of a proposal, the Contractor shall deliver its proposal or, as applicable, proposed fixed price or cost estimate (or both) within thirty (30) Days, or within such other time period as may be mutually agreed upon by the Parties, following, as applicable, the County's Authorized Representative's request of the Contractor for such proposal or the County's Authorized Representative's provision of a proposed scope of services to the Contractor's Authorized Representative. The County's Authorized Representative may, in his or her sole discretion, extend the period for the proposal to be submitted. Subject to this Section 10.1, the County shall pay to the Contractor its cost to prepare such proposal pursuant to Section 8.7.1.

If, after the County's Authorized Representative's receipt of the Contractor's proposal, the Director desires that the Contractor proceed with the removal or mitigation Work, so long as the proposal does not amend or modify the terms of this Agreement, the Director is hereby authorized to authorize and approve such Contractor Work in an amount not to exceed, in the aggregate for all such impacts, five hundred thousand dollars (\$500,000.00) for each Billing Year. The County shall pay for such removal or mitigation Work pursuant to Section 8.7.2. If (a) the Contractor's fees and costs to perform the proposed removal or mitigation Work contracted and to be paid by the County in such Billing Year, when added to other Force Majeure or County Fault removal or mitigation Work, if any, exceeds five hundred thousand dollars (\$500,000.00), or (b) the proposal contemplates or results in an amendment or

modification of the terms of this Agreement, any authorization by the County to proceed with and pay for such proposed Contractor Work shall be expressly conditioned on the approval and execution by the Parties of an amendment to this Agreement. If, due to the cost of such Work, an amendment to this Agreement is required, the County's Authorized Representative and the Contractor's Authorized Representative shall promptly meet and mutually develop such an amendment. Any such amendment shall set forth, at a minimum, the scope of work, payment terms, the schedule for completion of the additional services or Project(s), or both, and the impact on the rights and obligations of the Parties under this Agreement, the Service Fee, the Performance Guarantees and Utilization Allowances and any other changes required to this Agreement. The Contractor shall not have any obligation under this Agreement to remove the impact of the Force Majeure or County Fault (other than the Contractor's obligations and mitigation efforts under and pursuant to Section 9) unless and until, as applicable, the Director authorizes the Contractor pursuant to its proposal to proceed with such Work or the Parties execute an amendment to this Agreement consistent with this Section 10.1.

Section 10.1.2 Third Party Work Relative to the Removal of the Impact of a Force Majeure or County Fault.

Although the County, pursuant to the terms of Section 10.1.1, has the right to sole source the work to the Contractor relative to the removal of the impact of the Force Majeure or County Fault, the Parties agree that work relative to the removal of the Force Majeure or County Fault is not vested solely in the Contractor. The County retains the right at any time to procure the services of one or more Entities other than the Contractor to perform such work; provided, however, that the Contractor has also been requested by the County's Authorized Representative to submit a proposal to perform the work on similar terms and conditions as the other Entities;

and provided further, that as a result of such request from both the Contractor and other Entity(ies), the County shall not be liable for the preparation of the Contractor's proposal. The Contractor shall cooperate fully with the County and any Entity that the County retains to perform such work and the County shall exercise reasonable efforts to have the retained Entity(ies) not unreasonably interfere with the Contractor's Work.

If the removal or mitigation work performed by third party Entity(ies) engaged by the County (a) has a direct adverse effect on (i) the Contractor's performance of the Work, including the ability of the Contractor to meet the Performance Guarantees or achieve the Utilization Allowances, or (ii) the Contractor's costs to perform its Work, or (b) directly results in the loss of Processing Fee revenues or any other Facility revenues, the Contractor shall, promptly following discovery of the issue but in no event later than one hundred and eighty (180) Days after completion of such removal or mitigation Work, provide Notice to the County's Authorized Representative describing, in reasonable detail, the probable effect on the Contractor hereunder, including impact on the Contractor's obligations hereunder, expected duration and cost impact on the relevant provisions of this Agreement. The Authorized Representatives shall promptly meet thereafter to discuss the Contractor's Notice and possible amendment to this Agreement addressing such issues for the Board of County Commissioners' consideration and possible approval and execution. If there is an amendment to this Agreement addressing an adverse effect on Contractor's costs to perform its obligations under this Agreement or the loss of Processing Fee revenues or any other Facility revenues, any modification of such costs or Contractor revenue losses in any such amendment shall be based on the Contractor's Direct Costs, subject to Cost Substantiation, inclusive of Markup. If the Contractor has provided Notice to the County's Authorized Representative by the earlier of (A) when the Contractor becomes aware of such

impact or (b) one hundred eighty (180) Days in accordance with this paragraph, the Contractor shall not have any obligation under this Agreement to perform such Work that has such an adverse effect on the Contractor's performance of its obligations under this Agreement, the costs to perform the same (other than the Contractor's obligations and mitigation efforts under and pursuant to Section 9) or results in the loss of Contractor's revenues unless and until the Parties execute an appropriate amendment to this Agreement.

Section 10.2 Discretionary Additional Services and Projects.

At any time, the County's Authorized Representative may request that the Contractor submit a proposal to perform specific additional services or Project(s), or both, to or at the Facility that are not additional services or Project(s), or both, that the Contractor is otherwise obligated to perform for the Processing Fee compensation provided hereunder by the County. In such event, the Contractor shall, within thirty (30) Days, or within such other time period as may be mutually agreed upon by the Parties, following such County's Authorized Representative's request, submit to the County a proposal that includes a description of the additional services, any required changes to this Agreement and a firm fixed price or cost estimate for the discretionary additional services or discretionary Project(s), or both. The County's Authorized Representative may, in his or her sole discretion, extend the period for the proposal to be submitted. Alternatively or additionally, the County's Authorized Representative may provide the Contractor's Authorized Representative with a scope of services (including design plans and specifications) for such purposes and the Contractor shall, within thirty (30) Days or within such other time period as may be mutually agreed upon by the Parties, provide a firm fixed price or cost estimate or both (as required by the County) and any required changes to this Agreement. The County's Authorized Representative may also, in his or her discretion, extend the period for

the proposal to be submitted. In either case, the Authorized Representative shall, prior to the Contractor's performance of a Work relative to the preparation of such proposal, agree in writing on the Contractor's fees and costs to prepare and deliver the same to the County's Authorized Representative. Subject to the immediately succeeding paragraph of this Section 10.2, the Director is hereby authorized to authorize and approve such Contractor Work relative to the preparation of such proposal in amount not to exceed one hundred thousand dollars (\$100,000.00) per Billing Year. If the Contractor's fees and costs for such Work are proposed to exceed one hundred thousand dollars (\$100,000.00) in a Billing Year for all proposals prepared in accordance with this Section 10.2 or Section 10.1, any authorization by the County to proceed and pay for such Contractor Work shall be expressly conditioned on the development of an amendment to this Agreement, if any, approved and executed by the Parties. Upon approval of such Contractor Work relative to the preparation of a proposal, the Contractor shall deliver its proposal or, as applicable, proposed fixed price or cost estimate (or both) within the time period prescribed above. Subject to this Section 10.2, the County shall pay to the Contractor its cost to prepare such proposal pursuant to Section 8.7.1.

If, after the County's Authorized Representative's receipt of the Contractor's proposal, the Director desires that the Contractor proceed with the discretionary Project(s) or additional service, or both, the Director is hereby authorized to authorize and approve such discretionary Project or discretionary additional service work not requiring an amendment to this Agreement in an amount not to exceed, in the aggregate for all such discretionary Project(s) and discretionary additional services, five hundred thousand dollars (\$500,000.00) for such Billing Year. The County shall pay for such discretionary Project(s) or discretionary additional service pursuant to Section 8.7.2. If the Contractor's fees and costs to perform the proposed

discretionary Project(s) and discretionary additional services Work, when added to other discretionary Project(s) and discretionary additional services Work contracted and to be paid by the County in such Billing Year, if any, exceeds five hundred thousand dollars (\$500,000.00) or if the Work will result in changes to the Performance Guarantees in Schedule 2 (Performance Guarantees) or the Utility and Reagent Utilization Allowances in Schedule 7 (Utility and Reagent Utilization Allowances), any authorization by the County to proceed with and pay for such proposed Contractor Work shall be subject to an amendment to this Agreement, if any, approved and executed by the Parties. If, due to the cost of such Work, an amendment to this Agreement is required, the County's Authorized Representative and the Contractor's Authorized Representative shall promptly meet and mutually develop such an amendment. Any such amendment shall set forth, at a minimum, the scope of work, payment terms, the schedule for completion of the discretionary additional services or discretionary Project(s), or both, and the impact on the rights and obligations of the Parties under this Agreement, the Service Fee, the Performance Guarantees and Utilization Allowances and any other provisions of this Agreement.

Although the County, pursuant to this Section 10.2, has the right to sole source the work relative to discretionary additional services or discretionary Project(s), the Parties agree that Work relative to the discretionary additional services or discretionary Project(s), or both, is not vested in the Contractor. The County retains the right at any time to procure the services of firm(s) other than the Contractor to perform such work; provided, however, that the County's Authorized Representative may request that the Contractor's Authorized Representative submit a proposal to perform the work on similar terms and conditions as the other firms. The Contractor shall cooperate fully with the County and any firm that the County retains to perform such work,

and the County shall exercise reasonable efforts to have the retained firm(s) not unreasonably interfere with the Contractor's Work.

If the discretionary Project(s) or discretionary additional service work is reasonably expected to have a material adverse effect on the Contractor's ability to meet the requirements of Schedule 2 (Performance Guarantees), cause the Contractor to pay costs and expenses exceeding the Maximum Utility Utilization Allowance or the Maximum Reagent Utilization Allowance, or both, or materially adversely affect the Contractor's other obligations, including the costs to perform the same or a decrease in revenues, or both, the Authorized Representatives shall develop a necessary and appropriate amendment to this Agreement addressing such issues for the Board of County Commissioners consideration and possible approval and execution. If there is an amendment to this Agreement addressing an adverse effect on Contractor's costs to perform its obligations under this Agreement, any modification of such costs in any such amendment shall be based on the Contractor's Direct Costs, subject to Cost Substantiation, inclusive of Markup. The Contractor shall not have any obligation under this Agreement to perform such Work that has an adverse effect on the Contractor's performance of its obligations under this Agreement or the costs to perform the same (other than the Contractor's obligations and mitigation efforts under and pursuant to Section 9) unless and until the Parties execute an appropriate amendment to this Agreement.

Section 10.3 Design.

If any maintenance, Repair or Replacement work or any discretionary Project(s) or removal of the impact of a Force Majeure or County Fault undertaken by the Contractor pursuant to Sections 10.1, 10.2, 10.4 or 10.6 involves design work, the Contractor or the County (as appropriate) shall ensure that the design work shall: (a) be performed by an engineer licensed in

the State and having experience in the appropriate engineering discipline and (b) secure prior written approval of the design by the County's Authorized Representative prior to implementing such work. The County's Authorized Representative, however, may provide a written waiver for this requirement in whole or part. Additionally, the County reserves the right to have any of the design services for either a discretionary Project(s) or removal of the impact of a Force Majeure or County Fault performed by a qualified engineer of its choice who has substantial experience in the applicable design work, and the Contractor or, as applicable, firms other than the Contractor performing the discretionary Project(s) or removal of a Force Majeure, shall then implement such design as part of the discretionary Project(s) or removal of a Force Majeure. If the County elects to have the design services performed by an engineer of its choice, the County (and not the Contractor) shall be responsible for the design, including errors, omissions and design defects. If (1) the resulting design could reasonably be expected to adversely affect the ability of the Contractor to meet the Performance Guarantees and Utilization Allowances, (2) the resulting Equipment built and installed in accordance with the resulting designs adversely effects the ability of the Contractor to achieve the Performance Guarantees and Utilization Allowances or (3) the Contractor's costs of performing the Work or revenues received by it hereunder for the purposes of this Section 10.3 are adversely affected, then the County's Authorized Representative and the Contractor's Authorized Representative shall negotiate and prepare an amendment for the Board of County Commissioners consideration containing an equitable adjustment of such Performance Guarantees and Utilization Allowances. In the case of (1), (2), or (3) above, the Contractor shall be relieved of its compliance with the Performance Guarantees and Utilization Allowances or its Work to the extent such Performance Guarantees and

Utilization Allowances or Work are adversely impacted by such Equipment until such amendment is executed by the Parties.

Section 10.4 Contractor Projects.

The Contractor may, at its sole cost and expense, subject to the provisions of this Section 10.4, make changes to the Facility which the Contractor determines are necessary or desirable to comply with the Performance Guarantees and Utilization Allowances or other Work, only after prior Notice is provided by the Contractor's Authorized Representative to the County's Authorized Representative and the Consulting Engineer. Such notice shall contain all of the changes the Contractor proposes to make to the Facility. The County's Authorized Representative shall, within thirty (30) Days after the date of receipt of the Contractor's Authorized Representative's Notice, approve or disapprove the changes specified in such Notice. The County's Authorized Representative may disapprove such change(s) only if it determines that the proposed change(s) (a) impairs the quality or aesthetic appearance of the Facility, (b) adversely affects the ability of the Facility to comply with Permits, with the requirements of the Power Purchase Agreement or the Interconnection Agreement, (c) would adversely affect the income tax status of interest on the bonds or other financing documents used or as may be proposed to be used to finance changes to the Facility or (d) would have a negative impact on the Facility or the County's rights under this Agreement. In no event shall the Contractor undertake a change which the County's Authorized Representative has disapproved for reasons stated above unless a final resolution is secured by the Contractor pursuant to dispute resolution authorizing the Contractor to proceed with such proposed action. In no event shall any change undertaken by the Contractor pursuant to this Section 10.4 increase any component of the Service Fee.

The foregoing to the contrary notwithstanding, the Contractor is not authorized by this Section 10.4 to modify the appearance of the Facility, including, Facility colors, building materials, Facility Site layout and landscaping. Any such changes may be initiated by the Contractor only upon the written approval of the County's Authorized Representative.

Section 10.5 Design and Construction Monitoring of Projects.

The County or the Consulting Engineer, or both, shall have the right, in the manner specified in Schedule 18 (Design and Construction Monitoring and Review), to monitor and review the Contractor's performance of its obligations with respect to any projects undertaken by the Contractor pursuant to this Section 10.

Section 10.6 Technical Recovery Plan.

Section 10.6.1 Schedule 19 Projects.

Notwithstanding that the Contractor accepts the Facility in an as-is condition in accordance with Section 3.18, subject to and as expressly qualified by the Statement of Consequences for such Contractor-proposed TRP Project or LDC Project not approved by the County's Authorized Representative in accordance with this Section 10.6, certain known Facility defects have been identified by the County and other defects are anticipated to be identified once the Contractor conducts its inspection and evaluation of the Facility following the Contract Date in accordance with this Section 10.6. As of the Contract Date, the Technical Recovery Plan attached hereto as Schedule 19 (Technical Recovery Plan) sets forth (a) in Part A, a preliminary list of Technical Recovery Plan Projects ("TRP Projects") identified by the Parties to be performed by or on behalf of the Contractor, (b) in Part B, testing procedures and criteria for certain Facility systems and Equipment to be tested and assessed by or on behalf of the Contractor, and if such Facility systems or Equipment do not satisfy the relevant standards or

criteria specified therein, qualify such items as latent defect cure Projects (“LDC Projects”) to be performed by or on behalf of the Contractor, (c) in Part C, a list of certain Facility items to be Repaired or Replaced, as identified by the Consulting Engineer, to be performed by or on behalf of the Contractor, and (d) in Part D, the Contractor’s technical approach to the Technical Recovery Plan. The Parties recognize and agree that the County has approved the Repair or Replacement of the TRP Projects identified in Part A of Schedule 19 Technical Recovery Plan), subject to the County’s Authorized Representative’s approval of the Project Package, including Final Scope of Work and Maximum Project Price for each such TRP Project, in accordance with Section 10.6.4.

Section 10.6.2 Facility Inspection and Testing; Additional TRP Projects and Identified LDC Projects; Section 10.6 Notice.

Section 10.6.2.1 Additional TRP Projects.

During the period beginning on the Contract Date and continuing until the later of July 1, 2015 or six (6) Months following the Commencement Date (the “TRP Inspection Period”), the Contractor shall, at its own cost and expense, inspect and examine, or cause to be inspected or examined, all Facility systems and Equipment to determine which Facility system(s) and Equipment do not meet the standards set forth in the definition of Acceptable Operating Condition. Following such inspection, the Contractor may propose the addition of other TRP Projects to the list specified in Part A of Schedule 19 (Technical Recovery Plan) based on the failure of such Facility system(s) or Equipment to meet the definition of Acceptable Operating Condition in accordance with Section 10.6.2.3.

Section 10.6.2.2 LDC Projects.

During the period beginning on the Contract Date and continuing until the

later of December 31, 2015 or the first anniversary of the Contract Date (the “LDC Testing Period”), the Contractor shall, at its own cost and expense, (a) test and assess, or cause to be tested and assessed, each Facility system and Equipment specified in Part B of Schedule 19 (Technical Recovery Plan) in accordance with the test procedures specified therein or other testing methodology approved in writing by the County’s Authorized Representative and (b) determine which Facility system(s) or Equipment do not satisfy the relevant standards or criteria specified in Part B of Schedule 19 (Technical Recovery Plan). Unless disputed by the County’s Authorized Representative in accordance with Section 10.6.5, for each particular Facility system(s) or Equipment which (i) fails to satisfy the relevant acceptance standards or criteria specified in Part B of Schedule 19 (Technical Recovery Plan) and (ii) the estimated aggregate Repair or Replacement cost of such Facility system or Equipment is greater than twenty thousand dollars (\$20,000.00) (based on the reasonably expected Maximum Project Price of such Repair or Replacement), such Project shall constitute and be defined as a LDC Project.

Section 10.6.2.3 Additional TRP Projects and Identified LDC Projects.

Based on the Facility inspection, examination, testing or assessment conducted in accordance with Section 10.6.2.1 and 10.6.2.2, as applicable, the Contractor may deliver a Section 10.6 Notice to the County’s Authorized Representative. Unless otherwise approved in writing by the County, the Contractor may not (a) propose any additional TRP Project for inclusion in Part A of Schedule 19 (Technical Recovery Plan) after expiration of the TRP Inspection Period or (b) identify any LDC Project after expiration of the LDC Testing Period.

Promptly following the County’s Authorized Representative’s receipt and review of a Section 10.6 Notice, the County’s Authorized Representative shall deliver Notice to the

Contractor's Authorized Representative which such Notice shall (A) authorize the Contractor to proceed with preparing a preliminary scope of work containing all of the items identified in Schedule 19 (Technical Recovery Plan) (the "Preliminary Scope of Work") in accordance with Section 10.6.3.1, (B) dispute that the Equipment or Facility system(s) proposed to be Repaired or Replaced constitutes a TRP Project or LDC Project, or (C) request additional information or provide comments. If the County's Authorized Representative submits comments or requests additional information, the Contractor shall promptly respond to such comments or prepare the requested information and resubmit the Section 10.6 Notice containing such response or additional information to the County's Authorized Representative. The County's Authorized Representative shall have a reasonable time period following receipt of each such amended Section 10.6 Notice to review, comment or request additional information. If the County's Authorized Representative does not respond to the Contractor within ten (10) Days following its receipt of an initial or revised Section 10.6 Notice, as applicable, upon five (5) Days prior Notice to the County's Authorized Representative, the Contractor may thereafter refer the matter to the Independent Engineer for resolution in accordance with Section 10.6.5.

Section 10.6.2.4 Approved Outage Work.

If, and only if, the Commencement Date occurs before January 1, 2015, during the Early Award Period, the Contractor shall (a) perform, or cause to be performed, the Approved Outage Work, and (b) complete, or caused to be completed, the turbine generator overhaul and the retaining ring replacement, as described in the Approved Outage Work, and such other remaining portion of the Approved Outage Work as desired by the Contractor. The Contractor's Authorized Representative may, upon Notice to the County's Authorized Representative, request modifications, additions or changes to the Approved Outage Work;

provided, however, no such modifications, additions or changes shall be made to the Approved Outage Work without the prior written approval of the County's Authorized Representative.

Section 10.6.3 Preliminary Scope of Work for TRP Projects and LDC Projects; Procurement of Subcontractors.

Section 10.6.3.1 Preparation of Preliminary Scope of Work.

Promptly following the receipt of Notice from the County's Authorized Representative to proceed in accordance with Section 10.6.2.3, the Contractor's Authorized Representative shall prepare and deliver to the County's Authorized Representative a Preliminary Scope of Work for the subject Project described in the Section 10.6 Notice. Following the County's Authorized Representative's receipt of the Preliminary Scope of Work, the County's Authorized Representative shall promptly provide comments thereon or submit questions or requests for information to the Contractor's Authorized Representative. The Contractor's Authorized Representative shall promptly address each comment, respond to the County's Authorized Representative's questions or requests for information, and proceed with the requisite modifications and deliver the revised version of the Preliminary Scope of Work for the subject Project to the County's Authorized Representative. The County's Authorized Representative shall have reasonable time period(s), but as promptly as reasonably possible, following receipt of each revised Preliminary Scope of Work to review and comment.

Following preparation of a Preliminary Scope of Work and responding to County's Authorized Representative's comments or requests for information, if a Preliminary Scope of Work cannot be agreed upon by the Parties, either Party may refer the disputed issue(s) to the Independent Engineer in accordance with Section 10.6.5 for final resolution. Following agreement by the Parties on the Preliminary Scope of Work or resolution by the Independent

Engineer of any disputed item(s), if applicable, the Contractor shall prepare and deliver to the County's Authorized Representative a final Preliminary Scope of Work for the subject Project.

Section 10.6.3.2 Procurement of Subcontractors; Equipment Suppliers.

Concurrently with preparation of a final Preliminary Scope of Work in accordance with Section 10.6.3.1, the Contractor shall promptly procure and obtain bids or proposals from qualified Entities for Work on the subject Project. Each such proposed Subcontractor scope of Work and Equipment specification bid package shall (a) incorporate the terms, conditions and specifications for the work items or Equipment, (b) be based on the Contractor's customary bid packages, and (c) be subject to review and comment by the County's Authorized Representative or the County's Consulting Engineer, or both. The Parties shall work together, in good faith, to reach mutual agreement on all bid packages. If mutual agreement cannot be reached on the bid packages for a subject Project, the issue(s) may be referred to the Independent Engineer by either Party in accordance with Section 10.6.5. For each item of Major Equipment, the Contractor shall obtain at least three (3) bids or proposals from qualified Entities; provided, however, the County's Authorized Representative may waive this requirement, in writing, if the Contractor can reasonably demonstrate to the County's Authorized Representative that three (3) bidders are either not available or unable to be obtained.

Section 10.6.4 Bid Evaluation Report; Final Scope of Work; Notice to Proceed.

Promptly following receipt and review of all bids or proposals for all Work to be performed on a subject Project in accordance with Section 10.6.3.2, the Contractor shall prepare and deliver to the County's Authorized Representative for the relevant Project (a) a bid evaluation and tabulation report specifying the Subcontractor(s) tentatively selected by the Contractor to perform the Work (the "Bid Evaluation Report"), (b) a final scope of work

containing all of the items identified in Schedule 19 (Technical Recovery Plan) including the itemized build-up and a line item build-up of the Maximum Project Price (the "Final Scope of Work"), and (c) a Statement of Consequences (collectively, with the Bid Evaluation Report and Final Scope of Work, the "Project Package"). If requested by the County's Authorized Representative, the Contractor shall make the actual bid(s) or proposals received by the Contractor available to the County's Authorized Representative for review at the Facility.

Within a reasonable time following the County's Authorized Representative's receipt of the Project Package for the subject Project, the County's Authorized Representative shall, by Notice to the Contractor's Authorized Representative (A) authorize the Contractor to proceed with performing the Work on such Project based on the Final Scope of Work delivered to the County's Authorized Representative (a "Notice to Proceed"), (B) dispute any aspect of the Project Package, or (C) comment or request addition information. Unless the Contractor disputes the County's Authorized Representative's comments in accordance with Section 10.6.5, the Contractor shall address each comment, promptly respond to the County's Authorized Representative's questions or requests for information, and proceed with the requisite modifications to the Project Package. The Contractor shall promptly prepare and deliver revised version(s) of the Project Package to the County's Authorized Representative. The County's Authorized Representative shall have reasonable time period(s) following receipt of each resubmittal to review and comment. If the County's Authorized Representative does not respond to the Contractor within ten (10) Days following its receipt of an initial or revised Project Package, upon five (5) Days prior Notice to the County's Authorized Representative, the Contractor may thereafter refer the matter to the Independent Engineer for resolution in accordance with Section 10.6.5.

Section 10.6.5 Dispute Resolution Regarding TRP Projects and LDC Projects.

In the event of a dispute concerning any aspect of a TRP Project or LDC Project, including the scope of such Project, whether such Facility system or Equipment is in Acceptable Operating Condition, the cost of such Project or the Statement of Consequences, then the Authorized Representatives shall meet and discuss the dispute in an effort to resolve the dispute. If resolution is not achieved, either Party may, at any time, refer the dispute to the Independent Engineer for decision pursuant to Section 14.2.2, which decision shall be final and binding on the Parties and non-appealable. Notwithstanding the foregoing, the County expressly reserves the right, in its sole discretion, to decide if to undertake a TRP Project or LDC Project and the scope thereof; provided, however, if the County decides not to have Contractor undertake a TRP Project or LDC Project or materially limits the scope thereof, the Contractor shall be granted relief to the extent expressly specified in the Statement of Consequences for the Contractor-proposed TRP Project or LDC Project not approved by the County.

Section 10.6.6 Commencement of TRP Projects and LDC Projects; Time of Performance.

Following receipt of the Notice to Proceed in accordance with Section 10.6.4, the Contractor shall engage and contract with the Subcontractors specified in the final, approved Project Package and proceed with the relevant Work on such approved Project, consistent with and in conformance with the Final Scope of Work and the Contractor's technical approach to the Technical Recovery Plan as specified in Part D of Schedule 19 (Technical Recovery Plan). In no event shall the Contractor commence any Work relative to any approved Project prior to the County's Authorized Representative's issuance of a Notice to Proceed for the relevant Project. The Contractor shall diligently prosecute and complete each such TRP Project and LDC Project within the timeframes established in the Final Scope of Work for each particular Project and

each TRP Project and LDC Project shall be undertaken by the Contractor during the Initial Operating Period, unless such time period is extended (a) by the County's Authorized Representative pursuant to mutual written agreement or (b) due to an Force Majeure or County Fault. The Parties acknowledge and agree that, without limiting the application of other Sections of this Agreement, Sections 10.3 and 10.5 shall be applicable and govern all Work performed by the Contractor pursuant to Section 10.6.

The Contractor shall pay, or cause to be paid by the Subcontractors, all costs, royalties, fees, license payments, insurance (as provided in Section 11 (Insurance)) and similar expenses relative to the Work on the Projects required to be paid with respect to the Contractor's performance pursuant to its agreement with such Subcontractor.

Section 10.6.7 Facility Performance During Initial Operating Period.

Section 10.6.7.1 On-Peak Capacity Factor and Total Capacity Factor.

During the Initial Operating Period, the Contractor shall schedule and perform, or caused to be scheduled and performed, all Work relative to each Project listed in Schedule 19 (Technical Recovery Plan) and those added pursuant to Section 10.6.2 so as to attain (if applicable) and maintain at least a seventy percent (70%) On-Peak Capacity Factor and at least a seventy percent (70%) Total Capacity Factor, as measured on a twelve (12) Month rolling average basis under the Power Purchase Agreement. If the Facility fails to maintain a seventy percent (70%) On-Peak Capacity Factor and seventy percent (70%) Total Capacity Factor at any point during the Initial Operating Period, the applicable Capacity Maintenance Credit payment entitled to be received by the Contractor during such period(s) shall be automatically and immediately forfeited and Contractor shall have no right to such payment(s). If the Facility fails to maintain at least a sixty percent (60%) On-Peak Capacity Factor and at

least a sixty percent (60%) Total Capacity Factor during the Initial Operating Period, as measured on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, in addition to the forfeiture of the Capacity Maintenance Credit payment entitled to be received by the Contractor, the Contractor shall automatically be subject to, and shall pay, the Electric Capacity Payment Damages specified in Section 8.4.1.1.

Section 10.6.7.2 Effect on other Performance Guarantees; Maintenance Obligations.

In addition to maintaining the On-Peak Capacity Factor and Total Capacity Factor levels in accordance with Section 10.6.7.1, the Contractor shall exercise and use commercially reasonable efforts to (a) meet the Schedule 2 (Performance Guarantees) and Schedule 7 (Utility and Reagent Utilization Allowances) and (b) maintain the Facility, all in accordance with the Standards of Maintenance as prescribed in Section 3.10. If, despite such commercially reasonable efforts, any or all of the Standards of Maintenance, the Performance Guarantees or Allowances are unable to be achieved, except as otherwise provided in Section 10.6.7.1 and in this Section 10.6.7.2, the Contractor shall not be assessed any damage or penalty hereunder for such failure; provided, however, that, other than to the extent relief is specifically recognized in this Agreement due to the occurrence and continuance of a Force Majeure or County Fault, or in any Final Scope of Work mutually agreed in writing by the Authorized Representatives or any Statement of Consequences for a TRP Project or LDC Project not approved by the County or its Authorized Representative, the failure to meet the Residue Particle Size Guarantee, the Residue Quality Guarantee, the Environmental Regulations Performance Guarantee or the Process Wastewater Guarantee, or any one or more of the foregoing, shall subject the Contractor to the damages and penalties specified in this Agreement; provided,

further, however, that any Facility emissions violations during the period ending ninety (90) days after the Commencement Date shall not be considered a violation of the Environmental Regulations Performance Guarantee, provided that such emissions violation(s) is not due to Contractor negligence or willful misconduct.

After the Initial Operating Period, other than to the extent relief is specifically recognized in this Agreement due to the occurrence and continuance of a Force Majeure or County Fault, or in any Final Scope of Work mutually agreed in writing by the Authorized Representatives or in any Statement of Consequences for a TRP Project or LDC Project not approved by the County's Authorized Representative, all of the Contractor's obligations under this Agreement shall be applicable and in full force and effect, and the County shall be entitled to pursue the remedies and relief specified in this Agreement for the Contractor's failure to comply with all such obligations.

Section 10.6.8 Payment for Approved Outage Work, TRP Projects, LDC Projects and Part C Repairs and Replacements; Aggregate Maximum Project Price.

Section 10.6.8.1 Payment for Approved Outage Work, TRP Projects, LDC Projects and Part C Repairs and Replacements.

Notwithstanding anything herein to the contrary, payment for (a) Approved Outage Work performed by the Contractor in accordance with Section 10.6.2.4, (b) TRP Projects and LDC Projects approved by the County's Authorized Representative in accordance with this Section 10.6, and (c) those items Repaired or Replaced as specified in Part C of Schedule 19 (Technical Recovery Plan) shall be based on the Direct Costs incurred and paid or payable by the Contractor for such Approved Outage Work or Project, as applicable, subject to Cost Substantiation, inclusive of Markup; provided, however, with respect to Projects, in no

event shall the aggregate Direct Costs of any Project exceed the Maximum Project Price established for such Project (as set forth in the Final Scope of Work approved by the County's Authorized Representative in accordance with Section 10.6.4) without the prior written approval of the County's Authorized Representative. The Contractor shall submit Monthly invoices to the County in accordance with Section 8.5 for the Work performed on the Approved Outage Work and each Project, as applicable, during the previous Billing Month. To the extent a Final Scope of Work for a Project establishes a schedule of milestone progress payments, the Contractor shall submit its invoice for Work performed on such Project only following the County's Authorized Representative's verification that such Work has been performed to satisfy such milestone.

Section 10.6.8.2 Maximum Cost of Approved Outage Work, TRP Projects and LDC Projects.

In no event shall the cost of the Approved Outage Work and the Maximum Project Price of all TRP Projects and LDC Projects exceed one hundred fifty million dollars (\$150,000,000) in the aggregate. If the Direct Costs incurred by the Contractor in performing the Approved Outage Work and one or more Project(s), when taking into account the Direct Costs of the Approved Outage Work and all prior Projects approved by the County's Authorized Representative, is reasonably expected to exceed the above specified limits, the Parties shall negotiate, in good faith, an amendment to the Service Agreement to increase such amount; provided, however, nothing herein shall obligate the County to approve such amendment. The County shall not have any obligation or liability to pay any costs or expenses for Projects in excess of the amount(s) specified in this Section 10.6.8.2 without the County's Authorized Representative's written approval of an amendment to this Agreement and, with respect to outstanding Projects proposed by the Contractor in accordance with Section 10.6, the

Contractor shall be granted relief to the extent expressly specified in the Statement of Consequences for such outstanding Projects.

Section 10.6.9 Payment of Technical Recovery Plan Management Fee.

Section 10.6.9.1 Technical Recovery Plan Management Fee During Early Award Period.

If, and only if, the Commencement Date occurs before January 1, 2015, in addition to the County's reimbursement for the Work performed by or on behalf of the Contractor during the Early Award Period in accordance with Section 10.6.8, the County shall pay to the Contractor the Monthly TRP Management Fee (or pro rata amount for any period less than a full Month) as part of the Initial Service Fee in accordance with Section 8.2.5. During the Early Award Period, such Monthly TRP Management Fee (or pro rata amount for any period less than a full Month) is in addition to, and not inclusive in, the Technical Recovery Plan Management Fee.

Section 10.6.9.2 Technical Recovery Plan Management Fee During Initial Operating Period.

During the Initial Operating Period, in addition to the County's reimbursement for the Work performed by or on behalf of the Contractor on each Project in accordance with Section 10.6.8, the County shall pay to the Contractor the Monthly TRP Management Fee (or pro rata amount for any period less than a full Month) as part of the Initial Service Fee in accordance with Section 8.2.5.

Section 10.6.9.3 Technical Recovery Plan Management Services after the Initial Operating Period.

Except to the extent such timeframe is set forth and approved by the County's Authorized Representative in a Final Scope of Work for the relevant Project(s), if one or more County-approved TRP Projects or LDC Projects have not been completed and are not anticipated to be completed and accepted by the expiration of the Initial Operating Period, the Contractor may request, by Notice to the County's Authorized Representative, approval from the County's Authorized Representative to extend the completion date for such outstanding Project(s) beyond the Initial Operating Period. If the County's Authorized Representative approves in writing extension of the completion date(s) for such Project(s), (a) the Contractor shall not be subject to Withholding(s) pursuant to Section 8.4.7.3 only as such may be related to the Project(s) and during the pendency of the County's Authorized Representative's approval of extended completion period(s) for such Project(s) and (b) any Direct Costs, subject to Cost Substantiation, for Project management time during the completion period directly relating to managing the completion of such Project(s) may be included as part of the Direct Costs for such Project(s) and paid in accordance with Section 8.7.2.

Section 10.7 Project Completion and Acceptance; Payment for Projects.

Section 10.7.1 Project Completion and Acceptance.

Upon completion of each Project, the Contractor's Authorized Representative shall promptly give Notice to the County's Authorized Representative. The County's Authorized Representative shall inspect the Project Work, review any test results and approve or disapprove such Project as being complete within ten (10) Days following the Notice of such delivery from the Contractor's Authorized Representative. If the County's Authorized

Representative does not respond within such ten (10) Day period, then the Project shall be deemed to be accepted. If the County's Authorized Representative does not approve that the Project is complete and accepted, the County's Authorized Representative shall, together with such disapproval, provide a written explanation or basis for the same to the Contractor's Authorized Representative. To the extent not consistent with the terms of this Agreement or the Final Scope of Work for the subject Project, the Contractor alone, or through its Subcontractor(s), shall take corrective action consistent with the County's Authorized Representative's explanation or basis for disapproval and resubmit the Project for review and approval by the County's Authorized Representative as provided herein. If the Contractor's Authorized Representative and the County's Authorized Representative shall disagree on whether a Project is complete and accepted, the matter shall be considered a dispute and either Party may refer such matter to the Independent Engineer for decision pursuant to Section 14.2.2, which decision shall be final and binding on the Parties and non-appealable.

Section 10.7.2 Plans, Specifications, Operation and Maintenance Manuals and Drawings.

The Contractor shall maintain all plans, specifications, Operation and Maintenance Manuals, As-Built Drawings and any other drawings relative to the Projects in accordance with Section 3.25, and all such plans, specifications, Operation and Maintenance Manuals, As-Built Drawings and any other drawings relative to the Projects shall be deemed to be owned by the County. Prior to the Contractor submitting an application for final payment for each Project to the County pursuant to Section 8.8, the Contractor's Authorized Representative shall deliver to the County's Authorized Representative one hard copy and one copy in electronic format acceptable to the County's Authorized Representative of all such plans, specifications,

As-Built Drawings and any other drawings and Operation and Maintenance Manuals related to the Project.

Section 10.8 Payment for Facility Recovery and other Projects.

Payment for all Projects and improvements performed in accordance with Sections 10.1, 10.2 or 10.6 of this Section 10 shall be paid in accordance with the provisions of Sections 8.7 and 8.8, and invoices for all such payments shall be accompanied by an affidavit and release in the form provided in Schedule 21 (Form of Affidavit and Release).

SECTION 11

INDEMNIFICATION, LIMITATION OF LIABILITY, INSURANCE AND SECURITY

Section 11.1 Contractor Indemnification.

The Contractor agrees to save harmless, indemnify, and defend the County and all members of the Board of County Commissioners, its agents, consultants and employees (the "Indemnified Parties"), from and against any and all Losses, including claims for property damage and claims for injury to or death of persons, or on account of any claim or amounts recovered under the "workers compensation laws" or any other Applicable Laws that may hereafter at any time be made by any third party (including County employee) recovered against it arising directly or indirectly on account of or in connection with (1) any alleged or actual defects, errors or omissions relative to the Work occurring on and after the installation, completion and, as applicable, testing of any Project identified in Sections 10.1-10.4 and the Work identified in the Schedule 19 (Technical Recovery Plan), in each case, performed by or through the Contractor or (2) any act of negligence, recklessness or intentional wrongful misconduct (including an act of fraud) of the Contractor, its agents or employees with respect to this Agreement or the performance of the Work or by any person, firm, Subcontractor, Guarantor or Affiliate to whom any portion of the Work is subcontracted by the Contractor or resulting from the use by the Contractor or by anyone for whom the Contractor is legally liable, of any Equipment, materials, tools, supplies, chemicals, Reagents or other property of the Indemnified Parties. To the extent permitted by Applicable Law, this provision is intended to apply even if the injury or damage is caused in part by an act, omission or default of the Indemnified Parties except that the Contractor shall not be required to reimburse, defend or indemnify the Indemnified Parties for a Loss due to the sole negligence of the Indemnified Parties. In addition,

to the extent Applicable Law applies to an event, in the case of concurrent negligence of the Indemnified Parties, the Contractor's indemnification shall extend only to the extent of the Contractor's negligence. The Parties agree that the first one hundred dollars (\$100.00) of the Processing Fee paid by the County to the Contractor pursuant to this Agreement shall be given as separate consideration for this indemnification, and any other indemnification of the County by the Contractor provided for within this Agreement, the sufficiency of such separate consideration being acknowledged by the Contractor, by the Contractor's execution of this Agreement. The Contractor shall promptly give Notice to the County of the assertion of any claim against which the Indemnified Parties are indemnified hereunder, shall defend the Indemnified Parties against any claim from which the Indemnified Parties are indemnified hereunder, but shall not have the right to settle such claim without the prior written approval of the Indemnified Parties. The County agrees that it shall promptly provide Notice to the Contractor's Authorized Representative of the assertion of any claims against which the Indemnified Parties to be indemnified hereunder; provided, however, that the failure to give such Notice shall not affect the Contractor's indemnification obligations hereunder unless failure to provide Notice directly and materially affects the Contractor's ability to defend against or mitigate such claim. The extent of the Contractor's indemnification shall not be limited in any way as to the amount of any insurance limits contained in any insurance policy processed or provided in connection with this Agreement. The Contractor's obligations hereunder shall not be affected by the Contractor's use of Subcontractors, but the Contractor shall exercise reasonable efforts to require each Subcontractor to indemnify the Indemnified Parties under any contract entered into by the Contractor with each Subcontractor on terms similar to the indemnification provided for the benefit of the Indemnified Parties under this Section 11.1 but nothing in this Section 11.1 or

otherwise in this Agreement shall ever create any direct relationship between a Subcontractor and the County. These indemnification provisions are for the protection of the Indemnified Parties only and shall not establish, of itself, any benefit or liability to third parties. The Contractor's indemnification in this Section 11.1 shall be supplemental and in addition to the other indemnification obligations it has to the Indemnified Parties under this Agreement or for any other reason, and such indemnifications to the extent, if any, they may be inconsistent with this Section 11.1, shall not supersede this Section 11.1. To the extent that the County is found to be responsible for any Loss, nothing herein shall be construed to waive the sovereign immunity of the County beyond that described in §768.28, Florida Statutes, or to waive the procedural or notice provisions contained therein.

Section 11.2 Limitation and Liability of Exclusion of Consequential Damages.

Section 11.2.1 For the Contractor.

THE PARTIES ACKNOWLEDGE AND AGREE THAT BECAUSE OF THE UNIQUE NATURE OF THIS AGREEMENT, IT IS DIFFICULT OR IMPOSSIBLE TO DETERMINE WITH PRECISION THE AMOUNT OF DAMAGES THAT WOULD OR MIGHT BE INCURRED BY THE COUNTY AS A RESULT OF A BREACH OF THIS AGREEMENT BY THE CONTRACTOR. ACCORDINGLY, THE PARTIES AGREE THAT THE CONTRACTOR SHALL BE LIABLE AND OBLIGATED TO PAY ONLY THOSE DAMAGES (INCLUDING LIQUIDATED DAMAGES) AND OTHER AMOUNTS AS MAY BE SPECIFICALLY DUE AND PAYABLE IN ACCORDANCE WITH THE TERMS OF THIS AGREEMENT, AND THAT THE DAMAGES (INCLUDING LIQUIDATED DAMAGES) AND OTHER AMOUNTS THAT MAY BECOME DUE PURSUANT TO THE TERMS OF THIS AGREEMENT SHALL CONSTITUTE THE CONTRACTOR'S SOLE

DAMAGES AND AMOUNTS TO THE COUNTY AND THE COUNTY'S SOLE REMEDY IN RESPECT OF THE APPLICABLE BREACH. IN NO EVENT, WHETHER BECAUSE OF A BREACH OF ANY WARRANTY CONTAINED IN THIS AGREEMENT OR ANY OTHER CAUSE ARISING OUT OF THE PERFORMANCE OR NON-PERFORMANCE BY THE CONTRACTOR OF ITS OBLIGATIONS UNDER THIS AGREEMENT, WHETHER BASED UPON CONTRACT, TORT, WARRANTY OR OTHERWISE, SHALL THE CONTRACTOR'S TOTAL LIABILITY UNDER THIS AGREEMENT EXCEED FIFTY MILLION DOLLARS (\$50,000,000.00).

IN NO EVENT, HOWEVER, WHETHER BECAUSE OF A BREACH OF WARRANTY CONTAINED IN THIS AGREEMENT OR ANY OTHER CAUSE, WHETHER BASED UPON CONTRACT, TORT, WARRANTY OR OTHERWISE, ARISING OUT OF THE PERFORMANCE OR NON-PERFORMANCE BY THE CONTRACTOR, ITS SUBCONTRACTORS OR VENDORS AT ANY TIER, OF THEIR OBLIGATIONS UNDER THIS AGREEMENT, SHALL THE CONTRACTOR, ITS SUBCONTRACTORS OR VENDORS AT ANY TIER, BE LIABLE FOR OR OBLIGATED IN ANY MANNER TO PAY ANY SPECIAL, CONSEQUENTIAL OR INDIRECT DAMAGES, OR ANY OTHER AMOUNTS, EXCEPT AS HEREINABOVE PROVIDED.

NOTHING IN THIS SECTION 11.2.1 SHALL BE CONSTRUED TO LIMIT RESPONSIBILITY OR LIABILITY OF THE CONTRACTOR FOR ACTIONS BROUGHT BY THIRD PARTIES. THE PARTIES FURTHER RECOGNIZE AND AGREE THAT ANY PAYMENTS OF AMOUNTS TO THE COUNTY BY THE GUARANTOR UNDER THE GUARANTY WITH RESPECT TO THE CONTRACTOR'S LIMITATION OF LIABILITY

SHALL BE DEEMED TO BE FOR THE ACCOUNT OF THE CONTRACTOR FOR PURPOSES OF THIS SECTION 11.2.1.

Section 11.2.2 For the County.

THE PARTIES ACKNOWLEDGE AND AGREE THAT BECAUSE OF THE UNIQUE NATURE OF THIS AGREEMENT, IT IS DIFFICULT OR IMPOSSIBLE TO DETERMINE WITH PRECISION THE AMOUNT OF DAMAGES THAT WOULD OR MIGHT BE INCURRED BY THE CONTRACTOR AS A RESULT OF A BREACH OF THIS AGREEMENT BY THE COUNTY. ACCORDINGLY, THE PARTIES AGREE THAT TO THE EXTENT PERMITTED BY APPLICABLE LAW, THE COUNTY SHALL BE LIABLE AND OBLIGATED TO PAY ONLY THOSE DAMAGES (INCLUDING LIQUIDATED DAMAGES) AND OTHER AMOUNTS AS MAY BE SPECIFICALLY DUE AND PAYABLE IN ACCORDANCE WITH THE TERMS AND LIMITATIONS OF THIS AGREEMENT, AND THAT THE DAMAGES (INCLUDING LIQUIDATED DAMAGES) AND OTHER AMOUNTS THAT MAY BECOME DUE PURSUANT TO THE TERMS OF THIS AGREEMENT SHALL CONSTITUTE THE COUNTY'S SOLE LIQUIDATED DAMAGES AND AMOUNTS TO THE CONTRACTOR AND THE CONTRACTOR'S SOLE REMEDY IN RESPECT OF THE APPLICABLE BREACH.

IN NO EVENT, HOWEVER, WHETHER BASED UPON CONTRACT, TORT OR OTHERWISE, ARISING OUT OF THE PERFORMANCE OR NON-PERFORMANCE BY THE COUNTY, ITS SUBCONTRACTORS OR VENDORS AT ANY TIER, OF THEIR OBLIGATIONS UNDER THIS AGREEMENT, SHALL THE COUNTY, ITS SUBCONTRACTORS OR VENDORS AT ANY TIER BE LIABLE FOR OR OBLIGATED IN ANY MANNER TO PAY ANY SPECIAL, CONSEQUENTIAL OR INDIRECT DAMAGES,

OR ANY OTHER AMOUNTS, EXCEPT AS OTHERWISE SPECIFICALLY RECOGNIZED IN THIS AGREEMENT.

Section 11.3 Insurance Requirements.

Section 11.3.1 Obligation to Secure, Maintain and Pay for Insurance Coverage.

Section 11.3.1.1 Insurance Obligations of the Contractor.

Except as otherwise provided in this Section 11.3, the Contractor, on its own behalf and on behalf of any one directly employed by it for whose acts or omissions it may be liable, shall secure, or cause to be secured, and maintain the insurance policies with the policy limits specified in Schedule 11 (Insurance) (the “Required Contractor Insurance”) prior to the Contract Date. Prior to the Contract Date, the Contractor shall provide to the County’s Director of Risk Management a Certificate of Insurance, binder or copy of insurance policy declaration page, evidencing the Required Contractor Insurance coverage specified in Schedule 11 (Insurance). No Work shall commence, including Transition Period Work, unless and until the required Certificate(s) of Insurance has been delivered and approved by the County’s Director of Risk Management. The County reserves the right to require a certified copy of insurance policies that are Required Contractor Insurance specified in Schedule 11 (Insurance) available for review at the Facility Site upon fifteen (15) Days Notice to Contractor’s Authorized Representative. The Contractor shall not be required to disseminate copies of Required Contractor Insurance or leave copies of such policies with the County.

The Contractor shall not commence any Work of any kind under this Agreement until all insurance requirements contained in this Section 11.3 have been complied with, and until evidence of such compliance satisfactory to the County’s Director of Risk Management as to form and substance has been filed with the County’s Director of Risk

Management as provided herein. The Contractor and all Subcontractors shall be solely liable for all fees and costs associated with securing and maintaining all Required Contractor Insurance and no such fees and costs shall be a Pass Through Cost to the County; provided, however, to the extent, if at all, the Contractor, at the request of the County, secures and maintains any Required County Insurance policy(ies) that the Contractor is able to secure and maintain under applicable insurance policies or Applicable Law, the premium payments and reasonable broker fees for such policy(ies) shall be a Pass Through Cost to the County, and shall remain so until the County, in its sole discretion, gives Notice to the Contractor and thereafter secures and maintains such policy(ies) as Required County Insurance. The Contractor may secure additional insurance coverages and policies not specified or required under this Section 11.3 or Schedule 11 (Insurance) and all such insurance and associated deductible amounts shall not be Required Contractor Insurance and shall not be a Pass Through Cost. The cost for such additional insurance coverages and policies shall be borne exclusively by the Contractor at its sole cost and expense. The Contractor shall be responsible for securing certificates of insurance from all Subcontractors with appropriate insurance limits commensurate with industry standards and tracking certificates of insurance for expiration of coverage and obtaining a renewal certificate of insurance prior to any such expiration. No Subcontractor will commence Work until receiving Contractor approval.

Section 11.3.1.2 Insurance Obligations of the County.

Except as otherwise provided in this Section 11.3, the County shall secure, or cause to be secured, and maintain the insurance policies with the policy limits specified in Schedule 11 (Insurance) at least fifteen (15) Days prior to the Commencement Date (the "Required County Insurance") and evidence of such compliance in the form of a certificate of

insurance shall be promptly provided to the Contractor's Authorized Representative by the County's Authorized Representative. The administrative and premium payments for each such policy shall be borne exclusively by the County. Neither the Contractor nor any of its Subcontractors shall commence any Work of any kind under this Agreement until all Required County Insurance requirements shall have been complied with, and until evidence of the same has been provided to the Contractor. The County may secure in addition to the Required County Insurance, insurance coverages and policies not specified or required under this Section 11.3 or Schedule 11, and all such insurance costs shall be borne exclusively by the County at its sole cost and expense.

Section 11.3.1.3 Contractor Insurance Monitoring Requirements.

With respect to Required Contractor Insurance and Required County Insurance, (together, the "Required Insurance"), the Parties shall cooperate with one another and through the normal course of the respective Parties' business, track changes in the insurance marketplace and periodically meet to discuss issues that may materially affect insurance availability, cost and term of insurance coverages, premiums and deductibles. Notwithstanding the requirement for proof of insurance prior to the Contract Date as specified in Section 11.3.1.1.1, for Contractor placed insurance, the Contractor shall arrange for the placing broker to provide annually and prior to the expiration of each year's insurance program, a statement or Certificate of Insurance evidencing that the insurance carriers meet the requirements set forth in Section 11.3.5.4. Based on such statement and other information either or both the Contractor's Authorized Representative and the County's Director of Risk Management may secure from other sources, the County's Director of Risk Management or the Contractor's Authorized Representative, may propose that the requirements of this Section 11.3 be changed to address (a)

insurance market conditions, (b) changes in legal requirements pertaining to insurance or this Section 11.3, (c) changes in the liability environment, (d) provisions in this Section 11.3 or Schedule 11 (Insurance), or both, that are or may be deemed obsolete or inappropriate, (e) a circumstance wherein the cost for maintaining any applicable insurance coverage or policy outweighs the benefits and risk mitigation of maintaining such coverage or (f) a change as to which Party shall be responsible for securing and maintaining all or part of Required Insurance coverage hereunder if the other Party can secure such coverage on reasonably acceptable terms and conditions, including deductible amounts, and at a lesser premium cost.

With respect to any County's Director of Risk Management decision to propose one or more changes to the Required Insurance pursuant to Section 11.3.1.1 or this Section 11.3.1.3, unless the proposed change(s) (i) is/are arbitrary or capricious, (ii) is/are inconsistent with Applicable Law or (iii) unreasonably increases the Contractor's risk exposure cost associated with the insurance program the Parties agree to accept and be bound by the County's Director of Risk Management's proposal(s) relative to changes to the Required Insurance, the Parties obligations under this Agreement relative to Required Insurance shall be deemed changed consistent with the County's Director of Risk Management's decision(s) and such change(s) shall be effective sixty (60) Days from the date that Notice is given to the Contractor of the required changes. If the Contractor disagrees with the County's Director of Risk Management's directives pursuant to Section 11.3.1.1 or decision(s) pursuant to this Section 11.3.1.3, the Contractor may refer the matter to dispute resolution, pursuant to Section 14, at least five (5) Days prior to the effective date of such change to the Required Insurance. Failure of the Contractor to so refer such Notice to dispute resolution by such period of time shall be deemed a waiver of the Contractor's right to so refer the matter.

Section 11.3.2 Insurance Deductibles.

To the extent recognized in this Section 11.3.2 and Schedule 11 (Insurance), the Contractor shall be responsible to satisfy any and all deductibles and self-insured retentions contained in the Required Insurance under this Agreement, as well as any excluded loss or losses if the same are within the Contractor's liability under this Agreement due to any insured event unless caused by County Fault or Force Majeure, provided that in all events, the Contractor shall be liable for any deductible relative to Workers' Compensation Insurance or to the extent recognized in Applicable Law, or both, and any such deductible(s) shall not be a Pass Through Cost to the County. The County shall be liable for deductibles or self-insured retentions for all Required County Insurance, for insured events caused by County Fault or Force Majeure. The insurance coverages required to be secured and maintained by the Contractor and the County under this Agreement shall, to the extent deductible limits are specified, be those specified in Schedule 11 (Insurance), provided they are authorized by Applicable Law. If no insurance deductibles are specified in Schedule 11 (Insurance), the deductibles shall be that amount that the retaining Party may reasonably secure in the insurance marketplace; provided, however, that the Contractor's liability with respect to such deductibles shall be governed by this Section 11.3.2 and Schedule 11 (Insurance).

Section 11.3.3 Duty to Maintain Insurance.

Subject to this Section 11.3, all Required Insurance to be secured and maintained by the Parties under this Agreement shall be continuously maintained through the Term. Failure of the applicable Party to obtain and maintain the insurance required under and pursuant to the terms of this Agreement shall be deemed an Event of Default for purposes of Section 12.2.4 or, as applicable, Section 12.3.3. Failure of the applicable Party to maintain any Required Insurance

shall not relieve the applicable Party from any liability under this Agreement, nor shall these requirements be construed to conflict with the obligation of either Party concerning indemnification.

Section 11.3.4 Continuous Coverage.

The Contractor or, as applicable, the County, shall assure continuous coverage of any Required Insurance and, as applicable, assure that such Required Insurance is not canceled, is renewed, or not materially changed during the Term. The Contractor or, as applicable, the County shall, at its sole cost and expense, pay such extra premium as required to assure no lapse of Required Insurance coverage for any time period. If the Contractor pays such extra premium for Required County Insurance, such extra premium shall be a Pass Through Cost to the County. If the County pays such extra premium for Required Contractor Insurance, such extra premium shall be an Adjustment to the Service Fee.

Section 11.3.5 Insurance Requirements Generally.

The following shall be applicable to the insurance policies and coverages required to be secured and maintained pursuant to this Section 11.3:

Section 11.3.5.1 Policies of Insurance; Certificates as Evidence of Insurance.

Certificates of Insurance or binders evidencing the existence of Required Insurance to be secured and maintained by either Party shall be furnished to, as applicable, the Contractor's Authorized Representative or the County's Director of Risk Management as early as possible prior to the commencement date of such coverage for such furnished Party's review and approval. All policies shall be written on a primary, non-contributory basis. If a secured policy of Required Insurance is canceled, not renewed or materially changed, the applicable Party shall provide, or cause to be provided, a certificate for the substitute policy to, as

applicable, the Contractor's Authorized Representative or the County's Director of Risk Management, as early as possible before the commencement of the substitute policy period for the review and approval. If a policy of Required Insurance is renewed without material change, the applicable Party shall supply to, as applicable, the Contractor's Authorized Representative or the County's Director of Risk Management, a certificate of insurance which reflects the policy number of such Party's approved policy, lists the coverages provided and shows the policy's effective and termination dates. Each Party shall provide to, as applicable, the Contractor's Authorized Representative or the County's Director of Risk Management proof of the Required Insurance coverages in the form of a binder or certificate of insurance of each such policy as far in advance of the renewal as possible. If a binder or certificate is not provided more than fifteen (15) Days before the renewal, a letter from the applicable Party's broker will be sent advising as to the status of the renewal date on which the applicable policies will be bound. On the binding date, a certificate or binder will be provided to, as applicable, the Contractor's Authorized Representative or the County's Director of Risk Management. Binders shall be extended by the procuring Party until all such actual policies of such Required Insurance are received. After certificates or binders are delivered by the Party placing the coverage under master program policies, those actual policies, upon receipt of such Party, will be made available for inspection by the other Party, if so requested at the State offices of the placing Party. For the Contractor, such office shall be at the Facility.

Section 11.3.5.2 County Right to Secure Alternative Insurance.

If the County shall determine at any time during the Term that the cost or financial security of any particular insurance program, policy or coverage the Contractor is required to secure and maintain in this Section 11.3 and Schedule 11 (Insurance) is unacceptable,

the County retains the right once each Billing Year and consistent with Section 11.3.1.1 to secure, at its sole cost and expense, alternative programs, policies or coverages, except for Workers Compensation or Employer's Liability Insurance, on behalf of itself and the Contractor. Alternative insurance shall be with equivalent or greater financial security and program or policy coverages set forth in Schedule 11 (Insurance) without unreasonably increasing uninsured risk to the Contractor (other than the deductible amount which will not be deemed to have unreasonably increased uninsured risk, and in any event, the Contractor's liability regarding any deductible shall be governed by Section 11.3.2 and Schedule 11 (Insurance) regardless of the County's right to secure an alternative program or policy) provided that such alternative program nevertheless meets the requirements of Section 11.3.1.3. If an alternative program is provided for by the County, the Processing Fee shall be equitably adjusted on and after the date that the County's alternative program becomes effective in recognition that the Contractor's costs, i.e., insurance costs, are reduced.

Section 11.3.5.3 Waiver of Subrogation.

All Required Insurance shall include a waiver of subrogation rights in favor of the Contractor and the County, to the extent permitted by Applicable Law and except as specifically provided in Schedule 11 (Insurance). The Contractor and the County shall each require that any insurance provided by a subcontractor include a waiver of subrogation in favor of the other Party.

Section 11.3.5.4 Financial Security Requirement/Rating.

Any and all companies providing insurance required by Section 11.3 must meet the minimum financial security requirements set forth below. These requirements conform

to the ratings published by A.M. Best & Co. in the current Best's Key Rating Guide - Property-Casualty.

Companies providing Required Insurance under this Agreement must have a current:

- A. Best's Rating no less than A- and current.
- B. Best's Financial Size Category not less than Class IX, except for Pollution Legal Liability Insurance which shall not be less than Class VII.

Companies must be authorized to conduct and transact insurance contracts by the Department of Financial Services, State of Florida.

If the issuing company does not meet these minimum requirements, or during the course of coverage fails to meet such requirements and become unsatisfactory to the County, Notice shall be mailed to the other Party and, with respect to the County, also to the County's Director of Risk Management. The Party responsible for procuring the insurance shall promptly obtain a new policy issued by an issuer that does meet the requirements set forth in Section 11.3 and shall submit evidence of the same as required herein.

Section 11.3.5.5 Carrier Renewal and Cancellation Notification.

Any policy or policies procured, or caused to be procured, by either Party shall provide by endorsement that the other Party shall, without exception, be given not less than forty-five (45) Days Notice prior to the carrier's cancellation or nonrenewal, unless the cancellation is due to non-payment of premium in which case, not less than ten (10) Days Notice, as required by F.S. 627.4133 and that such Notice shall be delivered to the non-procuring Authorized Representative and the County's Director of Risk Management as provided for in this Agreement. Confirmation of this mandatory forty-five (45) Days Notice of nonrenewal or

cancellation as required by F.S. 627.4133 shall appear on the Certificate of Insurance and on any and all insurance policies required by Schedule 11 (Insurance). If any such policy is subject to cancellation or nonrenewal and the procuring Party fails to provide the other Party with written commitments to renew or purchase other such insurance meeting the requirements of this Section 11.3 at least forty-five (45) Days prior to the effective date of such cancellation or nonrenewal, then the non-procuring Party, upon Notice to the other Party and, with respect to the County, also to the County's Director of Risk Management, shall have the right to purchase or renew such coverage and the obligated procuring Party shall then be obligated to reimburse the purchasing Party for the premiums and broker fee costs for such insurance over and above that applicable had the obligated procuring Party renewed or repurchased such coverage.

Section 11.3.5.6 Named Insured and Additional Insured.

The County, the Board of County Commissioners, the County Solid Waste System and all agents, officers and employees of the County and the County Solid Waste System shall be covered as a named insured, but not the first named insured, under the Commercial General Liability and Excess Umbrella Policies and an additional insured under all other Required Insurance, other than Workers' Compensation and Professional Liability to be secured and maintained by the Contractor under this Section 11.3 and such insurance shall be primary with respect to the named and additional insured status, a severability of interest or separation of insureds provision shall be applicable to each policy. Confirmation of this shall appear on the Certificate of Insurance, and on any and all applicable insurance policies. In addition, a copy of the named or additional insured endorsements, or both, applicable to the policies shall be attached to the Certificate of Insurance. However, this requirement shall not apply to Workers' Compensation Insurance, Employer's Liability Insurance or Professional Liability. With regard

to property insurance, the Contractor shall be designated as an additional named insured relative to the Contractor's insurable interest in damage to property the Contractor owns that is required to be insured under the terms of this Agreement and the County shall be named as a loss payee as their interests may appear.

Section 11.3.5.7 Project Coverage.

Any policy of insurance required to be secured and maintained by the Contractor and the County under this Agreement may provide coverage for other projects or locations outside of the scope of this Agreement. However, any general aggregate policy limit contained in such a policy shall be on a project or location specific basis, such that the total annual coverage relative to the Facility is not subject to depletion by any claims or losses outside the scope of this Agreement. In the alternative, the Contractor's insurance may contain an aggregate reinstatement provision applicable to this Agreement should any aggregate limits be reduced by claims not related to this Agreement.

Section 11.3.5.8 Compliance Mechanisms.

The Contractor may comply with the various requirements of this Section 11.3 and Schedule 11 (Insurance) through the purchase of commercial insurance and/or participation in alternative risk financing programs. However, use of any risk financing mechanism proposed by the Contractor other than through a commercial insurer meeting the requirements of Section 11.3 shall be subject to approval by the County's Director of Risk Management. The County may comply with the various requirements of this Section 11.3 and Schedule 11 through the purchase of commercial insurance, the use of self-insurance and or participation in alternative risk financing programs.

Section 11.3.5.9 No Personal Liability.

No officer or employee of the County shall incur personal liability to the Contractor, nor will any officer, director or employee of the Contractor incur personal liability to the County, for reasonable actions taken in good faith in connection with this Section 11.3.

Section 11.3.5.10 Disposition of Insurance Proceeds.

The proceeds of any insurance received relative to any and all risk property insurance and boiler and machinery coverage identified in Schedule 11 (Insurance) shall be applied to Repair or Replace the damages for which such proceeds are awarded; provided, however, that if the County and the Contractor agree not to Repair or Replace such damages then the proceeds paid with respect to property owned by the County shall be retained and deposited with the County for the County's use and the proceeds paid with respect to property owned by Contractor shall be deposited with the Contractor for the Contractor's use. The proceeds of any insurance received pursuant to commercial general liability insurance, workers' compensation insurance and motor vehicle liability insurance identified in Schedule 11 (Insurance) shall be applied to satisfy claims for which such proceeds are awarded. The proceeds of any insurance received pursuant to business interruption and extra expense insurance identified in Schedule 11 (Insurance) shall be deposited with the County for its exclusive benefit and use which proceeds or portion thereof shall be reimbursed to the Contractor to the extent recognized under this Agreement.

Section 11.3.5.11 Non-Recourse Against County.

All insurance policies required to be secured and maintained by a Party under this Agreement shall provide that each insurance company shall have no recourse against the other Party for payment of any premiums or for assessments under any form of policy.

Section 11.3.5.12 No Representation of Coverage Adequacy.

The insurance coverages as required in this Section 11.3 represent that amount of insurance coverage considered by the County in its reasonable judgment to be proper and prudent for this Agreement, but the County is not representing that the coverages and limits required will necessarily be adequate to protect the Contractor, and such coverages in limits shall not be construed, nor deemed to be a limitation on the Contractor's liability under this Agreement. As provided for in Section 11.3.1.1, the Contractor may obtain, at the Contractor's sole cost and expense, any other insurance coverages or increased limits as the Contractor may require for the Contractor's benefit in addition to that specified in this Section 11.3.

Section 11.3.5.13 Authorization and Licensing of Agent.

Each and every agent acting as authorized representative on behalf of the companies affording coverage under this Agreement shall warrant, when signing the Certificate of Insurance, that specific authorization has been granted by the companies for the agent to bind coverage as required and to execute the Certificate of Insurance as evidence of such coverage. In addition, each and every agent shall warrant when signing the certificate of insurance that the agent is licensed to do business in the State and that the company or companies are currently in good standing in the State. If a broker is representing either the Contractor or the County, any binders may be signed by carrier underwriters.

Section 11.3.5.14 Verification of Pass Through Costs.

For all premium costs and reasonable broker fees for any policy of Required County Insurance whose obligation to secure and maintain becomes the Contractor's obligation pursuant to the request of the County as provided in Section 11.3.1, such actual fees and costs shall be a Pass Through Cost. The Contractor shall provide documentation evidencing

that such premium costs and reasonable broker fees are limited Required Contractor Insurance as well as the composite insurance pricing rates for each of the same. For such transferred insurance policy obligation that is not priced on a composite rate, the Contractor shall provide (a) the total premium for the applicable policy and (b) the exposure base related to such policy.

Section 11.3.5.15 Submittals to County's Authorized Representative.

All notices and Notices, directions, submittals to either the County's Director of Risk Management or the Contractor's Authorized Representative to the other, or both, decisions, certificates, binders and other information to be filed or delivered by the County's Director of Risk Management or the Contractor's Authorized Representative, or both, pursuant to this Section 11.3, shall also be filed or delivered (at least a copy thereof) to the County's Authorized Representative for informational and administrative purposes only and not for any substantive purpose under this Agreement.

Section 11.3.5.16 ACORD Form Compliance.

All Certificates of Insurance provided or to be provided or to be provided under this Section 11.3 shall be on ACORD 25 or the most current appropriate ACORD form or as a policy endorsement.

Section 11.3.5.17 Insurance Required for Section 10 Projects.

Prior to the commencement of Work by or on behalf of Contractor on any Project, the Authorized Representatives shall meet and discuss whether the County will require the Contractor to secure and maintain any additional insurance during the pendency of construction on such Project. If any additional insurance is required for construction of such Project, the actual premium costs and reasonable broker fees for any such insurance policy(ies) shall be included in the construction price for each such Project; provided, however, all insurance

for services provided (a) under Schedule 19 (Technical Recovery Plan) shall be included in the Technical Recovery Plan Management Fee and (b) after the Initial Operating Period that is/are a Technical Recovery Project, shall be included in the cost of each such Project, and in the case of both (a) and (b), not as additional insurance under this Section 11.3.5.17. The Contractor shall insure that its Subcontractors performing Work on any Project shall secure and maintain appropriate insurance covering their portion of the Work that is so associated.

Section 11.4 Security Instruments.

Section 11.4.1 Aggregate Amount; Requirements.

At all times during the Term, the Contractor shall secure and maintain, at its sole cost and expense, one or, as applicable to the Letter of Credit, two, Security Instrument(s) (as defined below) in the aggregate face amount of fifteen million dollars (\$15,000,000.00), as adjusted by the Adjustment Factor. The Contractor shall not perform any Work unless and until it secures, executes and delivers the Security Instrument(s) to the County. As used in this Section 11.4, the term "Security Instrument(s)" shall mean, at the option of the Contractor, one Performance Bond (as defined in Section 11.4.2) in the face amount of fifteen million dollars (\$15,000,000.00) or two Letter(s) of Credit (as defined in Section 11.4.3). The two Letters of Credit shall (a) be of approximately equal value totaling in the aggregate, fifteen million dollars (\$15,000,000.00), (b) each have a term offset by a minimum of six (6) Months from the other Letter of Credit as more specifically addressed in Section 11.4.3 and (c) meet the requirements of this Section 11.4 with no gaps in coverage during the Term unless this Agreement is terminated sooner in accordance with its terms. The Parties understand that if the Contractor elects to secure a Performance Bond to comply with Sections 11.4.1 and 11.4, such Performance Bond will have to be renewed or underwritten annually with the same or different Qualified Financial

Institution meeting the requirements of Sections 11.4.1 and 11.4.2. Further, during the Initial Operating Period, the Contractor shall secure and maintain Payment and Performance Bonds in the face amount of, for a term of and in compliance with other requirements specified in Section 11.4.4. Failure of the Contractor to secure, maintain or substitute the Security Instrument(s) in accordance with the requirements of this Section 11.4 shall be an Event of Default by the Contractor.

Section 11.4.2 Performance Bond.

If the Security Instrument is a performance bond, the performance bond must satisfy the following requirements (the "Performance Bond"):

- (a) Shall comply with Applicable Law, including Section 255.05 Florida Statutes, where applicable;
- (b) Shall be executed to and for the benefit of the County;
- (c) Secure the Contractor's performance of its scope of Work in the time and manner prescribed in this Agreement;
- (d) Shall be substantially in the form attached hereto as Schedule 8 (Form of Performance Bond);
- (e) Shall be underwritten by a surety authorized and licensed to do business in the State as a surety company and otherwise acceptable to the County; provided, however, that the surety shall be rated as "A" or better by S&P or rated as "A3" or better by Moody's or have an A.M. Best rating of "A-" or better and Class IX or higher as to financial size category; and
- (f) Shall specify that such bond shall be subject to and governed by Florida law.

In addition, if, during the Term, the surety for a bond is declared bankrupt, becomes insolvent, has its right to do business in the State terminated or it ceases to meet the requirements described above, the Contractor shall, within thirty (30) Days thereafter, substitute another Performance Bond, subject to County approval that such substitute bond satisfies the requirements specified above.

Section 11.4.3 Letters of Credit.

If the Security Instrument(s) are the two Letters of Credit (as defined below), the Letters of Credit must be issued in the names of and to the County and satisfy the following requirements (the "Letters of Credit"):

- (a) Shall specify that it shall be subject to and governed by Florida law;
- (b) Shall be issued by a Qualified Financial Institution in form and substance as provided in Schedule 9 (Irrevocable Letter of Credit), or as may otherwise be acceptable to the County;
- (c) The term of the (i) first Letter of Credit shall be for six (6) Months and (ii) the second Letter of Credit shall be for one (1) year, in each case, following the date of delivery of each such Letters of Credit to the County's Authorized Representative. At least sixty (60) Days prior to the expiration of the term of each such Letter of Credit, the Contractor shall renew the applicable Letter of Credit for a one (1) year term. The Contractor shall repeat such renewal process each year thereafter for the Term (so long as the Security Instrument(s) include a Letter of Credit), and such renewal shall be through a Qualified Financial Institution;
- (d) Shall require that the Qualified Financial Institution and any agent bank at which such Letters of Credit may be presented shall be instructed that the bank is to

honor any draft that the Director and the County Administrator may present without prior notice to the Contractor or the Guarantor; and

(e) Shall require such agent bank to make all payments to the Director and the County Administrator without obligation to notify the Contractor, the Guarantor or any Affiliate of such payment upon filing the documents specified therein and that the Contractor or the Guarantor shall not have first claim rights to such Letters of Credit or any right to make drawings thereunder. The Director and the County Administrator shall have the right to present such Letters of Credit for payment immediately and without notice upon the occurrence of an Event of Default of this Agreement.

In addition, if during the Term, the Qualified Financial Institution or its parent corporation experience a downgrade, withdrawal or suspension by or from Moody's or S&P (as such terms are defined in the definition of Qualified Financial Institution) below the required rating level, the County shall have the right to require that the Contractor, within thirty (30) Days after Notice of such downgrade, withdrawal or suspension is given by the County's Authorized Representative to the Contractor's Authorized Representative, secure a substitute Letter of Credit from a Qualified Financial Institution in accordance with the requirements of this Section 11.4.3, and failure to secure such substitute Letter of Credit in the time allowed shall result in the Director and the County Administrator having the right, without Notice to the Contractor, to draw on such Letter of Credit immediately and both Letters of Credit shall recognize such Director's and the County Administrator's right. The Contractor's Authorized Representative shall give the County's Authorized Representative promptly upon receipt, a copy of any notice or information it may receive relative to any downgrade, withdrawal or suspension.

Section 11.4.4 Project Performance and Payment Bonds.

In addition to any Performance Bond the Contractor may secure and maintain pursuant to Section 11.4.2, the Contractor shall separately secure prior to the commencement of Work on each and every Project and maintain throughout until completion of the same, including, as applicable, acceptance tests, a Performance Bond and a Payment Bond in the amount of the Parties' agreed to fixed price for each such Project or if there is no fixed cost, the Maximum Project Price of each such Project as agreed to by the Parties. If requested by the Contractor, the County may, in its reasonable discretion, agree in writing to waive the Contractor's obligation to secure a Payment Bond and a Performance Bond for each Project so long as the Contractor secures and maintains, prior to commencement of Work on any Project, one Payment Bond and Performance Bond in the face amount of the aggregate, good faith estimated cost of all identified Projects and all associated Work to be performed by the Contractor for the applicable period. The Parties shall agree on the good faith estimated costs for the applicable period before the Contractor shall secure the applicable Performance Bond and Payment Bond. Any Performance Bond and Payment Bond secured and maintained under this Section 11.4.4 shall comply with the requirements specified in Section 11.4.2. There shall be no gaps in coverage of the Performance Bond and Payment Bond regarding each Project.

Section 11.5 Guaranty.

On or before the Contract Date, the Guarantor shall have executed and delivered the Guaranty attached hereto as Schedule 10 (Guaranty) to the County's Authorized Representative.

Section 11.6 Audits.

The Contractor shall, with thirty (30) Days after each Billing Year, provide to the County's Authorized Representative the Guarantor's most recent Audited Financial Statements,

or if such Audited Financial Statements are not prepared, Unaudited Financial Statements; provided, however, if Unaudited Financial Statements are delivered to the County and the Guarantor's Audited Financial Statements are subsequently prepared or become available, the Contractor shall promptly deliver the Guarantor's Audited Financial Statements to the County's Authorized Representative. The County shall also have the right to audit the Contractor's invoices for fees, expenses, costs and charges under the Agreement at any time at the County's sole cost and expense; provided, however, the County shall not have the right to audit that portion of any Contractor invoice for a fixed fee or lump sum payment. The Contractor shall fully cooperate with the County regarding any and all such audits.

SECTION 12
EVENTS OF DEFAULT

Section 12.1 Remedies for Default.

As set forth in Section 12, the Contractor or the County may, in accordance with the requirements of this Agreement, terminate this Agreement upon the occurrence of an Event of Default by Notice to the other Party. The Parties agree that in the event of the breach by either Party of an obligation under this Agreement, neither Party shall have the right to terminate this Agreement except for and as a result of an Event of Default as described in Sections 12.2 and 12.3.

Section 12.2 Events of Default by the Contractor.

Each of the following shall constitute an Event of Default on the part of the Contractor:

Section 12.2.1 Failure or Refusal to Perform.

Except to the extent the Contractor is granted relief pursuant to Sections 3.1 and 10.6 with respect to Schedule 2 (Performance Guarantees) and Schedule 7 (Utility and Reagent Utilization Allowances) or any other obligations hereunder, the persistent or repeated failure or refusal by the Contractor to perform timely any material obligation under this Agreement, unless such failure or refusal is clearly recognized, excused or justified by the terms and conditions of this Agreement; provided, however, insofar as failure or refusal relates to (a) failure to meet a payment obligation of the Contractor, Section 12.2.2 shall govern, (b) the accumulation of Withholdings, regardless if reimbursed by the County, exceeding five hundred thousand dollars (\$500,000.00) over any twelve (12) Month rolling period, Section 12.2.3 shall govern, (c) the failure to maintain Required Contractor Insurance, and, as applicable, the Performance Bond and

the Letters of Credit, all pursuant to Section 11, Section 12.2.4 shall govern, (d) the failure to maintain solvency, Section 12.2.5 shall govern, (e) a default of the Guarantor under the Guaranty, Section 12.2.6 shall govern, (f) any untrue representation or warranty, Section 12.2.7 shall govern, (g) failure of senior executive officers to appear before the Board of County Commissioners pursuant to Section 8.2.7.8.1, Section 12.2.8 shall govern, and (h) failure to maintain a certain On-Peak Capacity Factor and a Total Capacity Facility on a minimum twelve (12) month rolling average basis under the Power Purchase Agreement, Section 12.2.9 shall govern.

Section 12.2.2 Failure or Refusal to Make Payment.

Failure of the Contractor to pay all undisputed amounts or any amounts required to be paid to the County under this Agreement within thirty (30) Business Days after the due date shall be a Contractor event of Default; provided, however, the County's Authorized Representative shall have given Notice of any such non-payment to the Contractor's Authorized Representative after the due date and prior to fifteen (15) Business Days before the County exercises its rights under this Section 12.2.2.

Section 12.2.3 Accumulation of Withholdings.

If, during any twelve (12) Month rolling average period, the total aggregate accumulated amount of Withholdings, regardless of whether any amounts thereof are reimbursed by the County, exceed five hundred thousand (\$500,000), a Contractor Event of Default shall be deemed to have occurred.

Section 12.2.4 Failure to Maintain Security Obligations.

Failure of the Contractor to obtain, maintain and, as applicable, renew in a timely manner, the Contractor's Required Insurance and, as applicable, the Performance Bond or

Letters of Credit, all in accordance with Sections 11.3.11.4 and 11.3.11.4, respectively, shall be a Contractor Event of Default.

Section 12.2.5 Failure to Maintain Solvency.

Failure of the Contractor or the Guarantor to maintain solvency, as determined under the applicable definition of “insolvent” contained in 11 U.S.C. §101(32), as amended, shall be a Contractor Event of Default. The occurrence of any of the following are deemed a failure to maintain solvency:

(a) inability, failure, or refusal to pay debts as they mature; entry into an arrangement by the Contractor or the Guarantor with or for the benefit of their creditors; the Contractor’s or the Guarantors consent to or acquiescence in the appointment of a receiver, trustee, or liquidator for a substantial part of the Contractor’s or the Guarantors property; or

(b) a bankruptcy, winding up, reorganization, insolvency, arrangement, or similar proceeding instituted by or against the Contractor or the Guarantor under the laws of any jurisdiction, which proceeding is not dismissed within sixty (60) Days of filing; or

(c) any action or answer in a bankruptcy, winding up, reorganization, insolvency, arrangement, or similar proceeding in which the Contractor or the Guarantor approve of, consent to, or acquiesce in, any such proceeding; or

(d) the levy of any distress, execution, or attachment upon the property of the Contractor or the Guarantor which shall substantially interfere with its performance hereunder; provided, however, that with respect to the Contractor only, this form of insolvency shall not be deemed to have occurred if the insolvency is caused primarily by the County’s failure to make a payment due pursuant to Section 8 within forty-five (45)

Days of when it becomes due and payable. In the event of the Contractor or the Guarantor being or becoming insolvent or bankrupt, the Contractor shall (1) assume or reject this Agreement within sixty (60) Days after the order for relief; (2) promptly cure any failure to perform its obligations or any Event of Default arising under this Agreement for reasons other than the event set forth in this paragraph; (3) compensate or provide adequate assurance that it will promptly compensate the County for any amounts due the County under this Agreement; and (4) provide adequate assurance of future performance under this Agreement under 11 USC §365(b)(1)(c), or any successor provision of the Federal Bankruptcy Code which adequate assurance shall include the posting of a letter of credit or other security by the Contractor or the Guarantor in an amount sufficient to secure their obligations under this Agreement and the Guaranty. The foregoing provisions shall not prevent the County from requesting such other conditions to assumption of this Agreement, as it deems reasonable and necessary.

Section 12.2.6 Guarantor Default Under the Guaranty.

The failure of the Guarantor to comply with its obligations thereunder in accordance with the terms and conditions therein shall be a Contractor Event of Default.

Section 12.2.7 Untrue Representation or Warranty.

Any representation or warranty of the Contractor under this Agreement or the Guarantor under the Guaranty, that is materially untrue as and when made, or, as applicable, reconfirmed shall be a Contractor Event of Default.

Section 12.2.8 Failure of the Senior Executive Officer to Appear Before Board.

Failure of the Senior Executive Officer of the Contractor and/or the Guarantor to appear before the Board of County Commissioners to explain the reasons for payment of a regulatory fine pursuant to Section 8.2.7.8.1 shall be a Contractor Event of Default.

Section 12.2.9 Failure to Maintain Electric Capacity Factors.

(a) Failure of the Contractor to maintain, at a minimum, on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, an On-Peak Capacity Factor of sixty percent (60%) in any Month during the Initial Operating Period shall be a Contractor Event of Default.

(b) Failure of the Contractor to maintain, at a minimum, on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement, both an On-Peak Capacity Factor of seventy percent (70%) and a Total Capacity Factor of seventy percent (70%) in any Month during the period beginning on the first Day following the Initial Operating Period and ending on the first anniversary thereof shall be a Contractor Event of Default; provided, however, a Contractor Event of Default shall be deemed to have occurred upon the occurrence of the earlier of (1) failure of the Contractor in any Month to achieve and maintain by the end of such calendar year and thereafter during the Term both an On-Peak Capacity Factor of seventy-five percent (75%) and a Total Capacity Factor of seventy-five percent (75%) on a twelve Month rolling average basis pursuant to the Power Purchase Agreement or (2) upon achievement, if at all, of both a seventy-five percent (75%) On-Peak Capacity Factor and a seventy-five percent (75%) Total Capacity Factor on a twelve (12) Month rolling average basis pursuant to the Power Purchase Agreement during such calendar year and once achieved, failure in any Month to maintain both such seventy-five percent (75%) capacity factor levels during the Term as

measured on a twelve (12) Month rolling average basis pursuant to Power Purchase Agreement, shall, in either case, be a Contractor Event of Default.

Section 12.3 Events of Default by the County.

Each of the following shall constitute an Event of Default on the part of the County.

Section 12.3.1 Failure or Refusal to Perform.

The persistent and repeated failure of the County to perform timely any material obligation under this Agreement unless such failure is clearly recognized, excused or justified by the terms and conditions of this Agreement shall be a County Event of Default, except for an Event of Default described in Sections 12.3.2 and 12.3.3.

Section 12.3.2 Failure or Refusal to Make Payments.

Failure of the County to pay undisputed amounts due and owing to the Contractor under this Agreement in accordance with the applicable timeframes under the Local Government Prompt Payment Act shall be a County Event of Default; provided, however, the Contractor shall have given Notice of any such non-payment to the County's Authorized Representative after the due date and prior to the fifteen (15) Business Days before the Contractor exercises its rights under this Section 12.3.2.

Section 12.3.3 Failure to Maintain Insurance.

Failure of the County to secure and maintain the County's Required Insurance in accordance with Section 11.3 shall be a County Event of Default.

Section 12.4 Default Notice.

Neither Party may exercise its termination rights pursuant to Section 13.1 or 13.2, as applicable, unless and until such Party shall have given the other Party Notice of its failure or

refusal to perform pursuant to, as applicable, Section 12.2 or 12.3. If an Event of Default specified in a required Notice of Default pursuant to this Section 12.4 is cured within thirty (30) Days after such Notice or if an Event of Default cannot be cured within thirty (30) Days through the exercise of due diligence, but expeditious and substantive steps are taken within said thirty (30) Day period to cure the Event of Default and thereafter pursued with due diligence to completion with completion occurring within a period not to exceed one hundred twenty (120) Days, no Event of Default shall occur pursuant to such Notice; provided, however, (a) if repeated Cures (no more than two in any Billing Year or three over any rolling three consecutive Billing Year period) are undertaken to address Events of Default under Section 12.2, or 12.3, other than Section 12.2.5, the County or the Contractor may, as applicable, notwithstanding this Section 12.4 to the contrary and in the applicable Party's sole judgment, exercise its right to terminate pursuant to Section 13.1 or, as applicable, Section 13.2 and (b) there shall be no cure period for an Event of Default pursuant to Section 12.2.5 and the County may terminate the Contractor immediately under this Agreement upon Notice to the Contractor for an Event of Default under Section 12.2.5.

SECTION 13
TERMINATION

Section 13.1 Termination by the County.

Section 13.1.1 Contractor Event of Default.

The County shall, in accordance with the provisions of this Agreement, have the right to terminate this Agreement for a Contractor Event of Default. Should such a Contractor Event of Default occur, the County shall, subject to Section 12.4, have the right to terminate this Agreement as of the thirtieth (30th) Day after providing the Contractor with Notice of such termination; provided that: (a) such termination shall be ineffective if within such thirty (30) Day period the Contractor cures such Event of Default and (b) such termination may be stayed, at the sole option of the County, pending cure of such Event of Default. If this Agreement is terminated, the County shall have no liability to the Contractor as a result of such termination under this Agreement, except that the Contractor shall be paid those amounts due and owing pursuant to Section 8 through the date of such termination. Termination of this Agreement by the County for an Event of Default by the Contractor shall not prejudice any rights the County may have under this Agreement and shall specifically not impair the County's right against the surety pursuant to the terms of the Performance Bond and the Qualified Financial Institution issuing the Letters of Credit required under this Agreement nor shall it adversely impact its rights against the Guarantor. Further, such County termination shall have no adverse impact on the Contractor's obligation to provide (a) transition assistance pursuant to Section 13.1.4, (b) licenses, certain information and assignment of contracts pursuant to Section 13.6, and (c) transition operations and assistance pursuant to Section 13.1.4. In any and all events, the Contractor shall comply with its obligations under Sections 3.14 and 3.32.4.

Section 13.1.2 Termination Damages.

In the event the County terminates this Agreement as a result of a Contractor Event of Default, the Contractor shall be liable to pay the County for all actual damages as a result of such termination. For purposes of this Section 13.1.2, the Parties agree and stipulate that actual damages shall include all of the County's costs and expenses relative to securing and procuring both a short-term (interim operations) and long-term replacement Facility operator.

Section 13.1.3 Sole and Exclusive Remedy.

The County's sole and exclusive remedies as a result of any termination of this Agreement by the County pursuant to Section 13.1.1 shall be the County's remedies and damages pursuant to Sections 13.1.1 and 13.1.2 and the County waives all other remedies. Such remedies and damages payments shall be in full settlement of any Losses incurred by the County in connection with any such termination. In no event shall the County be entitled to any prospective profits.

Section 13.1.4 Transition Assistance.

On and after the occurrence of an Event of Default by the Contractor, through termination and for thirty (30) Days following the termination date or, as applicable, the expiration of the Term and for one year prior to and for thirty (30) Days following the expiration of the Term, the Contractor shall cooperate with the County in providing access to the Facility and Facility Site to potential subsequent operators of the Facility to inspect and examine the same as often as may be reasonably requested by the County and to make available and to provide access to such operations, construction, operation and maintenance data and information, other than Cost Records, to the extent such information is not protected from disclosure by Applicable Law, provided that such access to the Facility, the Facility Site and to construction,

operation and maintenance data and information shall not unreasonably interfere with the Contractor's operation and maintenance of the Facility and (b) not restrict its supervisors, managers and personnel performing services at the Facility from being fully available to the County for employment or attempted employment by the County or potential successor operators if this Agreement is terminated or will expire or has expired. Additionally, the Contractor shall, during such periods, make available all information in its control reasonably required to operate the Facility. The Contractor shall, during such periods, fully cooperate with the County in its endeavor to ensure a smooth, uninterrupted and orderly transition of operational expertise acquired by such Contractor's personnel if this Agreement is terminated or will expire or has expired. The Contractor shall not restrict such personnel from meeting with the County and any potential successor operator, or interfere with their acceptance of offers of employment by the County or potential successor operators during such periods. The Contractor shall also have no covenant or agreement with any of its Facility supervisors, managers or personnel that prohibits, restricts or limits (i) the County or any potential successor operator(s) from hiring such individual(s) or (ii) such individual(s) from being hired by the County or any potential successor operator(s), in each case, in the event of termination or upcoming or actual expiration of the Term.

Section 13.2 Termination by the Contractor.

Section 13.2.1 County Event of Default.

The Contractor shall, in accordance with the provisions of this Agreement, have the right to terminate this Agreement for a County Event of Default. Should such a County Event of Default occur, the Contractor shall, subject to Section 12.4, have the right to terminate this Agreement as of the thirtieth (30th) Day after providing the County with Notice of such

termination; provided, that: (a) such termination shall be ineffective if, within such thirty (30) Day period, the County Cures said default and (b) such termination may be stayed, at the sole option of the Contractor, pending Cure of such Event of Default.

If this Agreement is terminated pursuant to this Section 13.2.1, the County shall pay the Contractor:

(i) the amount the Contractor and its Subcontractors have earned, is entitled to or has accrued as of the termination date but has not been paid in accordance with Section 8, including and Subcontractor cancellation charges that are specifically recognized as being payable under the terms of its subcontracts, plus

(ii) the Contractor's reasonably incurred actual costs of Demobilization, if any, not to exceed the Contractor's Direct Costs, subject to Cost Substantiation, exclusive of Markup, plus

(iii) if this Agreement is terminated during:

(A) the initial (and not extended) Term, a liquidated damage in an amount equal to (x) seven million five hundred thousand dollars (\$7,500,000.00) multiplied by (y) a fraction, the numerator of which is one hundred nineteen (119) less the number of completed Billing Months prior to the Billing Month in which termination is effective, and the denominator of which is one hundred nineteen (119); provided, however, such liquidated damage amount shall never be reduced below two million dollars (\$2,000,000.00); or

(B) any extension period pursuant to Section 15.1.1, a liquidated damage in an amount equal to (x) three million five hundred thousand dollars (\$3,500,000.00) multiplied by (y) a fraction, the numerator of which is fifty nine (59), less the number of completed Billing Months in the extension period prior to the Billing Month in which

termination is effective, and the denominator of which is fifty nine (59); provided, however, such liquidated damage amount shall never be reduced below one million dollars (\$1,000,000.00).

The Contractor shall exercise reasonable efforts to minimize, to the maximum extent possible, any cancellation charges or other costs that are specifically recognized as being payable by the County to the Contractor under this Agreement.

Section 13.2.2 Sole and Exclusive Remedy.

The Contractor's sole and exclusive remedy as a result of any termination of this Agreement by the Contractor pursuant to Section 13.2.1 shall be the payments provided for in Section 13.2.1 and Contractor waives all other remedies. Such payments shall be in full settlement of any Losses incurred by Contractor in connection with any such termination. In no event shall Contractor be entitled to any prospective profits or any damages because of any such termination. Notwithstanding this Section 13.2.2, the Contractor shall also provide the County with (a) the transition assistance pursuant to Section 13.1.4; the licenses, information and contract assignments pursuant to Section 13.6; and (c) the transfer operations assistance pursuant to Section 13.7. In any and all events, the Contractor shall comply with its obligations under Sections 3.14 and 3.32.4.

Section 13.3 Termination for Force Majeure.

If a Force Majeure shall occur relative to a material obligation of either Party, and such Force Majeure or the effect thereof, prevents or is reasonably anticipated to prevent performance of any material obligation by either Party for a period of two hundred seventy (270) Days or will, or is reasonably anticipated to, (a) materially increase the costs of either Party to perform or meet its obligations under this Agreement or (b) materially decrease the revenues to be received or reasonably anticipated to be received under this Agreement, in the case of either (a) or (b), after

accounting for insurance proceeds or other form of security proceeds, the affected Party, upon Notice to the other Party, may, in the affected Party's determination, terminate this Agreement forthwith without payment, damage or penalty other than that specifically provided for in Section 13.3.1(a), (b) and (c) below, notwithstanding that such Force Majeure could be Cured by either Party's actions, which the Party terminating this Agreement determines, in its sole discretion, not to procure, implement or pay for; provided, however, that with respect to any Contractor termination of this Agreement under this Section 13.3, the Contractor shall give the County at least ninety (90) Days Notice of its intent to terminate hereunder. If the County decides within such ninety (90) Day period to Cure such Force Majeure, delivers Notice of such decision to the Contractor and thereafter proceeds with reasonable diligence to Cure such Force Majeure, even if such Cure is not completed within the two hundred seventy (270) Day period, the Contractor may not terminate this Agreement under this Section 13.3 for such Force Majeure. Upon termination under this Section 13.3, neither Party shall be obligated to the other for the payment of any costs or expenses, except as earned and accrued pursuant to Section 8 to the date of termination.

Section 13.3.1 Sole and Exclusive Remedy.

The Contractor's, and, as applicable, the County's, sole and exclusive remedy as a result of any termination of this Agreement by the County or, as applicable, the Contractor, the pursuant to this Section 13.3 shall be the payments provided for in Section 13.3 and the Contractor shall provide the County with (a) the transition assistance pursuant to Section 13.1.4; (b) the licenses, information and contract assignments pursuant to Section 13.6; and (c) the transfer operations and assistance pursuant to Section 13.7, and the Parties waive all other

remedies. In any and all events, the Contractor shall comply with its obligations under Sections 3.14 and 3.32.4.

Such payments and, with respect to the Contractor, provision of such services, shall be in full settlement of any Losses incurred by Contractor in connection with any such termination. In no event shall Contractor be entitled to any prospective profits or any damages or any other payments, damages or penalties, except as provided in Section 13.3, because of any such termination.

Section 13.4 Termination for Fiscal Non-Funding.

The County hereby preserves its fiscal non-funding rights pursuant to Applicable Law, including the State Constitution, Article 7, Sections 10 and 12 and F.S.A. §129.07. If the County elects to exercise its non-funding rights under Applicable Law, the County may, notwithstanding any provision of this Agreement to the contrary, terminate this Agreement effective upon Notice to the Contractor.

If this Agreement is terminated pursuant to this Section 13.4, then the County shall pay to the Contractor (a) the amount the Contractor and its Subcontractors have earned or accrued, or both, to the date of such termination but has not been paid pursuant to Section 8, plus (b) reasonably incurred actual costs of Demobilization, if any, not to exceed the Contractor's Direct Costs, subject to Cost Substantiation, exclusive of Markup, plus (c) Subcontractor cancellation charges that are specifically recognized as being payable, and are actually paid by Contractor, under its subcontracts with the Contractor, plus (d) the liquidated damage amount specified in (i) Section 13.2.1(iii)(A) if this Agreement is terminated during the initial (and not extended) Term or (ii) Section 13.2.1(iii)(B) if this Agreement is terminated during any extension period pursuant to Section 15.1.1. The Contractor shall also exercise all reasonable efforts to minimize, to the

maximum extent possible, any cancellation charges or other costs that are specifically recognized as being payable by the County to the Contractor under the terms of this Agreement.

Subject to the foregoing rights of the County described in this Section 13.4, the Board of County Commissioners, when annually considering its authorization and appropriation of funds relative to this Agreement, shall take into account all of the County's specifically delineated monetary obligations under, pursuant to the terms of, and as limited by, this Agreement, including appropriate contingency amounts and liquidated amounts recognized under this Agreement.

Section 13.4.1 Sole and Exclusive Remedy.

The Contractor's and, as applicable, the County's sole and exclusive remedy as a result of any termination of this Agreement by the County pursuant to this Section 13.4 shall, subject to the payment limitations provided therein, be the payments provided for in Section 13.4 and the Contractor shall provide the County with (a) the transition assistance pursuant to Section 13.1.4; (b) the licenses, information and contract assignments pursuant to Section 13.6; and (c) the transfer operations and assistance pursuant to Section 13.6, and the Contractor waives all other remedies. In any and all events, the Contractor shall comply with its obligations under Sections 3.14 and 3.32.4.

Such payments shall be in full settlement of any Losses incurred by Contractor or the County in connection with any such termination. In no event shall Contractor be entitled to any prospective profits because of any such termination.

Section 13.5 Manner of Payment Upon Termination.

Any amount payable by either Party as a result of termination shall be paid in accordance with the applicable procedures and timeframes under the Local Government Prompt Payment

Act; provided, however, that with respect to Subcontractor cancellation costs and Demobilization costs only that are part of the applicable termination remedy under this Section 13, the Contractor may submit invoices for such amounts for County payment up to three (3) months following the date of termination.

Section 13.6 Obligation of Contractor to Grant License and Supply Proprietary Information to the County and Assignment of Contracts on Termination or Expiration of the Term.

In the event this Agreement is terminated or expires at the end of the Term:

(a) the Contractor shall grant the County or any subsequent operator of the Facility, (1) a non-exclusive license, without payment of royalties, and the Contractor's interest in, any patents and to any "shop right" needed to modify and operate the Facility, for the sole purpose of operating the Facility, and (2)(A) supply any proprietary components needed for the continuing operation of the Facility at their fair market price, subject to the continued availability of such components, provided the Contractor or its supplier has continued the supply of such components or (B) at the Contractor's sole expense, remove any proprietary component, equipment or materials, as the case may be, installed by the Contractor and, in each case, reinstall the original component, Equipment or materials in Acceptable Operating Condition and can use in Acceptable Operating Condition; and

(b) the Contractor shall, to the extent they are assignable and transferable, assign and transfer, for the benefit of the County or any subsequent operator of the Facility, as the case may be, all labor contracts, all maintenance contracts, all supply contracts and all contracts for the sale of Recovered Materials from the Facility, all to the extent the County so determines and requests assignment or transfer thereof from the

Contractor. The Contractor shall, at least thirty (30) Days prior to the termination or expiration of the Term of this Agreement, provide to the County's Authorized Representative the above-referenced contracts for the County's review for purposes of the determination and possible request to be made by the County under this subsection (b).

In addition, at least sixty (60) Days prior to the expiration of the Term or, as applicable, no later than one Week following the County's Notice of termination to the Contractor or the termination of this Agreement due to an Event of Default by the Contractor, the Contractor shall exercise all reasonable efforts to provide to the County or any subsequent operator of the Facility, as the case may be, specifications and shop drawings for all proprietary components of the Facility, and, if applicable, shall also grant the County the right to use those specifications to foster competitive bidding for the proprietary products required for the modification, operation and maintenance of the Facility if the Contractor no longer continues to provide such components, and if alternative components having the same function and use and which are compatible with the Facility are unobtainable at reasonable cost.

In the event that proprietary information is delivered to the County or any subsequent operator of the Facility, as the case may be, under the terms and conditions of this Section 13.6, and in order to protect the proprietary position of the Contractor, the County shall protect and keep to the extent provided by Applicable Law, or any subsequent operator of the Facility be required to agree to take all reasonable measures to protect and keep, or both, confidential, such proprietary information.

Section 13.7 Transfer of Operations on Termination.

If this Agreement is terminated due to a Contractor Event of Default or expires, the Contractor agrees to cooperate with the County, or any Entity scheduled to or who is operating the Facility, by providing initial training and data as may be necessary, in the County's Authorized Representative's sole judgment, subject only to the agreement(s) with respect to proprietary information contained herein, and in exchange therefor, the Contractor shall be paid its Direct Costs, subject to Cost Substantiation, exclusive of Markup.

In the event of such termination or expiration of this Agreement, the County, at its sole discretion, shall have the option to require the Contractor to continue to operate the Facility and if so required, the Contractor agrees to operate the Facility until the earlier to occur of:

- (a) such number of Days required by the County up to and including one year after the date of such termination or expiration with respect to termination due to an Event of Default by the Contractor or Force Majeure, or
- (b) the date on which a subsequent operator of the Facility is substituted for the Contractor.

The County's Authorized Representative shall endeavor to provide as much prior Notice to the Contractor's Authorized Representative of such required operation after the termination of this Agreement or expiration of the Term as reasonably possible. In the event of the exercise by the County of the continued operation of the Facility following the termination or expiration of the Term, in either case, of this Agreement, the County shall pay the Contractor its Direct Costs plus Markup, and all other applicable terms and conditions of this Agreement shall continue in effect for such period as though this Agreement had not been terminated.

Section 13.8 Resumption of Operation.

If the County or Contractor terminates this Agreement pursuant to Section 13.2, Section 13.3 or Section 13.4 and within two (2) years following such termination the County decides to recommence operations of the Facility by a private operator, the County's Authorized Representative shall, within ten (10) Days following such decision, provide Notice of such decision to the Contractor's Authorized Representative. Such Notice shall also provide an offer to the Contractor to reengage it to operate and maintain the Facility through the execution of an agreement that contains all of the same terms, conditions, pricing and guarantees specified in this Agreement; provided, however, the Parties recognize and agree that equitable adjustments may have to be made to such agreement depending on (a) whether the Power Purchase Agreement is and will continue in effect and (b) the then current condition of the Facility. Within twenty (20) Days following its receipt of such Notice, the Contractor shall provide Notice to the County's Authorized Representative as to whether or not it is interested in recommencing its operation and maintenance of the Facility on such terms and conditions and confirming that they still have financial and technical qualifications reasonably acceptable to the County and approximate what they were when the Contractor submitted its response to the RFQ. If the Contractor responds in such Notice that it is not interested in recommencing its operations and maintenance of the Facility on such terms and conditions or the Contractor fails to provide such Notice to the County's Authorized Representative within such twenty (20) Day period, the Contractor shall be deemed to have waived its rights under this paragraph of this Section 13.8.

If the Contractor gives Notice pursuant to the immediately preceding paragraph that it is interested in recommencing operations and maintenance of the Facility on the terms, conditions and equitable adjustments, if any, specified therein, then the Parties shall promptly meet and

develop and negotiate, in good faith, an agreement consistent with the immediately preceding paragraph of this Section 13.8. Failure of the Parties to complete and execute such agreement within one hundred and twenty (120) Days following the Contractor's Notice of such interest shall be deemed a failure of the Parties to reach an agreement and a waiver of the Contractor's rights under this and the immediately preceding paragraphs of this Section 13.8; provided, however, the Authorized Representatives may, in their sole discretion and in writing, extend the one hundred and twenty (120) Day period by such number of Days as they may agree. In no event shall the failure to agree on an agreement or a refusal by either Authorized Representative to extend the period to reach an agreement and execute the same be subject to dispute resolution pursuant to Section 14, and the Parties hereby waive any right they may otherwise have to such dispute resolution.

SECTION 14
RESOLUTION OF DISPUTES

Section 14.1 Procedure.

To facilitate the timely and effective resolution of any controversy or dispute that may arise under this Agreement, the Parties shall establish, at least thirty (30) Days prior to the Commencement Date, a coordination committee consisting of management representatives of the Contractor, the County and the Consulting Engineer (the "Member Entity(ies)"). Such representatives on the coordination committee shall be appointed by each Member Entity within such thirty (30) Day period prior to the Commencement Date, and Notice of such appointment shall be delivered to each member Entity. The appointed representatives are subject to change, and Notice of any such change by any Member Entity shall be delivered to all other Member Entities.

To the extent that the Parties, after good faith attempts, cannot resolve any controversy or dispute that may arise under this Agreement, (a) either Party, to the extent that its interests are adversely affected, may refer the matter to mediation in the State in accordance with Section 14.2 by a mediator selected pursuant to Section 14.3.1 and such mediator shall assume exclusive jurisdiction over the matter in controversy or (b) if the Parties agree that the matter primarily involves Technical Issues and desire that the Independent Engineer resolve the matter, the matter shall be referred to the Independent Engineer for resolution and such Independent Engineer shall assume exclusive jurisdiction over the matter in controversy. Neither the decision of the mediator nor the decision of the Independent Engineer shall be binding on the Parties, and either Party, after the mediator renders his or her recommendation or, as applicable, the Independent Engineer renders his or her decision, may refer the matter, exclusive of any other jurisdictional

forum, to the Sixth Judicial Circuit Court for Pinellas County, Florida. The Contractor may, in its discretion, join Subcontractor(s) in any resolution of disputes under this Section 14.

Section 14.2 Procedure for Referral and Decision.

Section 14.2.1 Mediator Referral and Decision.

Either Party may refer a matter in controversy to the mediator by delivering Notice of its claim and intention of pursuing mediation to the other Party. The Notice shall state in detail the contested matter and the initiating Party's basis for its opinion. Such Notice shall be delivered by the County's Authorized Representative and the Contractor's Authorized Representative to each such Party's selected mediator. Once the mediator is selected pursuant to Section 14.3.1, such mediator shall promptly convene, establish the procedures for the mediation and recommend resolution of the matter in controversy by written memorandum to the Parties.

Section 14.2.2 Independent Engineer Referral and Decision.

If the Parties agree to have the Independent Engineer render a decision on the matter in controversy, they shall refer the matter to the Independent Engineer selected by the County's Authorized Representative pursuant to Section 14.3.2. Within three (3) Days after the selection of the Independent Engineer, the Parties shall each provide to the Independent Engineer written notice stating in detail the contested matter and such Party's basis for its position. Within five (5) Days thereafter, the Parties shall meet with the Independent Engineer to resolve the matter in controversy. Within five (5) Business Days after such meeting or as soon thereafter as possible, the Independent Engineer shall decide the matter in controversy and issue a written memorandum decision to the Parties.

Section 14.3 Selection of the Mediator and the Independent Engineer.

Section 14.3.1 Selection of Mediator.

If the matter in controversy is referred to mediation pursuant to Section 14.1, each Party, within five (5) Days of the delivery of the Notice pursuant to Section 14.2, shall select a mediator from the Sixth Judicial Circuit Court for Pinellas County, Florida's list of certified and approved mediators. Each Party shall give Notice of such selection to the other Party and each Party's selected mediator. The selected mediators shall then select a third mediator from such court list and such third mediator shall serve as the mediator for the matter in controversy. Once selected, the Parties shall, within three (3) Days thereafter, deliver a copy of the Notice specified in Section 14.2.1 to such mediator. The mediator's costs and expenses shall be shared equally by the Parties.

Section 14.3.2 Selection of the Independent Engineer.

At least thirty (30) Days prior to the Commencement Date, the Parties shall meet to select and agree in writing on two engineering firms, each of which has the qualifications to serve as Independent Engineer. Such engineering firms shall be given Notice of such selection by the Parties and the Parties shall secure their agreement to serve as the Independent Engineer and be referred to any one of them for determination pursuant to Section 14.2.2. If one or more of such engineering firms shall not agree to serve as the Independent Engineer, the Parties shall select and agree on replacement engineering firms and secure their acceptance to serve until those engineering firms have agreed to so serve in such position. The engineering firm selected by the County's Authorized Representative from those two firms agreed upon by the Parties shall be the Independent Engineer for purposes of rendering a decision on the matter in controversy between the Parties. In no event shall a selected Independent Engineer be compensated or

perform services unless and until a matter is referred to such Independent Engineer for resolution pursuant to the procedures specified in this Section 14.3.2. The Independent Engineer's costs and expenses after referral of the matter to it for resolution shall be shared equally by the Parties. The Independent Engineer agreed upon by the Parties may not perform any engineering or consulting services for the Parties during the Term of the Agreement. If one of the Parties desires to use one of the selected firms for work, they shall promptly notify the other Party and the Parties shall identify another engineering firm to potentially serve as the Independent Engineer.

Section 14.4 Obligation to Continue to Perform.

The Parties shall continue to perform their respective obligations under this Agreement pending resolution of any dispute(s) unless the matter at issue precludes such continued activity until resolved.

SECTION 15
MISCELLANEOUS

Section 15.1 Term.

This Agreement, unless sooner terminated in accordance with its terms, shall be effective during the Term; provided, however, solely for purposes of the Contractor's compliance with its obligations under the Transition Plan, this Agreement shall, for such limited purposes, be effective during the Transition Period.

Section 15.1.1 Extension of Term.

The County, in its sole discretion, shall have the right to extend the Term twice, each for an extension period of five (5) years, for a total extension and renewal period of ten (10) years. The Contractor shall have the right, however, not to agree to any extension. An extension of this Agreement, if any, shall be pursuant to an amendment executed by the Parties, to this Agreement. Nothing in this Section 15.1 shall obligate the County to extend the Term or obligate the Contractor to agree to any extension.

Section 15.1.2 Period of Extension of Term Discussions.

Commencing three (3) Billing Years prior to the end of the Term, the Parties shall commence and schedule and hold meetings and discussions to provide for (a) Agreement closeout or transition, or both, or (b) a potential extension of the Term, or both. The Contractor shall fully cooperate in such activities.

Section 15.2 Assignment and Control.

Section 15.2.1 Assignment.

This Agreement shall not be assigned by either Party without the prior written consent of the other Party, and the Contractor shall not enter into any contractual agreement with a third party for the delegation to such third party of performance obligation of the Contractor of any part of this Agreement without the prior written consent of the County, which consent may be withheld by the County in its sole discretion; provided, however, the Contractor may, without such consent, assign its interest and obligations hereunder to (a) an Entity acquiring all or substantially all of the business and assets of the Contractor by merger, consolidation, transfer of assets or otherwise, or to (b) an Affiliate; provided, however, that such assignment shall not relieve the Guarantor from its obligations and undertakings under the Guaranty, and the Guarantor shall execute such documents as are necessary to assure that the Guaranty shall continue and remain in full force and effect; provided, further, that the Contractor's Performance Bond and the Letters of Credit required to be secured and maintained pursuant to Sections 11.4.1 - 11.4.4 shall remain in full force and effect and the surety and the Qualified Financial Institution shall execute such documents as are necessary to ensure that said Performance Bond and Letters of Credit remain and continue in full force and effect in accordance with its terms. Any other assignment of this Agreement by the Contractor without the express prior written consent and approval of the County, except as expressly recognized herein, shall be of no force and effect and null and void at inception. It is understood and agreed between the Parties that this Section 15.2 shall not be interpreted or construed to restrict the Contractor's ability to employ Subcontractors in connection with the performance of portions of its obligations hereunder, except that the

Contractor shall be restricted or limited in its ability to employ or secure Subcontractors to perform the Work pursuant to Section 15.7.

The County may assign this Agreement without the prior written consent of the Contractor to (i) a successor by merger or consolidation or a duly constituted authority or similar entity created by the County or by State legislation to which all or substantially all the System assets (including this Agreement) are transferred or assigned or (ii) a bank trustee as collateral for, or otherwise in connection with, the financing or refinancing of all or part of the Facility.

Section 15.2.2 Control.

Neither the Contractor nor the Guarantor shall transfer, sell, relinquish or otherwise convey in any form, indirectly or directly, Control to any Entity without the prior written consent of the County, which consent may be withheld in the County's sole discretion; provided, however, the County's prior written consent shall not be required if Control of the Contractor or Guarantor is transferred, sold, relinquished or otherwise conveyed to another Entity in a single transaction in which at least a majority of the waste-to-energy facilities (including the Facility) owned or operated, or both, by Guarantor and its Affiliates as of the Contract Date are transferred, sold or otherwise conveyed to such Entity; provided, further, however, that such transfer, sale or other conveyance of Control shall not relieve the Guarantor from its obligations and undertakings under the Guaranty, and the Guarantor shall execute such documents as are necessary to assure that the Guaranty shall continue and remain in full force and effect. To the extent the Contractor or Guarantor attempts or does transfer, sell, relinquish or otherwise conveys in any form, indirectly or directly, Control to any Entity in violation of this Section 15.2.2, such action shall be null and void at inception and of no force and effect. The

Guarantor shall not authorize, institute, condone, accept, direct or promote any action by the Contractor to attempt to transfer, sell relinquish or otherwise convey Control to any Entity.

Section 15.3 Transition Plan.

The Contractor shall comply with the requirements of the Transition Plan during the Transition Period, which Transition Plan, as of the Contract Date, has been mutually agreed to and attached hereto as Schedule 17 (Transition Plan).

The Parties recognize that it is to their benefit and in their respective interest to have a Contractor representative located on or adjacent to the Facility Site during the Transition Period. The Parties believe that such an accommodation will facilitate a smooth and orderly transition from the Prior Contractor to the Contractor and the assumption of the Contractor's obligations under this Agreement. Accordingly, the County agrees to provide an office to the Contractor's representative in the Division of Solid Waste administration building or other office building located on or adjacent to the Facility Site during such Transition Period. The Transition Plan shall include a provision for such accommodation, including the terms and conditions associated therewith.

Section 15.4 Industrial Property Rights.

The Contractor shall pay all royalties and license fees relating to its performance of its obligations hereunder. The Contractor, on behalf of itself and all Subcontractors, hereby warrants that the Work, the use of any component thereof and the use of any article, machine or process, software license or a combination of any or all of the foregoing, by the County or any third party Entity shall not infringe any patent, trademark, copyright or license of any other Entity. Subject to the penultimate paragraph of this Section 15.4, the Contractor shall defend any claim or

lawsuit brought against any Indemnified Parties, for infringement of any patent, trademark or copyrights relating to the Work and the subsequent operation of the Projects, items in the Technical Recovery Plan, all Repairs or Replacements and Punch List Items or for the unauthorized use of trade secrets by reason of Projects, items in the Technical Recovery Plan, all Repairs or Replacements and Punch List Items design, construction or operation, or the Contractor may, at its option, acquire the rights of use under infringed patents, trademarks, copyrights or trade secrets, or modify or replace infringing Equipment with Equipment equivalent in quality, performance, useful life, technical characteristics and development so that such Equipment or other property does not so infringe, and the Contractor shall indemnify the Indemnified Parties and hold each and all harmless against all Losses recovered against any Indemnified Party sustained by, in whole or in part, by reason of any such actual or alleged infringement of any patent, trademark, copyright or the unauthorized use of any trade secret.

Notwithstanding the foregoing of this Section 15.4, if (a) the Contractor fails to complete a Cure of a Punch List Item(s) pursuant to Section 6.3 and the County elects to Cure the Punch List Item(s) pursuant to Section 6.4 and 6.5 or (b) the County elects to secure the services of an Entity other than the Contractor to develop a Project pursuant to Sections 10.1 or 10.2, and in the case of either (a) or (b), the County selects, procures or otherwise acquires Equipment for installation and use as part of effecting a Cure or the development of the Project, the County shall either (i) assign such warranties for such Equipment to the Contractor or (ii) as the beneficiary of any warranty relative to such Equipment, enforce any such warranty, in which case the Contractor shall not be deemed to be in violation of its enforcement and indemnification obligations under this Section 15.4 or that is part of the Facility as of the Commencement Date.

The obligation of the Contractor to defend any claim or lawsuit brought against any Indemnified Parties for the infringement of any patent, trademark or copyright relating to the Work shall not be applicable to any infringement that relates specifically to Equipment that was acquired (a) by the Contractor at the direction of the County or (b) by the County in the exercise of its rights pursuant to the second paragraph of this Section 15.4.

Section 15.5 Relationship of the Parties.

Except as explicitly provided herein, neither Party to this Agreement shall have any responsibility whatsoever with respect to services provided or contractual obligations assumed by the other Party and nothing in this Agreement shall be deemed to constitute either Party a partner, agent or legal representative of the other Party or to create any fiduciary relationship between the Parties. The Contractor has entered into this Agreement and shall be performing the services contemplated herein as an independent contractor. As an independent contractor, the Contractor, and all of its Subcontractors are solely responsible for the means, methods, techniques, procedures and schedules used to perform the Work. The Contractor has the sole right to control and direct the means, manner and method by which the obligations of this Agreement are satisfied.

Except as expressly set forth herein, nothing in this Agreement may be interpreted to give the appearance that either Party possesses the apparent or actual authority to act or speak for the other Party and neither Party shall by words, act or representation convey to the general public, any Entity or any Governmental Authority the impression that such Party has the authority to speak or act for the other Party. If either Party believes that the other Party has the necessary power to bind such other Party or believes that either has the power to control how services are

provided by the other Party, such first Party shall take all reasonable actions as are necessary to correct the erroneous inferences and prevent reliance on such a mistake of fact.

Section 15.6 Confidential Information.

As used in this Agreement, “Confidential Information” means (a) trade secrets as such term is defined and interpreted by Applicable Law and (b) documents, data or other information deemed confidential under Applicable Law.

To the extent allowed by Applicable Law, the County shall hold Confidential Information in strict confidence and take all reasonable precautions to prevent disclosure to third party Entities; provided, however, the County shall not be precluded from disclosing Confidential Information that, in its sole judgment, is in the public domain or subject to disclosure by Applicable Law or by lawful demand of any Governmental Authority notwithstanding that the Contractor may have marked such information as being Confidential Information; provided further, that prior to disclosing of Confidential Information that the Contractor has labeled as such, the County shall provide at least five (5) Business Days prior Notice to the Contractor of the County’s intent to disclose such Confidential Information. The County, however, shall not be required to provide any prior Notice to the Contractor of the County’s intent to disclose Confidential Information that the Contractor did not label or mark as Confidential Information.

The rights and obligations of the Parties set forth herein with respect to Confidential Information are further subject to Applicable Law, including Florida common law and State and local laws pertaining to public records. To the extent any provision in this Agreement is inconsistent with this Section 15.6 relative to Confidential Information, this Section 15.6 shall govern.

Section 15.7 Subcontractors.

The Contractor may enter into subcontracts, without the County's Authorized Representative's approval for (a) major combustion train outage Work, (b) Facility Site grounds maintenance and aesthetic Work, (c) janitorial service Work, (d) pest control, (e) a major turbine generator overhaul, (f) water treatment services, (g) distributed control system (DCS) maintenance under this Agreement, (h) acquisition of Equipment, Spare Parts, Reagents, chemicals, supplies and materials, (i) professional or consulting services (including legal, accounting, engineering, testing and similar services), (j) contracts with haulers or recyclers, or both, of Ferrous Metals or Non-Ferrous Metals, or both, (k) marketing of Ferrous and Non-Ferrous Metals, (l) maintenance of Equipment by manufacturers or maintenance of Rolling Stock, and (m) Work relating to the Facility substation or electric interconnection facilities. Contractor shall remain liable to the County for any subcontracted Work. The Contractor shall not enter into a subcontract for any other Work with any Subcontractor without the prior written approval of the County's Authorized Representative and any such subcontract entered into without such prior written approval shall be of no force and effect and null and void at inception; provided, however, the County's Authorized Representative's prior written approval shall not be required for (1) subcontracts that have a term or duration of less than ninety (90) consecutive Days in a Billing Year, (2) subcontracts whose value is less than one hundred thousand dollars (\$100,000.00), (3) subcontracts with Affiliates of the Contractor or with Martin GmbH or (4) subcontracts for Work that under Applicable Law must be performed by independent Entities, such as testing laboratories.

The Contractor shall assure that the contracts the Contractor enters into with the Subcontractors (i) are assignable to the County or the trustee for any financing or other purposes,

(ii) require each Subcontractor to be bound to the Contractor to the same extent Contractor is bound to the County by the terms of this Agreement, as those terms may apply to the portion of the Work to be performed by the Subcontractor, (iii) contain appropriate and adequate damages for default, (iv) provide that the County will be an additional indemnified party of the subcontract, (v) provide that the County will be an additional insured on all insurance policies required to be provided by the Subcontractor except workers' compensation and professional liability, (vi) provide waiver of subrogation in favor of the County and other insurance terms and conditions are set forth in Section 11 and Schedule 11 (Insurance), (vii) assign all warranties directly to the County, and (viii) identify the County as an intended third-party beneficiary of the subcontract. If any Subcontractor defaults on its contract with the Contractor, the Contractor shall use all reasonable efforts to enforce its rights under such contract and, if the Contractor fails to do so, the Contractor shall, at the County's request, assign its rights, to the extent they are assignable, under such contract to the County.

When the Contractor requests approval of a subcontract by the County's Authorized Representative, the Contractor's Authorized Representative must submit the following: the qualifications of the Subcontractor, and a description of the scope of the Work to be performed. Such subcontract shall be deemed approved ten (10) Days after the complete submission of the required information unless the County's Authorized Representative disapproves the subcontract in writing (stating its objection in reasonable detail) or requests any relevant information that has not been previously provided to it for ten (10) Days.

This Section 15.7 shall not apply to Contractor's employment agreements with its employees.

The County's review or approval of any subcontracts or Subcontractor shall not relieve the Contractor from any of its obligations under this Agreement with respect to the subcontracted Work, and the Contractor shall be responsible for the engagement and management of its Subcontractors.

The scope of the County's Authorized Representative's approval rights of a subcontract under this Section 15.7 shall be limited to (a) the Subcontractor's scope of work, (b) the qualifications of such Subcontractor and (c) the location of the Subcontractor's equipment and facilities on the Facility Site. In no event shall the County's Authorized Representative's approval rights include any other terms and conditions of such subcontract.

Section 15.8 Authorized Representatives.

The Authorized Representative of the County for purposes of this Agreement shall be the Director or his or her designee. The Authorized Representative of the Contractor for purposes of this Agreement shall be the Facility Manager or his or her designee. Either Party may change its Authorized Representative upon five (5) Days prior Notice to the other Party. Prior to the Commencement Date, the Authorized Representatives shall give each other Notice of the appointment of any designee authorized to act on such Authorized Representative's behalf, if any. The Authorized Representatives may change their designee upon three (3) Days prior Notice to the other.

Section 15.9 Notices.

All Notices and consents required or permitted by this Agreement shall be in writing, shall be transmitted by (a) registered or certified mail, return receipt requested, with Notice deemed to be given upon receipt; postage prepaid, or (b) delivered by hand or by nationally

recognized courier service, or (c) telex, facsimile transmission or electronic communication system acceptable to the County's Authorized Representative with confirmed receipt thereof, and in all cases, addressed as follows:

If to the County:

Director Solid Waste Operations
Pinellas County Utilities
3095 114th Avenue North
St. Petersburg, Florida 33716

With a copy to:

Waste-to-Energy Program Manager
Solid Waste Operations
Pinellas County Utilities
3095 114th Avenue North
St. Petersburg, Florida 33716

With a copy to:

Pinellas County Attorney
315 Court Street
6th Floor
Clearwater, Florida 33756

If to the Contractor:

Covanta Projects, LLC
445 South Street
Morristown, NJ 07960
Attn: Senior VP of Business Management

With a copy to:

Covanta Projects, LLC
445 South Street
Morristown, NJ 07960
Attn: General Counsel

Changes in either or both of the respective names and addresses to which such Notices may be directed may be made from time to time by either Party by Notice to the other Party. If an Event of Default occurs, the Notice required to be given under this Agreement shall clearly identify in bold letters that such event has occurred.

Section 15.10 Entire and Complete Agreement.

This Agreement, together with the Schedules attached to this Agreement, constitutes the entire and complete agreement and commitment of the Parties with respect to the award and execution of this Agreement for the management, operation and maintenance of the Facility. All prior or contemporaneous understandings, arrangements, negotiations and/or commitments, whether oral or written, have been superseded by this Agreement.

Section 15.11 Binding Effect.

This Agreement shall bind and inure to the benefit of the Parties and any successor or assignee acquiring an interest hereunder consistent with Section 15.2.

Section 15.12 Governing Law.

The law of the State (excluding the conflicts of law principles thereof) shall govern the validity, interpretation, construction and performance of this Agreement.

Section 15.13 Labor Relations.

To the extent that it is practicable and consistent with the efficient performance of this Agreement and is consistent with Applicable Law, all labor employed by Contractor at the Facility Site for management, operation and maintenance of the Facility shall be obtained from that available in the vicinity of the Work to be performed. The Contractor reserves the right to hire or discharge, or designate the classification of Work for each employee; the right to provide for shop or field fabrication or other material in accordance with its best judgment; or carrying on the Work without restrictions except as otherwise expressly recognized under this Agreement. All labor employed by the Contractor at the Facility Site for the management, operation and maintenance of the Facility shall be paid by the Contractor.

Section 15.14 Waiver.

Unless otherwise specifically provided by the terms of this Agreement, no delay or failure to exercise a right resulting from any breach of this Agreement shall impair such right or shall be construed to be a waiver thereof, but such right may be exercised from time to time and as often as may be deemed expedient. Any waiver shall be in writing and signed by the Party granting such waiver. If any representation, warranty or covenant contained in this Agreement is breached by either Party and thereafter waived by the other Party, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach under this Agreement.

Section 15.15 Representations.

Section 15.15.1 Representations of the County.

The County represents to the Contractor that subject to Schedule 23 (Disclosures):

(a) The County is a political subdivision of the State and has the power and authority to conduct the governmental functions and operations as contemplated by this Agreement.

(b) The County has the power, authority and legal right to enter into and perform this Agreement and the execution, delivery and performance hereof by the County (1) have been duly authorized by the County, acting by and through its Board of County Commissioners, (2) do not require any other approvals by any other governmental officer or body, other than those Permits or approvals contemplated to be obtained after the Contract Date, (3) do not require any consent or referendum of voters, (4) will not violate any judgment, order, law or regulation applicable to the County, and (5) do not constitute a default under, or result in the creation of any lien, charge, encumbrance or security interest upon any assets of the County under any agreement or instrument to which the County is a party or by which the County or its assets may be bound or affected.

(c) This Agreement has been duly entered into and delivered by the Board of County Commissioners of the County and, as of the Contract Date, constitutes a legal, valid and binding obligation of the County, fully enforceable in accordance with its terms, subject to (1) the applicable bankruptcy, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights or remedies generally, (2) general equitable principles, whether considered in a proceeding at law or in equity, and (3)

limitations on the enforceability of rights to indemnification by federal or State laws or regulations or public policy.

(d) To the County's best information and belief and without independent investigation, there is no action, suit or proceeding, at law or in equity, before or by any court or Governmental Authority, pending or overtly threatened against the County, wherein an unfavorable decision, ruling or finding would materially adversely affect the performance by the County of its obligations hereunder or the other transactions contemplated hereby, or which, in any way, would adversely affect the validity or enforceability of this Agreement or any other agreement or instrument entered into by the County in connection with the transaction contemplated hereby.

(e) All Permits necessary for the performance of the Work that are required to be obtained prior to the Commencement Date by the County have been obtained by the County.

(f) No action, suit, proceeding or official investigation has been overtly threatened or publicly announced or commenced by any Entity or Governmental Authority in any federal, State or local governmental authority or agency or in any federal, State or local court, that seeks to enjoin, assess civil or criminal penalties against, assess civil damages against or obtain any judgment, order or consent decree with respect to (1) the County, (2) any Permits to be obtained by the County pursuant to Section 3.6 or (3) the agreements referred to in this Agreement, as a result of the County's negotiation, execution, delivery or performance of this Agreement or its participation or intended participation in any transaction contemplated thereby; provided, however, that any such action, suit, proceeding or investigation would, if adversely determined, materially

adversely affect any such Permits, this Agreement, the performance by the Parties of their respective obligations hereunder or the transactions contemplated thereby; and, provided further, that this Section 15.15.1(f) shall apply to any action, suit, proceeding or official investigation that is criminal in nature or that challenges any agreements referred to in this Service Agreement.

Section 15.15.2 Representations of Contractor.

The Contractor hereby represents to the County that:

(a) The Contractor is qualified to do business in the State and is duly qualified to do business wherever necessary to carry on the business and operations contemplated by this Agreement.

(b) The Contractor has the power, authority and legal right to enter into and perform its obligations set forth in this Agreement, and the execution, delivery and performance hereof by the Contractor, (1) have been duly authorized, (2) do not require the approval of any governmental officer or body, other than those Permits or approvals contemplated to be obtained after the Proposal Date, (3) will not violate any judgment, order, law or regulation applicable to the Contractor as of the Proposal Date, and as of the Proposal Date, any provisions of the Contractor's certificate of incorporation and by-laws and (4) do not constitute a default under or result in the creation of, any lien, charge, encumbrance or security interest upon any assets of the Contractor under any agreement or instrument to which the Contractor is a party or by which the Contractor or its assets may be bound or affected.

(c) The Contractor holds, or is expressly authorized under, the necessary patent rights, licenses and franchises to manage, operate and maintain the Facility pursuant to the terms of this Agreement.

(d) This Agreement has been duly entered into and delivered and, as of the Proposal Date, constitutes a legal, valid and binding obligation of the Contractor, fully enforceable in accordance with its terms, subject to (1) the applicable bankruptcy, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights or remedies generally, (2) general equitable principles, whether considered in a proceeding at law or in equity, and (3) limitations on the enforceability of rights to indemnification by federal or State laws or regulations or public policy.

(e) To the Contractor's best information and belief and without independent investigation, as of the Proposal Date, there is no action, suit or proceeding, at law or in equity, before or by any court or governmental authority, pending or threatened against the Contractor, wherein an unfavorable decision, ruling or finding would materially adversely affect the performance by the Contractor of its obligations hereunder or the other transactions contemplated hereby, or that, in any way, would adversely affect the validity or enforceability of this Agreement or any other agreement or instrument entered into by the Contractor in connection with the transactions contemplated hereby.

(f) There has been no material adverse change in the Contractor's or the Guarantor's financial condition during the period from the date the RFQ was submitted until the date the FRFP was submitted, and neither the Contractor nor the Guarantor is aware of any occurrence, event or situation that could reasonably be

expected to cause a material adverse change in the Contractor's or the Guarantor's financial condition in the future that, in either case, would materially impair the Contractor's ability to perform its obligations under this Agreement or the Guarantor's ability to fulfill its obligations under the Guaranty.

(g) The Contractor has met, during the RFQ/DRFP-FRFP procurement process period and through the date hereof, all of the minimum qualification criteria set forth in the RFQ.

(h) Neither the Contractor nor any of its Affiliates is prohibited from entering into this Agreement by Section 237.133 Florida Statutes, of which paragraph (2)(a) reads as follows:

A person or an Affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposal or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor or consultant under a contract with any public entity's and may not transact business with any public entity in excess of the threshold amount provided in FS. 287.017 for CATEGORY TWO for a period of thirty-six (36) Months following the date of being placed on the convicted vendor list.

(i) The Contractor's performance of its obligations under this Agreement and the transactions contemplated hereby do not conflict with the

Contractor's performance under any other agreements or instruments to which the Contractor is a party or by which the Contractor or its assets may be bound or affected.

(j) As of the Proposal Date, no action, suit, proceeding or official investigation has been overtly threatened or publicly announced or commenced by any Entity or Governmental Authority in any federal, State or local governmental authority or agency or in any federal, State or local court, that seeks to enjoin, assess civil or criminal penalties against, assess civil damages against or obtain any judgment, order or consent decree with respect to (1) the Contractor, (2) any Permits to be obtained by the Contractor pursuant to Section 3.6 or (3) the agreements referred to in this Agreement, as a result of the Contractor's negotiation, execution, delivery or performance of this Agreement or its participation or intended participation in any transaction contemplated thereby; provided, however, that any such action, suit, proceeding or investigation would, if adversely determined, materially adversely affect any of such Permits, this Agreement, the performance by the Parties of their respective obligations hereunder or the transactions contemplated thereby; and, provided further, that this Section 15.15.2(j) shall apply to any action, suit, proceeding or official investigation that is criminal in nature or that challenges any agreements referred to in this Agreement.

Section 15.16 Headings.

Captions and headings in this Agreement are for ease of reference only and do not constitute a part of this Agreement.

Section 15.17 Counterparts.

This Agreement may be executed in more than one counterpart, each of which shall be deemed an original, and all of which shall constitute one and the same agreement.

Section 15.18 Amendment.

No amendment, modification or change to this Agreement shall be effective unless the same shall be in writing and duly executed by the Parties.

Section 15.19 Severability.

If any provision of this Agreement shall, for any reason, be determined to be invalid, illegal or unenforceable in any respect, the Parties hereto shall negotiate in good faith and agree to such amendments, modifications or supplements of or to this Agreement or such other appropriate actions as shall, to the maximum extent practicable, in light of such determination, implement and give effect to the intentions of the Parties as reflected herein, and the other terms of this Agreement, as so amended, modified, supplemented or otherwise affected by such action, shall remain in full force and effect.

Section 15.20 Further Assurances.

Each Party agrees to, and shall use reasonable efforts to, provide such information, execute and deliver any instruments and documents and take such action as may be necessary, reasonably requested or required by the other Party that are not inconsistent with the provisions of this Agreement and which do not involve the assumption of obligations other than those provided for in this Agreement in order to give full effect to this Agreement and to carry out the intent of this Agreement.

Section 15.21 Interest on Payments.

All payments to be made pursuant to this Agreement outstanding after the applicable due date are eligible to receive interest, which interest, if interest is envisioned under this Agreement, bear interest at the rate calculated pursuant to the Local Government Prompt Payment Act.

Section 15.22 Payment Disputes.

If any Party shall dispute an amount owing to the other Party, such Party shall:

- (a) give Notice to the other Party of such disputed amount together with sufficient information to allow the other Party to understand the nature of the dispute, which Notice shall be prepared in the same manner as Cost Substantiation and shall be delivered on or before the due date of the amount disputed; and
- (b) pay all undisputed amounts on the due date.

Interest at the rate specified in Section 15.21 shall accrue from the original due date on disputed amounts, or the portions thereof, to the Party which is ultimately determined to be entitled to such disputed amount, or any portions of such disputed amounts. The remedies for disputes over payment are exclusively limited to those provided in this Agreement.

Section 15.23 Liability of Officers and Employees.

No member of the Board of County Commissioner, any director, officer, agent, consultant, representative or employee of either Party shall be charged personally by the other or held contractually liable thereto under any term or provision of this Agreement, because of either Party's execution or attempted execution of this Agreement or because of any breach or alleged breach thereof; provided, however, that all Entities remain responsible for any of their own criminal actions.

Section 15.24 Pledge of Credit.

The Contractor shall not pledge the County's credit or make it a guarantor of payment or surety for any contract, debt, obligation, judgment, lien or any form of indebtedness. The Contractor further warrants and represents that it has no obligation or indebtedness that would materially impair its ability to fulfill the terms of this Agreement.

Section 15.25 Third Party Beneficiary.

This Agreement is intended to be solely for the benefit of the Contractor and the County and their successors and permitted assigns and is not intended to and shall not infer any rights or benefits on any third party not a signature hereto.

Section 15.26 Survivability.

Any term, condition, covenant or obligation that requires performance by a Party subsequent to termination or expiration of this Agreement shall remain enforceable against such Party subsequent to such termination or expiration.

Section 15.27 No Conflict of Interest.

Without receiving prior written authorization from the County's Authorized Representative, the Contractor shall not enter into any agreements that would conflict with the Contractor's performance of its obligations under this Agreement or the other transactions contemplated herein.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the Parties has caused this Agreement to be executed in its name by a duly-authorized person and has caused its seal to be affixed to this Agreement.

ATTEST:
CLERK

PINELLAS COUNTY, FLORIDA, by and through its BOARD OF COUNTY COMMISSIONERS

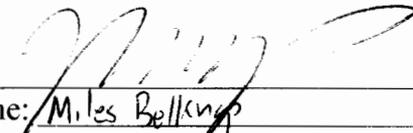
By: _____
Name: _____
Title: Clerk of the Court

By: _____
Name: _____
Title: _____

[Seal]

APPROVED AS TO FORM:

OFFICE OF THE COUNTY ATTORNEY

By: 
Name: Miles Bellenger
Title: County Attorney
Asst.

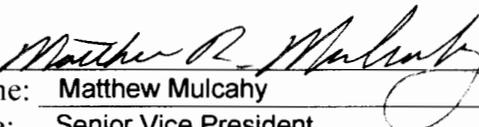
ATTEST:

CONTRACTOR:

Covanta Projects, LLC

[Seal]


WITNESS

By: 
Name: Matthew Mulcahy
Title: Senior Vice President


WITNESS

**WASTE TO ENERGY FACILITY OPERATOR
RFP NO. 134-0171-P (LN)**

SCHEDULES TO THE SERVICE AGREEMENT

BETWEEN

PINELLAS COUNTY, FLORIDA

AND

COVANTA PROJECTS, LLC

LIST OF SCHEDULES

Schedule 1	Description of the Facility and Facility Site
Schedule 2	Performance Guarantees
Schedule 3	Performance Calculations and Test Procedures
Schedule 4	Determination of Processible Waste Higher Heating Value
Schedule 5	Adjustment Factor
Schedule 6	Reporting Requirements
Schedule 7	Utility and Reagent Utilization Allowances
Schedule 8	Form of Performance Bond
Schedule 9	Form of Irrevocable Letter of Credit
Schedule 10	Guaranty
Schedule 11	Insurance
Schedule 12A	Form of Contractor's Monthly Invoice
Schedule 12B	Form of Contractor's Project and Additional Service Invoice
Schedule 12C	Form of Contractor's Annual Reconciliation Invoice
Schedule 13	Staffing Plan
Schedule 14	County Permits
Schedule 15	Non-Process Maintenance and Customer Service Standards
Schedule 16A	Required Equipment and Spare Parts Inventory List
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Schedule 18	Design and Construction Monitoring and Review
Schedule 19	Technical Recovery Plan
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SCHEDULE 1

DESCRIPTION OF THE FACILITY AND FACILITY SITE

a) Facility Site

The Facility Site consists of approximately twenty-two (22) acres of real property owned by the County located in the lower one-half of lots 42 through 44 and lots 53 through 55, inclusive, of the Bridgeway Acres Subdivision in Section 14, Township 30S, Range 16E, according to the plat thereof, recorded in Plat Book 6, Page 643, public records of the County, all as generally depicted in Figure 1-1 General Boundaries of the Facility Site.

The Facility Site is within the fenced in area bounded generally by 114th Avenue to the North, a ditch to the East, 110th Avenue to the South, and 31st Street to the West all within a latitude of 27° N and a longitude of 82° W. The boundaries of the Facility Site, as generally depicted on Figure 1-1, may be changed by the County from time to time without the Contractor's consent as long as such changes do not materially interfere with the Contractor's obligations contained in the Service Agreement.

b) Facility

The Facility includes all Equipment, buildings, structures, Utilities, grounds, landscaping and fencing located within the boundaries of the Facility Site, including the perimeter fencing around the Facility Site.

The Facility also includes structures and Equipment located outside of the Facility Site, including the Facility administration building (excluding the outside grounds) which is located immediately south of the Facility Site across 110th Avenue North as shown on Figure 1-1.

Figure 1-1 – General Boundaries of the Facility Site



SCHEDULE 2

PERFORMANCE GUARANTEES¹

1. Annual Processing Guarantee

The Facility shall Process, at a minimum, during a Billing Year, pro rata for a Billing Year less than a full Billing Year, the lesser of nine hundred thirty thousand (930,000) Tons of Processible Waste or that amount of Processible Waste delivered by or on behalf of the County (“Annual Processing Guarantee”).

2. Electric Energy Recovery Guarantee

The Facility shall generate for sale (net of Electric Energy used by the Facility while the Facility is generating Electric Energy) not less than four hundred thirty (430) kilowatt-hours per Ton of Processible Waste Processed.

3. Residue Quality Guarantee

The Facility shall produce Residue which shall meet the quality specified in Table 1 below (the “Residue Quality Guarantee”).

Table 1 Residue Quality

Parameter	Quality
Unburned Carbon	Less than four percent (4%) by weight (dry basis) excluding the amount of carbon reagent in the Residue that results from the operation of the activated carbon injection system
Water	Less than thirty percent (30%) by weight

¹ All calculations and test procedures for determining whether or not these Performance Guarantees have been met shall be in accordance with Schedule 3 to the Service Agreement.

4. Residue Particle Size Guarantees

a) Plus Five (5) Inch Separation System Availability Guarantee. A minimum of one hundred percent (100%) of the residue shall be processed through the plus five (5) inch separation system, and the plus five (5) inch separation system shall be available one hundred percent (100%) of the time that one or more boiler is in operation, except that if all residue is stockpiled and processed through the plus five (5) inch separation system when the system becomes available, then the one hundred percent (100%) available guarantee shall be considered to have been met, provided that such period of time when residue is being stockpiled does not exceed twenty-four (24) consecutive hours.

b) Residue Particle Size Guarantee. A minimum of ninety-eight percent (98%) of the Residue produced downstream of the plus five (5) inch separation system shall have a maximum particle size of five (5) inches in diameter (“Residue Particle Size Guarantee”).

5. Ferrous Metal Recovery and Non-Ferrous Metal Recovery Guarantees

a) Ferrous Metal Recovery Guarantee: The Facility shall recover from the Residue at least eighty percent (80%) by weight of all Ferrous Metal contained therein which would not pass through a one inch (1”) screen, (the “Ferrous Metal Removal Guarantee”).

b) Non-Ferrous Metal Recovery Guarantee: The Facility shall recover from the Residue at least sixty percent (60%) by weight of all Non-Ferrous Metal contained therein which would not pass through a three eights inch (3/8”) screen (the “Non-Ferrous Metal Removal Guarantee”).

6. Ferrous Metal Recovery System and Non-Ferrous Metal Recovery System Availability Guarantees

a) Ferrous Metal Recovery System Availability Guarantee: The Ferrous Metal recovery system shall be operational and available to recover Ferrous Metal at least ninety percent (90%) of the time that Residue is being generated by the Facility during a Billing Year (“Ferrous Metal Removal System Availability Guarantee”).

b) Non-Ferrous Metal Recovery System Availability Guarantee: The Non-Ferrous Metal recovery system shall be operational and available to recover Non-Ferrous Metal at least ninety percent (90%) of the time that Residue is being generated by the Facility during a Billing Year (“Non-Ferrous Metal Removal System Availability Guarantee”).

7. Process Wastewater Quality Guarantee: The Process Wastewater discharged from the Facility into the sanitary sewer shall comply with the maximum concentrations and restrictions shown in Table 2 (the “Process Wastewater Quality Guarantee”).

8. Environmental Regulations Guarantees

The Facility shall, at a minimum, meet at all times all requirements pertaining to the Facility specified in the County’s State of Florida Electrical Power Plant Site Certifications, No. PA 78-11 (Units 1 and 2) and PA 83-18 (Unit 3) and the County’s Florida Department of Environmental Protection Title V Air Operation Permit No. 1030117-009-AV (the “Environmental Regulations Guarantee”), as may be renewed or amended.

Table 2
Maximum Concentrations and Restrictions for Process Wastewater

Material Characteristic	Maximum Allowable Concentration/Value
Arsenic	0.1 mg/L
Cadmium	0.2 mg/L
Chromium	2.6 mg/L
Copper	1.0 mg/L
Cyanide	1.0 mg/L
Lead	0.6 mg/L
Mercury	0.1 mg/L
Nickel	2.0 mg/L
Phenols, Total	5.0 mg/L
Silver	2.0 mg/L
Zinc	2.0 mg/L
pH	5.5-9.5
Temperature	150 °F
TSS	650 mg/L
BOD	450 mg/L
Flash Point	140 oF
Petroleum Oils, Non-Biodegradable Cutting Oil or Other Product of Mineral Oils	50 mg/L
Animal or Vegetable Fats, Waxes or Greases	100 mg/L

All concentrations for metallic substances are for “total” metal.

9. Electrical Reliability Guarantee

The Facility shall, at a minimum, meet at all times all applicable Generator Owner and Generator Operator requirements pertaining to the Facility specified in the NERC Reliability Standards or any FRCC Regional Reliability Standards, except that the County shall be responsible for meeting the requirements in Standards BAL-005 and FAC-001 and FAC-002.

SCHEDULE 3

PERFORMANCE CALCULATIONS AND TEST PROCEDURES

The purpose of this Schedule 3 is to provide: (i) the calculations to be used to determine whether or not certain Performance Guarantees and Utility and Reagent Utilization Allowances have been met; and (ii) an outline of the procedures for Performance Testing Residue quality, the Residue separation system, the Ferrous Metal recovery system, the Non-Ferrous Metal recovery system and the air emissions from the stack, which procedures shall be incorporated into the Performance Test Plan to be developed pursuant to Section 3.26 of the Service Agreement.

PART A. PERFORMANCE CALCULATIONS

This Part A sets forth the calculations to be used to determine whether or not the following Performance Guarantees have been met.

1. Annual Processing Guarantee

For any Billing Year, the actual number of Tons of Processible Waste Processed by the Facility in such Billing Year shall be compared to the Annual Processing Guarantee to determine if such guarantee has been met. For the first and last Billing Year, the Annual Processing Guarantee shall be prorated by dividing the Annual Processing Guarantee by 365 and then multiplying by the actual number of Days in such first or last Billing Year as applicable.

The actual number of Tons of Processible Waste Processed shall be calculated as follows:

$$W_P = W_d - W_{NP} + W_{SB} - W_{SE}$$

Where:

$$W_P = \text{Tons of Processible Waste Processed during the Billing Year.}$$

- $W_d =$ Tons of Processible Waste that were delivered to the Facility during the Billing Year as recorded by the Facility's truck scales.
 $W_{NP} =$ Tons of Non-Processible Waste removed from the tipping floor during the Billing Year as recorded by the Facility's truck scales.
 $W_{SB} =$ Tons of Processible Waste in the Pit at the beginning of the first Day of the Billing Year as estimated jointly by the Contractor and the County.
 $W_{SE} =$ Tons of Processible Waste in the Pit at the end of the last Day of the Billing Year as estimated jointly by the Contractor and the County.

During Billing Years when turbine-generator No. 1 is off line for a scheduled major maintenance overhaul, the frequency of which shall be governed by Section 3.10 of the body of this Agreement, the Annual Processing Guarantee shall be adjusted to reflect the amount of time, if any, that either boiler No. 1 or boiler No. 2 was unable to operate during the scheduled major turbine-generator No. 1 maintenance overhaul period due to the capacity limitations of dump condenser No. 1.

The adjusted Annual Processing Guarantee for such Billing Years shall be calculated as follows:

$$G_A = APG \times \frac{OH_{P123} - DH_{T12}}{OH_{P123}}$$

Where:

- $G_A =$ Adjusted Annual Processing Guarantee in Tons for the Billing Year.
 $APG =$ Annual Processing Guarantee from Item 1 of Schedule 2 to the Service Agreement.
 $OH_{P123} =$ Total potential boiler operating hours for boiler Nos. 1, 2 and 3 during the Billing Year calculated as the product of (i) the total number of Days in the Billing Year, times (ii) 24, times (iii) 3.
 $DH_{T12} =$ Total boiler downtime hours for boiler Nos. 1 and 2 during the scheduled major maintenance outage, the frequency of which shall be governed by Section 3.10 of the body of this Agreement, for turbine-generator No. 1 during the Billing Year. Downtime hours shall only include those boiler hours where boiler Nos. 1 or 2, or both, were available to Process Processible Waste but unable to operate due to the capacity limitations

on dump condenser No. 1 and shall not include downtime related to scheduled or unscheduled maintenance conducted on these boilers during the outage period.

If the Weighted Average Annual Higher Heating Value during any Billing Year is less than 4,200 Btu per pound or greater than 5,000 Btu per pound, the Tons of Processible Waste Processed shall be corrected as follows prior to making the comparison with the Annual Processing Guarantee or adjusted Annual Processing Guarantee as applicable:

$$W_{PC} = W_P \times \frac{HHV_W}{HHV_B}$$

Where:

W_{PC} = Corrected Tons of Processible Waste Processed during the Billing Year.

W_P = Tons of Processible Waste Processed during the Billing Year as calculated above.

HHV_W = Weighted Average Annual Higher Heating Value during the Billing Year calculated in accordance with Schedule 4 of the Service Agreement.

HHV_B = Base higher heating value which shall be 4,200 if the Weighted Average Annual Higher Heating Value during the Billing Year is less than 4,200 Btu per pound and 5,000 if the Weighted Average Annual Higher Heating Value during the Billing Year is greater than 5,000 Btu per pound.

2. Electric Energy Recovery Guarantee

For any Billing Year, the actual number of net kilowatt-hours of Facility generated Electric Energy sold to the Electric Utility per Ton of Processible Waste Processed in such Billing Year shall be compared to the Electric Energy Recovery Guarantee to determine if such guarantee has been met.

The actual number of net kilowatt-hours per Ton of Processible Waste Processed sold to the Electric Utility shall be calculated as follows:

$$\text{kWh}_N/\text{Ton} = \frac{E_N}{W_P}$$

Where:

kWh_N/Ton = Net kilowatt-hours per Ton of Processible Waste Processed sold to the Electric Utility during the Billing Year.

E_N = Net kilowatt-hours of Facility generated Electric Energy sold to the Electric Utility during the Billing Year determined based upon the Facility's net electric meter used for billing purposes by the Electric Utility. The number of net kilowatt-hours of Facility generated Electricity Energy sold to the Electric Utility shall be calculated as the difference between the electric meter reading at the beginning of the first Day of the Billing Year and the electric meter reading at the end of the last Day of the Billing Year.

W_P = Tons of Processible Waste Processed or, if applicable, the corrected Tons of Processible Waste Processed (WPC) during the Billing Year as calculated in Paragraph 1 of Part A of this Schedule 3.

During Billing Years when either turbine-generator is off line for a scheduled major maintenance overhaul, the frequency of which shall be governed pursuant to Section 3.10 of the body of this Agreement, the Tons of Processible Waste Processed (WP) used in the above equation shall be adjusted to reflect the amount of time, if any, that one or more of the boilers continued to operate while the turbine-generator was off line by diverting steam to the dump condenser.

The adjusted Processible Waste Processed to be substituted for WP in the above equation for such Billing Years shall be calculated as follows:

$$W_{PA} = W_P \times \frac{OH_{T123} - OH_{012} - OH_{03}}{OH_{T123}}$$

Where:

- W_{PA} = Adjusted Tons of Processible Waste Processed during the Billing Year when a turbine-generator was off line for a scheduled major maintenance overhaul (the frequency of which shall be governed pursuant to Section 3.10 of the body of this Agreement) and one or more boilers continued to operate during the turbine-generator overhaul outage by diverting steam to the dump condenser.
- W_P = Tons of Processible Waste Processed or, if applicable, the corrected Tons of Processible Waste Processed (WPC) during the Billing Year as calculated in Paragraph 1 of Part A of this Schedule 3.
- OH_{T123} = Total boiler operating hours for boiler Nos. 1, 2 and 3 during the Billing Year.
- OH_{012} = Total boiler operating hours for boiler Nos. 1 and 2 during the scheduled major maintenance outage (the frequency of which shall be governed pursuant to Section 3.10 of the body of this Agreement) for turbine-generator No. 1 during the Billing Year.
- OH_{03} = Total boiler operating hours for boiler No. 3 during the scheduled major maintenance outage (the frequency of which shall be governed pursuant to Section 3.10 of the body of this Agreement) for turbine-generator No. 2 during the Billing Year.

3. Plus Five Separation System Availability Guarantee

For any Billing Year, the actual on-line availability of the Plus Five Separation System shall be compared to the Plus Five Separation System Availability Guarantee to determine if such guarantee has been met. The percent online availability of the Plus Five Separation System shall be calculated as follows:

$$A_{P5} = \frac{P5_O}{P5_A} \times 100$$

Where:

- A_{P5} = Percent on-line availability of the Plus Five Separation System during the Billing Year.
- $P5_O$ = Actual operating hours of the Plus Five Separation System during the Billing Year.
- $P5_A$ = Number of hours that the Plus Five Separation System was capable of being operated during the Billing Year. For purposes of determining the number of hours that the Plus Five Separation System was capable

of being operated, the number of hours that the total Facility was off-line (i.e., cold iron outage) shall be excluded.

4. Ferrous and Non-Ferrous Metal Recovery System Availability Guarantees

For any Billing Year, the actual on-line availability of the Ferrous Metal recovery system shall be compared to the Ferrous Metal Recovery System Availability Guarantee to determine if such guarantee has been met.

The percent on-line availability of the Ferrous Metal recovery system shall be calculated as follows:

$$A_{FE} = \frac{FE_O}{FE_A} \times 100$$

Where:

- A_{FE} = Percent on-line availability of the Ferrous Metal recovery system during the Billing Year.
- FE_O = Actual operating hours of the Ferrous Metal recovery system during the Billing Year.
- FE_A = Number of hours that the Ferrous Metal recovery system was capable of being operated during the Billing Year. For purposes of determining the number of hours that the Ferrous Metal recovery system was capable of being operated, the number of hours that the total Facility was off-line (i.e., cold iron outage) and/or the main Residue conveying system upstream of the Ferrous Metal recovery system was not running, such that no Residue could be processed by the Ferrous Metal removal system for the purpose of recovering Ferrous Metal, shall be excluded.

For any Billing Year, the actual on-line availability of the Non-Ferrous Metal recovery system shall be compared to the Non-Ferrous Metal Recovery System Availability Guarantee to determine if such guarantee has been met.

The availability of the Non-Ferrous Metal recovery system shall be calculated as follows:

$$A_{NFE} = \frac{NFE_O}{NFE_A} \times 100$$

Where:

A_{NFE} = Percent on-line availability of the Non-Ferrous Metal recovery system during the Billing Year.

NFE_O = Actual operating hours of the Non-Ferrous Metal recovery system during the Billing Year.

NFE_A = Number of hours that the Non-Ferrous Metal recovery system was capable being operated during the Billing Year. For purposes of determining the number of hours that the Non-Ferrous Metal recovery system was capable being operated, the number of hours that the total Facility was off-line (i. cold iron outage) and/or the main Residue conveying system upstream of the Non-Ferrous Metal recovery system was not running, such that no Residue could be processed by the Non-Ferrous Metal recovery system for the purpose of recovering Non-Ferrous Metal, shall be excluded.

5. Utility Utilization Allowances

a) Process Wastewater Utilization Allowance

For any Billing Year, the actual number of gallons of Process Wastewater per Ton of Processible Waste Processed discharged by the Facility into the sanitary sewer in such Billing Year shall be compared to the Process Wastewater Utilization Allowance to determine whether reimbursement of the cost of excess utilization is required in accordance with Section 8.4.5 of the Agreement..

The actual number of gallons of Process Wastewater per Ton of Processible Waste Processed discharged by the Facility shall be calculated as follows:

$$\text{Gal}_{\text{WW}}/\text{Ton} = \frac{\text{WW}}{\text{W}_\text{P}}$$

Where:

$\text{Gal}_{\text{WW}}/\text{Ton}$ = Gallons of Process Wastewater discharged to the Sanitary Sewer per Ton of Processible Waste Processed during the Billing Year.

WW = Gallons of Process Wastewater discharged to the sanitary sewer during the Billing Year based on the Process Wastewater meter. The number of gallons of Process Wastewater discharged shall be calculated as the difference between the Process Wastewater meter reading at the beginning of the first Day of the Billing Year and the Process Wastewater meter reading at the end of the last Day of the Billing Year.

W_P = Tons of Processible Waste Processed or, if applicable, the corrected Tons of Processible Waste Processed (W_{PC}) during the Billing Year as calculated in Paragraph 1 of Part A of this Schedule 3.

b) Natural Gas Utilization Allowance

For any Billing Year, the actual number of therms of natural gas consumed by the Facility in such Billing Year shall be compared to the Natural Gas Utilization Allowance to determine whether reimbursement of the cost of excess utilization is required in accordance with Section 8.4.5 of the Agreement. For the first and last Billing Year, the Natural Gas Utilization Allowance shall be prorated by dividing the Natural Gas Utilization Allowance by 365 and then multiplying by the actual number of Days in such first or last Billing Year as applicable. The actual number of therms of natural gas consumed by the Facility shall be based on the cubic feet of natural gas recorded by the Facility's natural gas meter used for billing purposes by the natural gas supplier and the conversion factor from cubic feet to therms determined by the natural gas supplier. The cubic feet of natural gas consumed shall be the difference between the natural gas meter reading at the beginning of the first Day of the Billing Year and the natural gas meter

reading at the end of the last Day of the Billing Year. As an alternate method for determining natural gas use, the number of therms consumed may be determined based upon the natural gas supplier billings by summing the therms billed for all Billing Months within a Billing Year.

c) Purchased Electricity Utilization Allowance

For any Billing Year, the actual number of kilowatt-hours of electricity purchased by the Facility in such Billing Year shall be compared to the Purchased Electricity Utilization Allowance to determine whether reimbursement of the cost of excess utilization is required in accordance with Section 8.4.5 of the Agreement. For the first and last Billing Year, the Annual Purchased Electricity Utilization Allowance shall be prorated by dividing the Purchased Electricity Utilization Allowance by 365 and then multiplying by the actual number of Days in such first or last Billing Year as applicable. The actual number of kilowatt-hours of electricity purchased by the Facility shall be calculated based on the electric meter used for billing purposes by the Electric Utility and shall be the difference between the electric meter reading at the beginning of the first Day of the Billing Year and the electric meter reading at the end of the last Day of the Billing Year. As an alternate method for determining purchased electricity, the number of kilowatt-hours purchased may be determined based upon the Electric Utility's billings by summing the kilowatt-hours billed for all Billing Months within a Billing Year.

6. Reagent Utilization Allowances

a) Pebble Lime Utilization Allowance

For any Billing Year, the actual pounds of pebble lime per Ton of Processible Waste Processed consumed by the Facility in such Billing Year shall be compared to the Pebble Lime Utilization Allowance to determine whether reimbursement of the cost of excess utilization is required in accordance Section 8.4.5 of the Agreement.

The actual pounds of pebble lime per Ton of Processible Waste Processed consumed by the Facility shall be calculated as follows:

$$Lb_{PL}/Ton = \frac{PL_C}{W_P}$$

Where:

Lb_{PL}/Ton = Pounds of pebble lime consumed per Ton of Processible Waste Processed during the Billing Year.

W_P = Tons of Processible Waste Processed or, if applicable, the corrected Tons of Processible Waste Processed (WPC) during the Billing Year as calculated in Paragraph 1 of Part A of this Schedule 3.

PL_C = Pounds of pebble lime consumed by the Facility during the Billing Year calculated as follows:

$$PL_C = PL_D + PL_B - PL_E$$

Where:

PL_D = Pounds of pebble lime delivered to the Facility during the Billing Year.

PL_B = Pounds of pebble lime in the pebble lime storage silo at the beginning of the first Day of the Billing Year.

PL_E = Pounds of pebble lime in the pebble lime storage silo at the end of the last Day of the Billing Year.

b) Urea Utilization Allowance

For any Billing Year, the actual gallons of urea per Ton of Processible Waste Processed consumed by the Facility in such Billing Year shall be compared to the Urea Utilization Allowance to determine whether reimbursement of the cost of excess utilization is required in accordance with Section 8.4.5 of the Agreement.

The actual gallons of urea per Ton of Processible Waste Processed consumed by the Facility shall be calculated as follows:

$$\text{Gal}_U/\text{Ton} = \frac{U_C}{W_P}$$

Where:

Gal_U/Ton = Gallons of urea consumed per Ton of Processible Waste Processed during the Billing Year.

W_P = Tons of Processible Waste Processed or, if applicable, the corrected Tons of Processible Waste Processed (WPC) during the Billing Year as calculated in Paragraph 1 of Part A of this Schedule 3.

U_C = Gallons of urea consumed by the Facility during the Billing Year calculated as follows:

$$U_C = U_D + U_B - U_E$$

Where:

U_D = Gallons of urea delivered to the Facility during the Billing Year.

U_B = Gallons of urea in the urea storage tank at the beginning of the first Day of the Billing Year

U_E = Gallons of urea in the urea storage tank at the end of the last Day of the Billing Year.

c) Carbon Utilization Allowance

For any Billing Year, the actual pounds of carbon consumed by the Facility in such Billing Year shall be compared to the Carbon Utilization Allowance to determine whether reimbursement of the cost of excess utilization is required in accordance with Section 8.4.5 of the Agreement.

The actual pounds of carbon consumed by the Facility shall be calculated as follows:

(i)

$$\text{Lb}_C/\text{Hr} = \frac{C_C}{T}$$

Where:

Lb_C/Hr = Pounds of carbon consumed per boiler operating hour during the Billing Year.

T = Total number of hours that all three boilers operated during the Billing Year.

C_C = Pounds of carbon consumed by the Facility during the Billing Year calculated as follows:

$$C_C = C_D + C_B - C_E$$

Where:

C_D = Pounds of carbon delivered to the Facility during the Billing Year.

C_B = Pounds of carbon in the carbon storage silo at the beginning of the first Day of the Billing Year.

C_E = Pounds of carbon in the carbon storage silo at the end of the last Day of the Billing Year.

or (ii)

$$\text{Lb}_C/\text{Ton} = \frac{C_C}{W_P}$$

Where:

- Lb_C/Ton = Pounds of carbon consumed per Ton of Processible Waste Processed during the Billing Year.
- C_C = Pounds of carbon consumed by the Facility during the Billing Year as calculated in Paragraph 6 c) (i) of Part A of this Schedule 3.
- W_P = Tons of Processible Waste Processed or, if applicable, the corrected Tons of Processible Waste Processed (WPC) during the Billing Year as calculated in Paragraph 1 of Part A of this Schedule 3.

PART B. PERFORMANCE TESTS

This Part B sets forth an outline of the procedures for Performance Testing Residue quality, the Ferrous Metal recovery system, the Non-Ferrous Metal recovery system, wastewater quality and the air emissions from the stack, which procedures shall be incorporated into the Performance Test Plan to be developed pursuant to Section 3.26 of the Service Agreement.

1. General Procedures for Performance Testing

Prior to commencement of Performance Testing, the Contractor's Authorized Representative shall meet with the County's Authorized Representative and the Consulting Engineer to discuss and review procedures and protocol for the conduct of Performance Testing in accordance with the Performance Test Plan.

The Performance Test Plan shall require normal operation of the Facility during each testing phase. During Performance Testing, the existing operating personnel shall operate the Facility in accordance with normal operating procedures and staffing levels (except that special staffing required to conduct tests and record measurements is acceptable) and as contemplated by

the Service Agreement; and all operations shall be conducted, including routine equipment operation and maintenance services, and loading of Residue, Ferrous Metal, Non-Ferrous Metal and normal quantities of Nonprocessable Waste. All instrumentation, meters and recording devices to be relied upon during testing shall be calibrated within twenty-one (21) Days of commencement of each Performance Test. The Contractor's Authorized Representative shall furnish to the Consulting Engineer, at least seven (7) Days prior to commencement of each testing phase, documentation confirming the calibrations of the instruments to be used during the testing. All measured readings and test results shall not be adjusted to account for margin of error.

Processing interruptions during Performance Testing shall not necessarily invalidate the results of any individual test(s). Occasional and minor Processing interruptions are considered part of normal operation. Shutdown of all or part of the Facility to make necessary repairs to equipment or to correct normal operational problems shall be permitted, provided that the duration of some tests may need to be extended or the tests repeated as the case may be.

2. Residue Quality Performance Test

The Residue Quality Performance Test shall be conducted over a twenty-four (24)-hour period to determine the extent to which the Facility complies with the Residue Quality Guarantee. During the Residue Quality Performance Test, the Facility shall be operated so that each boiler produces a minimum average steam flow of 220,000 pounds per hour.

Representative grab samples of Residue produced from the Facility shall be taken downstream of the plus five (5) inch separation system at least every thirty (30) minutes during the test period. The Performance Test Plan shall specify the exact sampling point, method of

sampling and individual sample weight to assure that representative Residue from the Facility is being sampled.

One twenty-four (24)-hour composite sample shall be prepared by mixing the thirty (30) minute (or less) samples. The twenty-four (24)-hour composite sample shall be analyzed to determine dry weight percentage of unburned combustible matter and moisture content in accordance with the following:

(i) The dry weight percentage of unburned carbon in the Residue shall be calculated as follows:

$$UBC = \frac{HC_R - HC_C}{14,500} \times 100$$

Where:

UBC = Dry weight percentage of unburned carbon in the Residue.
HC_R = Heat content of the Residue in Btu per pound of Residue as determined by ASTM-2015 using an adiabatic bomb calorimeter.
HC_C = Amount of heat in the Residue in Btu per pound of Residue contributed by the carbon reagent that results from operation of the carbon injection system for the Facility calculated as follows:

$$HC_C = \frac{W_C \times 14,500}{W_R \times (1 - M_R)}$$

Where:

W_C = Pounds of carbon reagent added during the test period.
W_R = Pounds of wet residue generated during the test period.

$M_R =$ Moisture content of the Residue as a decimal fraction as determined in Paragraph 2 (ii) of Part B of this Schedule 3.

(ii) For the determination of moisture content, ASTM method D-3302 shall be used.

The results for the twenty-four (24)-hour composite sample shall be compared with the Residue Quality Guarantee to determine the extent to which the Facility complies with the Residue Quality Guarantee.

3. Residue Particle Size Performance Test

The Residue Particle Size Performance Test shall be conducted over a four (4)-hour period to determine the extent to which the Facility complies with the Residue Particle Size Guarantee. During the Residue Particle Size Performance Test, each operational unit shall be operated at a minimum average steam flow of 220,000 pounds per hour.

Representative grab samples of Residue produced from the Facility shall be taken downstream of the plus five (5) inch separation system at least every thirty (30) minutes during the test period. The Performance Test Plan shall specify the exact sampling point, method of sampling and individual sample weight to assure that representative Residue from the Facility is being sampled.

Each grab sample of Residue shall be passed through a screen containing five (5) inch holes. The weights of minus five (5) inch Residue and plus five (5) inch Residue from each sample shall be totaled for the four (4)-hour test period. The total weight of minus five (5) inch Residue shall be divided by the sum of the total weights for minus five (5) inch Residue and plus five (5) inch Residue to determine the percentage of total Residue that is less than five (5) inch in size.

4. Ferrous Metal Recovery Performance Test

The Ferrous Metal Recovery Performance Test shall be conducted to determine the extent to which the Facility complies with the Ferrous Metal Recovery Guarantee. The Performance Test Plan shall specify a method of determining the extent to which the Ferrous Metal recovery system complies with the Ferrous Metal Recovery Guarantee. The method shall address weighing recovered Ferrous Metal, which shall include both plus five (5) inch and minus five (5) inch metals, and the separation and weighing of non-recovered Ferrous Metal from the Residue. Three eight (8)-hour tests shall be performed. The results from the three test runs shall be averaged and the resulting average compared with the Ferrous Metal Recovery Guarantee to determine the extent to which the Facility meets the Ferrous Metal Recovery Guarantee.

5. Non-Ferrous Metals Recovery Performance Test

The Non-Ferrous Metal Recovery Performance Test shall be conducted to determine the extent to which the Facility complies with the Non-Ferrous Metal Recovery Guarantee. The Performance Test Plan shall specify a method of determining the extent to which the Non-Ferrous Metal Recovery system complies with the Non-Ferrous Metal Recovery Guarantee. The method shall address weighing recovered Non-Ferrous Metal and the separation and weighing of non-recovered Non-Ferrous Metals from the Residue. Three eight (8)-hour tests shall be performed. The results from the three test runs shall be averaged and the resulting average compared with the Non-Ferrous Metal Recovery Guarantee to determine the extent to which the Facility meets the Non-Ferrous Metal Recovery Guarantee.

6. Process Wastewater Quality Performance Test

Process Wastewater shall be sampled and analyzed twice per calendar year at approximately six month intervals to demonstrate compliance with Table 2 of Schedule 2 to the Service Agreement. Sampling and analysis shall be in accordance with Section 126-330 of Chapter 126 (Utilities) of Article IV (County Sewer System) of the Pinellas County Code. The limits in Table 2 of Schedule 2 to the Service Agreement apply to samples collected as composite samples, except where standard collection procedures require that grab samples be collected. For grab samples, the average of all grab samples collected within a twenty-four (24)-hour period shall be used to determine compliance. Process Wastewater samples shall be collected from the wastewater discharge line from the blowdown sump. Process Water samples may be taken for each Process Water source concurrently with the Process Wastewater samples. The Contractor shall be relieved of compliance with a particular maximum concentration or restriction, or both, in Table 2 of Schedule 2 to the Service Agreement to the extent that failure to achieve compliance was a direct result of the quality of the Process Water supplied by the County being out of compliance with such maximum concentration and/or restriction. The Contractor shall be responsible for reasonably demonstrating to the County that failure to achieve one or more of the maximum concentrations and restrictions in Table 2 of Schedule 2 to the Service Agreement was due solely or in part to the quality of the Process Water supplied by the County.

7. Environmental Regulations Guarantee

The Contractor shall hire an independent testing firm(s) acceptable to the County to perform (at the Contractor's expense) all sampling, testing and analysis specified in the Facility's permits and other applicable regulations. The test methods and procedures for emissions shall be those test methods and procedures as specified in the Facility's permits, or methods and

procedures consistent with accepted industry practices, regulatory guidance documents or specified by the permit issuer.

PART C. TEST REPORTS

Upon completion of Performance Testing, the Contractor shall submit a written report to the County's Authorized Representative and the Consulting Engineer. The Performance Test Plan shall specify the contents of such report including but not limited to:

- a) a certification that testing was conducted in accordance with the Performance Test Plan;
- b) a certification of the results of the testing including a determination of the extent to which the Facility complies with the applicable Guarantee;
- c) documentation confirming the calibration of the instruments used during the testing;
- d) all data measured and recorded during the test(s);
- e) all calculations and computations;
- f) all laboratory analytical results;
- g) any other data reasonably requested by the County to be included in such report; and
- h) a statement as to whether the Contractor intends to conduct additional testing and an estimated schedule of such testing.

SCHEDULE 4

DETERMINATION OF PROCESSIBLE WASTE

HIGHER HEATING VALUE

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1 Introduction

Schedule 4 to the Service agreement sets forth procedures for determining the higher heating value (HHV) of Processible Waste on a monthly basis. The data and calculations used to determine the monthly Processible Waste HHV shall be included in the Monthly Report prepared in accordance with Section 5.1 of the Service Agreement and Section 2.2 of Schedule 6 to the Service Agreement. Processible Waste HHV for the months preceding development of the specific method set forth in Schedule 4 shall be back calculated following development of the specific steam correlation curve/equation based on the actual process data for those months. Changes to the methodology and calculations outlined in Schedule 4 may be made to improve the accuracy of the HHV calculation methodology if mutually agreed upon by the County's Authorized Representative and the Contractor's Authorized Representative.

The purpose of the Boiler as a Calorimeter (BAC) procedure is to determine the higher heating value (HHV) of the refuse fired during a given period. The period can be any length of time that a reasonable estimate of the amount of waste fired is available. As set forth above, the HHV shall be calculated on a monthly basis.

The BAC test has been used by the waste processing industry for over 30 years as the procedure for determining HHV for fuels of varying heat content. The procedure has recently been codified in the ASME Power Test Code 34 - Waste Combustors with Energy Recovery (PTC 34). PTC 34 has formalized the procedure so all interested parties may use a common code for testing boilers firing municipal solid waste.

PTC 34 was approved in 2007 and published in 2008. It is designed to test performance of municipal waste combustors for acceptance upon completion of construction. A formal PTC 34 test is a rigorous eight-hour test designed to determine the performance of a facility with a

low degree of uncertainty. The monthly procedure to determine the waste HHV follows the basic principles and calculations contained in PTC 34 to obtain reasonable results using existing Facility instrumentation.

A computer program using Excel® has been developed to calculate the HHV of refuse fired at the Facility. This Schedule 4 provides a description of the calculations in the BAC procedure in that program. A set of sample calculations is contained in Paragraph 7 of this Schedule 4. The calculations that are shown in this Schedule 4 have been taken from the computer program to confirm that the program follows the equations in this Schedule. A copy of the program is available electronically.

2 HHV Determination Using Boiler as a Calorimeter

Figure 1 shows the steam generator boundaries as defined in PTC 34. The reference point numbers in Figure 1 are used throughout this procedure and nomenclature follows that in PTC 34. Nomenclature used herein is in Paragraph 6.

Using the BAC procedure, all outputs, losses, and credits are calculated on an energy per unit of time basis (BTU/hr). After the total input from fuel has been determined, HHV can be calculated by dividing the BTU/hr by the weight of material processed, in lb/hr, to obtain BTU/lb of the fuel

2.1 Outputs

The following three outputs are defined in PTC 34:

- output in main steam (Q_{rSt32});
- output in auxiliary steam (Q_{rStFAx}), and

- output in blowdown (Q_{rBd})

Auxiliary steam includes steam which exits the steam generator envelope, such as sootblowing steam, and is considered to be a boiler output. It does not include steam used to heat the entering air. An estimate of monthly sootblowing steam is incorporated into the procedure. The blowdown is used intermittently and is difficult to measure. It is also an insignificant output and will be included in the unmeasured losses. (An unmeasured loss is the same as an unmeasured output for the purposes of the calculations.)

2.2 Losses

The following twelve losses are defined in PTC 34:

- Dry gas loss (Q_{rLDFg})
- Water from fuel loss (Q_{rLWF})
- Wet ash pit loss (Q_{rLAp})
- Loss due to moisture in air (Q_{rLWDA})
- Loss due to additional moisture (Q_{rLWAd})
- Loss due to unburned combustibles in residue (Q_{rLUbC})
- Loss due to carbon monoxide in flue gas (Q_{rLCO})
- Loss due to sensible heat of residue (Q_{rLRs})
- Loss due to surface radiation and convection
- Loss from recycled streams (Q_{rLRy})
- Loss due to steam coil air heater when steam source is from boiler (Q_{rL36})

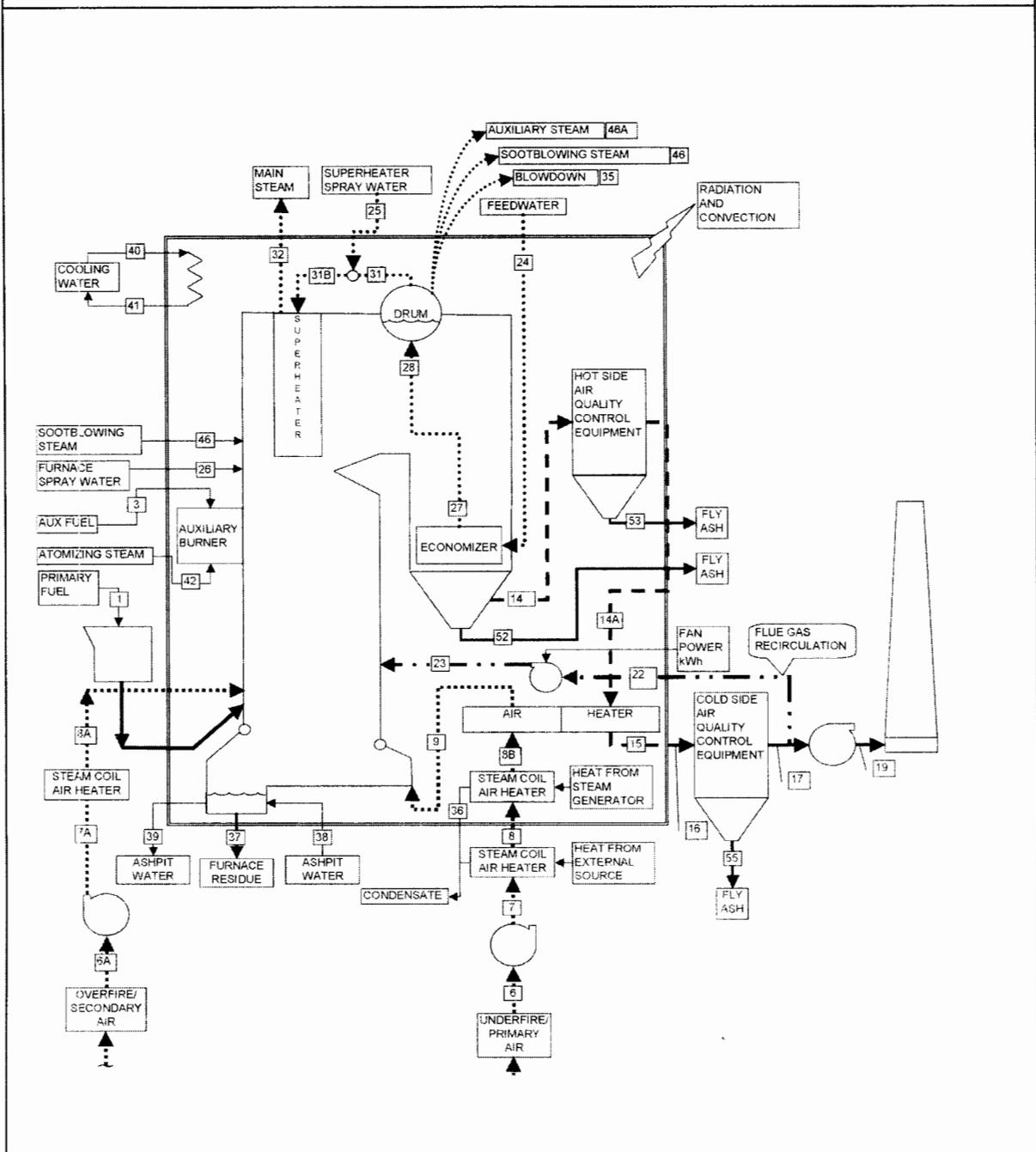
- Loss from cooling water (Q_{rLCw})

There is no loss due to additional moisture as defined in PTC 34, and there are no recycled streams in the facility, so these losses does not apply. The steam coil air heater is generally used continuously. However, it is supplied from an outside source of steam (turbine extraction), not from the boiler. Therefore, this loss is not included, but is included as a heat credit. The following nine losses are accounted for in this procedure:

- Dry gas loss (Q_{rLDFg})
- Water from fuel loss (Q_{rLWF})
- Wet ash pit loss (Q_{rLAp})
- Loss due to moisture in air (Q_{rLWDA})
- Loss due to unburned combustibles in residue (Q_{rLUbC})
- Loss due to carbon monoxide in flue gas (Q_{rLCO})
- Loss due to sensible heat of residue (Q_{rLRs})
- Loss due to surface radiation and convection (Q_{rLSrc})
- Loss from cooling water (Q_{rLCw})

Figure 1

PTC 34 Boiler Boundaries



2.3 Credits

The following five credits are defined in PTC 34:

- Credit due to entering dry air (Q_{rBDA})
- Credit due to moisture in entering dry air (Q_{rBWA})
- Credit due to sensible heat in as-fired fuel (Q_{rBF})
- Credit due to auxiliary equipment power (Q_{rBAx})
- Credit due to energy in additional moisture (Q_{rBWAd})

Auxiliary equipment power is from those equipment items which are within the boundary of the boiler being tested. These credits are small and are ignored. Typical examples of additional moisture are sootblowing and atomizing steam. These are also small and can be ignored.

The three credits which are determined in the procedure include:

- Credit due to entering dry air (Q_{rBDA})
- Credit due to moisture in entering dry air (Q_{rBWA})
- Credit due to sensible heat in as-fired fuel (Q_{rBF})

The reference temperature is the average ambient temperature as input to the program for the month. The reference temperature shall be the temperature recorded by the new temperature transmitters installed upstream of each steam coil air heater (SCAH) as part of Exhibit 2 to the Construction Agreement. The heat losses and credits are adjusted to the reference temperature.

The credit due to entering air is based on the heat supplied by an outside source (turbine extraction). The difference between SCAH inlet and outlet temperature is used to determine this credit. Only the underfire air is heated by the SCAH. The assumed percentage of underfire air

(65 percent) is used to split the heated vs unheated combustion air to determine this credit. The JANAF tables are used to calculate the air credit. When using these tables, the combined enthalpy due to moisture in air and dry air is used. Therefore, the calculations show only a credit due to entering air (QrBA), which is actually the sum of QrBDA and QrBWA.

3 Data Collection

This section describes the specific measurements which are required to perform the calculations for the BAC procedure. A summary of data points, units, equipment tag numbers and nomenclature is presented in Table 1.

3.1 Processible Waste Processed

The following equation shall be used to determine the monthly processible waste throughput using the truck scale/pit volume method:

$$\text{MWT} = \text{PIB} + \text{WRS} - \text{WR} - \text{PIE}$$

Where:

MWT Monthly processible waste throughput = the amount of processible waste in tons determined to have been processed by the Facility in accordance with the above formula.

PIB Pit inventory beginning = the amount of processible waste in tons determined to be in the refuse storage pit at the beginning of the month.

WRS Waste received scales = the amount of processible waste in tons as measured by the truck scales or other mutually accepted method, transported to the Facility and discharged into the refuse storage it during the month.

WR Waste returned = the amount of processible waste and non-processible waste in tons diverted from the Facility (for alternate disposal) after having been credited as WRS.

PIE Pit inventory end = the amount of processible waste in tons determined to be in the refuse storage pit at the end of the month.

Refuse storage pit inventory measurements shall be performed at midnight on the last day of the month in accordance with Schedule 6 of the Service Agreement. The County's Authorized Representative and the Consulting Engineer shall have the right to witness and concur with these determinations in accordance with the visitation rights of the Service Agreement.

3.2 DCS Data

Most of the data that is needed for the BAC calculation is collected on the DCS. The DCS collects data several times a minute and averages it over each hour.

One of the most important data points collected for the test is the steam flow. Feedwater flow meter readings will be used to determine the steam flow, since a water flow meter is more accurate than a steam flow meter.

Facility averages for superheated steam temperature, superheated steam pressure, boiler feedwater temperature, economizer inlet and outlet flue gas temperatures, SCAH inlet and outlet temperatures, and economizer outlet water temperature shall be calculated by weight averaging the values for each individual boiler using feedwater flow as the weighting factor.

All instruments used to measure the data that is used in the calculation of Processible Waste HHV shall be calibrated on a regular basis, but in no event less than once per year.

Qualified Facility staff can perform some or all of the calibrations or some or all of the calibrations can be performed by qualified third party's under subcontract to the Contractor. The County's Authorized Representative and the Consulting Engineer shall be notified in writing by the Contractor's Authorized Representative five (5) Business Days prior to such calibrations and shall have the right to witness such calibrations. The record of these calibrations shall be maintained at the Facility for inspection by the County's Authorized Representative and the Consulting Engineer.

3.3 Manual Data

The only data that must be collected manually are the relative humidity of the ambient air, the hours of unit operation, total number of soot blows, and residue characterization. Relative humidity can be estimated or obtained monthly from the following website:

<http://www.weather.gov/climate/index.php?wfo=tbw>

- 1 - product - monthly weather summary
- 2 - location - Tampa
- 3 - Time frame - archived data (pick month)

The average relative humidity that is shown on the website is used in the model. The hours of unit operation shall be calculated as the total monthly hours less the hours of unit downtime reported in the Daily Log. A log of the total number of times that soot was blown for all three units will be maintained. Paragraph 3.5 below explains how the residue will be characterized.

**Table 1
Data Collection Points, Units, Tag Number, and Nomenclature**

Data Point	Units	Unit 1 Tag No.	Unit 2 Tag No.	Unit 3 Tag No.	Nomenclature
Total feedwater flow	1000 lb	FQI-1161A	FQI-2116A	FQI-050A	MrW24
Main steam temperature	degrees F	TIC-1125-2	TIC-2125-2	03-TIC-060	TSt32
Main steam pressure	psig	PI-1118	PI-2118	03-PI-066	PSt32
Feedwater temperature	degrees F	TI-1125	TI-2125	03-TI-051	TW24
SCAH inlet temperature	degrees F	TI-1008	TI-2008	03-TI-005-1	TA7
SCAH outlet temperature	degrees F	TI-1007	TI-2007	03-TI-005	TA8
Average economizer inlet flue gas temp	degrees F	TI-1111-11	TI-2111-11	03-TI-045	TFg27
Econ. outlet flue gas temp (SDA inlet)	degrees F	1TI-040	2TI-040	3TI-040	TFg14
Economizer outlet water temperature	degrees F	TI-1125-3	TI-2125-3	03-TI-052	TW27
Hours of operation	hours	-	-	-	-
Waste fired	tons	-	-	-	MrF
Total aux burner gas volume	10,000 cf	FQI-0302	FQI-0302	FQI-0302	FAXV

3.4 Residue

Residue is normally collected for a BAC test to determine the heat loss due to unburned carbon in the residue. The procedure allows a subjective assessment of the burnout for the month (good or poor) and assigns a heat loss based on the input. "Good" burnout is considered

to be typical for the facility. It is assigned a heat loss of 200 BTU/lb waste (about 4 percent of input). "Poor" burnout is assigned a heat loss of 400 BTU/lb waste (about 8 percent of input). "Poor" burnout will usually occur during periods when the MSW is extremely wet or several outages have required the operators to clear the grates of MSW, thereby allowing waste to be processed without being fully combusted. In most cases, "good" burnout is anticipated. The Contractor, the County's Authorized Representative and the Consulting Engineer shall agree on the appropriate model input. The input to the model is good = 1 or poor = 2.

3.5 Timing of Period

The timing of the start and end of the period should correspond closely with the time in which the data was collected. For example, if all data is collected on a daily basis ending at midnight, the pit measurement should theoretically be taken at midnight each month. In reality, if the pit measurements are taken consistently at the same time of day, the error will be insignificant and will correct itself during each successive period.

4 Computer Program

This section describes the computer program, inputs, calculations, and use. The sections below describe the features of the program from the upper left corner of the program, scrolling down. Each section below has the headings from the program.

All cells are locked except the ones that are used to input data. This is done to protect the program from accidental inputs into the wrong field. To make a modification to the program, the cells can be unlocked using the password "veolia".

IMPORTANT NOTE BEFORE USING PROGRAM:

Before using the program for the first time on any computer, the user must install “add-ins” to the computer and modify four cells in the program to calculate the values correctly for certain variables. Once installed on a computer, the add-ins will calculate properly without further changes. The software includes three files: the program (“HHVCalcfinal.xls”) and two add-ins (“Book1.xla” and “Janaf Properties.xla”). All three files must be saved onto the user’s computer. Once loaded, perform the following steps:

1. Start Excel and open the program “HHVCalcfinal.xls.
2. Unprotect the program (tools, protection, unprotect sheet, password = veolia. For Excel 2007, unprotect sheet is found under the “review” tab.).
3. Install the add-ins (tools, add-ins, select “Book1” and “Janaf Properties”. For Excel 2007, add-in selection is found by clicking on the Microsoft Office Button and then clicking on the Excel Options). If the files do not appear, select “browse”, and locate them on your computer in the file folder that you saved them in, then select them.
4. Go to Cells F72 through F75. These cells have an apostrophe as the first character. Remove the apostrophe in each cell.
5. Protect the program (tools, protection, protect sheet, password = veolia. For Excel 2007, protect sheet is found under the “review” tab.).
6. Save the program under a different name.

The program is now ready for use. If the program is to be used on a different computer, copy the original file and follow the above steps before using the program for the first time.

Failure to do so will result in incorrect values in cells F72 through F75, and incorrect higher heating values.

4.1 Data Input

Each boiler's monthly data must be input. It is crucial for the units (lb/hr, etc.) to be exactly as required by the program. Units selected for the program are the ones that are generally collected by the DCS or by manual readings. Data includes the following:

- Total feedwater flow, 1000 lb
- Main steam temp, deg. F
- Main steam pressure, psig
- Feedwater temp, deg. F
- SCAH inlet temp, deg. F
- SCAH outlet temp, deg. F
- Average economizer inlet flue gas temp, deg. F
- Economizer outlet flue gas temp (SDA inlet), deg. F
- Economizer outlet water temp, deg. F
- Hours of operation

In addition, the following data is input once for all three units:

- Waste fired, tons
- Total number of soot blows
- Residue burnout (good = 1, poor = 2)

- Total auxiliary burner gas volume, 10,000 cf
- Relative humidity, percent

These items are input to the cells in the upper left corner of the program, along with the month and year. When all of the inputs have been entered, print the results. A one page summary of the inputs, resulting HHV, and summary of heat outputs, losses and credits are printed out.

4.2 Corrections to Data

Two automatic corrections have been incorporated in the program. The economizer inlet thermocouple has been found to read lower than the actual temperature because it tends to become insulated from the flue gas by fly ash deposits. The program automatically adds 20 degrees to the calculated weighted average economizer inlet flue gas temperature.

The program assumes a flue gas moisture content of 16 percent. The calculations are made, a correction to the flue gas moisture is made, and another iteration of the program is performed. The purpose of this is to run the program with a flue gas moisture content that is more appropriate for the initially calculated HHV. The correction is a linear equation where the moisture at 4500 BTU/lb is 18 percent and the moisture at 5500 BTU/lb is 14 percent. The equation of this line is $y = - 0.004 (\text{HHV}) + 36$,

Where:

- y flue gas moisture for second iteration
- m slope of line
- x calculated HHV from first iteration

b y intercept

After the first iteration and the HHV is calculated, the model looks to this equation to determine the moisture content for the final HHV. A second iteration is done using that moisture content to determine the final HHV.

If a change in either correction is desired, unlock the program, input the desired changes, and lock the program again.

4.3 Assumptions

Certain assumptions must be made to complete the HHV calculations. The assumptions made for this procedure include the following:

- Sootblowing steam is 30,000 lb per blow
- Weight fraction of heated combustion air is 0.65 (65 percent)
- The reference temperature is equal to the SCAH inlet air temperature
- Natural gas HHV is 1000 BTU/cf
- Natural gas combustion efficiency is 80 percent
- Percentage of gas that produces steam is 10 percent
- Moisture in fuel is 25 percent
- Unmeasured heat loss is 2.5 percent of HHV
- SDA inlet oxygen is 10 percent
- SDA inlet carbon dioxide is 10 percent
- SDA inlet flue gas moisture is 16 percent

- The difference in fuel temp from SCAH inlet (reference) temp is 0.
- Residue multiplier (HHVC) is 200 times the input (good = 1, poor = 2)

The residue multiplier is multiplied by the residue quality input (1 or 2) to determine the heat loss in BTU/lb of refuse (200 or 400). If a change in any of the assumptions is desired, unlock the program, input the desired changes, and lock the program again. The program will automatically adjust for these changes.

4.4 Constants

The constants that are used in the calculations are shown in Table 2. These values should not be changed.

4.5 Reference Values

Reference values include enthalpies and specific humidity. Steam and water enthalpies are taken from "ASME Steam Tables, Fifth Edition." Appropriate steam tables are included in the program. Enthalpies are calculated by interpolation using the actual temperature and pressure data. Air and flue gas enthalpies are taken from the JANAF tables. The JANAF tables are handled as an "add-in" to the Excel® spreadsheet. Copies of the add-ins are on the disk in the back pocket of this Schedule. The add-ins must be loaded before using the program for the first time. After that, they will remain attached to the program for future use.

Humidity is calculated from a curve fit equation. The saturated value is calculated using the ambient temperature as both the wet and dry bulb temperature. The specific humidity is the saturated value times the relative humidity. Reference values which are used in the calculations are shown in Table 3.

Table 2 - Constants Used in Program			
Nomenclature	Parameter	Value	Source
Specific Heats (BTU/lb-F)			
CpFW	Water in fuel	1.00	PTC 34
CpF	Dry fuel	0.30	PTC 34
CpDFg	Dry flue gas	0.24	PTC 34
Molecular Weights (lb/lb-mol)			
MwH2O	Water or moisture	18	-
MwN	Nitrogen	28	-
MwO2	Oxygen	32	-
MwCO2	Carbon Dioxide	44	-
Other Constants			
Weight fraction nitrogen in dry air		0.7685	PTC 34

Table 3 - Reference Values	
Nomenclature	Reference Terms
HFg14	Enthalpy of wet flue gas leaving economizer
HFg27	Enthalpy of wet flue gas entering economizer
HSt32	Main steam enthalpy, BTU/lb
HW24	Feedwater enthalpy, BTU/lb
HW27	Economizer outlet feedwater enthalpy, BTU/lb
HWvFg	Flue gas moisture enthalpy, BTU/lb
HWvRe	Reference vapor enthalpy, BTU/lb
HWRe	Reference water enthalpy, BTU/lb
MFrWDA	Specific humidity, lb moisture per pound of dry air

4.6 Intermediate Calculations

Intermediate calculations are made to correct the raw data to the proper units for the HHV calculations.

Hourly data collected for each boiler is weighted based on steam flow. The average for each period is multiplied by the steam flow for that unit and divided by the total steam flow for the period. This allows a higher weight to be assigned to a boiler which is firing more refuse.

4.7 Missing or Suspect Data

Temperature and pressure operating data which is missing or is suspected of being incorrect may be estimated by averaging the data from the other units or using historical data from the unit. Data should not be left out of any fields, as the program will assume the value is zero and result in incorrect calculations. Temperature and pressure data from partial days should be omitted entirely for that day to avoid erroneous average data.

If the feedwater flow is missing or suspected to be incorrect, the steam flow for the unit should be used for that period's calculation. If both steam and feedwater flow are not available, the feedwater flow and hours of operation should be set to zero for that unit. Also, an estimate of the amount of MSW processed by that unit should be removed from the total waste processed during the period. This will eliminate that boiler's contribution to the HHV, and the HHV will be based on the data from the other operating boilers that have reliable operating data. The resulting HHV for that period should not be considered to be a reliable value and should not be used for contractual purposes.

Any missing or suspect data will be included in the monthly report, along with a description of how the data was adjusted.

5 Boiler as a Calorimeter Equations

The equations below are set up to report each output, credit and loss in terms of BTU/hr, and are taken from PTC 34. Dividing the final BTU/hr by the waste throughput in lb/hr results in the calculated HHV in BTU/lb.

5.1 Heat Outputs

QrSt32 Output in main steam from MSW

The usable fraction of steam generated from natural gas must be subtracted from the total heat input to determine the heat input from MSW alone.

$$QrSt32 = (MrW24 - MrW25)(HSt32 - HW24) + (MrW25)(HSt32 - HW25) - QrStFAx$$

Where:

MrW24 Mass flow rate water entering economizer

MrW25 Mass flow rate water entering desuperheater

HSt32 Enthalpy of steam at main steam outlet

HW24 Enthalpy of water at economizer inlet

HW25 Enthalpy of water entering desuperheater

QrStFAx Heat in steam output from auxiliary fuel (natural gas)

Superheater spray water flow (MrW25) is taken off the feedwater system after the feedwater flow meter. Therefore, it is always equal to zero. The output in main steam from MSW simplifies to:

$$QrSt32 = (MrW24)(HSt32 - HW24) - QrStFAx$$

$$Q_{rStFAx} = (FAxV)(HHVFAx)(FAxFr)(FAxE)$$

Where:

- FAxV Auxiliary fuel (natural gas) volume in cf
- HHVFAx HHV of natural gas in BTU/cf
- FAxFr Fraction of auxiliary fuel as useful heat input
- FAxE Auxiliary fuel combustion efficiency
- QrAxSt Output in auxiliary steam**

$$Q_{rAxSt} = (MrSt46A)(HSt32 - HW24)$$

Where:

- MrSt46A Mass flow rate of steam for sootblowing
- HSt32 Enthalpy of steam at main steam outlet
- HW24 Enthalpy of water at economizer inlet

Steam used for sootblowing is estimated to be 30,000 lb per sootblowing cycle per unit. The total number of sootblows per month is input. The calculated value for MrSt46A is 30,000 times the number of soot blows divided by the total operating hours in the month. Since primary steam is used for sootblowing, the enthalpy of main steam is used.

5.2 Heat Losses

QrLDFg Dry gas loss

$$Q_{rLDFg} = (MrDFg14)(CpDFg)(TFg14 - TRe)$$

Where:

CpDFg	Heat capacity of dry flue gas
MrDFg14	Mass flow rate of dry flue gas at the economizer outlet
TFg14	Temperature of dry flue gas at the economizer outlet
TRe	Reference Temperature

The wet flue gas flow is determined by an economizer heat balance. The temperatures of the water and the flue gas in and out of the economizer are known. Using steam tables and JANAF tables, a heat balance around the economizer can be used to determine the mass flow rate of flue gas. This is the recommended procedure from PTC 34. The alternate procedure is using a stack testing firm to collect flue gas composition, moisture and flow, which is not feasible for this type of procedure and not as accurate as the economizer heat balance. The flue gas composition is not critical for this calculation since it is used only to calculate the flue gas molecular weight, which does not vary much with different compositions.

The heat balance around the economizer is determined first. Equation 5-8-1 of PTC 34 calculates the mass flow rate of wet flue gas using the economizer heat balance as follows:

$$\text{MrFg} = (\text{MrW24})(\text{HW27} - \text{HW24})/(\text{HFg27} - \text{HFg14})(\text{ST/SB})$$

Where:

MrFg	Mass flow rate of wet flue gas
MrW24	Mass flow rate of feedwater
HW27	Enthalpy of feedwater out of economizer
HW24	Enthalpy of feedwater into economizer
HFg27	Enthalpy of wet flue gas entering economizer

HFg14	Enthalpy of wet flue gas leaving economizer
ST	Total heating area of economizer and enclosure
SB	Total heating area of economizer

The ratio of ST and SB can be assumed to equal unity, so the equation simplifies to:

$$MrFg = (MrW24)(HW27 - HW24)/(HFg27 - HFg14)$$

The dry flue gas mass flow rate is determined by multiplying the wet flue gas flow rate by the weight fraction of dry flue gas.

$$MrDFg14 = (MrFg)(1-MFrWFg)$$

Where:

MrDFg 14 Mass flow rate of dry flue gas at economizer outlet

MFrWFg Mass fraction moisture in the flue gas

The mass fraction of moisture in the flue gas is determined from the volumetric moisture in the flue gas and the molecular weights of flue gas and moisture.

MFrWFg Mass fraction moisture in flue gas

$$MFrWFg = (MwH2O)*(VpH2O)/(MwDFg)/100$$

Where:

MwH2O Molecular weight of moisture

VpH2O Volume percent moisture in flue gas

MwDFg Molecular weight of dry flue gas

The mass flow rate of moisture in the flue gas is the total flue gas minus the dry flue gas.

$$\text{MrWFg14} = \text{MrFg} - \text{MrDFg14}$$

Where:

MrWFg14 is the mass rate of moisture in the flue gas at the economizer outlet

QrLDFg Heat loss due to dry flue gas

$$\text{QrLDFg} = (\text{MrDFg14})(\text{CpDFg})(\text{TFg14} - \text{TRe})$$

The temperature of air entering the boiler boundary is taken at the inlet of the steam coil air heater (reference temperature). This is done because the heat supplied to the SCAH is from the turbine extraction, which is outside the boundary. The heated air is handled as a heat credit in a later section.

QrLWF Water from fuel loss

The water from fuel loss is calculated from moisture in the flue gas and is intended by the code to include water from water in the fuel and from the combustion of hydrogen in the fuel. The moisture in the flue gas also includes water from sources other than the fuel, such as the wet ash pit loss because that additional water enters the steam generator envelope in liquid form at the same temperature as the fuel. The moisture in air is subtracted from this and is handled separately because it enters as a vapor with a higher enthalpy.

$$\text{QrLWF} = (\text{MrWFg14} - \text{MrWDA})(\text{HWvFg} - \text{HWRe})$$

Where:

MrWDA Mass flow rate of moisture in dry air

The moisture in dry air is calculated using a humidity curve fit equation based on the ambient air temperature and relative humidity. The ambient air temperature is input to the wet

bulb and dry bulb temperatures in the equation. This results in the specific humidity at 100 percent relative humidity. Multiplying this by the relative humidity gives the specific humidity.

In order to determine the amount of moisture in dry air, the weight of dry air is determined first using a nitrogen balance. The flue gas components (including nitrogen by subtraction) are known from the assumed data. The oxygen and carbon dioxide readings are in percent volume, so the nitrogen must be converted to a weight basis by multiplying by the ratio of the molecular weights.

$$MFrNFg = (1 - DVpCO2/100 - DVpO2/100)(MwN)/(MwDFg)$$

Where:

- MFrNFg Mass fraction nitrogen in flue gas
- DVpCO2 Percent volume dry carbon dioxide in flue gas
- DVpO2 Percent volume dry oxygen in flue gas
- MwN Molecular weight of nitrogen
- MwDFg Molecular weight of dry flue gas

$$MrNFg = (MFrNFg)(MrDFg)$$

Where:

- MrNFg Mass flow rate of nitrogen in flue gas
- MrDFg Mass flow rate of dry flue gas

$$MrDA = MrNFg/0.7685$$

Where:

0.7685 Weight fraction nitrogen in dry air

MrWDA Mass flow rate of moisture in dry air

$$\text{MrWDA} = (\text{MFrWDA})(\text{MrDA})$$

Where

MFrWDA Mass fraction moisture in dry air (specific humidity)

MrDA Mass flow rate of dry air

$$\text{QrLWF} = (\text{MrWFg14} - \text{MrWDA})(\text{HWvFg} - \text{HWRe})$$

QrLAp Wet ash pit loss

This loss is included in the water from fuel loss above.

QrLWDA Loss due to moisture in air

$$\text{QrLWDA} = (\text{MrWDA})(\text{HWvFg} - \text{HWvRe})$$

Where:

HWvFg Enthalpy of water vapor in flue gas

HWvRe Enthalpy of water vapor at reference temperature

QrLUBC Loss due to unburned combustibles in residue

Residue is normally sampled and tested during a BAC test to determine the heat loss due to unburned carbon in the residue. The procedure allows a subjective assessment of the burnout for the period. Normal burnout is expected to be about four percent of the heat input. At 5000 BTU/lb, this amounts to 200 BTU/lb of as-fired waste. The subjective inputs for HHVC are

good = 1 (200 BTU/lb), and poor = 2 (400 BTU/lb). It is anticipated that most of the readings will be good.

$$QrLUbC = (HHVC)(MrF)$$

Where:

HHVC Higher heating value of carbon in residue per pound of as-fired fuel

MrF Mass flow rate of fuel

QrLCO Loss due to carbon monoxide in flue gas

This loss is small and is included with the unmeasured losses.

QrLRs Loss due to sensible heat of residue

This loss is small and is included with the unmeasured losses.

QrLSrc Loss due to surface radiation and convection

This loss is included with the unmeasured losses.

QrLCw Loss from cooling water

This loss is small and is included with the unmeasured losses.

QrLUm Unmeasured Losses

Unmeasured losses are agreed to be equal to 2.5 percent of the as-fired waste HHV. During a conventional BAC test when a boiler is operating optimally with no interruptions, the unmeasured loss is generally around 1.5 percent. The model assumes a loss of 2.5 percent due to the inefficiencies of day-to-day operation, including startup and shutdown times. This is equivalent to 2.5 percent of the resulting outputs plus losses minus credits, calculated as follows:

$$QrLUm = (1/(1 - 2.5/100) - 1)(QrO + QrL - QrB)$$

Where:

QrO Total heat outputs

QrL Total heat losses

QrB Total heat credits

This loss must be calculated after all of the other calculations are made, since it is dependent on the total refuse HHV.

5.3 Heat Credits

Heat credits are heat inputs into the boiler boundary from outside sources. These include the heat in combustion air (since the air is heated from turbine extraction), the moisture in that air, and the sensible heat in refuse.

QrBA Credit due to entering air

The JANAF tables are used to determine the enthalpy of wet combustion air entering the steam coil air heater. When using the JANAF tables, the credit due to entering air is equal to the sum of the entering dry air and moisture in the air. The enthalpy of entering air is at the reference temperature.

$$QrBA = (MrDA + MrWDA)(HA8 - HA7)(AFr)$$

Where:

HA8 Enthalpy of air at the average air temperature at SCAH outlet

HA7 Enthalpy of air at the average air temperature at SCAH inlet

A_{Fr} Weight fraction heated combustion air

Q_{rBF} Credit due to sensible heat in as-fired fuel

$$Q_{rBF} = (M_rF)((C_pF)(1 - M_{FrFW})(T_F - T_{Re}) + (M_{FrFW})(H_{FW} - H_{WRe})) = (M_rF)((C_pF)(1 - M_{FrFW})(T_F - T_{Re}) + (M_{FrFW})(C_pFW)(T_F - T_{Re}))$$

Where:

M_{rF} Mass flow rate of fuel

C_{pF} Heat capacity of fuel

M_{FrFW} Mass fraction of moisture in fuel

T_F Temperature of waste fuel

T_{Re} Reference temperature

H_{FW} Enthalpy of water at temperature of waste fuel

H_{WRe} Enthalpy of water at reference temperature

C_{pFW} Heat capacity of water in fuel

5.4 Refuse HHV

The total heat into the system is the sum of the outputs and losses minus credits, in BTU/hour. The refuse HHV is the total heat into the unit divided by the firing rate in pounds per hour. The resulting HHV is in BTU/lb.

$$\text{Outputs} = Q_{rSt32} + Q_{rAxSt}$$

$$\text{Losses} = Q_{rLDFg} + Q_{rLWF} + Q_{rLWDA} + Q_{rLUbC} + Q_{rLUm}$$

$$\text{Credits} = Q_{rBA} + Q_{rBF}$$

Total heat input = outputs + losses - credits

Refuse HHV = total heat input from MSW/refuse fired

5.5 HHV Calculation - Second Iteration

Based on the calculated HHV of the first iteration using 16 percent moisture in the flue gas, the moisture is adjusted to that calculated from the straight line of moisture vs HHV. The points of the line are 14 percent moisture at 5500 BTU/lb and 18 percent moisture at 4500 BTU/lb. The equation of the line is $y = -.004x + 36$, where y is the moisture content and x is the calculated HHV from the first iteration. If desired, the points of this line may be changed and the program will calculate the equation of the resulting line.

The calculations are identical to the first iteration, but using the revised moisture content of the flue gas. Contrary to conventional thinking, when the moisture content is increased (indicating a lower HHV), the HHV will actually increase. This is due to the economizer heat balance, where moisture has a higher specific heat than flue gas, causing the model to increase the flue gas flow to account for all of the heat captured by the economizer. This causes the HHV to increase.

5.6 Efficiency

An estimate of the boiler efficiency is also reported on the output sheet, and is calculated as:

$$\text{efficiency} = (\text{total outputs})/(\text{total outputs} + \text{total losses}) * 100 / 0.99$$

The factor 0.99 is applied to eliminate the additional one percent unmeasured loss due to inefficiencies of starting up and shutting down a boiler. The estimated boiler efficiency is calculated during times of steady state boiler operation.

6 Nomenclature

6.1 Basic Terms

A	Air
Ap	Ash pit
Ax	Auxiliary
B	Credit
C	Carbon
CO	Carbon monoxide
CO ₂	Carbon dioxide
C _p	Heat capacity
C _w	Cooling water
D	Dry
E	Efficiency
F	Fuel
F _g	Flue gas
Fr	Fraction
H	Enthalpy
HHV	Higher heating value
H ₂ O	Moisture

L	Loss
M	Mass
Mr	Mass flow rate
Mw	Molecular weight
N	Nitrogen
O2	Oxygen
Qr	Heat transfer rate
Re	Reference
Rs	Residue
Src	Surface radiation and convection
St	Steam
T	Temperature
Ub	Unburned
Um	Unmeasured
V	Volume
Vp	Volume percent
W	Water
Wv	Water vapor

6.2 Combined Terms

AFr	Weight fraction heated combustion air
CpDFg	Heat capacity of dry flue gas
CpF	Heat capacity of fuel
CpFW	Heat capacity of water in fuel
DVpCO2	Percent volume dry carbon dioxide in flue gas
DVpO2	Percent volume dry oxygen in flue gas
FAxE	Auxiliary fuel combustion efficiency
FAxFr	Fraction of auxiliary fuel as useful heat input
FAxV	Auxiliary fuel (natural gas) volume in ccf
HA7	Enthalpy of air at the average air temperature at SCAH inlet
HA8	Enthalpy of air at the average air temperature at SCAH outlet
HFg27	Enthalpy of wet flue gas entering economizer
HFg14	Enthalpy of wet flue gas leaving economizer
HFw	Enthalpy of water at temperature of waste fuel
HHVC	Higher heating value of carbon in residue per pound of as-fired fuel
HHVFax	HHV of natural gas in BTU/cf
HSt32	Enthalpy of steam at main steam outlet
HWRe	Enthalpy of water at reference temperature

HWvFg	Enthalpy of water vapor in flue gas
HWvRe	Enthalpy of water vapor at reference temperature
HW24	Enthalpy of water at economizer inlet
HW25	Enthalpy of water entering desuperheater
HW27	Enthalpy of feedwater out of economizer
MFrFW	Mass fraction of moisture in fuel
MFrNFg	Mass fraction nitrogen in flue gas
MFrWDA	Mass fraction moisture in dry air (specific humidity)
MFrWFg	Mass fraction of moisture in the flue gas
MrDA	Mass flow rate of dry air
MrDFg14	Mass flow rate of dry flue gas at the economizer outlet
MrF	Mass flow rate of fuel
MrFg	Mass flow rate of wet flue gas
MrNFg	Mass flow rate of nitrogen in flue gas
MrSt46A	Mass flow rate of steam for sootblowing
MrWDA	Mass flow rate of moisture in dry air
MrWFg14	Mass flow rate of moisture in the flue gas at the economizer outlet
MrW24	Mass flow rate water entering economizer
MrW25	Mass flow rate water entering desuperheater

MwH ₂ O	Molecular weight of moisture
MwN	Molecular weight of nitrogen
MwCO ₂	Molecular weight of carbon dioxide
MwO ₂	Molecular weight of oxygen
MwDFg	Molecular weight of dry flue gas
PSt ₃₂	Main steam pressure
QrAxSt	Output in auxiliary steam
QrB	Total heat credits
QrBA	Credit due to entering air
QrBDA	Credit due to entering dry air
QrBF	Credit due to sensible heat in as-fired fuel
QrBWA	Credit due to moisture in entering dry air
QrL	Total heat losses
QrLAp	Wet ash pit loss
QrLCO	Loss due to carbon monoxide in flue gas
QrLCw	Loss from cooling water
QrLDFg	Heat loss due to dry flue gas
QrLRs	Loss due to sensible heat of residue
QrLsrc	Loss due to surface radiation and convection

QrLubC	Loss due to unburned combustibles in residue
QrLUm	Unmeasured loss
QrLWDA	Loss due to moisture in air
QrLWF	Water from fuel loss
QrO	Total heat outputs
QrSt32	Output in main steam
QrStFAx	Heat in steam output from auxiliary fuel (natural gas)
QrW	Heat flow rate in feedwater
TA8	Temperature of air entering boiler (SCAH outlet temperature)
TF	Temperature of waste fuel
TFg14	Flue gas temperature at economizer outlet
TFg27	Flue gas temperature at economizer inlet
TRe	Reference temperature
TSt32	Main steam temperature
TW24	Feedwater temperature
TW27	Economizer outlet water temperature
VpH2O	Volume percent moisture in flue gas

7 Sample Calculation

Table 4 shows the inputs, reference values and intermediate calculations used in the sample calculation. All of the inputs for the three boilers are the average hourly values for the month as reported by the DCS.

The reference values are as calculated in the model. Enthalpies are derived from the ASME steam tables. The specific humidity is calculated based on the average ambient temperature and humidity.

The intermediate calculations are used to calculate the weighted averages for the three units, based on steam flow, or to convert the input data to the proper units needed for the calculations. The assumptions and constants do not change and are the same as those listed in the above sections.

The sample calculations show primarily the equations and do not contain much of the descriptive information that is contained in the calculations section above. The calculations were done using the computer program, a copy of which is attached to this Schedule.

7.1 Heat Outputs

QrSt32 Output in main steam from MSW

$$QrSt32 = (MrW24)(HSt32 - HW24) - QrStFAx$$

$$QrStFAx = (FAxV)(HHVFAx)(FAxFr)(FAxE)$$

$$= (4,688)(1000)(0.8)(0.1)$$

$$QrStFAx = 375,045 \text{ BTU/hr}$$

$$QrSt32 = (213,536)(1379.2 - 210.6) - 375,045$$

$$QrSt32 = 249,152,940 \text{ BTU/hr}$$

QrAxSt Output in auxiliary steam

QrSt32 Output in main steam from MSW

$$QrAxSt = (MrSt46A)(HSt32 - HW24)$$

$$= (1818.2)(1379.2 - 210.6)$$

$$QrAxSt = 2,124,641 \text{ BTU/hr}$$

$$\text{Total Outputs} = 251,277,581 \text{ BTU/hr}$$

Table 4					
Sample Calculation Data					
Inputs					
Nomen.	Parameter	Unit 1	Unit 2	Unit 3	Total/Wt . Avg.
-	Feedwater flow, 1000 lb	146,063	109,543	103,775	359,381
TSt32	Main steam temp, °F	750	750	750	750
PSt32	Main steam pressure, psig	608	609	609	609
TW24	Feedwater temp, °F	242	236	244	241
TA7	SCAH inlet temp, °F	85	82	83	84
TA8	SCAH outlet temp, °F	87	161	161	131
TFg27	Econ. inlet flue gas temp, °F	862	842	828	866
TFg14	Econ. outlet flue gas temp, °F	556	562	524	549
TW27	Economizer outlet water temp, °F	465	483	471	472
-	Hours of operation	664	563	456	1,683
-	Waste fired, tons				69,332

Table 4					
Sample Calculation Data					
-	Total number of soot blows				102
-	Residue burnout (good = 1, poor = 2)				1
-	Total aux burner gas flow, 10,000 cf				789
-	Relative humidity, percent				66.0

Reference Values		
HARe	Economizer Inlet Wet Flue Gas Enthalpy, BTU/lb	1.6
HA8	Economizer Outlet Wet Flue Gas Enthalpy, BTU/lb	13.1
HFg14	Enthalpy of Wet Flue Gas Leaving Economizer, BTU/lb	114.8
HFg27	Enthalpy of Wet Flue Gas Entering Economizer, BTU/lb	196.8
HSt32	Main Steam Enthalpy, BTU/lb	1379.2
HW24	Feedwater Enthalpy, BTU/lb	210.6
HW27	Economizer Outlet Feedwater Enthalpy, BTU/lb	455.5
HWvFg	Flue Gas Moisture Enthalpy, BTU/lb	1311.6
HWvRe	Reference Vapor Enthalpy, BTU/lb	1098.0
HWRe	Reference Water Enthalpy, BTU/lb	51.5
MFrWDA	Specific humidity, lb moisture per pound of dry air	0.0165
Intermediate Calculations		
MrF	Waste fired, pounds per hour	82,391

-	Total feedwater flow, 000 lb	146,063	109,543	103,775	359,381
MrW24	Feedwater flow, lb/hr				213,536
FAxV	Average aux burner gas flow, cf/hr				4,688
MrSt46A	Sootblowing steam, lb/hr				1818.2
TF	Fuel Temperature, deg. F				83.5
MwDFg	Mol. weight of dry flue gas lb/lb-mol				30.00

7.2 Heat Losses

QrLDFg Dry gas loss

The heat balance around the economizer is determined first.

$$\begin{aligned} \text{MrFg} &= (\text{MrW24})(\text{HW27} - \text{HW24})/(\text{HFg27} - \text{HFg14}) \\ &= (213,536)(455.5 - 210.6)/(196.8 - 114.8) \end{aligned}$$

$$\text{MrFg} = 638,103$$

$$\begin{aligned} \text{MFrWFg} &= (\text{MwH2O}) * (\text{VpH2O}) / (\text{MwDFg}) / 100 \\ &= (18) * (16) / (30) / 100 \end{aligned}$$

$$\text{MFrWFg} = 0.096$$

$$\begin{aligned} \text{MrDFg14} &= (\text{MrFg})(1 - \text{MFrWFg}) \\ &= (638,103)(1 - 0.096) \end{aligned}$$

$$\text{MrDFg14} = 576,845 \text{ lb/hr}$$

$$\begin{aligned} \text{MrWFg14} &= \text{MrFg} - \text{MrDFg14} \\ &= 638,103 - 576,845 \end{aligned}$$

$$\text{MrWFg14} = 61,258 \text{ lb/hr}$$

$$\begin{aligned} \text{QrLDFg} &= (\text{MrDFg14})(\text{CpDFg})(\text{TFg14} - \text{TRe}) \\ &= (576,845)(0.24)(549 - 83.5) \end{aligned}$$

$$\text{QrLDFg} = 64,387,036 \text{ BTU/hr}$$

QrLWF Water from fuel loss

$$\text{QrLWF} = (\text{MrWFg} - \text{MrWDA})(\text{HWvFg} - \text{HWRe})$$

$$\begin{aligned} \text{MFrNFg} &= (1 - \text{DVpCO2}/100 - \text{DVpO2}/100)(\text{MwN})/(\text{MwDFg}) \\ &= (1 - 10/100 - 10/100)(28)/(30) \end{aligned}$$

$$\text{MFrNFg} = 0.75$$

$$\begin{aligned} \text{MrNFg} &= (\text{MFrNFg})(\text{MrDFg14}) \\ &= (0.75)(576,845) \end{aligned}$$

$$\text{MrNFg} = 430,711 \text{ lb/hr}$$

$$\begin{aligned} \text{MrDA} &= \text{MrNFg}/0.7685 \\ &= 430,711/0.7685 \end{aligned}$$

$$\text{MrDA} = 560,457 \text{ lb/hr}$$

$$\begin{aligned} \text{MrWDA} &= (\text{MFrWDA})(\text{MrDA}) \\ &= (0.0165)(560,457) \end{aligned}$$

$$\text{MrWDA} = 9,249 \text{ lb/hr}$$

$$\begin{aligned} \text{QrLWF} &= (\text{MrWFg} - \text{MrWDA})(\text{HWvFg} - \text{HWRe}) \\ &= (61,258 - 9,249)(1311.6 - 51.5) \end{aligned}$$

$$\text{QrLWF} = 65,535,055 \text{ BTU/hr}$$

QrLAp Wet ash pit loss

Included in Unmeasured Loss

QrLWDA Loss due to moisture in air

$$\begin{aligned} \text{QrLWDA} &= (\text{MrWDA})(\text{HWvFg} - \text{HWvRe}) \\ &= (9,249)(1311.6 - 1098.0) \end{aligned}$$

$$\text{QrLWDA} = 1,976,307 \text{ BTU/hr}$$

QrLUbC Loss due to unburned combustibles in residue

$$\begin{aligned} \text{HHVC} &\text{ good} = 200 \\ &\text{ poor} = 400 \\ \text{HHVC} &= 200 \end{aligned}$$

$$\begin{aligned} \text{QrLUbC} &= (\text{HHVC})(\text{MrF}) \\ &= (200)(82,391) \end{aligned}$$

$$\text{QrLUbC} = 16,478,194 \text{ BTU/hr}$$

QrLCO Loss due to carbon monoxide in flue gas

Included in Unmeasured Loss

QrLRs Loss due to sensible heat of residue

Included in Unmeasured Loss

QrLSrc Loss due to surface radiation and convection

Included in Unmeasured Loss

QrLCw Loss from cooling water

Included in Unmeasured Loss

QrLUm Unmeasured Losses

$$\begin{aligned} \text{QrLUm} &= (1/(1-2.5/100) - 1)(\text{QrO} + \text{QrL} - \text{QrB}) \\ &= (1/(1-2.5/100) - 1)(251,277,581 + 148,376,591 - 4,279,081) \end{aligned}$$

$$QrLUm = 10,137,823 \text{ BTU/hr}$$

$$\text{Total losses} = 158,514,414$$

7.3 Heat Credits

QrBA Credit due to entering air

$$\begin{aligned} QrBA &= (MrDA + MrWDA)(HA8 - HA7)(AFr) \\ &= (560,457 + 9,249)(13.1 - 1.6)(0.65) \end{aligned}$$

$$QrBA = 4,279,081 \text{ BTU/hr}$$

QrBF Credit due to sensible heat in as-fired fuel

$$QrBF = (MrF)((CpF)(1 - MFrFW)(TF - TRe) + (MFrFW)(HFW - HWRe))$$

$$\begin{aligned} QrBF &= (MrF)((CpF)(1 - MFrFW)(TF - TRe) + (MFrFW)(CpFW)(TF - TRe)) \\ &= (82,391)((0.3)(1 - 0.25)(83.5 - 83.5) + (0.25)(1.0)(83.5 - 83.5)) \end{aligned}$$

$$QrBF = 0 \text{ BTU/hr}$$

$$\begin{aligned} \text{Total Credits} &= 4,279,081 \text{ BTU/hr} \end{aligned}$$

7.4 Refuse HHV

$$\text{Total heat input, excluding unmeasured losses} = 395,375,091 \text{ BTU/hr}$$

$$\text{Unmeasured Losses} = 10,137,091 \text{ BTU/hr}$$

$$\text{Total heat input from MSW} = 405,512,914 \text{ BTU/hr}$$

$$\text{MSW HHV} = \text{Total heat input from MSW}/MrF$$

$$= (405,512,914)/(82,391)$$

$$\text{MSW HHV} = 4,922 \text{ BTU/lb}$$

7.5 Second Iteration

Once the first HHV has been calculated, a second iteration is done using a revised value for moisture in the flue gas. Using equation for moisture based on HHV:

$$y = mx + b$$

Where:

y flue gas moisture for second iteration

m slope of line (- 0.004)

x calculated HHV from first iteration (4922)

b y intercept (36)

$$y = (- 0.004)(4922) + 36$$

$$y = VpH_2O = 16.31 \text{ percent}$$

The same equations as above are used with the new flue gas moisture content. The resulting refuse HHV is 4939 BTU/lb.

7.6 Efficiency

The estimated efficiency is calculated as:

$$\text{efficiency} = (\text{total outputs})/(\text{total outputs} + \text{total losses}) * 100 / 0.99$$

$$= 251,277,581 / (251,277,581 + 159,945,677) * 100 / 0.99$$

$$\text{efficiency} = 61.7 \text{ percent}$$

Note: the total heat loss is taken from that calculated in the second iteration, which is not shown here.

7.7 Sample Calculation Output

The printed output from the model is shown on Table 5.

Table 5
Sample Model Output
HHV Results for January 2008

Model Inputs	Boiler 1	Boiler 2	Boiler 3	Weighted Average/ Total
Total feedwater flow, 1000 lb	146,063	109,543	103,775	359,381
Main steam temp, deg. F	750	750	750	750
Main steam pressure, psig	608	609	609	609
Feedwater temp, deg. F	242	236	244	241
SCAH inlet temp, deg. F	85	82	83	84
SCAH outlet temp, deg. F	87	161	161	131
Average economizer inlet flue gas temp, deg. F	862	842	828	866
Economizer outlet flue gas temp, deg. F	556	562	524	549
Economizer outlet water temp, deg. F	465	483	471	472
Hours of operation	664	563	456	1,683
Waste fired, tons				69,332
Total number of soot blows				102
Residue burnout (good = 1, poor = 2)				1
Total auxiliary burner gas flow, 10,000 cf				789
Ambient air temp, deg. F				83.5
Relative humidity, percent				66.0

Model Output	HHV =	4939 BTU/lb
	BTU/lb	Percent
Heat Outputs:		
Output in main steam from MSW	3024.0	61.2
Output in auxiliary steam	25.8	0.5
Total Heat Outputs	3049.8	61.7
Heat Losses:		
Dry Gas Loss	779.9	15.8
Water from Fuel Loss	814.0	16.5
Loss due to moisture in air	23.9	0.5
Loss due to unburned combustibles in residue	200.0	4.0
Unmeasured Losses	123.5	2.5
Total Heat Losses	1941.3	39.3
Heat Credits:		
Credit due to entering air	51.8	1.0
Credit due to sensible heat in as-fired fuel	0.0	0.0
Total Heat Credits	51.8	1.0
Refuse HHV = Outputs + Losses - Credits	4939	100.0
Approximate Efficiency		61.7 Percent

SCHEDULE 5

ADJUSTMENT FACTOR

The Adjustment Factor for Billing Year “n” shall be the greater of 1.0 or the number determined as follows:

$$\begin{array}{rcl} & 0.60 & \times \text{ Labor Index for Billing Year “n” divided by the Labor Index} \\ & & \text{for the second quarter of 2014} \\ \text{Plus} & 0.40 & \times \text{ Machinery and Equipment Index for Billing Year “n” divided} \\ & & \text{by Machinery and Equipment Index for June 2014} \end{array}$$

Where:

(a) The index for any Billing Year is the index published for June, or the second quarter of the preceding year, as applicable.

(b) The Labor Index is the Employment Cost Index, Wages and Salaries, Private Industry, Installation, Maintenance and Repair, Series ID CIU2010000430000I, published quarterly by the U.S. Department of Labor, Bureau of Labor Statistics. The value of this index as of the second quarter of 2014 is 122.6.

(c) The Machinery and Equipment Index is the Producer Price Index - Commodities, Machinery and Equipment, General Purpose Machinery and Equipment, Series ID WPU114 published monthly by the U.S. Department of Labor, Bureau of Labor Statistics. The value of this index as of June 2014 is 222.9.

If, at the commencement of any Billing Year, any index is not available for the above stated month or quarter, the most recently published value of such index shall be utilized to estimate the Adjustment Factor for each Billing Month in such Billing Year until such time that all of the above stated indices are available for the above stated month or quarter. When all of

the above stated indices are available for the above stated month or quarter, the final Adjustment Factor shall be calculated for such Billing Year, and all Billing Months in such Billing Year where the estimated Adjustment Factor was used will be adjusted using the final Adjustment Factor, and the Contractor shall submit an invoice for either (i) an additional payment to the Contractor by the County to correct for underpayments, or (ii) a credit to the County to correct for overpayments. The final Adjustment Factor shall be used for all the remaining Billing Months in such Billing Year.

If any index defined above shall not be determined and published or if any index as it is construed on the Proposal Date is thereafter substantially changed, there shall be substituted for such index another index which is determined and announced on a basis substantially similar to the index being replaced as shall be mutually agreed upon by the County and the Contractor. If one or more indices are substituted due to the preceding sentence, (i) the base indices (the denominator for each index) used in this Schedule 5 in the Fiscal Year the substitution is made, and all subsequent Fiscal Years, shall be changed to the value from the second quarter or June, as the case may be, for the Fiscal Year prior to the Fiscal Year the substitution is being made, and (ii) the amount in the definition of the Processing Fee in the Service Agreement shall be changed to an amount equal to the Processing Fee that was in effect in the Fiscal Year prior to such substitution.

SCHEDULE 6

REPORTING REQUIREMENTS

1. Daily Report

The Contractor shall prepare a Daily report which shall be submitted electronically to the County and the Consulting Engineer in email format every Day. The Daily report shall include:

- a) the current and next day projected operating status of each boiler and turbine generator,
- b) the reason or purpose and anticipated duration for any scheduled or unscheduled Equipment downtime,
- c) the estimated inventory of the Pit,
- d) a discussion of whether the need for diversion of waste may be required within the next two (2) Days, and
- e) the time of scheduled inspections of the Equipment or Facility or both, if any, for the current and next day.

2. Weekly Report

The Weekly report prepared and submitted by the Contractor pursuant to Section 5.1 of the Service Agreement shall include at least the following sections and information.

2.1 Weekly Operating Data

The Contractor shall include in the Weekly report a summary of the daily operating data for the prior week and month to date totals and such Weekly data shall be submitted in a spreadsheet format acceptable to the County's Authorized Representative. A final report containing this information shall be prepared at the end of each month. The data, which shall include daily, weekly and monthly totals, shall be summarized in a spreadsheet format and include the following at a minimum:

- a) Solid Waste received (Tons)
- b) Nonprocessable Waste received and rejected (Tons)
- c) Net Processible Waste received (Tons)
- d) Pit inventory of Processible Waste as provided for in Section 1.2 of this Schedule 6 (Tons)
- e) Estimated Processible Waste Processed (Tons)
- f) Total steam generation for each boiler (thousands of pounds)

- g) Pounds of steam per pound of Processible Waste Processed
- h) Average steam capacity utilization (actual average hourly steam generation divided by design steam generation) for each boiler (percent)
- i) Boiler feedwater makeup (thousands of pounds)
- j) Pounds of boiler feedwater makeup per pound of steam (percent)
- k) Gross electricity generation for each turbine-generator (MWH)
- l) Average steam rate (turbine throttle steam divided by gross kWh) for each turbine-generator (pounds of steam per kWh)
- m) Total Facility electricity usage (MWH)
- n) Total net electricity sold (MWH)
- o) Gross kWh/Ton of Processible Waste Processed (kWh/Ton)
- p) Net kWh/Ton of Processible Waste Processed (kWh/Ton)
- q) Total scheduled downtime and total unscheduled downtime for each boiler and for each turbine-generator (hours)
- r) On-line availability (actual operating hours divided by total hours) for each boiler and each turbine-generator (percent)
- s) Cold iron outage hours (hours)
- t) Total Residue (Residue plus metals) generated (Tons)
- u) Residue (total Residue less metals) (Tons)
- v) Tons of total Residue per Ton of Processible Waste Processed (percent)
- w) Downtime hours for the main Residue conveying system (hours)
- x) Ferrous Metals hauled away from the Facility (Tons)
- y) Tons of Ferrous Metals per Ton of Processible Waste Processed (percent)
- z) Tons of Ferrous Metals per Ton of total Residue (percent)
- aa) Downtime hours for the Ferrous Metal removal system (hours)
- bb) Non-Ferrous Metals hauled away from the Facility (Tons)
- cc) Tons of Non-Ferrous Metals per Ton of Processible Waste Processed (percent)
- dd) Tons of Non-Ferrous Metals per Ton of total Residue (percent)

- ee) Downtime hours for the Non-Ferrous Metal removal system (hours)
- ff) The date(s) and number of hours during such date(s) that the Residue bypassed the plus five (5) inch separation system (date(s) and hours)
- gg) Reagent delivery amounts for Carbon, Lime and Urea
- hh) Average carbon feed rate for each boiler (pounds per hour)
- ii) Actual carbon usage (pounds per Ton of Processible Waste Processed)
- jj) Average lime slurry feed rate for each boiler (gallons per minute)
- kk) Average lime slurry specific gravity
- ll) Actual pebble lime usage (pounds per Ton of Processible Waste Processed)
- mm) Average urea feed rate for each boiler (gallons per hour)
- nn) Actual urea usage (gallons per Ton of Processible Waste Processed)
- oo) Electricity purchased (kWh) and maximum demand (MW)
- pp) Natural gas used (therms)
- qq) Potable Water used for Process Water (gallons)
- rr) Reclaimed Water used (gallons)
- ss) Total Process Water (Potable, Reclaimed and Pond A) (gallons)
- tt) Total Process Water used per Ton of Processible Waste Processed
- uu) Wastewater discharged (gallons)
- vv) Wastewater discharged per Ton of Processible Waste Processed
- ww) Block twenty-four (24) hour average CEM data for NO_x , SO_2 (inlet and outlet), corrected to 7% O_2 (ppm), SDA outlet temperature
- xx) Block four (4) hour average CEM data for CO , corrected to 7% O_2 (ppm)
- yy) Block eight (8) hour average CEM data for carbon feed rate
- zz) Waste delivery truck breakdowns, spills of substances that required cleanup and like occurrences on the tipping floor or entrance or exit roadways that resulted in lengthening waste delivery truck turn-around times (the date, time and duration of each occurrence shall be reported)

2.2 Calculation to Determine the Estimated Pit Inventory of Processible Waste

The Contractor shall include in the Weekly report a calculation of the estimated Pit inventory that reflects the estimated quantity of Processible Waste in the Pit prior to receipt of deliveries each Monday (or Tuesday if the preceding Monday is a Legal Holiday). The Contractor shall submit a protocol for estimating the Tons of Processible Waste in the Pit based on the volume and density of the Processible Waste to the County's Authorized Representative for review and approval.

The Contractor shall provide the County with a Weekly data table listing the estimated Processible Waste elevation at the front and rear of each tipping bay in the Pit and a 3-D column chart depicting the front and rear Processible Waste elevations by tipping bay. The elevations of the tipping floor and top of the Pit walls shall be shown on the column chart for reference purposes. Processible Waste elevations shall be reported in feet above the bottom of the Pit. If any Processible Waste is being stored on the tipping floor at the time the inventory is made, the location and estimated quantity of such Processible Waste shall also be reported. This section shall be submitted in an electronic format acceptable to the County's Authorized Representative.

3. Monthly Report

The Monthly Report prepared and submitted by the Contractor pursuant to Section 5.1 of the Service Agreement shall include at least the following sections and information. It is recognized that the data supplied in each Monthly Report may differ from invoices for billings and revenues since many of those items are not read at the beginning and end of each Month. The Monthly Report shall be submitted in electronic form acceptable to the County's Authorized Representative.

3.1 Monthly Operating Data

- a) The Contractor shall include in the Monthly Report a summary of operating data from Part 1.1 of this Schedule for the prior Billing Month. The data shall include Monthly totals, Billing Year-to-date totals and twelve (12)-month rolling averages for the items specified below, plus the estimated heating value of Processible Waste (Btu/pound Processible Waste Processed) and shall be provided in a tabular format. The Contractor shall also provide CEMS data required for GHG reporting, including carbon dioxide and air flow measurements for each boiler, reported on an Hourly basis, for each Month.
- b) Estimated Processible Waste Processed (Tons)
- c) Total steam generation for each boiler (thousands of pounds)
- d) Boiler feedwater makeup for each boiler (thousands of pounds)
- e) Pounds of steam per pound of Processible Waste Processed
- f) Average steam rate (turbine throttle steam divided by gross electricity) for each turbine-generator (pounds of steam per kWh)
- g) Total net electricity sold (MWH)
- h) Gross kWh/Ton of Processible Waste Processed (kWh/Ton)

- i) Net kWh/Ton of Processible Waste Processed (kWh/Ton)
- j) On-line availability (actual operating hours divided by total hours) for each boiler and each turbine-generator (percent)
- k) Calculated HHV (Btu/pound)
- l) Tons of total Residue per Ton of Processible Waste Processed (percent)
- m) Tons of Ferrous Metals per Ton of Processible Waste Processed (percent)
- n) Tons of Non-Ferrous Metals per Ton of Processible Waste Processed (percent)
- o) Average carbon feed rate for each boiler (pounds per hour)
- p) Actual pebble lime usage (pounds per Ton of Processible Waste Processed)
- q) Actual urea usage (gallons per Ton of Processible Waste Processed)
- r) Natural gas used (therms) in each boiler

3.2 Monthly Operations Status

The Contractor shall include in the Monthly Report for each Billing Month, the following information at a minimum:

- a) Description of all scheduled and unscheduled outages during the reporting period for the boilers, turbine-generators and metal recovery equipment including unit identification, start date, outage duration and a detailed description of the reason for each outage.
- b) Description of any partial or total shutdowns for maintenance and Repair or Replacement anticipated during the next three (3) Billing Months.
- c) Description of any Repair or Replacement performed to Equipment, the Facility or the Facility Site, or any or all of the foregoing, during the reporting period including any deficiencies identified by the County's Authorized Representative or the Consulting Engineer, or both, in accordance with Section 6 of the Service Agreement.
- d) Provide the number of PM work orders completed each month as well as the number of PM work order remaining open.
- e) Description of all environmental testing conducted during the reporting period including air emission, CEM and Residue tests, or other required monitoring or any and all of the foregoing that are anticipated to be performed during the next three (3) Billing Months.

- f) Description of any regulatory or insurance inspections and any inspections of major equipment performed by the Contractor or outside party during the reporting period.
- g) Description of any major safety issues during the reporting period including all OSHA accidents.
- h) Processible Waste higher heating value (HHV) for the reporting period calculated in accordance with Schedule 4 of the Service Agreement including the calculation worksheet and the Daily data used as input to the calculation.
- i) Spare 13.8 kV transformer maintenance log (and the annual maintenance log for the month in which annual maintenance was performed on such transformer) .
- j) The date(s) on which Processible Waste was turned over in the Pit or standing water was removed from the Pit, or both, if any, pursuant to Section 7.1.3 of the Service Agreement.
- k) The dates and descriptions of any reportable air quality violations and Process upsets.
- l) The Punch List Items that were Cured during the reporting period shall be listed.

4. Environmental Reports

The Contractor shall provide copies of all environmental test or compliance reports, or both, required to be submitted to any regulatory agency or insurance company to the County's Authorized Representative and the Consulting Engineer for review and approval in accordance with Sections 3.6, 3.7 and 11.3 of the Service Agreement. If the regulatory agency or insurance company must be notified immediately, the County's Authorized Representative shall also be notified immediately. The Contractor shall also provide copies of any correspondence to or from any regulatory agency or insurance company to the County's Authorized Representative and the Consulting Engineer in a timely manner.

5. Other Technical Data

The Contractor shall provide copies of all technical data, reports and certificates associated with the inspection, Repair or Replacement, maintenance or certification of Facility components, or any or all of the foregoing, to the County's Authorized Representative and the Consulting Engineer upon issuance of the data, report or certifications. This shall include, but not be limited to, ultrasonic thickness (UT) data, boiler hydro test reports, outage reports, vendor and insurance inspection reports, electrical test data, boiler certifications, etc.

6. Maintenance Records

The Contractor shall provide copies of preventive maintenance and Repair or Replacement work orders completed each Month in digital format such that the data may be uploaded to the County's asset management system. Alternatively, the Contractor may provide the County with access to its work management system.

7. Annual Processing Projection

Each year, on or before October 1, the contractor shall provide the County with an outage schedule for the forthcoming calendar year. The schedule shall include planned outages for each boiler and each turbine generator, including the start date and scheduled duration of each outage. The Contractor shall also provide a monthly forecast for the forthcoming calendar year with an estimate of tons that will be processed and electricity generated each month. The Contractor shall make the County aware of any change to the annual outage schedule and forecast upon becoming aware of the need for such change.

SCHEDULE 7

UTILITY AND REAGENT UTILIZATION ALLOWANCES

1. Maximum Utility Utilization Allowances

The Contractor shall be responsible for payment for all utilities and reagents utilized in excess of the Maximum Utility Utilization Allowances provided herein.

a) **Process Wastewater**: The Process Wastewater Utilization Allowance is one hundred (100) gallons of Process Wastewater per Ton of Processible Waste Processed discharged to the sanitary sewer during a Billing Year.

b) **Natural Gas**: The Natural Gas Utilization Allowance is one million (1,000,000) therms, as corrected by the natural gas supplier to a base heating value, of natural gas during a Billing Year.

c) **Purchased Electricity**: The Purchased Electricity Utilization Allowance is three hundred sixty thousand (360,000) kilowatt-hours of purchased electricity during a Billing Year.

2. Maximum Reagent Utilization Allowances

a) **Pebble Lime**: The Pebble Lime Utilization Allowance for the Facility is twenty (20) pounds of Pebble Lime (CaO - 90% reactive) per Ton of Processible Waste Processed during a Billing Year.

b) **Urea**: The Urea Utilization Allowance for the Facility is five tenths (0.50) of a gallon of Urea per Ton of Processible Waste Processed during a Billing Year.

c) **Carbon**: The Carbon Utilization Allowance for the Facility is 110 percent of the "hourly feed rate" or sixty-six hundredths (0.66) of a pound of carbon per Ton of Processible Waste Processed during a Billing Year provided, however, that if more than sixty-six hundredths

(0.66) of a pound of carbon per Ton of Processible Waste Processed is demonstrated to be required to meet the applicable emission limits, then the rate used during the dioxin compliance test shall govern until the next dioxin compliance test. For the purposes of this provision, "hourly feed rate" shall mean the activated carbon feed rate per boiler operating hour as demonstrated during the most recent dioxin compliance test.

SCHEDULE 8

FORM OF PERFORMANCE BOND

BOND NO. _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: THAT _____

_____, as Principal, and _____

_____, as Surety, located at _____

_____ (Business Address) are held and firmly bound unto Pinellas County Board of County Commissioners, Pinellas County, Florida, as Obligee, in the sum of _____ (\$ _____) for payment whereof we bind ourselves, our heirs, executors, personal representatives, successors and assigns jointly and severally.

WHEREAS, Principal has entered into the Service Agreement dated _____, 2014 (the "Agreement"), with Obligee for the management, operation, repair and maintenance of the Facility (as defined in the Agreement).

THE CONDITION OF THIS PERFORMANCE BOND is that if Principal:

1. Performs the Agreement in accordance with and in the manner prescribed in the Agreement; and
2. Pays Obligee to the extent provided in the Agreement any and all losses, damages, costs and attorneys' fees that Obligee sustains because of any default by Principal under Agreement, including, but not limited to, any damages, whether liquidated or actual, incurred by Obligee; and
3. Performs all Work (as defined in the Agreement), then this Performance Bond is void; otherwise it remains in full force and effect through _____ (date).

Any changes in or under the Agreement and compliance or noncompliance with any formalities with the Agreement or any such changes do not affect Surety's obligation under this Performance Bond.

The Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Agreement or the Work to be performed thereunder, or the specifications referred to therein, shall in any way affect its obligation under this Performance Bond, and it does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Agreement or the Work.

This instrument shall be construed in all respects as a common law bond. It is expressly understood that the time provisions and statute of limitations under Section 255.05 Florida Statutes shall not apply to this Performance Bond.

In no event shall the Surety be liable in the aggregate to Obligee for more than the penal sum of this Performance Bond regardless of the number of suits that may be filed by the Obligee.

[Signature Page Follows]

IN WITNESS WHEREOF, the above bounded parties have executed this instrument this _____ day of _____, 2014 the name of each party being affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Signed, sealed and delivered
In the presence of:

PRINCIPAL:

Witness as to Principal

By: _____
(Authorized Signature)

Name: _____

Title: _____

Business Address: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2014, by _____ of _____, a _____, on behalf of _____. He / she is personally known to me or has produced Identification (Type of Identification Produced _____) and who did (did not) take an oath.

(Notary Signature)

Print Name: _____

Commission Number: _____

My Commission expires: _____

SURETY:

Witness as to Surety

By: _____
(Authorized Signature)

Name: _____

Title: _____

Business Address: _____

OR

Witness as to Attorney in Fact

By: _____

Name: _____

Title: Attorney in Fact

(Attach Power of Attorney)

Business Address: _____

Telephone Number: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2014,
by _____, of _____, a _____, on
behalf of _____. He/she is personally known to me or has produced Identification
(Type of Identification Produced _____) and who did (did not) take an
oath.

(Notary Signature)

Print Name: _____

Commission Number: _____

My Commission expires: _____

FORM OF PAYMENT AND PERFORMANCE BOND FOR PROJECTS

BOND NO. _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: THAT _____, as Principal, and _____, as Surety, located at _____ (Business Address) are held and firmly bound unto Pinellas County Board of County Commissioners, Pinellas County, Florida, as Obligee, in the sum of _____ (\$ _____) for payment whereof we bind ourselves, our heirs, executors, personal representatives, successors and assigns jointly and severally.

WHEREAS, Principal has entered into that certain Service Agreement dated _____, 2014 (the "Agreement"), with Obligee for the design, construction, installation, testing and acceptance, as applicable, of each Project in accordance with the Agreement, which Agreement is incorporated by reference and made part hereof.

THE CONDITION OF THIS PERFORMANCE BOND is that if Principal:

1. Performs each Project under the Agreement at the times and in the manner prescribed in the Agreement; and
2. Pays Obligee to the extent provided in the Agreement any and all losses, damages, costs and attorneys' fees that Obligee sustains because of any default by Principal under the Agreement, including, but not limited to, any damages, whether liquidated or actual, incurred by Obligee; and
3. Performs the Project and furnishes all materials under the Agreement, then this Performance Bond is void; otherwise it remains in full force at the time specified in said Agreement through _____ (date); then this Performance Bond is void; otherwise this Performance Bond remains in full force and effect.

Any changes in or under the Agreement and compliance or noncompliance with any formalities with the Agreement or any such changes do not affect Surety's obligation under this Performance Bond.

The Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Agreement or other Work to be performed thereunder shall in any way affect its obligation under this Performance Bond, and it does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Agreement or the Work.

This instrument shall be construed in all respects as a common law bond. It is expressly understood that the time provisions and statute of limitations under Section 255.05 Florida Statutes shall not apply to this Performance Bond.

In no event shall the Surety be liable in the aggregate to Obligee for more than the penal sum of this Performance Bond regardless of the number of suits that may be filed by the Obligee.

[Signature Page Follows]

IN WITNESS WHEREOF, the above bounded parties have executed this instrument this ____ day of ___, 201___, the name of each party being affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Signed, sealed and delivered
In the presence of:

PRINCIPAL:

Witness as to Principal

By: _____
(Authorized Signature)

Name: _____

Title: _____

Business Address: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ___ day of _____, 2014, by _____ of _____, a _____, on behalf of _____. He / she is personally known to me or has produced Identification (Type of Identification Produced _____) and who did (did not) take an oath.

(Notary Signature)

Print Name: _____

Commission Number: _____

My Commission expires: _____

SURETY:

Witness as to Surety

By: _____
(Authorized Signature)

Name: _____

Title: _____

Business Address: _____

OR

Witness as to Attorney in Fact

By: _____

Name: _____

Title: Attorney in Fact

(Attach Power of Attorney)

Business Address: _____

Telephone Number: _____

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2014,
by _____, of _____, a _____, on
behalf of _____. He/she is personally known to me or has produced Identification
(Type of Identification Produced _____) and who did (did not) take an
oath.

(Notary Signature)

Print Name: _____

Commission Number: _____

My Commission expires: _____

PAYMENT BOND

BY THIS PAYMENT BOND, We, _____, hereinafter called the "Principal" and _____, hereinafter called the "Surety", located at _____, a surety insurer chartered and existing under the laws of the State of _____ and authorized to do business in the State of Florida, are held and firmly bound unto Pinellas County Board of County Commissioners, Pinellas County (hereinafter called the "Owner") in the sum of _____ (\$ _____), for payment of which we bond ourselves, our heirs, our personal representatives, our successors and our assignees, jointly and severally.

WHEREAS, Principal and Owner have entered into the Agreement dated _____, 2014 for the design, construction, installation, testing and acceptance of each Project (as defined in the Agreement) under the Agreement being made a part of this Payment Bond by this reference.

NOW, THEREFORE, THE CONDITION OF THIS PAYMENT BOND IS THAT IF THE PRINCIPAL:

1. Shall promptly make payments to all claimants as defined in Section 255.05(1), Florida Statutes, supplying the Principal with labor, materials or supplies, as used directly or indirectly by the Principal in the prosecution of the Work provided for in the Agreement through _____ (date).
2. Shall pay the Owner, to the extent provided in the Agreement, for all losses, damages, expense, costs and attorneys' fees, including those resulting from appellate

proceedings, that the Owner sustains because of a default by the principal in contravention of the Agreement in regard to payment for such labor, materials, or supplies furnished to the Principal; then this Payment Bond is void; otherwise this Payment Bond remains in full force and effect.

BE IT FURTHER KNOWN:

1. Any changes in or under the Agreement and compliance or noncompliance with any formalities connected with said Agreement or alterations which may be made in the terms of said Agreement, or in the Work to be done under it, or giving by the Owner of any extension of time for the performance of said Agreement, or any other forbearance on the part of the Owner of Principal to the other, shall not in any way release the Principal and the Surety or either of them, their heirs, personal representatives, successors or assigns from liability hereunder, notice to the Surety of any such changes, alterations, extensions or forbearance being here waived.

2. Certain claimants seeking the protection of this Payment Bond must timely comply with the strict requirements set forth in Section 255.05, Florida Statutes, including notice and time limitation provisions in Section 255.05(2) and as otherwise provided by law.

[Signature Page Follows]

THIS PAYMENT BOND DATED THE ____ day of _____, 20__ (the date of issue by the Surety or by the Surety's agent and the date of such agent's power -of- attorney).

Signed, sealed and delivered
In the presence of:

PRINCIPAL:

Witness as to Principal

By: _____
(Authorized Signature)

Name: _____

Title: _____

Business Address: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2014, by _____ of _____, a _____, on behalf of _____. He / she is personally known to me or has produced Identification (Type of Identification Produced _____) and who did (did not) take an oath.

(Notary Signature)

Print Name: _____

Commission Number: _____

My Commission expires: _____

SURETY:

Witness as to Surety

By: _____
(Authorized Signature)

Name: _____

Title: _____

Business Address: _____

OR

Witness as to Attorney in Fact

By: _____

Name: _____

Title: Attorney in Fact

(Attach Power of Attorney)

Business Address: _____

Telephone Number: _____

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2014,
by _____, of _____, a _____, on
behalf of _____. He/she is personally known to me or has produced Identification
(Type of Identification Produced _____) and who did (did not) take an
oath.

(Notary Signature)

Print Name: _____

Commission Number: _____

My Commission expires: _____

SCHEDULE 9

FORM OF IRREVOCABLE LETTER OF CREDIT

_____, 2014

Amount: _____ (U.S. \$ _____) Letter of Credit No. _____

Account Party: _____ (“Contractor”)

Payee: Pinellas County, Florida

Attn:

Gentlemen:

At the request and on instructions of _____ (“Contractor”),
_____ (“Issuing Bank”) hereby establishes in favor of Pinellas County, Florida
(the “County”) this Irrevocable Letter of Credit (“LOC”) in the aggregate amount of
_____ DOLLARS (\$_____). We understand this LOC is furnished in
connection with and pursuant to the Service Agreement dated _____, 2014 (the “Service
Agreement”), pursuant to which the Contractor has agreed to manage, operate and maintain the
Facility (as defined in the Service Agreement) and has further agreed to secure its performance
obligations thereunder, in part, by this Letter of Credit. Except as otherwise defined herein,
capitalized terms used herein shall have the meanings set forth in the Service Agreement.

All demands for payment hereunder may be made in whole or in part from time to time
by presentation to the Issuing Bank of one or more drafts at sight, each of which shall be in the
form of Exhibit A attached hereto, accompanied by a certificate signed by an officer of the

County (or one describing himself/herself therein as such) in the form of Exhibit B attached hereto.

All demands for payment hereunder, together with any documents presented to Issuing Bank in connection therewith, as well as all notices and other communications to Issuing Bank in respect of this LOC, shall be in writing, shall make specific reference to this LOC by number, and shall be addressed and presented or personally delivered to the Issuing Bank, Address: _____, Attn _____, with copies to: (i) _____. Attn: _____ and (ii) _____, Attn: _____. Such documents, notices, and other communications shall be personally delivered or mailed by registered mail to Issuing Bank. Issuing Bank reserves the right to change the address for notices hereunder by delivering written notice of any such change to the County at the address above.

Conforming draft and certificates presented to and received by the Issuing Bank before 12:00 noon on any Business Day will be paid that Day.

THE MAXIMUM LIABILITY OF THE ISSUING BANK UNDER THIS LOC IS EXPRESSLY LIMITED TO AND SHALL NOT EXCEED THE SUM OF _____ DOLLARS (\$_____).

This LOC is irrevocable and shall expire upon (and may not be modified or terminated by the Issuing Bank prior to _____ (DATE).

This LOC shall become null and void and be of no further force and effect upon the earlier to occur of (i) the Issuing Bank's payment in full of its obligations hereunder or (ii) the expiration of this LOC in accordance with its terms, whereupon, in either case, the County shall

deliver to the Issuing Bank the executed original hereof; provided, however, failure to return such executed original of the LOC shall have no effect on the application of this LOC.

This LOC may not be transferred in whole or in part.

We hereby agree to provide prompt written notice to the County of the occurrence of any downgrade, withdrawal or suspension of the rating or ratings applicable to the Issuing Bank or its ultimate parent corporation from any such rating in place on the date of issuance hereof by any one or more of Standard and Poor's, Moody's Investors Service or Fitch Ratings.

This LOC sets forth in full the terms of Issuing Bank's undertaking, and this undertaking shall not in any way be modified, amended or amplified by reference to any document, instrument or agreement referred to herein (except the Uniform Customs (hereinafter defined)) or in which this LOC is referred to or to which this LOC relates, and any such reference shall not be deemed to incorporate herein by reference any document, instrument or agreement.

Unless otherwise expressly stated, this LOC is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision), International Chamber of Commerce, Publication No. 600 (the "Uniform Customs"). This LOC shall be deemed to be a contract made under the laws of the State of Florida and shall, as to matters not governed by the Uniform Customs, be governed by and construed in accordance with the laws of said State of Florida, without regard to principles of conflicts of law.

Very truly yours,

[ISSUING BANK]

By: _____

Name: _____

Title: _____

EXHIBIT A

[Letterhead of Pinellas County]

[Date]

[Insert Bank Name - Letter of Credit Issuer]

[Insert Address]

Attn: Letter of Credit Dept.

Re: Draw Request – Letter of Credit No. _____

Dear Sirs:

This letter constitutes a demand for payment under the above referenced Letter of Credit. Attached hereto is the original Certificate required by the Letter of Credit.

DRAFT AMOUNT: S[Insert Drawdown Amount]

PLEASE IMMEDIATELY WIRE TRANSFER DRAW PROCEEDS IN THE ABOVE AMOUNT AS FOLLOWS:

Payee:	Pinellas County, Florida
Bank:	[Insert name and address of Pinellas County's bank]
ABA Number:	_____
Credit to:	[Insert name of Pinellas County's bank account]
	Account No: _____
Notification	Please notify [insert name of County contact person],
Contact:	Phone: _____, when wire is sent.

Please contact the undersigned if you have questions.

Sincerely,

PINELLAS COUNTY, FLORIDA

By: _____

Name: _____

Title: County Administrator

By: _____

Name: _____

Title: Director, Solid Waste Operations

EXHIBIT B

CERTIFICATE OF PINELLAS COUNTY, FLORIDA

PINELLAS COUNTY, FLORIDA (the "County") hereby demands payment in the amount of _____ DOLLARS (\$ _____) under Irrevocable Letter of Credit No. _____ issued by _____ and dated _____. The total amount of all prior draws under said Letter of Credit ("LOC") is \$ _____, which, together with this draw, do not exceed the maximum amount of the LOC.

The County hereby certifies that (1) _____ ("Contractor") is in breach of its obligations(s) under the Service Agreement between the County and the Contractor, (2) all conditions to making this draw, as set forth in the Service Agreement and all related documents, have been satisfied, and (3) the County is entitled to make this draw under the terms hereof.

IN WITNESS WHEREOF, the undersigned duly authorized officer of the County has executed this certificate as of the date set forth below.

PINELLAS COUNTY, FLORIDA

Date: _____

By: _____
Name: _____
Title: County Administrator

By: _____
Name: _____
Title: Director, Solid Waste Operations

SCHEDULE 10

GUARANTY

This Guaranty made as of the ___ day of _____, 2014, by _____, a _____ corporation ("Guarantor"), having its principal place of business in _____, _____, to and for the benefit of Pinellas County, Florida, a political subdivision of the State of Florida (the "County"). Guarantor and County are referred to herein individually as a "Party" and collectively as the "Parties."

Section 1 Background.

Section 1.1 The County owns a municipal, mass-burn, waste-to-energy facility located in the County (the "Facility"), and proposes to contract with _____ ("Contractor"), a wholly owned subsidiary of the Guarantor, for the operation and maintenance of the Facility pursuant to that certain Service Agreement dated as of _____, 2014 (as amended, restated, supplemented or otherwise modified from time to time, the "Service Agreement").

Section 1.2 The County is willing to enter into and perform its obligations pursuant to the Service Agreement only upon the condition that Guarantor execute this instrument;

Section 1.3 The Guarantor has agreed to guarantee payment and performance of all of Contractor's covenants, agreements and obligations under the Service Agreement; and

Section 1.4 The Guarantor will benefit from the transactions contemplated by the Service Agreement. For valuable consideration, the receipt and sufficiency of which is hereby acknowledged by Guarantor for the purpose of inducing the County to enter into the Service

Agreement, the Guarantor does hereby make the following guarantees to and agreements with the County.

Section 2 Definitions. Capitalized terms used herein shall have the meanings assigned to them herein or, if not defined herein, such terms shall have the meanings assigned to them in the Service Agreement.

Section 3 Guaranty. Beginning on the Commencement Date, Guarantor absolutely, irrevocably and unconditionally guarantees, (a) the due and punctual payment of (i) each payment required to be made by Contractor under the Service Agreement, when and as due, including payments in respect of reimbursement of disbursements and interest thereon and (ii) all other monetary obligations whatsoever, including indemnities, fees, costs and expenses, whether primary, secondary, direct, contingent, fixed or otherwise, of Contractor under the Service Agreement, whether such obligations now exist or arise hereafter and subject to all limitations of liability thereunder (all such obligations referred to in this clause (a) being collectively referred to as the "Monetary Obligations") and (b) the due and punctual performance and observance of, and compliance with, all covenants, agreements and obligations of Contractor under or pursuant to the Service Agreement, or any other agreement or instrument entered into by Contractor related thereto whether such obligations now exist or arise hereafter (all such obligations referred to in the preceding clauses (a) and (b) being collectively referred to as the "Obligations"). Guarantor further agrees that the Obligations may be extended, amended, modified or renewed, in whole or in part, without notice to or further assent from it, and that it will remain bound upon its guarantee notwithstanding any extension, amendment, modification or renewal of any Obligation by the County and Contractor.

Section 4 Obligations Not Waived. To the fullest extent permitted by Applicable

Law, Guarantor waives all notices whatsoever with respect to this Guaranty and the Service Agreement or with respect to the Obligations, including presentment to, demand of payment from and protest to Contractor of any of the Obligations, and notice of acceptance of its guaranty and notice of protest for nonpayment. To the fullest extent permitted by Applicable Law, the Obligations of Guarantor hereunder shall not be affected by (a) the failure of the County to assert any claim or demand or to enforce or exercise any right or remedy against Contractor in respect of the Obligations or otherwise under the provisions of the Service Agreement, or otherwise, or, in each case, any delay in connection therewith, or (b) any rescission, waiver, amendment or modification of, or any release from any of the terms or provisions of the Service Agreement, or any other agreement to which Contractor is a party.

Section 5 Continuing Guaranty of Payment and Performance. Guarantor further agrees that its guaranty constitutes a continuing guaranty of payment and performance when due, and not of collection, and Guarantor further waives any right to require that any resort be had by the County to any security.

Section 6 No Discharge or Diminishment of Guaranty.

Section 6.1. The obligations of Guarantor hereunder shall not be subject to any reduction, limitation, impairment or termination, or be subject to any defense or setoff, counterclaim, recoupment or termination whatsoever, or otherwise be affected, for any reason (other than the performance in full of all Obligations, including the indefeasible payment in full of all Monetary Obligations, or the termination of all the Obligations), including: (a) any claim of waiver, release, surrender, alteration or compromise of any of the Obligations; (b) the invalidity, illegality or unenforceability of the Obligations; (c) the occurrence or continuance of any event of bankruptcy, reorganization, insolvency, receivership or other similar proceeding

with respect to Contractor or any other Entity or the dissolution, liquidation or winding up of Contractor or any other Entity; (d) any permitted assignment or other transfer of this Guaranty by the County or any permitted assignment or other transfer of the Service Agreement; (e) any sale, transfer or other disposition by Guarantor of any direct or indirect interest it may have in Contractor or any other change in ownership or control of Contractor; or (f) the absence of any notice to, or knowledge on behalf of, Guarantor of the existence or occurrence of any of the matters or events set forth in the foregoing clauses.

Section 6.2. Without limiting the generality of the foregoing, the Obligations of Guarantor hereunder shall not be discharged or impaired or otherwise affected by the failure of the County to assert any claim or demand or to enforce any remedy under the Service Agreement, by any waiver or modification of any provision thereof, by any default, failure or delay, willful or otherwise, in the performance of the Obligations, or by any other act or omission that may or might in any manner or to any extent vary the risk of Guarantor or that would otherwise operate as a discharge of Guarantor as a matter of law or equity (other than the performance in full of all Obligations, including the indefeasible payment in full in cash of all Monetary Obligations, or the termination of all the Obligations).

Section 7 Defenses Waived. The County may compromise or adjust any part of the Obligations, make any other accommodation with Contractor or exercise any other right or remedy available to it against Contractor, without affecting or impairing in any way the liability of Guarantor hereunder except to the extent all the Obligations have been fully and finally performed, including the indefeasible payment in full of all Monetary Obligations, or terminated. To the fullest extent permitted by Applicable Law, Guarantor waives any defense arising out of any such County election even though such election operates, pursuant to Applicable Law, to

impair or to extinguish any right of reimbursement or subrogation or other right or remedy of Guarantor against Contractor or any security. Guarantor waives all defenses to which it may be entitled under Applicable Law as in effect or construed from time to time.

Section 8 Representations and Warranties of Guarantor. Guarantor represents and warrants to the County as follows:

Section 8.1. Organization. Guarantor is a corporation duly organized, validly existing and in good standing under the laws of the State of _____ and has all requisite corporate power and authority to own, lease and operate its properties and to carry on its business as is now being conducted.

Section 8.2. Authority Relative to this Guaranty. Guarantor has all necessary corporate power and authority to execute and deliver this Guaranty and to perform its obligations hereunder. The execution and delivery by Guarantor of this Guaranty and performance by Guarantor of its obligations hereunder have been duly and validly authorized by the Guarantor and no other corporate proceedings on the part of Guarantor are necessary to authorize this Guaranty or performance by Guarantor of its obligations hereunder. This Guaranty has been duly and validly executed and delivered by Guarantor and this Guaranty constitutes a valid and binding agreement of Guarantor, enforceable against Guarantor in accordance with its terms.

Section 8.3 Consents and Approvals; No Violation.

Section 8.3.1. Neither the execution and delivery of this Guaranty by Guarantor nor performance by Guarantor of its obligations hereunder will (i) conflict with or result in any breach of any provision of the organizational or governing documents or instruments of Guarantor, (ii) result in a default (or give rise to any right of termination,

cancellation or acceleration) under any of the terms, conditions or provisions of any note, bond, mortgage, indenture, license, agreement, lease or other instrument or obligation to which Guarantor or any of its subsidiaries is a party or by which any of their respective assets may be bound or (iii) violate any order, writ, injunction, decree, statute, rule or regulation applicable to Guarantor, or any of its assets, except in the case of clauses (ii) and (iii) for such failures to obtain a necessary consent, defaults and violations which would not, individually or in the aggregate, have a material adverse effect on the ability of Guarantor to discharge its obligations under this Guaranty (a "Guarantor Material Adverse Effect").

Section 8.3.2. No declaration, filing or registration with, or notice to, or authorization, consent or approval of any Governmental Authority is necessary for performance by Guarantor of its obligations hereunder, other than such declarations, filings, registrations, notices, authorizations, consents or approvals which, if not obtained or made would not, individually or in the aggregate, have a Guarantor Material Adverse Effect.

Section 9 Agreement to Perform and Pay; Subordination. In furtherance of the foregoing and not in limitation of any other right that the County has at law or in equity against Guarantor by virtue hereof, upon the failure of Contractor to perform or pay any Obligation when and as the same shall become due, Guarantor hereby promises to and will forthwith, as the case may be, (a) perform, or cause to be performed, such unperformed Obligations and (b) pay, or cause to be paid, to the County the amount of such unpaid Monetary Obligations. Upon payment by Guarantor of any sums to the County as provided above, all rights of Guarantor against Contractor, arising as a result thereof by way of right of subrogation, contribution, reimbursement, indemnity or otherwise shall in all respects be subordinate and junior in right of payment to the prior indefeasible payment in full of all the Monetary Obligations. If any amount

shall erroneously be paid to Guarantor on account of (i) such subrogation, contribution, reimbursement, indemnity or similar right or (ii) any such indebtedness of Contractor, such amount shall be held in trust for the benefit of the County and shall forthwith be paid to the County to be credited against the payment of the Monetary Obligations or performance in accordance with the terms of the Service Agreement.

Section 10 Information. Guarantor assumes all responsibility for being and keeping itself informed of Contractor's financial condition and assets, and of all other circumstances bearing upon the risk of nonperformance of the Obligations (including the nonpayment of Monetary Obligations) and the nature, scope and extent of the risks that Guarantor assumes and incurs hereunder, and agrees that the County does not have any duty to advise Guarantor of information known to it regarding such circumstances or risks.

Section 11 Termination and Reinstatement. This Guaranty shall be effective as of the Commencement Date and (a) shall terminate when all the Obligations have been (i) performed in full, including the indefeasible payment in full of the Monetary Obligations or (ii) terminated and (b) shall continue to be effective or be reinstated, as the case may be, if at any time any payment, or any part thereof, of any Obligation is rescinded or must otherwise be restored by the County upon the bankruptcy or reorganization of Contractor or Guarantor or for any other reason.

Section 12 Assignment; No Third Party Beneficiaries. This Guaranty and all of the provisions hereunder shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns, and nothing herein express or implied will give or be construed to give any entity any legal or equitable rights hereunder. Neither this Guaranty nor any of the rights, interests and obligations hereunder shall be assigned by Guarantor, including by operation of law, without the prior written consent of the County; provided, however, that no

assignment or transfer of rights or obligations by Guarantor shall relieve it from the full liabilities and the full financial responsibility, as provided for under this Guaranty, unless and until the transferee or assignee shall agree in writing to assume such obligations and duties and the County has consented in writing to such assumption.

Section 13 Amendment and Modification; Extension; Waiver. This Guaranty may be amended, modified or supplemented only by an instrument in writing signed on behalf of each of the Parties. Any agreement on the part of a Party to any extension or waiver in respect of this Guaranty shall be valid only if set forth in an instrument in writing signed on behalf of such Party. The failure of a Party to this Guaranty to assert any of its rights under this Guaranty or otherwise shall not constitute a waiver of such rights.

Section 14 Governing Law. It is the express intention of the Parties that all legal actions and proceedings related to this Guaranty or to any rights or any relationship between the Parties arising therefrom shall be solely and exclusively initiated and maintained in the courts of the State of Florida and the laws of that State shall govern the validity, interpretation, construction and performance of this Guaranty, excluding any conflict-of-law rules which would direct the application of the law of another jurisdiction.

Section 15 Notices. All notices and other communications hereunder shall be in writing and shall be deemed given as of the time of delivery if delivered personally or, in the case of a facsimile communication as of the time of confirmation or at the time received if sent by overnight courier (providing proof of delivery) to the Parties at the following addresses (or at such other address for a Party as shall be specified by like notice):

If to the County:

Director, Solid Waste Division
Department of Environment & Infrastructure
3095 114th Avenue North
St. Petersburg, Florida 33716

with a copy to:

Waste-to-Energy Program Manager, Solid Waste Division
Department of Environment & Infrastructure
3095 114th Avenue North
St. Petersburg, Florida 33716

with a copy to:

Pinellas County Attorney
315 Court Street – 6th Floor
Clearwater, Florida 33756

with a copy to:

Consulting Engineer

If to the Contractor:

With a copy to:

Section 16 Jurisdiction and Enforcement.

Section 16.1. Each of the Parties irrevocably submits to the exclusive jurisdiction

of the Circuit Court of the State of Florida for the 6th Judicial Circuit for the purpose of any suit, action or other proceeding arising out of this Guaranty or any transaction contemplated hereby. Each of the Parties agrees to commence any action, suit or proceeding relating hereto in the 6th Judicial Circuit Court for Pinellas County, Florida. Each of the Parties further agrees that service of process, summons, notice or document by hand delivery or U.S. registered mail at the address specified for such Party in Section 15 (or such other address specified by such Party from time to time pursuant to Section 15) shall be effective service of process for any action, suit or proceeding brought against such Party in such court. Each of the Parties irrevocably and unconditionally waives any objection to the laying of venue of any action, suit or proceeding arising out of this Guaranty or the transactions contemplated hereby in the Circuit Court of the State for the 6th Judicial Circuit and hereby further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum.

Section 16.2. The Parties agree that irreparable damage would occur in the event that any of the provisions of this Guaranty were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the Parties shall be entitled equitable relief, including an injunction or injunctions to prevent breaches of this Guaranty and to specifically enforce the terms and provisions of this Guaranty, this being in addition to any other remedy to which they are justly entitled to, whether at law or in equity.

Section 17. Survival of Guaranty. All covenants, agreements, representations and warranties made by Guarantor herein and in the certificates or other instruments prepared or delivered in connection with or pursuant to this Guaranty shall be considered to have been relied upon by the County and shall unconditionally survive the consummation of the transactions

contemplated by the Service Agreement, regardless of any investigation made by the County or on its behalf, and shall continue in full force and effect as long as any Obligations remain outstanding.

Section 18 Effectiveness; Counterparts. This Guaranty shall become effective when executed by Guarantor. This Guaranty may be executed in two counterparts, each of which shall be deemed an original, but both of which together shall constitute one and the same instrument.

Section 19 Rules of Interpretation. The rules of interpretation specified in Section 2.2 the Service Agreement shall be applicable to this Guaranty.

Section 20 Severability.

Section 20.1. If any term or other provision of this Guaranty is invalid, illegal or incapable of being enforced by any rule of law or public policy, all other conditions and provisions of this Guaranty shall nevertheless remain in full force and effect. Upon such determination that any term or other provision is invalid, illegal or incapable of being enforced, the Parties shall negotiate in good faith to modify this Guaranty so as to effect the original intent of the Parties as closely as possible to the fullest extent permitted by applicable law, in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the extent possible.

Section 20.2. In the event that the provisions of this Guaranty are claimed or held to be inconsistent with any other agreement or instrument evidencing the Obligations, the terms of this Guaranty shall remain fully valid and effective.

Section 21 Entire Guaranty. This Guaranty embodies the entire agreement and understanding of the Parties in respect of the matters contemplated hereby. There are no

restrictions, promises, representations, warranties, covenants or undertakings other than those expressly set forth or referred to herein. This Guaranty supersedes all prior agreements and understandings between the Parties with respect to the matters contemplated hereby.

IN WITNESS WHEREOF, this Guaranty has been duly executed and delivered by the Guarantor as of the date first above written.

By: _____
Name: _____
Title: _____

SCHEDULE 11

INSURANCE

1. Insurance required to be Secured and Maintained by Contractor.

a. Workers' Compensation and Employer's Liability Insurance. Workers' Compensation and Employer's Liability Insurance shall be maintained by the Contractor in compliance with the Applicable Laws of the State of Florida (if separately for Subcontractors, all Subcontractors to be addressed similarly). Employer's liability limit for all of the Contractor's employees to be engaged in Work provided for in this Agreement shall not be less than (i) one hundred thousand dollars (\$100,000.00) per employee; (ii) one hundred thousand dollars (\$100,000.00) per employee disease; and (iii) five hundred thousand dollars (\$500,000.00) policy limit for disease. An excess liability coverage may be used to fulfill the Employee's Liability limit requirement. Policies hereunder shall include voluntary compensation endorsement, broad form "all states" coverage endorsement and stop gap endorsement as applicable. Coverage shall include a waiver of subrogation in favor of the County.

b. Commercial General Liability Insurance. The Contractor shall maintain Commercial General Liability Insurance (excluding aircraft, watercraft fifty (50) feet or longer and automobiles) to protect the Contractor against claims arising from injuries to members of the public or damage to property of others, including loss of the use of tangible property damaged, arising out of any act or omission of the Contractor, its agents, employees or independent contractors. This policy shall insure the contractual liability assumed by the Contractor under the indemnification provisions of this Agreement to the extent that such contractual liability would be covered under a Commercial General Liability policy.

Commercial General Liability coverage shall be written on a policy form equivalent or superior to Insurance Services Offices (ISO)CG 00 01 and contain the following provisions:

- (i) Premises and operations;
- (ii) Products and completed operations;
- (iii) Personal injury and advertising injury;
- (iv) No exclusions for explosion, collapse, or underground damage;
- (v) Coverage for independent contractors and Subcontractors employed by the Contractor;
- (vi) Coverage for contractual liability for insured contracts;
- (vii) Waiver of subrogation as provided in the Insurance provisions of this Agreement;
- (viii) Personal injury liability;
- (ix) Employees included as additional insureds (excluding bodily-injury to fellow employees only); and
- (x) Separation of insureds or severability of interests.

The liability limits shall not be less than (a) one million dollars (\$1,000,000.00) per occurrence; (b) one million dollars (\$1,000,000.00) products/completion operations aggregate; (c) one million dollars (\$1,000,000.00) personal injury and advertising injury general; and (d) two million dollars (\$2,000,000.00) aggregate. If the policy is not specific to this location and/or project, and part of a master policy, an endorsement shall be issued providing that the general aggregate applies to this project or this location.

Exclusions shall be acceptable for environmental impairment liability, professional liability, asbestos, lead and other standard exclusions normally contained in a Commercial

General Liability policy and may be additional policies required in this Schedule. Such Commercial General Liability policy shall not contain an explosion, collapse or underground (x, c, u) exclusion; nor shall there be a crane weight, jig or boom exclusion.

c. Automobile Liability Insurance. The Contractor shall maintain Motor Vehicle Liability Insurance written on a Business Auto Policy form or Motor Carrier form during the life of this Agreement to protect itself while performing Work covered by this Agreement against all claims for injuries, including accidental death to members of the public and damage to property of others arising from such use of motor vehicles, and such policies shall cover the operation on or off the site of all motor vehicles licensed for highway use, that are directly involved in the daily operations of the plant, whether they are owned, not-owned, or hired. If Contractor does not own any vehicles, then evidence of hired and non-owned coverage is sufficient. The insurance limit shall not be less than one million dollars (\$1,000,000.00) combined single limit per accident in accordance with the Applicable Laws of the State of Florida as to the ownership, maintenance, and use of all owned, non-owned, leased, or hired vehicles. The policy or policies shall also provide uninsured/underinsured motorist coverage as required by Applicable Law. Coverage shall (a) include a waiver of subrogation in favor of the County, (b) be on an "occurrence" basis, (c) include coverage for loading and unloading hazards, unless the Contractor can establish to the County, and the County subsequently waives such requirement, that such coverage exists under its Commercial General Liability policy.

d. Umbrella Excess Liability Insurance. The Contractor shall maintain policy or policies of umbrella excess liability insurance with liability limits, that when combined with the primary liability limits, will not be less than (a) twenty-five million dollars (\$25,000,000.00) per each occurrence or claim for all liability and (b) twenty-five million dollars (\$25,000,000.00) in

the general aggregate per policy year. The wording of the excess liability policy or policies shall be at least as broad as the primary or underlying policy or policies and shall apply both to the Contractor's general liability, employer's liability and to the automobile liability insurance (and shall be written on an occurrence basis), such that the total limit for general liability, employer's liability, automobile and umbrella liability shall be twenty-five million dollars (\$25,000,000.00). The Contractor is granted the option of arranging coverage under a single policy for the full limit required or by a combination of underlying policies with the balance provided by an excess or umbrella liability policy equal to the total limit(s) requested. All policies shall be endorsed to drop-down over any exhausted aggregate limits applicable to underlying policies. If not provided for in the umbrella excess liability form, a waiver of subrogation endorsement in favor of the County shall be endorsed onto the policy.

e. Professional Liability Insurance including Construction Managers Errors and Omissions. Professional Liability insurance including Construction Managers errors and omissions shall be provided with limits of (a) five million dollars (\$5,000,000.00) for each occurrence or claim, and (b) five million dollars (\$5,000,000.00) in the aggregate. If "claims made" coverage is provided, "tail coverage" extending three (3) years beyond completion and acceptance of the Technical Recovery Projects with proof of "tail coverage" to be submitted with the invoice for final payment. In lieu of "tail coverage", the Contractor may submit annually to the County's Director of Risk Management or the County's Authorized Representative, a current certificate of insurance providing "claims made" insurance with prior acts coverage in force with a retroactive date no later than the Commencement Date.

For acceptance of Professional Liability coverage included within another policy required in this Schedule 11 (Insurance), a statement notifying the certificate holder must be included on

the certificate of insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of Professional Liability and other coverage combined.

f. Pollution Legal Liability Insurance (“PLL”). PLL insurance shall be provided with limits of (a) five million dollars (\$5,000,000.00) per claim or occurrence and (b) five million dollars (\$5,000,000.00) aggregate. Coverage may be provided on a claims-made and reported or occurrence basis. The Contractor must procure insurance and furnish a certificate of insurance for PLL insurance with coverage for sudden and non-sudden pollution conditions, including the discharge, dispersal, release, seepage, migration or escape of any solid, liquid, gaseous or thermal pollutant, irritant or contaminant, including, but not limited to, smoke, vapor, soot, fumes, acids, alkalis, toxic chemicals, hazardous materials, waste materials, including medical, infectious, biological and pathological wastes, mold or microbial matter, silt, sedimentation, asbestos and lead-based paint, electromagnetic fields and low level radioactive waste and material into or upon land, or structures thereupon, the atmosphere or any watercourse or body of water, including ground water, or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water as a result of the Work. The PLL policy shall include coverage for the following:

i. Bodily injury, including sickness, disease, mental anguish (whether or not accompanied by bodily injury) or shock sustained by any person, including death and any associated medical monitoring costs;

ii. Property damage including (1) physical injury to or destruction of tangible property including the resulting loss of use thereof, (2) loss of use of tangible property that has not been physically injured or destroyed, (3) diminished third-party property value; and (4) Natural Resource Damages (for purposes of this Schedule 11 (Insurance, “Natural Resource

Damage” means physical injury to or destruction of, including the resulting loss of value of, land, fish, wildlife, biota, air, water, groundwater, drinking water supplies and other such resources belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by the United States (including the resources of the fishery conservation zone established by the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.)), any State or local government, any Indian tribe or if such resources are subject to a trust restriction on alienations, any member of an Indian tribe;

iii. Cleanup costs on or off of the Facility Site, including costs to investigate, quantify, monitor, mitigate, abate, remove, dispose, treat, neutralize, or immobilize pollution conditions and costs to restore, repair or replace real or personal property, to substantially the same condition it was in prior to being damaged during the course of responding to a pollution condition;

iv. Pollution incidents associated with transportation, loading and unloading of materials or Solid Waste; and

v. Non-Owned Disposal Sites coverage.

The PLL insurance shall include business interruption insurance from polluted conditions and defense costs, including costs, charges and expenses incurred in the investigation and adjustment of defense of claim for such compensation. Any products liability exclusion shall not apply to claims arising from pollution conditions caused by water or biosolids, derived fertilizer material or recycled ash that is distributed and/or supplied by the insured.

For County acceptance of PLL coverage included within another policy coverage required herein, a statement notifying the certificate holder must be included on the certificate of

insurance and the total amount of said coverage per occurrence must be greater than or equal to the amount of PLL coverage and other coverage combined.

g. Property Insurance. Contractor is responsible for insuring Contractor's property, including personal property and rolling stock, and any Contractor property not included in the definition of Facility.

h. Cyber Risk Liability Insurance including Terrorism. Cyber Risk Liability insurance, with coverage for terrorism, hardware and software breaches, shall be provided with limits of (a) five million dollars (\$5,000,000.00) for each occurrence, and (b) five million dollars (\$5,000,000.00) in the aggregate.

2. Insurance Required to be Secured and Maintained by County.

a. All Risk Property and Boiler & Machinery Coverage. The County shall provide all risk property and boiler & machinery coverage insuring against physical damage or loss to the Facility under an "All Risk" policy form. The County shall provide as much coverage as is commercially available and/or available at a reasonable cost to the County either through the purchase of commercial insurance or from government entities. Subject to the foregoing, coverage shall be provided for the full 100% insurable replacement cost value of the property. The deductible for property damage shall be an amount on a per occurrence basis as determined by the County's Director of Risk Management. The level of deductibles for earth movement, flood, windstorm and hurricane losses will be consistent with insurance market conditions and may be in the form of percentages of the total insurable replacement values at risk. Personal property of the Contractor (or any Subcontractor), including rolling stock, shall not be included in such coverage. All such risk property coverage shall include coverage for the perils of earth movement, flood, windstorm, and hurricane as is commercially available and/or available at a

reasonable cost to the County. Should separate policies of insurance be provided for the “all risk” property portion and the boiler & machinery portion of the property; a joint loss endorsement shall be included in each such separate policy of insurance. Contractor shall be an additional named insured on All Risk Property and Boiler & Machinery Coverage. The property policies shall include a waiver of subrogation in favor of the Contractor.

b. Business Interruption and Extra Expense Insurance. Business Interruption and Extra Expense Insurance shall be purchased and maintained by the County for the benefit of the County and the Contractor in accordance with an agreed formula with the insurance company as to the method of determining the loss of total income of the Facility due to the interruption of business and extra expenses and such insurance shall include protection against loss due to total or partial interruption of operations as a result of an insured peril. Coverage shall cover loss of gross earnings from all revenue sources, including Electrical Capacity and Electric Energy sales to the Electric Utility and from the sale of other Recovered Materials. The policy shall also include endorsements for extra expense and increased cost of construction. This coverage may be included in the County’s Blanket Policy. Contractor shall be an additional named insured on the business interruption and extra expense policy.

3. Contractor’s Deductible Obligation. The Contractor shall be responsible for insurance policy deductibles in accordance with Section 11.3.2 of the Service Agreement and this Schedule 11, for policies purchased by the County or the Contractor, provided that, notwithstanding anything therein or herein to the contrary (a) the Contractor’s liability for property damage deductible(s) and excluded losses under the “all risk” property and boiler & machinery insurance shall not exceed five hundred thousand dollars (\$500,000.00) per occurrence and (b) the Contractor’s liability for business interruption deductible(s) under the business interruption and

extra expense insurance shall be the assumption of all its liability and loss for the first thirty (30) Days on a per occurrence basis or five hundred thousand dollars (\$500,000.00), whichever is less. Contractor shall be responsible for all deductibles for insurance coverage that is required to be secured and maintained by Contractor.

SCHEDULE 12A

FORM OF CONTRACTOR'S MONTHLY INVOICE

SCHEDULE 12A - FORM OF CONTRACTOR'S MONTHLY INVOICE

(Contractor's Name)
Service Fee Invoice for Billing Month: _____
Attachment A
Calculation of Monthly Processing Fee (MPF)

In accordance with Section 8.2.2 and 8.3.2 of the Service Agreement	
1 Monthly Processing Fee-Base Delivery Amount (Section 8.2.2 and 8.3.2)	
1a <u>Initial Operating Period Tonnage for Base Payment (Section 8.2.2.1 and 8.3.2.1)</u>	67,500
1b Total Solid Waste delivered this Billing Month (Tons)	
1c Nonprocessable Waste removed this Billing Month (Tons)	
1d Processible Waste accepted this Billing Month (Tons) (Item 1 minus Item 2)	
1e Total Processible Waste accepted this Billing Year as of Last Month (Tons)	
1f Total Processible Waste accepted this Billing Year (Tons)	
1g Processible Waste Base Tonnage Processing Guarantee (Tons)	810,000.00
1h Processible Waste to Reach Base Tonnage Processing Guarantee (Tons)	
1i Base Tonnage Processing Fee (\$/Ton)	
1j Contractor's Primary Processing Fee for this Billing Month (\$) ^a	
2 Monthly Processing Fee For Excess Tonnage Amount (Section 8.2.2.2 and 8.3.2.2)	
2a Processible Waste Excess Tonnage Limit	810,000.00
2b Processible Waste Tonnage Above Excess Tonnage Limit	
2c Excess Tonnage Processible Waste Processing Percentage	40%
2d Excess Tonnage Processing Fee (\$)	
2f Contractor's Excess Tonnage Processing Fee for this Billing Month (\$)	
2g Total Monthly Processing Fee	
3 True-up of Scale Record (Section 8.4.8)	
4a Estimated Tons of Processible Waste Delivered to Facility	
4b Actual Tons of Processible Waste Delivered to Facility	
4c Difference	
4d Processing Fee	
4e Total True-up of Scale Record Owed Contractor / (County)	
4 True-up of Adjustment Factor for Processing Fee (Section 8.6.1)	
3a Initial Calculated Processing Fee (\$)	
3b Final Calculated Processing Fee (\$)	
3c Difference (\$)	
3d Tonnage Paid at Initial Calculated Processing Fee (Tons)	
3e Total True-up of Adjustment Owed Contractor / (County) (\$)	
5 Total Monthly Processing Expenses	

a During the Initial Operating Period, the base Processing Fee will be based on the tonnage value from 1a.

SCHEDULE 12A - FORM OF CONTRACTOR'S MONTHLY INVOICE

(Contractor's Name)
Service Fee Invoice for Billing Month: _____
Attachment B
Calculation of Electric Energy Revenue (EER)
and
Calculation of Electric Capacity Payment (ECP)

In accordance with Section 8.3.3 and 8.3.4 of the Service Agreement	
1 Calculation of Net Electrical Energy Revenues (Section 8.3.3)	
1a Electric Billing Month (Prior Month)	
1b Electric Energy sold this Billing Month (MWH) ^(a)	
1c Electric Energy sold Billing Year to date Last Month (MWH)	
1d Electric Energy sold Billing Year to date (MWH) ^(a) (Item 1 plus Item 2)	
1e Gross Electric Revenue This Billing Month	
1f Tie Line Maintenance	\$3,500.00
WTE Plant Monthly Electric Invoice Standby Adjustment Detail (Prior Month)	
1g Standby Adjustment - 1	
1h Standby Adjustment - 2	
1i Standby Adjustment Fee (Greater of Item 1g and 1h)	
1j Gross Receipts Tax	
1k Total Electric Expense (Item 1i plus Item 1j)	
1l Net Revenues for Electric Energy this Billing Month (\$) ^(a)	
1m Contractor's Electric Energy share (%)	10%
1n Contractor's Electric Energy Revenue This Billing Month (\$) ^(b) (lines 1l * 1m)	
2 Capacity Amount Maintenance Credit Payment (Section 8.2.4 and 8.3.4)	
2a Peak Rolling Capacity This Month	
2b Minimum Peak Rolling Capacity Allowed	70%
2c Contractor's Maintenance of Capacity Payment	\$0
2d Multiplier (2x first 12 months of IOP, 1.5x balance of IOP)	1.5
2e Total Contractor's Maintenance of Capacity Payment (Item 2c times Item 2d)	\$0.00
3 Contractor's Total Electric Energy Revenue for this Billing Month (\$) ^(d) (Item 1n plus Item 2e)	\$0.00

Notes

a) Based on the Electric Utility's invoice(s) received during the Billing Month for Electric Energy sold.

SCHEDULE 12A - FORM OF CONTRACTOR'S MONTHLY INVOICE

(Contractor's Name)

Service Fee Invoice for Billing Month: _____

Attachment C

Calculation of Revenue from Recovered Materials (RRM)

In accordance with Section 8.3.5 of the Service Agreement	
1	Total Ferrous Metals Recycled this Billing Year to Date (Tons)
2	Total Ferrous Metals Tonnage Paid to Date (Tons)
3	Total Ferrous Metals Tonnage Paid this Billing Month (Tons) ^(a)
4	Net Ferrous Metal revenue this Billing Month (\$) ^(a)
5	Total Non-Ferrous Metals Recycled this Billing Year to Date (Tons)
6	Total Non-Ferrous Metals Tonnage Paid to Date (Tons)
7	Total Non-Ferrous Metals Tonnage Paid this Billing Month (Tons) ^(a)
8	Net Non-Ferrous Metal revenue this Billing Month (\$) ^(a)
9	Total Net Revenue from Recovered Materials this Billing Month (\$) (Item 3 plus Item 6)
10	County's Recovered Materials revenue share (%)
11	County's Revenue from Recovered Materials for this Billing Month (\$) (Item 7 times Item 8)
	50%

Notes

a) Based on the metal purchaser's invoice(s) received during the Billing Month for metals sold.

SCHEDULE 12A - FORM OF CONTRACTOR'S MONTHLY INVOICE

(Contractor's Name)

Service Fee Invoice for Billing Month: _____

Attachment D

Calculation of Pass Through Costs (PTC)

In accordance with Section 8.3.6 of the Service Agreement	
1 Utility costs not directly paid by the County this Billing Month (Section 8.3.6.1) ^(a)	
2 Reagent costs this Billing Month (Section 8.3.6.2) ^(a)	
2a Pebble lime (\$)	
2b Carbon (\$)	
2c Urea (\$)	
2d Other chemicals (\$)	
2e Subtotal Reagent costs (\$) ^(b) (Sum of Item 2a through Item 2d)	
3 Loss of Recovered Materials Market (Section 8.3.6.3)	
4 Fees (Section 8.3.6.4)	
5 <u>Economic Benefit from Emission Purchase and Sale Transactions and Tax Incentives or Subsidies (Section 8.3.6.5)</u>	
6 <u>Pass Through Taxes and Fees (Section 8.3.6.6)</u>	
7 <u>County Required Insurance Obligation Transfer (Section 8.3.6.7)</u>	
8 <u>Pass Through for Purchase of Electronic Communication Equipment (Section 8.3.7.8)</u>	
9 <u>Pass Through for Costs Associated with Special Handling (Section 8.3.6.9)</u>	
10 <u>Pass Through for Purchase of Equipment or Spare Parts (Section 8.3.6.10)</u>	
11 Total Pass Through Costs for this Billing Month (\$) (Sum of Item 2d, Item 3e, Item 4, Item 5, and Item 6)	

Notes

a) Based on the supplier invoice(s) received during the Billing Month.

SCHEDULE 12A - FORM OF CONTRACTOR'S MONTHLY INVOICE

(Contractor's Name)

Service Fee Invoice for Billing Month: _____

Attachment E - 1

Calculation of Adjustments (ADJ) Liquidated Damages, Penalties and other Fees and Costs (a)

In accordance with Section 8.4 of the Service Agreement	
1 Electric Capacity Payment Damages this Billing Month (ECPD) (Section 8.4.1.1)	
2 Residue Particle Size Guarantee Adjustment this Billing Month (RPSGA) (Section 8.4.1.2)	
3 Plus Five Separation System Availability Adjustment (Section 8.4.1.3)	
4 Residue Quality Guarantee Adjustment (Section 8.4.1.4)	
5 Violation of Residue and Recovered Materials Management Plan (Section 8.4.2)	
6 County's Cost to Cure (Section 8.4.3)	
7 Inventory Settlement (Section 8.4.4)	
8 Failure to Meet Ferrous/Non-Ferrous Metal Recovery Guarantee (Section 8.4.5)	
9 DEP Fees, Fines, Administrative Actions, Notices of Violation and Lawsuits (Section 8.4.6)	
9a Fines and Penalties Caused by the Contractor and paid by County (Section 8.4.6.1)	
9b Fines and Penalties Caused by Force Majeure or County Fault (Section 8.4.6.2)	
9c Subtotal Other Adjustments Fines and Penalties (Item 9a plus Item 9b)	
10 Total Liquidated Damage Adjustments for this Billing Month (\$) (Sum of Item 1 through Item 8, and Item 9c)	

Notes

a) Line 9b is a credit (negative value) for fines or penalties paid by the contractor on behalf of the County.

SCHEDULE 12A - FORM OF CONTRACTOR'S MONTHLY INVOICE

(Contractor's Name)

Service Fee Invoice for Billing Month: _____

Attachment E - 2

Calculation of Adjustments (ADJ) Withholdings (a)

In accordance with Section 8.4.7 of the Service Agreement	
1 Withholdings or Reimbursements of Withholdings, and Credits and Set-Offs this Billing Month (ALDWCS)	
1e Failure to Make Submittals (Section 8.4.7.1)	
1b Failure to Timely Cure Items identified on Consultant Inspection Report (Section 8.4.7.2)	
1c Failure to Timely Complete the Technical Recovery Plan (Section 8.4.7.3)	
1d Failure to Comply with Schedules (Section 8.4.7.4)	
1e Subtotal Withholdings or Reimbursement of Withholdings; and Credits and Set-Offs (Sum of Item 1a through Item 1d)	
2 Reimbursement of Withholdings this Billing Month	
3 Total Withholding Adjustments for this Billing Month (\$) Item 1n less Item 2)	

Notes

a) Damages and Withholdings shall be negative adjustments and reimbursements of Withholdings shall be positive adjustments

Service Fee Invoice for Billing Month: _____

Attachment F

Summary of Withholdings and Reimbursements of Withholdings

	Column A Total Accumulated Withholdings	Column B Total Withholdings From Prior Billing Months	Column C Total Withholdings This Billing Month to Date	Column D Reimbursement of Withholdings This Billing Month	Column E Net Withholdings This Billing Month
1 Failure to Make Submittals (Section 8.4.7.1)					\$0.00
2 Failure to Timely Cure Items Identified on Consultant Inspection Report (Section 8.4.7.2)					\$0.00
3 Failure to Timely Complete the Technical Recovery Plan (Section 8.4.7.3)					\$0.00
4 Failure to Comply with Schedules (Section 8.4.7.4)					\$0.00
5 Total Withholdings This Billing Month (Sum Item 1 through Item 4)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6 Total for Default (Item 5 in Column A plus Item 5 in Column E)					\$0.00
7 Maximum Amount of Withholdings that Causes a Default Pursuant to Section 12.2.3 of the Service Agreement					\$500,000.00
8 Contractor In Default or Not In Default	Not In Default				

Note:

Any withholdings returned in Column D are added to the withholdings in Column A

SCHEDULE 12A - FORM OF CONTRACTOR'S MONTHLY INVOICE

(Contractor's Name)

Service Fee Invoice for Billing Month: _____

Attachment G

Rounding Conventions

Measurements	Precision
Scaled Tonnages	100th ton
Pit Inventory	Ton
Electricity Exported	MWH
Electricity Imported	KWH
Lime Delivered	100th ton
Urea Delivered	100th gallon
Soda Ash Delivered	pound
Carbon Delivered	pound
Reclaimed Water	gallon
Potable Water	gallon
Pond A Water	100 gallons
IWTF Water	gallon
Wastewater	gallon
Time	minute
Silo / Tankage Percent Capacity	10th percent
Monetary Values	Precision
Electricity Sold	cent
Electricity Purchased	cent
Chemicals Purchased	cent
Water Purchased	10th cent
Wastewater Useage	10th cent
Calculated Values	Precision
Tons	100th ton
Per Ton Usages / Rates > Unit	100th UOM
Per Ton Usages / Rates < Unit	100th UOM
Time	100th hour
Percentages	100th percent
Sales Price / MWH	exact
Sales Price / KWH	exact
Monetary Products	cent

SCHEDULE 12B

FORM OF CONTRACTOR'S PROJECT AND ADDITIONAL SERVICE INVOICE

SCHEDULE 12B - FORM OF CONTRACTOR'S PROJECT AND ADDITIONAL SERVICE INVOICE

Projects and Additional Services Invoice for Billing Month: _____
Summary

In accordance with Section 8.7 and 8.8 of the Service Agreement	
1. Monthly Projects and Improvements Expenses (R & R) (Attachment A)	
2. Monthly Projects and Improvements Expenses (CIP) (Attachment B)	
3. Total Monthly Projects Expenses (\$) (Sum of Item 1 through Item 2)	

Notes

a) Payments to Contractor are positive and credits to County are negative.

SCHEDULE 12B - FORM OF CONTRACTOR'S PROJECT AND ADDITIONAL SERVICE INVOICE

Service Fee Invoice for Billing Month: _____
Attachment A
Monthly Project and Improvement Expenses (R & R)

In accordance with Section 8.7 and 8.8 of the Service Agreement	
1 Cost to Prepare Proposals (Section 8.7.1)	
1a Force Majeure or County Fault Expenses	
1b Discretionary Projects Expenses	
1c Total Cost to Prepare Proposals (Item 1a plus Item 1b)	
2 Technical Recovery Plan Project Expenses (Section 8.7.2)	
3 Projects to Remove Impacts of Force Majeure or County Fault Expenses (Section 8.7.2)	
4 Discretionary Projects Expenses (Section 8.7.2)	
5 Total Monthly Projects & Improvements Expenses (Sum of Item 1c through Item 4)	

Notes

Line Items 2, 3 and 4 require submittal of Affidavit And Release

SCHEDULE 12B - FORM OF CONTRACTOR'S PROJECT AND ADDITIONAL SERVICE INVOICE

**Service Fee Invoice for Billing Month: _____
Attachment B
Monthly Project and Improvement Expenses (CIP)**

In accordance with Section 8.7 and 8.8 of the Service Agreement	
1 Cost to Prepare Proposals (Section 8.7.1)	
1a Force Majeure or County Fault Expenses	
1b Discretionary Projects Expenses	
1c Total Cost to Prepare Proposals (Item 1a plus Item 1b)	
2 Technical Recovery Plan Project Expenses (Section 8.7.2)	
2a Amount of Current Expenses	
2b Retainage this Submittal	
2c Return of Retainage from prior Submittals	
2d Total TRP Expenses Due (Sum of Items 2a, 2b and 2c)	
3 Projects to Remove Impacts of Force Majeure or County Fault Expenses (Section 8.7.2)	
3a Amount of Current Expenses	
3b Retainage this Submittal	
3c Return of Retainage from prior Submittals	
3d Total FM and CF Expenses Due (Sum of Items 3a, 3b and 3c)	
4 Discretionary Projects Expenses (Section 8.7.2)	
4a Amount of Current Expenses	
4b Retainage this Submittal	
4c Return of Retainage from prior Submittals	
4d Total Discretionary Project Expenses Due (Sum of Item 4a, 4b and 4c)	
5 Total Monthly Projects & Improvements Expenses (Sum of Item 1c, Item 2d, Item 3d, and Item 4d)	

Notes

Line Items 2, 3 and 4 require submittal of Affidavit And Release
Items 2b, 3b, and 4b, when applicable
Items 2c, 3c, and 4c are credits (negative values)

SCHEDULE 12C

FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

(Contractor's Name)

Annual Reconciliation Invoice for Billing Year: ___ - ___
Summary

In accordance with Section 8.6 and Schedules 2 and 3 and 7 of the Service Agreement	
1 Annual Processing Guarantee Shortfall Damages - Attachment A ^(a)	
2 Annual Base Delivery Amount Shortfall Damages - Attachment B ^(a)	
3 Annual Electric Energy Recovery Guarantee Damages - Attachment C ^(a)	
4 Annual Metal Removal System Availability Guarantee Damages - Attachment D ^(a)	
5 Excess Reagent and/or Utility Usage - Attachment E ^(a)	
6 HHV Adjustment Amount - Attachment F ^(a)	
7 Annual Reconciliation Amount Due County/(Contractor) (Sum Items 1 through 6)	

Notes

a) Payments to County are positive and payments to Contractor are negative.

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Annual Reconciliation Invoice for Billing Year: ____ - ____

Attachment A

Annual Processing Guarantee Shortfall Damages

In accordance with Sections 2 and 8.6.2.1 of the Service Agreement, Item 1 of Schedule 2 of the Service Agreement and Item 1 of Part A of Schedule 3 of the Service Agreement	
1 Processible Waste Processed (Tons) ^(a)	
2 Annual Processing Guarantee (Tons)	930,000
3 Processible Waste Shortfall (Tons) (Item 2 minus Item 1)	
4 Total Electric Energy sold (MWH)	
5 Processible Waste Processed during turbine-generator downtime (Tons)	
6 Net Processible Waste Processed (Tons) (Item 1 minus Item 5)	
7 MWH/Net Ton Processible Waste Processed (Item 4 divided by Item 6)	
8 MWH/Ton of Electric Energy Guarantee	
9 Total Net Electric Energy Revenue (\$)	
10 Average Electric Energy sales price (\$/MWH) (Item 9 divided by Item 4)	
11 Total Lost Electric Energy (MWH) (Item 3 times Item 8)	
12 Total Lost Electric Energy Revenue (\$)	
13 County's share of Electric Energy Revenue (%)	90%
14 County's share of Lost Electric Energy Revenue (Item 12 times Item 13)	
15 Total Ferrous Recovered Material sold (tons)	
16 Ton Ferrous/Ton Processible Waste Processed (Item 15 divided by Item 1)	
17 Total Lost Ferrous Recovered Material (Item 16 times Item 3)	
18 Total Ferrous Recovered Material Revenue (\$)	
19 Average Ferrous Recovered Material Revenue (\$)/Ton (Item 18 divided by Item 15)	
20 Total Lost Ferrous Recovered Material Revenue (\$) (Item 17 times Item 19)	
21 County's share of Recovered Material Revenue (%)	50%
22 County's share of Lost Ferrous Recovered Material Revenue (Item 20 times Item 21)	
23 Total Non-Ferrous Recovered Material sold (tons)	
24 Ton Non-Ferrous/Ton Processible Waste Processed (Item 23 divided by Item 1)	
25 Total Lost Non-Ferrous Recovered Material (Item 24 times Item 3)	
26 Total Non-Ferrous Recovered Material Revenue (\$)	
27 Average Non-Ferrous Recovered Material Revenue (\$)/Ton (Item 26 divided by Item 23)	
28 Total Lost Non-Ferrous Recovered Material Revenue (\$) (Item 25 times Item 27)	
29 County's share of Recovered Material Revenue (%)	50%
30 County's share of Lost Non-Ferrous Recovered Material Revenue (Item 28 times Item 29)	
31 Annual Processing Guarantee Shortfall Damages due County this Billing Year (\$) (Item 14 plus Item 22 plus Item 30)	

Notes

a) Per Item 1 of Part A to Schedule 3

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Annual Reconciliation Invoice for Billing Year: ____-____

Attachment B

Annual Delivery Guarantee Shortfall Damages

In accordance with Schedule 2, Schedule 3, Section 7.1.1 and Section 8.6.2.2 of the Service Agreement	
1 Lost Processing Fees (Section 8.6.2.2.1)	
1a Total Solid Waste delivered (Tons)	
1b Nonprocessable Waste removed (Tons)	
1c Processible Waste delivered (Tons) (Item 1a minus Item 1b)	
1d Processible Waste diverted to Landfill due to Contractor Fault (Tons)	
1e Contractor's Credit for Returned Processible Waste (Section 8.6.2.2.4, note b)	
1e Total Processible Waste available for delivery (Tons) (Item 1c plus Item 1d minus Item 1e)	
1f Annual Delivery Guarantee (Tons)	
1g Delivery shortfall (Tons) (If Item 1e less than Item 1f then Item 1f minus Item 1e, else 0)	
1h Processing Fee (\$/Ton)	
1i Lost Processing Fee (\$) (Item 1g times Item 1h)	
2 Lost Electric Energy Revenues (Section 8.6.2.2.2)	
2a MWH/Net Ton Processible Waste Processed (Attachment A, Line 7)	
2b Total lost Electric Energy (MWH) (Item 1g times Item 2a)	
2c Average Electric Energy sales price (\$/KWH) (Attachment A, Line 10)	
2d Total Lost Electric Revenue (\$) (Item 2b times Item 2c)	
2e Contractor's share of Electric Energy Revenue (%)	10%
2f Contractor's Lost Electric Energy Revenue (\$) (Item 2d times Item 2e)	
3 Lost Ferrous Recovered Material Revenues (Section 8.6.2.2.2)	
3a Ferrous Tons/Ton Processible Waste Processed (Attachment A, Line 16)	
3b Total lost Ferrous Recovered Materials (tons) (Item 1g times Item 3a)	
3c Average Ferrous Recovered Material sales price (\$/Ton) (Attachment A, Line 19)	
3d Total Lost Ferrous Recovered Material Revenue (\$) (Item 3b times Item 3c)	
3e Contractor's share of Recovered Material Revenue (%)	50%
3f Contractor's Lost Ferrous Recovered Material Revenue (\$) (Item 3d times Item 3e)	
4 Lost Non-Ferrous Recovered Material Revenues (Section 8.6.2.2.2)	
4a Non-Ferrous Tons/Ton Processible Waste Processed (Attachment A, Line 24)	
4b Total lost Non-Ferrous Recovered Materials (tons) (Item 1g times Item 4a)	
4c Average Non-Ferrous Recovered Material sales price (\$/Ton) (Attachment A, Line 27)	
4d Total Lost Non-Ferrous Recovered Material Revenue (\$) (Item 4b times Item 4c)	
4e Contractor's share of Recovered Material Revenue (%)	50%
4f Contractor's Lost Non-Ferrous Recovered Material Revenue (\$) (Item 4d times Item 4e)	
5 Annual Delivery Guarantee Shortfall Damages due Contractor this Billing Year (\$) (Item 1i plus Item 2f plus Item 3f plus Item 4f)	\$0.00

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Notes

a) Per Item 1 of Part A to Schedule 3

b) Recovered Processible Waste Credit (Section 8.6.2.2.4)

b1 Total Diverted Waste

b2 Total Recovered Waste

b3 Recovered Waste (Tons) in excess of Diverted Waste (Negative values reported as 0) (b2-b1)

b4 Contractor's Recovered Waste Percentage

b5 Credit for Total Tons Recovered up to amount of Total Tons Diverted
(if b2 < b1, b2 times b4; if b2 > b1, b1 times b4)

b7 Total Recovered Processible Waste Credit (b3 plus b5)

0.40

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Annual Reconciliation Invoice for Billing Year: ____ - ____
Attachment C

Annual Electric Energy Recovery Guarantee Damages

In accordance with Schedule 2, Schedule 3, Section 7.1.1 and Section 8.6.2.3 of the Service Agreement	
1 Total Electric Energy sold (MWH)	
2 Total Processible Waste Processed (Tons) ^(a)	
3 Adjusted Processible Waste Processed for scheduled major turbine-generator overhaul (Tons) ^(b)	
4 Net MWH Electric Energy sold/Ton adjusted Processible Waste Processed (Item 1 divided by Item 3)	
5 Electric Energy Recovery Guarantee (MWH/Ton)	
6 Electric Energy Recovery Guarantee shortfall (MWH/Ton) (If Item 4 less than Item 5 then Item 5 minus Item 4, else 0)	
7 Total Net Electric Energy Revenue (\$)	
8 Total Electric Energy sold (MWH)	
9 Average Electric Energy sales price (\$/MWH) (Item 7 divided by Item 8)	
10 Total lost Electric Energy (MWH) (Item 3 times Item 6)	
11 Total Lost Electric Revenue (Item 9 times Item 10)	
12 County's Share of Lost Electric Revenue	90%
13 Annual Electric Energy Recovery Guarantee Damages due County this Billing Year (\$) (Item 11 times Item 12)	

Notes

- a) Per Item 1 of Part A to Schedule 3
- b) Per Item 2 of Part A to Schedule 3

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Annual Reconciliation Invoice for Billing Year: ____ - ____

Attachment D

Annual Metal Removal System Availability Guarantee Damages

In accordance with Schedule 2, Schedule 3 and Section 8.6.2.4 of the Service Agreement	
1 Ferrous Metal Removal System Availability Guarantee Damages (Section 8.6.2.4.1)	
1a Actual operating hours of the Ferrous Metal removal system (Hrs)	
1b Hours that the Ferrous Metal Removal system was capable of being operated (Hrs)	
1c Ferrous Metal Removal system availability (%) (Item 1a divided by Item 1b times 100)	
1d Ferrous Metal Removal System Availability Guarantee (%)	90%
1e Ferrous Metal Removal System availability shortfall (%) (If Item 1c less than Item 1d then Item 1d minus Item 1c, else 0)	
1f Shortfall damage (\$ Per % Shortfall)	
1g Ferrous Metal Removal System Availability Guarantee Damages (\$) (Item 1e times Item 1f)	
2 Non-Ferrous Metal Removal System Availability Guarantee Damages (Section 8.6.2.4.2)	
2a Actual operating hours of the Non-Ferrous Metal removal system (Hrs)	
2b Hours that the Non-Ferrous Metal Removal System was capable of being operated (Hrs)	
2c Non-Ferrous Metal Removal system availability (%) (Item 2a divided by Item 2b times 100)	
2d Non-Ferrous Metal Removal System Availability Guarantee (%)	90%
2e Non-Ferrous Metal Removal System availability shortfall (%) (If Item 2c less than Item 2d then Item 2d minus Item 2c, else 0)	
2f Shortfall damage (\$ Per % Shortfall)	
2g Non-Ferrous Metal Removal System Availability Guarantee Damages (\$) (Item 2e times Item 2f)	
3 Annual Ferrous Metal and Non-Ferrous Metal Removal System Availability Guarantee Damages due County this Billing Year (\$) (Item 1g plus Item 2g)	

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Annual Reconciliation Invoice for Billing Year: ____ - ____

Attachment E

Excess Reagent and/or Utility Usage

<p>In accordance with Schedule 7, Schedule 3 and Section 8 6.2.5 of the Service Agreement</p> <p>1 Excess Reagent Usage (Attachment E-1)</p> <p>1a Pebble lime (\$)</p> <p>1b Urea (\$)</p> <p>1c Carbon (\$)</p> <p>1d Subtotal Excess Reagent Usage (\$) (Sum Items 1a through 1c)</p> <p>2 Excess Utility Usage (Attachment E-2)</p> <p>2a Process Wastewater (\$)</p> <p>2b Natural Gas (\$)</p> <p>2c Purchased Electricity (\$)</p> <p>2d Subtotal Excess Utility Usage (\$) (Sum Items 2a through 2c)</p> <p>3 Excess Reagent and/or Utility Usage due County this Billing Year (\$) (Item 1d plus Item 2d)</p>	
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SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

**Annual Reconciliation Invoice for Billing Year: ____ - ____
Attachment E-1**

In accordance with Schedule 7, Schedule 3 and Section 8.6.2.5 of the Service Agreement	
1 Pebble Lime	
1a Pebble lime in inventory on first Day of Billing Year (Tons)	
1b Pebble lime delivered (Tons)	
1c Pebble lime in inventory on last Day of Billing Year (Tons)	
1d Pebble lime consumed (Tons) (Item 1a plus Item 1b minus Item 1c)	
1e Processible Waste Processed (Tons) ^(a)	
1f Pounds (lb) of pebble lime consumed/Ton Processible Waste Processed (Item 1d times 2000 divided by Item 1e)	
1g Pebble Lime Utilization Allowance (lb/Ton)	
1h Excess pebble lime consumed (lb/Ton) (If Item 1f greater than Item 1g then Item 1f minus Item 1g, else 0)	
1i Excess pebble lime consumed (Tons) (Item 1e times Item 1h divided by 2000)	
1j Average pebble lime purchase price (\$/Ton)	
1k Excess pebble lime costs due County (\$) (Item 1i times Item 1j)	
2 Urea	
2a Urea in inventory on first Day of Billing Year (gallons)	
2b Urea delivered (gallons)	
2c Urea in inventory on last Day of Billing Year (gallons)	
2d Urea consumed (gallons) (Item 2a plus Item 2b minus Item 2c)	
2e Processible Waste Processed (Tons) ^(a)	
2f Gallons urea consumed/Ton Processible Waste Processed (Item 2d divided by Item 2e)	
2g Urea Utilization Allowance (gallons/Ton)	
2h Excess urea consumed (gallons/Ton) (If Item 2f greater than Item 2g then Item 2f minus Item 2g, otherwise 0)	
2i Excess urea consumed (gallons) (Item 2h times Item 2e)	
2j Average urea purchase price (\$/gallon)	
2k Excess urea costs due County (\$) (Item 2i times Item 2j)	
3 Carbon	
3a Carbon in inventory on first Day of Billing Year (Tons)	
3b Carbon delivered (Tons)	
3c Carbon in inventory on last Day of Billing Year (Tons)	
3d Carbon consumed (Tons) (Item 3a plus Item 3b minus Item 3c)	
3e Processible Waste Processed (Tons) ^(a)	
3f Pounds of carbon consumed/Ton Processible Waste Processed (Item 3d times 2000 divided by Item 3e)	
3g Carbon Utilization Allowance (lb/Ton)	
3h Excess carbon consumed (lb/Ton) (If Item 3f greater than Item 3g then Item 3f minus Item 3g, else 0)	
3i Excess carbon consumed (Tons) (Item 3e times Item 3h divided by 2000)	
3j Average carbon purchase price (\$/Ton)	

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Annual Reconciliation Invoice for Billing Year: ____-____

Attachment E-1

Calculation of Excess Reagent Usage

3k Excess carbon costs (\$) (Item 3i times Item 3j)	
3l Total boiler operating hours (Hrs)	
3m Pounds (lb) of carbon consumed/boiler operating hour (Item 3d times 2000 divided by Item 3l)	
3n Carbon Hourly Feed Rate from Most Recent Dioxin Test	
3o Carbon Utilization Allowance (lb/operating hour) (Item 3n time 110 percent)	
3p Excess carbon consumed (lb/operating hour) (If Item 3m greater than Item 3o then Item 3m minus Item 3o, otherwise 0)	
3q Excess carbon consumed (Tons) (Item 3l times Item 3p divided by 2000)	
3r Average carbon purchase price (\$/Ton)	
3s Excess carbon costs (\$) (Item 3p times Item 3q)	
3t Excess carbon costs due County (\$) (Lesser of 3k or 3r)	

Notes

a) Per Item 1 of Part A to Schedule 3

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Annual Reconciliation Invoice for Billing Year: ____ - ____

Attachment E-2

Calculation of Excess Utility Usage

In accordance with Schedule 7, Schedule 3 and Section 8.6.2.5 of the Service Agreement	
<p>1 Process Wastewater</p> <p>1a Process Wastewater disposed (gallons)</p> <p>1b Processible Waste Processed (Tons) ^(a)</p> <p>1c Gallons of Process Wastewater disposed/Ton Processible Waste Processed (Item 1a divided by Item 1b)</p> <p>1d Process Wastewater Utilization Allowance (gallons/Ton)</p> <p>1e Excess Process Wastewater consumed (gallons/Ton) (If Item 1c greater than Item 1d then Item 1c minus Item 1d, else 0)</p> <p>1f Excess Process Wastewater consumed (gallons) (Item 1b times Item 1e)</p> <p>1g Average Process Wastewater price (\$/gallon)</p> <p>1h Excess Process Wastewater costs due County (\$) (Item 1f times Item 1g)</p> <p>2 Natural Gas</p> <p>3a Natural gas consumed (therms)</p> <p>3b Natural Gas Utilization Allowance (therms/Billing Year)</p> <p>3c Excess natural gas consumed (therms) (If Item 3a greater than Item 3b then Item 3a minus Item 3b, else 0)</p> <p>3d Average natural gas purchased price (\$/therm)</p> <p>3e Excess natural gas costs due County (\$) (Item 3c times Item 3d)</p> <p>3 Purchased Electricity</p> <p>3a Electricity purchased (KWH)</p> <p>3b Purchased Electricity Utilization Allowance (KWH/Billing Year)</p> <p>3c Excess purchased electricity (KWH) (If Item 3a greater than Item 3b then Item 3a minus Item 3b, else 0)</p> <p>3d Average purchased electricity price (\$/KWH)</p> <p>3e Excess purchased electricity costs due County (\$) (Item 3c times Item 3d)</p>	

Notes

a) Per Item 1 of Part A of Schedule 3

SCHEDULE 12C - FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE

Annual Reconciliation Invoice for Billing Year: ____-____

Attachment F

HHV Adjustment Amount

In accordance with Section 8.6.2.6 and Schedule 4 of the Service Agreement	
1	Weighted Average Annual Higher Heating Value (Btu/lb)
2	If Weighted Average Annual Higher Heating Value is less than 4,000 Btu/lb
2a	HHV Adjustment Factor (1 minus (Item 1 divided by 4,000))
2b	Processing Fee (\$/Ton)
2c	Processible Waste Processed ^(a)
2d	HHV Adjustment amount (\$) (Item 2a times Item 2b times Item 2c)
3	If Weighted Average Annual Higher Heating Value is greater than 5,000 Btu/lb
3a	HHV Adjustment Factor ((Item 1 divided by 5,000) minus 1)
3b	Processing Fee (\$/Ton)
3c	Processible Waste Processed ^(a)
3d	HHV Adjustment amount (\$) (Item 3a times Item 3b times Item 3c)
4	HHV Adjustment Amount due Contractor this Billing Year (\$) (Item 2d plus Item 3d)

Notes

a) Per Item 1 of Part A to Schedule 3

**SCHEDULE 12C
- FORM OF CONTRACTOR'S ANNUAL RECONCILIATION INVOICE**

Annual Reconciliation Invoice for Billing Year: ___ - ___

**Attachment H
Rounding Conventions**

Measurements	Precision
Scaled Tonnages	100th ton
Pit Inventory	Ton
Electricity Exported	MWH
Electricity Imported	KWH
Lime Delivered	100th ton
Urea Delivered	100th gallon
Soda Ash Delivered	pound
Carbon Delivered	pound
Reclaimed Water	gallon
Potable Water	gallon
Pond A Water	100 gallons
IWTF Water	gallon
Wastewater	gallon
Time	minute
Silo / Tankage Percent Capacity	10th percent
Monetary Values	Precision
Electricity Sold	cent
Electricity Purchased (MWH)	cent
Electricity Purchased (KWH)	1,000th Cent
Chemicals Purchased	cent
Water Purchased	10th cent
Wastewater Usage per 1,000 gallons	10th cent
Wastewater Usage per gallon	1,000th cent
Calculated Values	Precision
Tons	100th ton
Per Ton Usages / Rates > Unit	100th UOM
Per Ton Usages / Rates < Unit	100th UOM
Time	100th hour
Percentages	100th percent
Sales Price / MWH	exact
Sales Price / KWH	exact
Monetary Products	cent

SCHEDULE 13

STAFFING PLAN

This Schedule will be the Staffing Plan provided at the Pre-Commencement Meeting prepared in accordance with the Final RFP and appended upon County approval.

SCHEDULE 14

COUNTY PERMITS

The Contractor shall be responsible for compliance with the following County Permits, as such Permits may be renewed or amended, as well as additional monitoring and reporting as required by Applicable Law.

1. Power Plant Siting Act - PA 78-11 (Units 1 and 2) and PA 83-18 (Unit 3)
2. FDEP Title V Air Permit - 1030117-008-AV and 1030117-010-AC
3. BWA Landfill Operating Permit - 34184-019-SO
4. NPDES Permit - FL 0168505-002-IW7A
5. SWFWMD Permit - ERP 497341.000, as amended
6. Appendix 4C to the NERC Compliance Monitoring and Enforcement Program Rules of Procedure
7. 40 CFR part 98, subpart C

SCHEDULE 15

NON-PROCESSING MAINTENANCE AND CUSTOMER SERVICE STANDARDS

1. Maintenance Standards For Non-Process Equipment And Grounds

The Contractor shall be responsible for maintaining the Facility and the Facility Site in good condition at all times and undertaking necessary maintenance and upkeep in a timely manner in accordance with the Service Agreement, including the Standards of Maintenance as defined therein. This includes the following:

Safety and Security

- a) Fire detection and protection equipment shall be Repaired or Replaced within three (3) Days of discovery of the need for Repair or Replacement by the Contractor or notice by the County. Temporary protection measures shall be put in place until Repair or Replacement is completed.
- b) Inoperable interior and exterior light fixtures and light bulbs (regular and emergency) for buildings and Equipment areas shall be Repaired or Replaced within one week of discovery of the need for Repair or Replacement by the Contractor or notice by the County. Lights and light fixtures requiring a high lifter to fix shall be Repaired or Replaced on a quarterly basis.
- c) All plumbing and piping leaks and failures shall be temporarily Repaired or Replaced within twenty- four (24) hours of discovery by the Contractor or notice by the County and permanent Repair or Replacement made within one week. In the case of minor steam leaks or other piping leaks that do not pose a safety concern but require a shutdown of one or more combustion units to perform the Work, permanent Repair or Replacement shall be made at the next scheduled outage.
- d) Fencing shall be Repaired or Replaced within seven (7) Days of discovery of the need for Repair or Replacement by the Contractor or notice by the County. Temporary protection measures shall be put in place until Repair or Replacement is completed.

Structural Elements

- a) Siding, roofing and other types of building interior and exterior treatments shall be Repaired or Replaced or painted within sixty Days of discovery of the need for Repair or Replacement by the Contractor or Notice by the County.
- b) Doors and windows (including all appurtenances thereto) shall be Repaired or Replaced within sixty (60) Days of discovery of the need for Repair or Replacement by the Contractor or Notice by the County.
- c) Damaged insulation or lagging shall be Repaired or Replaced within sixty (60) Days of discovery of the need for Repair or Replacement by the Contractor or Notice by the County.
- d) Drains, gutters, down comers and spillways shall be cleaned regularly and shall be Repaired or Replaced within thirty (30) Days of discovery of the need for Repair or Replacement by the Contractor or Notice by the County.
- e) Roof leaks shall be temporarily Repaired or Replaced within twenty-four (24) hours of discovery of the leak by the Contractor or Notice by the County and permanent Repair or Replacements made within thirty (30) Days.
- f) Corrosion of metal surfaces shall be Repaired or Replaced, sanded and painted within

- sixty (60) Days of discovery of corrosion by the Contractor or Notice by the County.
- g) Cracked or spalled concrete, asphalt and expansion joints shall be Repaired or Replaced within sixty (60) Days of discovery of the need for Repair or Replacement by the Contractor or Notice by the County. Separation (either vertically, horizontally or both) of concrete, asphalt and expansion joints shall be Repaired or Replaced within sixty Days of discovery of the need for Repair or Replacement by the Contractor or Notice by the County.
 - h) Rollup doors shall be maintained in good working condition and shall be closed except during the Receiving Time.

Grounds Maintenance

- a) Roadways, pavement markings, traffic and site signage, light poles and lights, curbing and guardrails shall be Repaired or Replaced within thirty (30) Days of discovery of the need for Repair or Replacement by the Contractor or Notice by the County.
- b) Stormwater pathways and structures (all ditches and culverts within the Facility Site) shall be kept free of silt, litter and debris. Maintenance activities shall be sufficient to maintain flow at all times. Removal of vegetation from the bottom of ditches and Repair or Replacements and stabilization of side slopes is included in this activity.
- c) Sedimentation basins shall be cleaned on a quarterly basis, at minimum, and more frequently if necessary to prevent accumulated solids from passing through the system. If Residue enters the stormwater system, it shall be removed within twenty-four (24) hours of discovery by the Contractor or Notice by the County, and provisions shall be put in-place within one Week of the event so that such event will not be repeated.
- d) The Contractor shall provide for the daily collection and disposal of all litter on the Facility Site.
- e) The Contractor shall mow, trim, weed eat and edge vegetative matter within the Facility Site, including all ditch lines, trimming to water's edge in all areas, trimming around fences, along roadways, and around all structures, and edging along all paved surfaces and curbs. Chemical control of vegetation shall be only by chemicals approved by the County's Authorized Representative.
- f) Failures or damage to any underground sprinkler system (in any area that has such system) shall be Repaired or Replaced within thirty (30) Days of discovery by the Contractor or Notice by the County.
- g) Roadways shall be swept at least three (3) times a Week, and more frequently if necessary to control dust, litter and debris. Any spills shall be contained and cleaned up immediately.
- h) There shall be no exterior storage of Spare Parts, except as specifically authorized by the County's Authorized Representative.

General Housekeeping Requirements

- a) Routine housekeeping shall be performed Daily and shall include: mopping or vacuuming of floors of building entrances, administration areas, conference room, lunchroom, restroom, locker-room, control room, and laboratories. All finished floors shall be stripped and a new floor finish applied as necessary to maintain appearance and safety standards. Walls shall be cleaned every six (6) Months, and touch up paint applied as necessary. Tile walls shall be washed every Month. The exterior vertical areas of all buildings (siding, doors and the like) shall be pressure washed annually. The interior and exterior of all windows shall be washed at least once every three (3) Months.
- b) Regular pest and vector control measures shall be applied by the Contractor or a licensed pest control service company hired by the Contractor.

- c) All Spare Parts, materials and supplies shall be stored in a neat, clean, and orderly manner and in accordance with manufacturer's recommendations.

The County's Authorized Representative, at his/her sole discretion, and upon written request by the Contractor's Authorized Representative, may extend the above Repair or Replacement timeframes (e.g., for Work that requires additional time to procure outside contractors, materials and/or Spare Parts), or any or all of the foregoing.

2. Customer Service Standards

All employees of the Contractor (and any Subcontractors) who come in contact with non-Contractor personnel shall be trained to:

- a) Behave in a courteous and professional manner
- b) Be helpful and promptly respond to questions
- c) Be properly dressed in a uniform, except for;
 - (i) administrative and management personnel who shall wear at minimum, business casual attire; and
 - (ii) Subcontractors.

The Contractor's Authorized Representative shall immediately notify the County's Authorized Representative of any user complaints concerning the operation of the Facility such as litter, noise, dust, odor, property damage, accidents or injuries or other claims or complaints which may involve any party, against the Contractor or the County. Any notification shall be promptly followed by a written report.

SCHEDULE 16A

REQUIRED EQUIPMENT AND SPARE PARTS INVENTORY LIST

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
35600EI110	VAC CONTACTOR PART# CR193VB4AB3A412AA02E	#2 MCC ROO	1	1	OK	7,861.66	7,861.66	-
35600EI111	BREAKER, CIRCUIT ***PERM-3***	AA100	1	1	OK	87.50	87.50	-
35600EI113	SWITCH, LIQUID LEVEL, COMPAC ENG.	AA101	2	2	OK	18.15	36.30	-
35600EI115	BREAKER, GOULD ITE	AA101	4	4	OK	12.15	48.60	-
35600EI116	BREAKER, GOULD ITE	AA101	3	3	OK	16.83	50.49	-
35600EI117	BREAKER, GOULD 20 AMP BQSWD, 120-240 VAC	AA101	4	4	OK	57.20	228.80	-
35600EI118	BREAKER, CIRCUIT ***PERM-1***	AA101	2	2	OK	226.67	453.34	-
35600EI119	RELAY, 600VT ***PERM-2***	AA101	0	0	OK	-	-	-
35603EI011	CONTROL, PHOTO, PRECISION, 200/270 V	AA101	7	7	OK	42.49	297.43	-
35600EI120	INSULATION BARRIER FOR SIEMENS MOTOR CON	AA102	0	0	OK	-	-	-
35600EI121	RELAY, 120 VAC, RELAY 700, ALLEN BRADLEY	AA102	2	2	OK	166.69	333.37	-
35600EI122	RELAY, OVERLOAD ***PERM-2***	AA102	1	1	OK	74.00	74.00	-
35600EI123	SWITCH, ZERO SPEED FOR SHAFT, S/N 19058	AA102	1	1	OK	17.00	17.00	-
35600EI124	CURRENT TRANSFORMER ASSM. 150/5 FOR SIEM	AA102	3	3	OK	795.00	2,385.00	-
35600EI125	FUSE 1E, 4800V FOR SIEMENS CONTROL CENTE	AA103	0	0	OK	-	-	-
35600EI126	FUSE 48FM9R-4 FOR SIEMENS CONTROL CENTER	AA103	1	1	OK	680.00	680.00	-
35600EI127	CURRENT TRANSFORMER C50 FOR SIEMENS MOTO	AA103	3	3	OK	527.50	1,582.50	-
35600EI128	HV CONTROL POWER TRANSFORMER FOR SIEMENS	AA103	1	1	OK	924.00	924.00	-
35600EI129	INNER FUSE CLIPS FOR SIEMENS MOTOR CONTR	AA104	2	2	OK	55.00	110.00	-
35600EI130	OUTER FUSE CLIP FOR SIEMENS MOTOR CONTRO	AA104	2	2	OK	40.00	80.00	-
35600EI131	CURRENT TRANSFORMER C20 FOR SIEMENS MOTO	AA104	1	1	OK	180.00	180.00	-
35600EI133	FUSE HOLDER FOR SIEMENS MOTOR CONTROL CE	AA104	1	1	OK	40.00	40.00	-
11201EI100	PURIFIER, GAS, MATHESON TYPE 451	AA200	5	5	OK	44.63	223.15	-
15109EI150	RELAY, PNEUMATIC TIMER SERIES B	AA200	2	2	OK	1,008.95	2,017.90	-
30505EI102	HEATER ELEMENT, WARREN ELECTRIC FOR NALC	AA200	1	1	OK	1,126.40	1,126.40	-
30505ME117	Gasket, Tube Rest	AA201	23	23	OK	16.36	376.28	-
01159EI606	Switch, push type, DCM3 W/plug ST218	AA202	2	2	OK	173.93	347.85	-
01159EI623	Relay, miniature	AA202	8	8	OK	11.94	95.52	-
01159EI624	Transducer, Under Grate Air	AA202	1	1	OK	-	-	-
15109EI127	Thyristor, Power Supply	AA202	3	3	OK	3,172.31	9,516.92	-
01159EI602	Transducer, linear displacement L=200	AA203	1	1	OK	787.17	787.17	-
01159EI610	Martin Grate Card Type 115	AA203	2	2	OK	841.88	1,683.75	-
01159EI611	Switch, Pressure, 2"-20"WC	AA203	1	1	OK	203.62	203.62	-
01159EI615	Valve, check, twin throttle DN06	AA203	0	0	OK	-	-	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
1159E1616	Valve, check, double pilot operated DN6	AA203	2	2	OK	243.68	487.35	-
1159E1612	Valve, check RK4-G 3/8" A DIN 7445	AA300	1	1	OK	31.59	31.59	-
1159E1614	Valve, restrictor check	AA300	1	1	OK	97.21	97.21	-
1159E1619	Valve, 4/3 way, NG06 Fd. chute & clinker	AA300	1	1	OK	324.01	324.01	-
1159E1621	Filter, medium Pressure	AA300	1	1	OK	332.19	332.19	-
1159E1622	Filter, supermicronic cartridge (P12105-MSx3)	AA300	8	4	CHECK	21.90	175.20	(88)
5109E1151	MODULE, METER	AA300	1	1	OK	1,266.00	1,266.00	-
5109E1152	MODULE, FREQUENCY DETECTOR	AA301	1	1	OK	3,513.00	3,513.00	-
5109E1153	MODULE, BIAS, P/H	AA301	2	2	OK	1,258.64	2,517.28	-
5109E1154	MODULE, MAGNEGARD CONTROL, P/H, PART#79U	AA301	3	3	OK	1,429.11	4,287.33	-
5109E1155	MODULE, STABILITY,P&H, #79U797	AA301	2	2	OK	2,090.75	4,181.50	-
5109E1156	MODULE, PLUGGING CONTROL, P&H, #79U-9	AA301	1	1	OK	1,242.82	1,242.82	-
5109E1157	MODULE, MAGNETIC AMPLIFIER, P/H, PART 79	AA301	1	1	OK	4,047.00	4,047.00	-
5109E1158	MODULE, OFF POSITION	AA301	3	3	OK	2,207.00	6,621.00	-
5109E1159	Relay w/3 NO Contact Blocks / Square D 8501X040V02	AA302	2	2	OK	73.19	146.37	-
5109E1160	CONTACT BLOCK, RELAY	AA302	6	6	OK	216.01	1,296.07	-
11353ME100	KIT, SPARE PARTS, LIQUID METRONICS	AA302	1	1	OK	36.80	36.80	-
11353ME101	PUMP, LMI 60 GPD, 1/2" TUBE CONN.	AA302	1	1	OK	568.00	568.00	-
11353ME102	NUT, LOCKING FOR MILTON ROY METER PUMP #	AA302	8	8	OK	10.00	80.00	-
11353ME103	CONNECTOR, INJECTION, ASSEMBLY FOR LM	AA302	4	4	OK	11.90	47.60	-
11353ME104	ASSEMBLY, INJECTION ASSEMBLY, LIQUID MET	AA302	3	3	OK	40.20	120.59	-
15109E1148	Relay, Timing, 120 VAC (for Cranes)	AA303	2	2	OK	120.77	241.53	-
11353ME105	VALVE, SUCTION ASSEMBLY 92T, LIQUID METR	AA303	2	2	OK	14.61	29.22	-
11353ME106	ASSEMBLY, VALVE, A/S-RLF, LIQUID METRONI	AA303	2	2	OK	36.35	72.70	-
11353ME107	FITTING, INJECTOR @ VITON FLAPPER FOR RO	AA303	1	1	OK	9.37	9.37	-
11353ME108	FLAPPER, VITON, LIQUID METRONICS	AA303	38	38	OK	1.75	66.50	-
15109E1161	JOYSTICK, MASTER SWITCH ASSEMBLY TYPE SJ	AA304	1	1	OK	3,367.00	3,367.00	-
15109E1162	JOYSTICK, MASTER SWITCH ASSEMBLY TYPE SJ	AA304	1	1	OK	3,270.00	3,270.00	-
15109E1163	TRANSFORMER, ANODE ***PERM-2*** 75Z51	AA400	2	2	OK	410.00	820.00	-
15109E1164	TRANSFORMER, TROLLEY BRAKE ***PERM-2***	AA400	1	1	OK	495.00	495.00	-
15109E1165	TRANSFORMER,HOLD/CLOSE***PERM-1***	AA400	2	2	OK	740.33	1,480.66	-
11183ME010	SPROCKET-#1/450075K2-20MM	AA401	1	1	OK	40.00	40.00	-
11183ME011	SPROCKET #1/4675911K10-20MM	AA401	1	1	OK	40.00	40.00	-
11201E1011	CONTACT, RELAY THERM MARTIN	AA401	6	6	OK	98.74	592.42	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
01201EI012	BUTTON, PUSH MARTIN FOR ASH DISCHARGE	AA401	18	18	OK	6.10	109.88	-
01201EI015	CHAIN TENSIONER 320Z3 MARTIN	AA403	2	2	OK	60.00	120.00	-
01201EI017	ASSEMBLY, LENS MARTIN, SET CONSISTS OF G	AA403	1	1	OK	0.72	0.72	-
01201EI021	RECTIFIER, BRIDGE, 36A. TYPE R622S, MART	AA404	2	2	OK	29.97	59.94	-
01201EI022	SWITCH, UNDERFIRE AIR PRESSURE SWITCH.	AA404	2	2	OK	70.83	141.66	-
01201EI025	GLASS PROTECTNG BOILER/MARTIN	BB100	3	4	CHECK	11.00	33.00	1
01201EI026	GLASS 5 X 4 3/4 X 1/4 MARTIN	BB100	2	2	OK	44.00	88.00	-
01201EI027	CONTACT, DOUBLE ADJUSTABLE TOROIDAL RESI	BB100	2	2	OK	127.16	254.31	-
01201EI029	Cable, Grease Distributor PFV11-W-10M	BB101	4	4	OK	39.14	156.56	-
01201EI031	SWITCH, CAM CONTROLLER TI-2, 15004/C 10A	BB101	2	2	OK	28.20	56.40	-
30501EI010	GASKET, PTS 1 1/2 & 1 FLOW METER MOD 551	BB102	4	4	OK	2.71	10.84	-
30501EI012	GASKET, FOR 1 1/2 FLOWMETER, WALLACE/TIE	BB102	1	1	OK	1.62	1.62	-
30501EI013	O RING, FOR 1" FLOWMETER, WALLACE/TIERNA	BB102	3	3	OK	1.10	3.30	-
35600EI134	Receptacle, Welding, Meltric #33-64043	BB102	1	1	OK	349.29	349.29	-
35600EI135	Receptacle, Welding, Meltric # 33-68043	BB102	0	0	OK	-	-	-
30509EI003	O-ring, 146 x 3, Viton	BB104	7	7	OK	20.40	142.80	-
30509EI004	O-Ring, 109.5 x 3, Viton	BB104	2	2	OK	44.47	88.93	-
30509EI509	Motor, Stepper, for filter wheel	BB104	1	1	OK	223.00	223.00	-
30509EI510	Motor, stepper	BB104	0	0	OK	-	-	-
01180ME022	BEARING, #1 & #2 FD FAN	BB200	4	4	OK	823.26	3,293.04	-
30509EI501	Valve, Brass, 3 way	BB201	1	1	OK	53.72	53.72	-
30509EI506	O RING SET OF 2 FOR HEATED FLOWMETER, AL	BB202	0	0	OK	-	-	-
30509EI602	INSERT,IR LIGHT SOURCE MCS100 FOR ALTECH	BB202	0	0	OK	-	-	-
01201EI001	Transmitter, Pressure Indicating	BB204	1	1	OK	1,544.25	1,544.25	-
01180ME020	Ring, Seal Aluminum	BB300	3	3	OK	54.98	164.95	-
01180ME023	ADAPTOR, FD FAN, SNW 28 X 4 15/16 SKF	BB300	3	2	CHECK	167.36	502.09	(167
34201EI099	Processor module, IMMFP02 *VERSION 8* (reverse compatible)	BB301	2	2	OK	1,956.00	3,912.00	-
34201EI100	Processor module, IMMFP12 multifunction	BB301	2	2	OK	4,219.00	8,438.00	-
34201EI101	Module, analog output	BB301	1	1	OK	2,393.67	2,393.67	-
34201EI102	Module, digital input	BB301	2	1	CHECK	647.67	1,295.33	(648
34201EI103	Module, digital output IMDS014	BB302	2	2	OK	726.62	1,453.24	-
34201EI104	Module, Analog Input	BB302	2	2	OK	1,105.04	2,210.08	-
34201EI105	Unit, Termination	BB302	1	1	OK	277.08	277.08	-
34201EI107	Fuse, .25A, NTDI01	BB302	15	15	OK	1.17	17.55	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
4201EI108	Fuse, 3A, NTDI01	BB302	15	15	OK	0.65	9.75	-
4201EI109	Fuse, 1A, NTMP01	BB302	10	10	OK	1.17	11.70	-
4201EI110	Module, Loop Interface	BB303	3	3	OK	1,565.00	4,695.00	-
4201EI111	Module, Network Processing	BB303	1	1	OK	3,935.75	3,935.75	-
4201EI112	Breaker, Entry Circuit	BB303	1	1	OK	357.50	357.50	-
4201EI113	Fuse, Slo-Blo, 2A, 250V, IPMON01	BB304	5	6	CHECK	1.91	9.55	2
4201EI114	Fuse, Miniature, 1/32A, IPMON01	BB304	5	5	OK	3.35	16.75	-
4201EI115	Fuse, .5A, 250VAC, IPSYS01	BB304	5	5	OK	1.63	8.15	-
4201EI116	Fuse, 2A, 250VAC, IPSYS01	BB304	5	5	OK	1.63	8.15	-
4201EI117	Fuse, 6.3A, 250VAC, IPSYS01	BB304	5	5	OK	5.36	26.80	-
4201EI118	Module, Fan	BB304	1	1	OK	565.50	565.50	-
4201EI119	Kit, ESD Field Service	BB304	1	1	OK	81.25	81.25	-
4201EI120	Assembly, PCB, IEMMU21	BB304	1	1	OK	284.05	284.05	-
4201EI121	Module, Communication Port	BB304	2	2	OK	1,754.34	3,508.68	-
4201EI001	REMOTE TERMINATION FOR BAILEY DRY FLU GA	BB400	1	1	OK	1,124.05	1,124.05	-
4201EI003	LOOP INTERFACE MODULE FOR BAILEY DRY FLU	BB400	0	0	OK	-	-	-
4201EI004	NETWORK PROCESS MODULE FOR BAILEY DRY FL	BB400	1	1	OK	2,875.00	2,875.00	-
4201EI005	POWER MODULE FOR BAILEY DRY FLU GAS DESU	BB400	1	1	OK	2,968.00	2,968.00	-
4201EI006	CARD, ANALOG INPUT (IMFEC11) BAILEY CONTROLS	BB400	1	1	OK	616.68	616.68	-
4201EI007	CARD, DIGITAL INPUT BAILEY CONTROLS	BB401	2	2	OK	1,508.01	3,016.02	-
4201EI008	CARD, ANALOG OUTPUT BAILEY CONTROLS	BB401	0	0	OK	-	-	-
4201EI009	POWER ENTRY PANEL FOR BAILEY DRY FLU GAS	BB401	0	0	OK	-	-	-
4201EI010	ASSEMBLY AC MODULE FOR IEPEP03, FOR BAIL	BB401	1	1	OK	484.23	484.23	-
4201EI011	ASSEMBLY BUS MONITOR MODULE FOR BAILEY D	BB401	1	1	OK	403.52	403.52	-
4201EI012	ENTRY CIRCUIT BREAKER FOR BAILEY DRY FLU	BB402	1	1	OK	440.00	440.00	-
4201EI013	POWER SUPPLY MODULE FOR BAILEY DRY FLU G	BB402	2	2	OK	2,306.00	4,612.00	-
4201EI014	MODULE ASSEMBLY, POWER SUPPLY, FOR BAILE	BB402	1	1	OK	1,436.00	1,436.00	-
4201EI015	SYSTEM POWER MODULE FOR BAILEY DRY FLU G	BB402	0	0	OK	-	-	-
4201EI002	TERMINATION MODULE FOR BAILEY DRY FLU GA	BB403	2	2	OK	300.00	600.00	-
4201EI016	FAN MODULE FOR BAILEY DRY FLU GAS DESULF	BB403	1	1	OK	2,173.85	2,173.85	-
4201EI017	KIT,ESD FIELD SERVICE FOR BAILEY DRY FLU	BB403	1	1	OK	75.00	75.00	-
4201EI018	FAN, AC TUBEAXIAL FOR BAILEY DRY FLU GAS	BB403	1	1	OK	79.19	79.19	-
4201EI019	ASSEMBLY PCB IEMMU21 FOR BAILEY DRY FLU	BB403	0	0	OK	-	-	-
21201EI004	ASSEMBLY, PRE AMP ***PERM-I***	BB404	3	3	OK	175.00	525.00	-

Schedule 16A - Initial Spare Parts List

ITEM#	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Differenc
21201EI005	PROBE, PH MEASURING, L&N	BB404	1	1	OK	88.00	88.00	-
21201EI006	PROBE, L & N	BB404	2	2	OK	88.00	176.00	-
34201EI020	ASSEMBLY PCB. 1EMMU21 FOR BAILEY DRY FLU	BB404	2	2	OK	219.00	438.00	-
34201EI021	PRINT HEAD FOR 11PRT02, FOR BAILEY DRY F	BB404	1	1	OK	1,614.10	1,614.10	-
34201EI022	PRINTER RIBBON FOR 11PRT02, BAILEY DRY F	BB404	0	0	OK	-	-	-
34201EI023	FUSE FASTRACTIND, 3A 250V FOR BAILEY DRY	BB404	5	5	OK	1.26	6.30	-
34201EI024	FUSE 2A 250V FOR BAILEY DRY FLU GAS DESU	BB404	5	5	OK	1.57	7.85	-
34201EI025	FUSE,6.3A 250V FOR BAILEY DRY FLU GAS DE	BB404	3	3	OK	8.25	24.75	-
34201EI026	FUSE FASTRACTING 2A 250V FOR BAILEY DRY	BB404	2	2	OK	0.42	0.83	-
34201EI027	FUSE, MINI. 1/32A FOR BAILEY DRY FLU GAS	BB404	3	3	OK	5.15	15.45	-
34201EI028	FUSE 5A 250VAC FOR BAILEY DRY FLU GAS DE	BB404	5	5	OK	1.61	8.05	-
34201EI029	FUSE 6.3A250VAC FOR BAILEY DRY FLU GAS D	BB404	4	4	OK	8.25	33.00	-
34201EI030	FUSE 2A. MOUNTING HARDWAREM FOR BAILEY D	BB404	3	3	OK	2.72	8.16	-
01159ME712	DAMPER ADJUST ASSEM MARTIN	BLUE	43	43	OK	4.64	199.56	-
35603EI007	SWITCH, PRESSURE P&F FOR #3 SWITCHYARD	CC100	1	1	OK	149.00	149.00	-
35603EI008	COIL, RELAY "X" P&F FOR #3 SWITCHYARD	CC100	1	1	OK	109.00	109.00	-
35603EI052	Coil, close 41-211-176-023	CC100	2	2	OK	458.00	916.00	-
35603EI053	Coil, open 41-211-176-034	CC100	2	2	OK	458.00	916.00	-
35603EI054	Motor, with gear 41-211-208-032	CC100	2	2	OK	1,600.00	3,200.00	-
35600EI011	DIODE, SOLID STATE CONTROL, #60074, #3 S	CC101	2	2	OK	41.18	82.36	-
35600EI012	FUSE, SOLID STATE CONTROL, 5A X 250V, 3#	CC101	9	9	OK	3.90	35.10	-
35600EI013	LIGHT, PILOT, RED FOR #3 SWITCHYARD, SOL	CC101	3	3	OK	4.01	12.03	-
35600EI014	LIGHT, PILOT, AMBER FOR 3# SWITCHYARD, S	CC101	4	4	OK	8.00	32.00	-
35600EI015	SCR ***PERM-2*** PART 611104,110550N15	CC101	2	2	OK	117.00	234.00	-
35600EI016	FUSE, SOLID STATE CONTROLS, 150A X 150V	CC101	10	10	OK	27.69	276.90	-
35600EI017	SCR ***PERM-4*** PART 611105/110550N80	CC101	2	2	OK	66.15	132.30	-
35600EI018	BUSHING CAM ROLLER ***PERM-1*** FOR	CC101	1	1	OK	25.69	25.69	-
35603EI009	SWITCH, AUX ***PERM-1*** 6 STAGE(SIEMA	CC101	1	1	OK	277.55	277.55	-
35603EI010	SWITCH, AUX ***PERM-1*** 4 STAGE(SIEM	CC101	1	1	OK	130.00	130.00	-
35600EI019	BARRIER, PI ARC FOR #3 SWITCHYARD	CC102	13	13	OK	9.56	124.28	-
35600EI020	ASSEMBLY, HANDLE FOR #3 SWITCHYARD	CC102	1	1	OK	1.68	1.68	-
35600EI021	COIL, HVC 115V/60HZ FOR #3 SWITCHYARD	CC102	1	1	OK	739.33	739.33	-
35603EI050	Disk, rupture 72-183-253-002	CC102	2	2	OK	360.00	720.00	-
35603EI051	Gasket rupture disk 72-182-584-002	CC102	4	4	OK	63.00	252.00	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
1200EI001	SEAL, AUX 5"	CC103	4	4	OK	33.00	132.00	-
2201EI001	PROBE, PROXIMITY TRANSDUCER, BENTLEY NEV	CC103	2	2	OK	105.50	211.00	-
2201EI002	PROXIMITOR, TRANSDUCER, BENTLEY NEVADA	CC103	0	0	OK	-	-	-
2201EI003	PROBE, VIBE PART# 2096J15-0	CC103	2	3	CHECK	267.00	534.00	267
2201EI004	PROBE, PROXIMITY	CC103	2	1	CHECK	88.00	176.00	(88)
01183EI001	POSITIONER,MODULE REPLACEMENT FOR 3511 S	CC104	2	2	OK	588.30	1,176.60	-
0318EI001	GOVERNOR #2 BFW pump	CC104	1	1	OK	2,098.00	2,098.00	-
2201EI005	PROBE, PROXIMITY TRANSDUCER, BENTLEY NEV	CC200	1	1	OK	121.00	121.00	-
2201EI006	PROBE, PROXIMITY TRANSDUCER, BENTLEY NEV	CC200	2	2	OK	349.00	698.00	-
2201EI008	PROBE #300-03-00-33-24-01	CC200	3	3	OK	525.00	1,575.00	-
2201EI009	PROBE, PROXIMITY, BENTLEY NEVADA	CC200	2	2	OK	525.00	1,050.00	-
2201EI010	CABLE, EXTENSION, (TRANSDUCERS) BENTLY N	CC200	1	1	OK	110.00	110.00	-
2201EI011	PROBE, PROX. BENTLY NEVADA #21505-00-28-	CC200	2	2	OK	145.00	290.00	-
2201EI012	CABLE, EXTENSION G.E.	CC200	3	3	OK	36.00	108.00	-
2201EI013	CONTROL, PICK UP MAG SPD FOR #2 TG DL-09	CC202	1	1	OK	406.00	406.00	-
2201EI014	CARTRIDGE, LED FOR #2 TG DL 095 CONTROLS	CC202	5	5	OK	8.00	40.00	-
2201EI015	CAPACITOR, #2 T/G DL-095 CONTROLS DL, G.	CC202	2	2	OK	7.00	14.00	-
2201EI016	RELAY, #2 TG PART# 3092J42-	CC202	4	4	OK	29.00	116.00	-
2201EI017	RELAY, 28 VDC PART 2047J5	CC203	1	1	OK	111.00	111.00	-
2201EI018	RELAY, 28 VDC PART 2047J55	CC203	1	1	OK	111.00	111.00	-
2201EI019	FUSE, 1/2 AMP, FOR #2 TG DL-095 CONTROLS	CC203	5	5	OK	5.00	25.00	-
2201EI020	FUSE, 5 AMP, #2 TG DL-095 CONTROLS DL	CC203	2	2	OK	6.00	12.00	-
2201EI021	FUSE, 6 AMP, #2 TG DL-095 CONTROLS DL	CC203	5	5	OK	6.00	30.00	-
2201EI024	O RING, #2 TG DL-095 CONTROLS DL,S/P 007	CC203	4	4	OK	8.00	32.00	-
2201EI026	RELAY,28 VDC	CC203	1	1	OK	91.00	91.00	-
2201EI027	METER, G.E.	CC203	2	2	OK	133.00	266.00	-
2201EI028	SWITCH, 1200 3A	CC203	2	2	OK	61.00	122.00	-
12565EI001	CARTRIDGE, STD. SET, 1,000 PSI VALVE	CC203	2	2	OK	66.75	133.50	-
12565EI002	BODY, BLOCK REGULATOR, ALUMINUM	CC203	4	4	OK	28.05	112.20	-
2201EI029	BOARD, INVERTER 120VT ***PERM-2*** COP	CC204	2	2	OK	750.00	1,500.00	-
2201EI030	BOARD, PC ASSEMBLY INVERT ***PERM-1***	CC204	1	1	OK	200.00	200.00	-
2201EI041	BUSHING #2 T/G ***PERM-2***	CC204	0	0	OK	-	-	-
30509EI010	PROBE TUBE,SS 1 METER FOR ALTECH CEM	CC204	1	1	OK	247.27	247.27	-
2201EI042	PROBE AXIAL	CC300	1	1	OK	123.00	123.00	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
12201EI043	KIT, FIELD, SERVO HYD STRAINER FOR TURBI	CC300	2	2	OK	850.00	1,700.00	-
12201EI044	DIRECTIONAL VALVE & COIL ASSM. #2 TURBIN	CC300	1	1	OK	10,076.85	10,076.85	-
21201EI001	ELECTRODE, ROSEMOUNT MODEL 396P-01-10-54	CC300	2	2	OK	509.34	1,018.67	-
21201EI003	TEE, ROSEMOUNT FLOW THROUGH TEE W/ADAPTO	CC300	1	1	OK	208.00	208.00	-
12201EI045	RELAY, TIME ***PERM-1***	CC301	1	1	OK	69.00	69.00	-
12201EI048	GEAR, MOTOR, GE	CC301	1	1	OK	429.51	429.51	-
12201EI049	TIMER, COMPLETE, #3 AIR DRYER QRIAD II,	CC301	2	2	OK	200.00	400.00	-
12201EI050	MONITOR, POWER SUPPLY, G.E.	CC301	0	0	OK	-	-	-
12201EI051	Valve, Servo, # 1 and # 2 T/G	CC301	2	3	CHECK	8,600.00	17,200.00	8,600
12201EI078	RELAY, 110V ***PERM-2*** G.E.	CC302	2	2	OK	17.00	34.00	-
12201EI079	RELAY, HI FI ***PERM-1***	CC302	1	1	OK	19.00	19.00	-
20201EI001	Positioner, Flow, Type DVC6010	CC302	1	1	OK	3,086.42	3,086.42	-
35600EI047	IND LIGHT FOR G.E. SWITCHGEAR EQUIP.	CC303	2	2	OK	69.50	139.00	-
35600EI048	IND LIGHT FOR G.E. SWITCHGEAR EQUIP.	CC303	2	2	OK	18.63	37.26	-
35600EI049	SEL SWITCH FOR G.E. SWITCHGEAR EQUIP.	CC303	0	0	OK	-	-	-
35600EI050	OVERLOAD RELAY-S21 FOR G.E. SWITCHGEAR E	CC303	2	2	OK	64.83	129.66	-
35600EI051	GROUND FAULT SENSOR FOR G.E. SWITCHGEAR	CC303	1	1	OK	264.81	264.81	-
35600EI052	GRD, FAULT RELAY FOR G.E. SWITCHGEAR EQU	CC303	1	1	OK	283.45	283.45	-
35600EI053	NAMEPLATE FOR G.E. SWITCHGEAR EQUIP.	CC303	2	2	OK	1.50	3.00	-
35600EI054	HEATER FOR G.E. SWITCHGEAR EQUIP.	CC303	2	2	OK	6.43	12.86	-
35600EI055	TERMINAL BLOCK SWITCHGEAR EQUIP.	CC304	18	18	OK	10.60	190.80	-
35600EI056	TERM BOARD FOR G.E. SWITCHGEAR EQUIP.	CC304	3	3	OK	10.39	31.17	-
20303EC001	Actuator, Pneumatic, (Pall System)	CC401	1	1	OK	-	-	-
20303EC005	Supressor, Surge (Pall Sys)	CC401	1	1	OK	-	-	-
20303EC011	Memory, 1500 CPU 12K (Pall Sys)	CC401	1	1	OK	-	-	-
20303EC012	Base, Memory (Pall Sys)	CC401	1	1	OK	-	-	-
20303EC002	Actuator, Pneumatic, (Pall System)	CC402	1	1	OK	-	-	-
20303EC006	Supply, Power, 100 watt (Pall System)	CC402	0	0	OK	-	-	-
20303EC008	Card, Analog Input 4 Channel 1769-IF4 Micrologix 1500	CC402	1	1	OK	-	-	-
20303EC009	Module, Output Analog I/O (Pall System)	CC402	1	1	OK	-	-	-
20303EC010	Relay, Isolated Output (Pall System)	CC402	1	1	OK	-	-	-
20303EC013	Processor, (Pall System)	CC402	1	0	CHECK	-	-	-
20303EC016	Drive, Vari-Speed, (Pall System)	CC403	1	1	OK	-	-	-
35600EI022	GASKET, WEST.	CC404	9	9	OK	7.30	65.70	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
35600EI023	GASKET, WEST.	CC404	4	4	OK	5.80	23.20	-
35600EI024	GASKET, WEST	CC404	16	16	OK	7.01	112.16	-
35600EI025	GASKET, WEST.	CC404	1	1	OK	6.03	6.03	-
35600EI026	GASKET, WEST	CC404	1	1	OK	5.90	5.90	-
35603EI012	RELAY, 4 POLE ***PERM-2***	CC404	1	1	OK	145.00	145.00	-
35603EI013	CONTACT, AUXILIARY, AMETEK	CC404	1	1	OK	50.00	50.00	-
35603EI014	CONTACT, AUX. PART#588C981 H01 WESTINGH	CC404	4	4	OK	399.29	1,597.14	-
35603EI015	TRANSFORMER ***PERM-2***	CC404	1	1	OK	148.00	148.00	-
35603EI016	ASSEMBLY, CONTACT, WESTINGHOUSE	CC404	4	4	OK	369.29	1,477.14	-
50018EI027	TRANSFORMER, TYPE MTC, WESTINGHOUSE	CC404	2	2	OK	72.50	145.00	-
35600EI027	CONTACT, PISTON WESOCO	DD100	6	6	OK	175.00	1,050.00	-
35600EI028	CONTACT, STATION WESTINGHOUSE	DD100	1	1	OK	75.00	75.00	-
35600EI029	CONTACT, STATION WESTINGHOUSE	DD100	8	8	OK	75.00	600.00	-
35600EI030	CONTACT, STATION WESTINGHOUSE	DD100	3	3	OK	75.00	225.00	-
35600EI031	CONTACT, SPRING MOUNT WESTINGHOUSE	DD100	6	6	OK	20.00	120.00	-
35600EI032	PIN, CONTACT MOV	DD101	3	3	OK	20.00	60.00	-
35600EI033	SPRING, KICK OUT ***PERM-3***	DD101	3	3	OK	50.00	150.00	-
35600EI034	CONTACT, STAT MAIN WESTINGHOUSE	DD101	3	3	OK	120.00	360.00	-
35600EI035	CONTACT, STATION ARCHING WESTINGHOUSE	DD101	3	3	OK	70.00	210.00	-
35600EI036	PLATE,MOV.MAIN RH	DD101	3	3	OK	75.00	225.00	-
35600EI037	CONTACT, MOV ARC WESTINGHOUSE	DD101	12	12	OK	90.00	1,080.00	-
35600EI038	SPRING, MOV CONT HINGE ***PERM-5***	DD101	6	6	OK	15.00	90.00	-
35600EI039	COIL 115VDC FOR G.E. SWITCHGEAR EQUIP.	DD102	1	1	OK	1,820.00	1,820.00	-
35600EI040	V/BOLT/ASM.INTRIM/400 FOR G.E. SWITCHGEA	DD102	2	2	OK	1,367.30	2,734.60	-
35600EI041	4-1/2 PANEL METER 15 FOR G.E. SWITCHGEAR	DD102	1	1	OK	81.12	81.12	-
35600EI042	4-1/2 PANEL METER 20 FOR G.E. SWITCHGEAR	DD102	1	1	OK	81.12	81.12	-
35600EI043	2KVA4160/230/115-5/6 TRANSFORMER FOR G.E	DD103	1	1	OK	642.18	642.18	-
35600EI044	SWITCH FOR G.E SWITCHGEAR EQUIP.	DD103	1	1	OK	97.57	97.57	-
35600EI045	PUSH BUTTON FOR G.E. SWITCHGEAR EQUIP.	DD103	2	2	OK	17.99	35.98	-
35600EI046	PUSH BUTTON FOR G.E. SWITCHGEAR EQUIP.	DD103	1	1	OK	17.99	17.99	-
35600EI057	MOT STAB ASM 2&3 HI FOR G.E. SWITCHGEAR	DD103	1	1	OK	940.50	940.50	-
35600EI058	MAGNET FRAME DC HVC FOR G.E. SWITCHGEAR	DD103	1	1	OK	232.85	232.85	-
35600EI059	EJ-FU-4.8KV/9R CLIP FOR G.E. SWITCHGEAR	DD104	1	0	CHECK	589.52	589.52	(590)
35600EI060	ARM SPRING CR193V&W FOR G.E. SWITCHGEAR	DD104	2	2	OK	14.79	29.58	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
35600EI061	MOVEABLE ARM CR193V&W FOR G.E. SWITCHGEA	DD104	1	1	OK	609.84	609.84	-
35600EI062	2AMP CPT FUSE 4.8KV FOR G.E. SWITCHGEAR	DD104	6	6	OK	101.15	606.92	-
35600EI063	CONTACT FINGER-SIL FOR G.E. SWITCHGEAR E	DD104	20	20	OK	5.55	111.00	-
35600EI064	HV BUSH. MALE 3HI FOR G.E. SWITCHGEAR EQ	DD104	3	3	OK	10.17	30.51	-
35600EI065	HV BUSH. FEMALE 3HI FOR G.E. SWITCHGEAR	DD104	3	3	OK	3.73	11.19	-
35600EI066	POWER STAB SPRING (set of 3)	DD104	29	29	OK	1.87	54.23	-
35600EI067	1 POLE/FUSE BLOCK	DD104	3	3	OK	9.50	28.50	-
35600EI068	FUSE-250V/10AMP FOR G.E. SWITCHGEAR EQUI	DD104	3	3	OK	6.53	19.59	-
35600EI069	LIGHT, RED INDICATOR, 125 V, FOR #3 SWIT	DD200	1	1	OK	242.86	242.86	-
35600EI070	LIGHT, GREEN INDICATOR, 125V, FOR #3 SWI	DD200	1	1	OK	27.36	27.36	-
35600EI071	BUTTON, PUSH, OILTIGHT, FOR #3 SWITCHYAR	DD200	2	2	OK	14.07	28.14	-
35600EI072	BUTTON, PUSH, OILTIGHT FOR #3 SWITCHYARD	DD200	0	0	OK	-	-	-
35600EI073	ASSEMBLY, AUX.***PERM-1*** INTERLOCK FOR	DD200	1	1	OK	205.49	205.49	-
35600EI074	INTERLOCK, CONTROL POWER FOR #3 SWITCHYA	DD200	5	5	OK	1,205.49	6,027.45	-
35600EI075	INTERLOCK, TEST POWER FOR #3 SWITCHYARD	DD200	1	1	OK	205.49	205.49	-
35600EI076	RESISTOR, ASSEMBLY ***PERM-1***	DD200	1	1	OK	169.00	169.00	-
35600EI077	METER 2131J72001	DD200	1	1	OK	38.00	38.00	-
35600EI078	HEATER, OVERLOAD FOR #3 SWITCHYARD	DD201	3	3	OK	4.46	13.38	-
35600EI079	HEATER, OVERLOAD FOR #3 SWITCHYARD. G.E.	DD201	3	3	OK	4.36	13.08	-
35600EI080	KIT, SPARE PART 302-332	DD201	2	2	OK	39.50	79.00	-
50018ME025	KIT, MASTER, SIZE 5/8-11 PART 540I-10 HEL	DD201	1	1	OK	6.82	6.82	-
50018ME026	KIT, REPAIR G.E.	DD201	1	1	OK	167.50	167.50	-
50018ME027	KIT, REPAIR G.E.	DD201	1	1	OK	174.85	174.85	-
20303EI001	Display, Hydroranger	DD202	1	1	OK	1,467.94	1,467.94	-
35600EI081	COIL, 120 VAC	DD202	1	1	OK	28.50	28.50	-
35600EI082	HANDLE #5311459B1	DD202	1	1	OK	9.31	9.31	-
35600EI083	ASSEMBLY, CABLE ***PERM-1***	DD202	1	1	OK	63.18	63.18	-
35600EI084	REGULATOR ***PERM-1***	DD202	1	1	OK	104.29	104.29	-
35600EI085	PROXIMITOR #2 TG ***PERM-3*** G.E.#2096J	DD202	3	3	OK	2,601.00	7,803.00	-
35600EI086	DIODE, TG, GE. 2088570-001	DD202	4	4	OK	37.50	150.00	-
35600EI087	CARTRIDGE, LED, TG, 28U, 2101J8802, GE	DD202	4	4	OK	8.00	32.00	-
35600EI088	WHEEL, SWITCH THUMB ***PERM-1***	DD202	1	1	OK	62.00	62.00	-
20303EI002	Programmer, Level Detector	DD203	1	1	OK	100.00	100.00	-
20303EI003	Transducer, Level Detector	DD203	1	1	OK	1,064.43	1,064.43	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
5600EI089	RELAY, 4 POLE ***PERM-1***	DD203	1	1	OK	106.92	106.92	-
5600EI090	SWITCH, PUSH BUTTON G.E.	DD203	1	1	OK	32.00	32.00	-
5600EI091	SUPPLY, POWER ***PERM-1***	DD203	1	1	OK	267.00	267.00	-
0009EI002	SWITCH MERCROID CONTROL	DD203	0	0	OK	-	-	-
5600EI092	SWITCH, D.P.S.T. ***PERM-2*** FOR #3 SWI	DD204	1	1	OK	36.25	36.25	-
5600EI093	RELAY, AGA ***PERM-2***	DD204	2	2	OK	389.00	778.00	-
5600EI094	RELAY, TIME DELAY ***PERM-2***SER W7FGVN	DD204	2	2	OK	295.50	591.00	-
5600EI095	RELAY, TIME DELAY ***PERM-1*** #3 AIR CO	DD204	1	1	OK	302.00	302.00	-
5600EI096	RELAY, TIME DELAY ***PERM-3***	DD204	2	2	OK	161.17	322.33	-
5600EI097	SHIELD, ARC BOTTOM ***PERM-6***	DD301	6	6	OK	30.80	184.80	-
5600EI098	ASSEMBLY, TRANSFER STOCK ***PERM-6***	DD301	6	6	OK	112.70	676.20	-
5600EI099	SHIELD, ARC ***PERM-6***	DD301	6	6	OK	38.50	231.00	-
1165EI002	PLUG, BOILER DRUM LEVEL, DIAMOND POWER (DD302	3	3	OK	330.89	992.67	-
5600EI100	SHIELD, ARC ***PERM-6***	DD302	6	6	OK	38.50	231.00	-
5600EI101	RELAY, OIL ***PERM-4*** FOR #3 SWITCHYAR	DD302	4	4	OK	30.95	123.80	-
5600EI102	RELAY, GROUND FAULT ***PERM-1*** FOR #3	DD302	1	1	OK	448.01	448.01	-
5600EI103	FUSE, EII 4.8KV/3 AMP FOR #3 SWITCHYARD	DD302	2	2	OK	40.30	80.60	-
5600EI104	METER, AMP 0-3000 SQ D DYNATRON PART 486	DD303	1	1	OK	70.00	70.00	-
5600EI105	TRANSFORMER, MOD RSC-2B REGULATING CONTR	DD303	2	2	OK	94.49	188.97	-
5600EI106	MOTOR, 115V WESTINGHOUSE	DD303	2	2	OK	213.16	426.32	-
5600EI107	TRANSFORMER, 50V ***PERM-2*** 0.05KVA	DD303	2	2	OK	215.00	430.00	-
5600EI108	RELAY, RESET ROD EXT. OVERLOAD	DD303	41	41	OK	9.89	405.41	-
6450EI002	SWITCH SAFETY, MATERIAL CONTROL MODEL MCI-SS-5	DD304	0	0	OK	-	-	-
1153EI002	LIMIT SWITCH/GO, BURNERS SLIDE GATE	DD400	2	2	OK	227.00	454.00	-
1153EI003	SCANNER FIREYE #45UV5-1009 SELF-CHECK UV	DD400	2	2	OK	974.66	1,949.32	-
1180ME007	SEAL, FELT AMER.DAVIDSON FOR FD FAN	DD400	8	8	OK	14.00	112.00	-
1180ME008	SEAL, CORK AMER.DAVIDSON FOR FD FAN	DD400	10	10	OK	41.00	410.00	-
1180ME009	GASKET, SEAL AMER.DAVIDSON FOR FD FAN	DD400	9	9	OK	43.90	395.08	-
1180ME010	SPRING, SEAL AMER.DAVIDSON FOR FD FAN	DD400	10	10	OK	29.00	290.00	-
1201EI032	CHECK VALVE, REXROTH	DD402	2	2	OK	283.91	567.81	-
1201EI033	Decompression Valve Rexroth	DD402	1	1	OK	857.00	857.00	-
1201EI034	NEEDLE VALVE, REXROTH (Martin Hydraulics)	DD402	2	4	CHECK	212.36	424.72	425
1201EI037	LIMIT SWITCH, ALLEN BRADLEY FOR TLT DI	DD402	4	4	OK	318.33	1,273.32	-
1201EI038	BRACKET, MOUNTING (PEPPERL+FUCHS)	DD402	2	2	OK	33.17	66.34	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
01201EI039	PROXIMITY SWITCH, A/B SENSOR (DRAG CONVEYOR)	DD403	6	6	OK	83.16	498.93	-
16450ME110	HYCON FILTER ELEMENT (Outlet)	DD403	0	0	OK	-	-	-
16450ME111	HYCON FILTER ELEMENT (Inlet)	DD403	0	0	OK	-	-	-
01153EI004	VALVE, 3"SHUT OFF,GAS BURNER	DD404	1	1	OK	3,652.52	3,652.52	-
01153EI005	VALVE, 4"AUTOMATIC SHUT-OFF RF FLANGE 2-	DD404	1	1	OK	5,140.00	5,140.00	-
20303EC004	Processor, Versa View, (Pall Sys)	E/I FLOOR	1	1	OK	2,771.00	2,771.00	-
30505ME116	Shield, Operator Protection	EE303	7	7	OK	32.62	228.32	-
50003ME117	HOSE CLIP FOR ATLAS COPCO AIR COMPRESSOR	F101	8	0	CHECK	15.14	121.15	(121)
50003ME118	Valve, Check	F101	0	0	OK	-	-	-
50018EI005	LAMP, FLUORESCENT, MCP CONTROL RECORDER	F101	12	12	OK	0.24	2.91	-
50018EI006	LAMP, SXL, 10 PER BOX	F101	30	30	OK	1.07	32.10	-
50018EI009	LAMP, MVR100/U	F101	2	2	OK	26.72	53.44	-
50018EI015	KIT, MOTOR, CONTACT, 3 HP, RAYCHEM MCK-5-1V-00	F102	2	0	CHECK	180.44	360.88	(361)
50018EI016	KIT, MOTOR, CONTACT, 3 HP, RAYCHEM MCK-5-2V-00	F102	2	2	OK	280.11	560.22	-
50018EI018	SWITCH, LIMIT, SNAP-LOCK, NAMECO CONTROL	F102	2	2	OK	129.34	258.68	-
50018EI019	SWITCH, MICRO, HONEYWELL	F102	2	2	OK	67.45	134.90	-
50018EI020	CIRCUIT BREAKER, INTERRUPTER TYPE KB NON	F102	1	1	OK	714.31	714.31	-
50018EI021	BREAKER, GOULD	F102	4	4	OK	11.15	44.58	-
50018EI022	BREAKER, WESTCO 15A, 120 VT	F102	5	5	OK	74.00	370.00	-
50018EI023	BREAKER, 15 AMP, WESTINGHOUSE, 2 POLE, 60	F102	2	2	OK	266.47	532.93	-
50018EI025	PANALARM, DC CYCLE RELAY, 125 VOLT, MOD	F103	1	1	OK	192.06	192.06	-
50018EI104	TRANSMITTER SEALED PRESSURE	F103	0	0	OK	-	-	-
50018EI106	ASSEMBLY, VALVE, AIR DIST	F103	0	0	OK	-	-	-
50018EI107	GAUGE, PRESSURE, 0-4 BAR, 213.63.4.3105.	F103	1	1	OK	132.27	132.27	-
50018EI111	REGULATOR, SCREW TYPE, FAIRCHILD	F104	1	1	OK	105.86	105.86	-
50018EI117	GAUGE, 0-40, WATER PRESSURE	F104	2	2	OK	57.53	115.06	-
50018EI118	GAUGE, ASHCROFT, SIZE 10, 0-60 PSI, LIQU	F104	1	1	OK	37.43	37.43	-
50018EI123	GAUGE, OXYGEN REGULATOR LOW SIDE, 2" 0-2	F105	1	1	OK	293.85	293.85	-
50018EI127	GAUGE, 4 1/2" PRESSURE, 1/4" NPT, 0-800	F105	4	4	OK	62.38	249.52	-
50018EI133	GAUGE WATER CONBRACO 20-205 1/2" F	F105	-8	2	CHECK	16.19	(129.48)	162
50018EI135	THERMOMETER, SS-DIAL TEMP MOD.B	F106	0	0	OK	-	-	-
50018EI136	THERMOMETER, BI METAL 5" RANGE 0-200 F I	F106	3	3	OK	78.05	234.15	-
50018EI138	THERMOMETER, BI METAL 5" ASHCROFT 12" ST	F107	2	2	OK	86.64	173.28	-
50018EI139	THERMOMETER, BI-METAL (# GT500R-3810-06-	F107	1	1	OK	54.83	54.83	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
50018EI151	THERMOMETER, BI METAL 5" ASHCROFT	F201	2	2	OK	91.50	183.00	-
50018EI153	REGULATOR, PREP AIR 3/4" NPT W/GAUGE, SC	F201	1	1	OK	68.00	68.00	-
50018EI154	GAUGE, TEMPERATURE 6" STEM	F201	1	1	OK	35.00	35.00	-
50018ME011	NOZZLE, GASPUMP WITH LEVER 1" CONNECTIO	F201	1	1	OK	22.95	22.95	-
50018EI137	THERMOMETER, BI METAL 5" ASHCROFT,50-400	F202	1	1	OK	111.45	111.45	-
50018EI148	THERMOMETER, BI METAL 3" 0-200F 4" STEM	F202	1	1	OK	39.18	39.18	-
50018EI149	ASSEMBLY, PRE AMP ***PERM-1***	F202	1	1	OK	260.00	260.00	-
50018EI150	METER, VISIFLOAT FLOW DWYER	F202	4	4	OK	45.50	182.00	-
50018EI155	Solenoid, Flowserve (for AutoMax)	F203	0	0	OK	-	-	-
50018ME001	Hub, coupling (Lovejoy) L-095 X 1.125"d	F203	5	5	OK	9.50	47.50	-
50018ME003	Hub, coupling (Lovejoy) L-095 X .375"d	F203	7	7	OK	13.49	94.43	-
50018ME005	Insert, coupling (Lovejoy) L-095	F203	0	0	OK	-	-	-
50018ME006	Insert, coupling (Lovejoy) L-075	F203	9	9	OK	7.72	69.48	-
50018ME010	COUPLER, 1/8 HYDBALL CHECK / 6Y884 Grainger	F203	3	3	OK	4.78	14.35	-
50018ME013	BRUSH, BRASS BRISTLE, DIAMOND POWER	F203	0	0	OK	-	-	-
50018ME105	VALVE, RELIEF, 1/2" VACUUM, WATTS (ORDE	F204	1	1	OK	178.49	178.49	-
50018ME111	VACUUM Breaker, 1/2" JOHNSON FOR AIRHEA	F204	17	17	OK	41.52	705.80	-
50018ME116	Valve, Ball, 3/4" Threaded, 400 P	F205	1	1	OK	40.60	40.60	-
50018ME122	VALVE JERGUSON SIGHT GLASS ISOLATION #14	F205	2	2	OK	531.25	1,062.50	-
50018ME128	VALVE, RELIEF 1 1/2 (DRESSER)	F206	1	1	OK	195.47	195.47	-
50018ME135	Valve, Ball, 1/2" Threaded	F206	30	29	CHECK	5.83	174.76	(6)
50018ME142	VALVE 1.2 NPT POP OFF RO	F206	2	2	OK	10.00	20.00	-
50018ME015	Headgear, cutting	F301	10	7	CHECK	11.81	118.10	(35)
21350ME375	REPAIR KIT, MIXER -LIME SOFTENER-	F302	1	1	OK	1,254.00	1,254.00	-
50018ME170	VALVE, CONTROL ROBERT SHAW	F304	1	1	OK	199.88	199.88	-
1553EI023	STATOR, WELD	F403	0	0	OK	-	-	-
21350ME409	SPROCKET, DRIVEN	F403	1	1	OK	183.39	183.39	-
21350ME410	E-BUSHING, 2.0" BORE MARTIN #E-	F403	1	1	OK	43.03	43.03	-
21350ME411	E-BUSHING, 2-3/16" BORE	F403	1	1	OK	43.03	43.03	-
21350ME412	CHAIN, ROLLER	F403	10	10	OK	15.60	156.00	-
21350ME413	LINK, CONNECTING	F403	0	0	OK	-	-	-
21350ME414	SCREW, ADJUSTING	F403	1	1	OK	58.50	58.50	-
21350ME415	SPRING, DISC	F403	10	10	OK	21.15	211.50	-
1550ME071	Diaphragm, Atmospheric Burst Disc Relief (#1)	F404	1	1	OK	2,693.82	2,693.82	-

Schedule 16A - Initial Spare Parts List

ITEM#	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND		REMARKS	Cost Per Unit	Total Cost	Difference
12550ME140	Diaphragm, Atmospheric Relief (#2) (disc)	F404	1	1	OK		1,411.76	1,411.76	-
21350ME300	IMPELLER -GOULDS- LIME SOFTENER	F501	1	1	OK		601.18	601.18	-
21350ME301	BEARING, OUTBOARD -GOULDS- LIME SOFTENER	F501	1	1	OK		97.47	97.47	-
21350ME302	LOCKNUT, BEARING -GOULDS- LIME SOFTENER	F501	1	1	OK		5.64	5.64	-
21350ME303	SIGHT GLASS -GOULDS- LIME SOFTENER	F501	1	1	OK		32.43	32.43	-
21350ME304	SEAL, OBD. LABYRINTH W/ O-RINGS -LIME SO	F501	1	1	OK		96.72	96.72	-
21350ME305	SEAL, INBD LABYRINTH W/ O-RINGS -LIME S	F501	1	1	OK		96.72	96.72	-
21350ME306	GASKET, CASING -GOULDS- LIME SOFTENER	F501	1	1	OK		19.20	19.20	-
21350ME307	GASKET, FRAME TO ADAPTOR -GOULDS- LIME S	F501	1	1	OK		4.53	4.53	-
21350ME308	RING, RETAINING -GOULDS- LIME SOFTENER	F501	1	1	OK		9.45	9.45	-
21350ME309	LOCKWASHER, BEARING -GOULDS- LIME SOFTEN	F501	1	1	OK		2.82	2.82	-
21350ME310	O-RING, BEARING HOUSING -GOULDS- LIME SO	F501	1	1	OK		7.52	7.52	-
21350ME311	O-RING, OBD LABYRINTH ROTOR - LIME SOFTE	F501	1	1	OK		8.19	8.19	-
21350ME312	O-RING, OBD. LABYRINTH STATOR -LIME SOFT	F501	1	1	OK		9.28	9.28	-
21350ME313	O-RING, INBD. LABYRINTH ROTOR - LIME SOF	F501	1	1	OK		9.67	9.67	-
21350ME314	O-RING, INBD. LABYRINTH STATOR -LIME SOF	F501	1	1	OK		13.32	13.32	-
21350ME315	O-RING, IMPELLER -GOULDS- LIME SOFTENER	F501	2	2	OK		11.31	22.62	-
21350ME316	SLEEVE, SHAFT -GOULDS- LIME SOFTENER	F501	0	0	OK		-	-	-
11550ME008	SPRING, PACKING	F502	0	0	OK		-	-	-
11562ME003	GASKET, GE. 6 PER SET TAG 120 AND 121	F502	0	0	OK		-	-	-
21350ME350	RING, LANTERN (2 Rings = 1 set)	F502	2	2	OK		38.00	76.00	-
21350ME351	SLEEVE, SHAFT -CHEMCO-LIME SOFTENER	F502	1	1	OK		228.00	228.00	-
21350ME352	LOCKNUT, TIMKEN N8 -CHEMCO-LIME SOFTENER	F502	2	2	OK		3.58	7.16	-
21350ME353	SEAL, OIL #473438 -CHEMCO-LIME SOFTENER	F502	4	4	OK		5.49	21.96	-
21350ME354	GASKET -CHEMCO-LIME SOFTENER	F502	2	2	OK		25.00	50.00	-
21350ME355	O-RING -CHEMCO- LIME SOFTENER	F502	5	5	OK		12.65	63.25	-
21350ME356	O-RING -CHEMCO- LIME SOFTENER	F502	1	1	OK		20.37	20.37	-
21350ME357	RING, SNAP -CHEMCO- LIME SOFTENER	F502	2	2	OK		36.05	72.10	-
21350ME358	LINER, SUCTION -CHEMCO-LIME SOFTENER	F502	1	1	OK		662.00	662.00	-
21350ME359	LOCKWASHER, TIMKEN W8 -CHEMCO- LIME SOFT	F502	2	2	OK		1.36	2.72	-
21350ME360	BUSHING, DRIVER -CHEMCO- LIME SOFTENER	F502	5	5	OK		14.00	70.00	-
21350ME361	BUSHING, DRIVEN -CHEMCO- LIME SOFTENER	F502	0	0	OK		-	-	-
21350ME362	SHEAVE, MOTOR, BROWNING #2VP42 (1 1/8)	F502	1	1	OK		95.67	95.67	-
21350ME363	IMPELLER -CHEMCO-LIME SOFTENER	F502	1	1	OK		1,689.00	1,689.00	-

Schedule 16A - I Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
1350ME376	BUSHING -LIME SOFTENER	F503	2	2	OK	47.00	94.00	-
1350ME400	PIN, ACTUATING	F503	1	1	OK	6.35	6.35	-
1350ME401	BEARING, THRUST	F503	1	1	OK	169.50	169.50	-
1350ME402	BEARING, ROLLER	F503	2	2	OK	28.50	57.00	-
1350ME403	BEARING, THRUST -NACHI #29412E MY	F503	1	1	OK	180.50	180.50	-
1350ME404	RING, RETAINING	F503	2	2	OK	6.78	13.56	-
1350ME405	RING, RETAINING	F503	0	0	OK	-	-	-
1350ME406	SEAL, OIL -NATIONAL #476470 3.250 X 4.	F503	2	2	OK	6.84	13.68	-
1350ME407	SEAL, LIP	F503	22	22	OK	4.00	88.00	-
1350ME408	SPROCKET, DRIVER	F503	1	1	OK	70.21	70.21	-
1350ME450	BUSHING	F504	1	1	OK	335.00	335.00	-
1350ME451	BEARING, BALL SKF#7409 BCBM	F504	2	2	OK	56.50	113.00	-
1350ME452	BEARING, BALL NATIONAL #022	F504	1	1	OK	39.50	39.50	-
1350ME453	SEAL, OIL	F504	1	1	OK	4.88	4.88	-
1350ME455	SHEAVE	F504	2	2	OK	17.60	35.20	-
1350ME456	BUSHING	F504	0	0	OK	-	-	-
1350ME457	BUSHING	F504	1	1	OK	14.00	14.00	-
1353EI002	SWITCH,#BZ MICR STRAIGHT LEVER	F504	2	2	OK	7.88	15.76	-
1353ME001	CONNECTOR, PIGTAIL FLEX 4 FOR COOLING TO	F504	6	6	OK	34.00	204.00	-
1353ME003	VALVE, SHUT OFF, 3/4. COOLING TOWER CHLO	F504	2	2	OK	35.50	71.00	-
0042ME100	FILTER ELEMENT, K-3 FOR SHROEDER MOD.#HF	F504	0	0	OK	-	-	-
1350ME454	COUPLING	F505	1	1	OK	98.50	98.50	-
1350ME458	REDUCER,GEAR	F505	1	1	OK	607.00	607.00	-
1550ME065	GASKET #236B3493P0510	F601	0	0	OK	-	-	-
2400ME100	BEARING, OUTBOARD BALL FOR GOULDS PUMP M	F601	1	1	OK	67.00	67.00	-
2400ME101	SHAFT FOR GOULDS PUMP MODEL: 3196 MTX 3X	F601	1	1	OK	377.00	377.00	-
2400ME102	SLEEVE, SHAFT FOR GOULDS PUMP MODEL:	F601	1	1	OK	468.00	468.00	-
2400ME103	LOCK NUT, BEARING FOR GOULDS PUMP MODEL:	F601	3	3	OK	8.00	24.00	-
2400ME104	BEARING, INBOARD BALL FOR GOULDS PUMP MO	F601	1	1	OK	44.00	44.00	-
2400ME105	SIGHT GLASS FOR GOULDS PUMP MODEL: 3196	F601	0	0	OK	-	-	-
2400ME106	SEAL, OB LABYRINTH FOR GOULDS PUMP MODEL	F601	1	1	OK	130.00	130.00	-
2400ME107	SEAL, IB LABYRINTH FOR GOULDS PUMP MODEL	F601	1	1	OK	130.00	130.00	-
2400ME108	GASKET, CASE FOR GOULDS PUMP MODEL:3196	F601	1	1	OK	22.00	22.00	-
2400ME109	GASKET, FRAME ADAPTOR FOR GOULDS PUMP MO	F601	1	1	OK	11.31	11.31	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
22400ME110	RETAINING RING, BEARING HOUSING FOR GOUL	F601	1	1	OK	12.00	12.00	-
22400ME112	O-RING, IMPELLAR FOR GOULDS PUMP MODEL:	F601	1	1	OK	14.00	14.00	-
22400ME113	O-RING, BEARING HOUSING FOR GOULDS PUMP	F601	1	1	OK	10.00	10.00	-
22400ME114	O-RING, OB SEAL-ROTATING FOR GOULDS PUMP	F601	0	0	OK	-	-	-
22400ME115	O-RING, OB SEAL-STATIONARY FOR GOULDS PU	F602	1	1	OK	12.00	12.00	-
22400ME116	O-RING, IB SEAL-ROTATING FOR GOULDS PUMP	F602	1	1	OK	12.00	12.00	-
22400ME117	O-RING, IB SEAL-STATIONARY FOR GOULDS PU	F602	1	1	OK	17.00	17.00	-
22400ME118	MECHANICAL SEAL, COMPLETE W/GLAND, SLEEV	F602	2	2	OK	1,509.00	3,018.00	-
22400ME119	COUPLING,REXNORD W/BOLTS FOR WASTE WATER	F602	2	2	OK	244.42	488.83	-
50042ME010	ARM, SHORT BOOM LOADER, JOHN DEERE	F602	1	1	OK	889.37	889.37	-
30500ME050	Cap, Universal Retaining, SS(nozzle nut)	F604	0	0	OK	-	-	-
30500ME053	STRAINER,BASKET, KRAISSEL SINGLE ELEMENT	F604	1	1	OK	181.00	181.00	-
30500ME054	Gasket, Lance	F604	10	10	OK	34.84	348.43	-
30500ME060	Separator, Water 1 1/2"	F605	2	3	CHECK	115.77	231.54	116
30500ME061	FILTER ELEMENT, NORGREN GULF CONT	F605	2	2	OK	33.19	66.38	-
30500ME062	SEAL KIT,NORGREN GULF CONT	F605	3	3	OK	9.70	29.10	-
30500ME063	O-RING,BOWL, NORGREN GULF CONT	F605	6	6	OK	1.95	11.70	-
30500ME065	VALVE,DRAIN, NORGREN GULF CONT	F605	3	3	OK	3.72	11.16	-
30501EI151	TIMER, C/W SOLENOIDS FOR LIME SILO & CARBON	F701	1	1	OK	384.00	384.00	-
30501EI153	DIAPHRAGM VALVE 1-1/2" RCA 45T000 FOR LIME SILO BIN V	F701	1	1	OK	114.24	114.24	-
30501EI154	VALVE KIT, DIAPHRAGM FOR LIME SILO BIN V	F701	0	0	OK	-	-	-
30501ME060	LINER, FRAME PLATE FOR WARMAN MOD.1.5/1	F703	1	1	OK	397.94	397.94	-
30501ME061	RING,INTAKE JOINT FOR WARMAN MOD. 1.5/1	F703	1	1	OK	58.79	58.79	-
30501ME062	LINER, VOLUTE FOR WARMAN MOD.1.5/1 BAH-A	F703	1	1	OK	673.67	673.67	-
30501ME063	SEAL, VOLUTE FRAME FOR WARMAN MOD.1.5/1	F703	2	2	OK	22.34	44.68	-
30501ME064	JOINT RING,DISCHARGER FOR WARMAN MOD.1.5	F703	0	0	OK	-	-	-
30501ME065	IMPELLER 5VOG FOR WARMAN MOD.1.5/1 BAH-A	F703	2	2	OK	252.90	505.79	-
30501ME066	SPACER, SHAFT, FOR WARMAN MOD.1.5/1 BAH-	F703	1	1	OK	240.17	240.17	-
30501ME067	RESTRICTOR,LANTERN FOR WARMAN MOD.1.5/1	F703	1	1	OK	182.44	182.44	-
30501ME068	O RING, IMPELLAR SEAL FOR WARMAN MOD.1.5	F703	3	3	OK	6.81	20.43	-
30501ME069	GLAND, SPLIT-W/BOLTS FOR WARMAN MOD.1.5/	F703	1	1	OK	161.10	161.10	-
30501ME070	SLEEVE,SHAFT FOR WARMAN MOD.1.5/1 BAH-A	F703	2	2	OK	157.61	315.22	-
30501ME071	O RING,SHAFT FOR WARMAN MOD.1.5/1 BAH-A	F703	5	5	OK	5.45	27.25	-
30501ME072	RING, SEAL FOR WARMAN MOD.1.5/1 BAH-A	F703	2	4	CHECK	59.37	118.74	119

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
30501ME073	BOLT, GLAND W/NUT & WASHER FOR WARMAN MOD	F703	8	8	OK	14.63	117.02	-
30501ME074	COVER, END FOR WARMAN MOD.1.5/1 BHA-A	F703	2	2	OK	168.25	336.50	-
30501ME075	SHIM SET, END COVER FOR WARMAN MOD.1.5/1	F703	2	2	OK	18.21	36.41	-
30501ME076	RETAINER, GREASE FOR WARMAN MOD.1.5/1 BAH	F703	3	3	OK	55.11	165.32	-
30501ME077	LABYRINTH FOR WARMAN MOD.1.5/1 BAH-A	F703	3	3	OK	77.41	232.22	-
30501ME078	BEARING FOR WARMAN MOD.1.5/1 BAH-A	F703	9	9	OK	38.98	350.84	-
30501ME079	LOCKNUT, LABYRINTH FOR WARMAN MOD.1.5/1 B	F703	3	3	OK	53.07	159.21	-
30501ME080	KEY, SHAFT-METRIC FOR WARMAN MOD.1.5/1 BA	F703	3	3	OK	12.21	36.62	-
30501ME081	SEAL RING, BEARING (CR W40) FOR WARMAN MO	F703	4	4	OK	14.66	58.64	-
30501ME206	CONNECTOR, 10" SPOUT SWECO (boot) LIME GRI	F705	1	1	OK	87.00	87.00	-
11550ME069	GASKET, 3 PT SS, 900 PSI, #02182J87P0914 &	F801	0	0	OK	-	-	-
30501ME204	Assembly, Bottom Weight	F801	1	1	OK	363.00	363.00	-
30501ME205	GASKET, TABLE TRAY-EDPM FOR SWECO MOD.XS	F801	2	1	CHECK	48.11	96.22	(48)
30501ME209	Assembly, Top Weight	F801	1	1	OK	357.69	357.69	-
30501ME207	BANDS, 10" SPOUT FOR SWECO MOD.XS48C66 L	F802	0	0	OK	-	-	-
30501ME210	TOP WEIGHT ASSEMBLY FOR SWECO MOD.XS48C	F802	1	1	OK	171.00	171.00	-
30501ME214	GROUNDING STRAP, FOR SWECO MOD.XS40C128 W	F803	8	8	OK	7.28	58.24	-
30501ME216	MOTOR WEDGE FOR SWECO MOD.XS40C128 WATER	F803	5	5	OK	25.00	125.00	-
30501ME217	BOLT 3/4NC X 9" GRADE 5 FOR SWECO MOD.XS	F803	9	9	OK	10.00	90.00	-
30501ME218	HOSE, LUBE -5" LONG FOR SWECO MOD.XS40C1	F803	2	1	CHECK	16.00	32.00	(16)
01201EI036	DEMAN 2 STATION 505H MANIFOLD ADO5HP025S	FF501	0	0	OK	-	-	-
01201EI043	INDICATOR, REMOTE FOR DRUM LEVEL, SOLART	FF906	1	1	OK	850.00	850.00	-
01201EI044	SENSOR, FOR DRUM LEVEL INDICATOR, SOLART	FF906	6	6	OK	39.74	238.44	-
35600EI138	CIRCUIT, INTEGRATE	FF907	1	1	OK	2.20	2.20	-
35600EI139	RELAY 110 VDC	FF907	5	5	OK	30.00	150.00	-
35600EI140	INVERTER, DC, FOR INVERTER SCI(UPS)SOLID	FF907	1	1	OK	1,090.00	1,090.00	-
35600EI141	BOARD, VOLTAGE & CURRENT REGULATOR, GOUL	FF907	2	2	OK	644.50	1,289.00	-
35600EI142	BOARD, PC RELAY ***PERM-1*** (SOLIDSTAT	FF907	1	1	OK	310.00	310.00	-
35600EI143	BOARD, PC NOISE SUBB. ***PERM-1*** (SOL	FF907	1	1	OK	210.00	210.00	-
15109EI166	BRAKE, CONTROL	FF908	1	1	OK	1,020.00	1,020.00	-
15109EI167	BOARD, PC ASSEM. BRK CNTRL ***PERM-4***	FF908	2	2	OK	909.00	1,818.00	-
35600EI137	BOARD, PC TRANS. INVERT ***PERM-1*** (S	FF908	1	1	OK	160.00	160.00	-
15109EI100	Motor, Crane Hoist/Close	FLOOR	2	2	OK	35,974.50	71,949.00	-
15109ME100	Brake, Hoist 23" SBE	FLOOR	1	1	OK	12,575.00	12,575.00	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
50042ME003	Blade, Rubber 128" (644E) w/hardware	FLOOR	0	0	OK	-	-	-
30501ME219	HOSE, LUBE 20" LONG FOR SWECO MOD.XS40C1	G101	3	3	OK	40.00	120.00	-
30501ME221	CLAMP BANDS FOR SWECO MOD.XS40C128 WATER	G101	2	0	CHECK	14.00	28.00	(28)
30501ME222	GASKET, WHITE TPE FOR SWECO MOD.XS48C66	G101	4	4	OK	56.20	224.81	-
30501ME300	KIT, SEAL HARDWARE, STUD & NUTS (4ea/kit)	G102	2	2	OK	31.00	62.00	-
30501ME301	HUB, FALK COUPLING 30T31 FOR TERTIARY WAT	G102	3	3	OK	625.56	1,876.68	-
30501ME302	SPACER ASSEMBLY, COUPLING 102T31 FOR TER	G102	1	1	OK	139.00	139.00	-
30501ME303	HUB, FALK COUPLING 1020T31/35 FOR TERTIA	G102	1	1	OK	49.00	49.00	-
30501ME304	IMPELLER, 1K3X2-62RV P/N MY50729A62/KE103	G102	1	1	OK	540.00	540.00	-
30501ME305	GASKET, IMPELLER GPIK FOR TERTIARY WATER	G102	2	2	OK	12.50	24.99	-
30501ME306	SHAFT-GPIK SOLID HOOK SLEEVE FOR TERTIAR	G102	1	1	OK	194.00	194.00	-
30501ME307	GASKET, REAR COVER 8" FOR TERTIARY WATER	G102	1	1	OK	19.75	19.75	-
30500ME064	SILENCER, UNIVERSAL MOD.U5-3 WHEELA.	G106	1	1	OK	290.00	290.00	-
11550ME046	BUSHING, BRONZE SEAL RING, GE# 0356C329G	G203	2	2	OK	6,189.25	12,378.50	-
30501EI208	Motor, MOTION GENERATOR, 2 1/2 HP 460V, CHEMICA (Dilution Gri	G204	1	1	OK	1,456.50	1,456.50	-
12550ME067	O-RING #0655A770P0236	G301	0	0	OK	-	-	-
12550ME068	GASKET #02182I92P0047	G301	0	0	OK	-	-	-
30501ME082	RING, PISTON-HOOK STYLE FOR WARMAN MOD.1.	G303	0	0	OK	-	-	-
30501ME308	DEFLECTOR, 1B GPIK FOR TERTIARY WATER PU	G403	1	1	OK	26.50	26.50	-
30501ME309	OIL SEAL, 1K 1B CTRG FOR TERTIARY WATER P	G403	1	1	OK	17.70	17.70	-
30501ME310	BEARING, 1B 1K OIL FOR TERTIARY WATER PU	G403	1	1	OK	19.60	19.60	-
30501ME311	BEARING, OB 1K OIL FOR TERTIARY WATER PU	G403	1	1	OK	46.00	46.00	-
30501ME312	LOCKNUT, OB BEARING 1K FOR TERTIARY WATE	G403	1	1	OK	7.85	7.85	-
30501ME313	LOCKWASHER, OB BEARING 1K FOR TERTIARY W	G403	1	1	OK	5.90	5.90	-
30501ME314	OIL SEAL, GPI-1K OB CTRG FOR TERTIARY WA	G403	1	1	OK	17.70	17.70	-
30501ME315	GASKET, GLAND SEAL 1K O-RING, P/N AY30451E	G403	1	1	OK	20.00	20.00	-
30501ME316	SLEEVE 1K HOOK FOR TERTIARY WATER PUMPS,	G403	1	1	OK	214.00	214.00	-
30501ME317	SIGHTGLASS, 1"NPT FOR TERTIARY WATER PUM	G403	2	2	OK	50.22	100.43	-
30501ME318	O RING, BEARING CARRIER GPI MK3A FOR TER	G403	6	6	OK	4.90	29.40	-
30501ME319	RING, RETAINING B-CARR 1K FOR TERTIARY W	G403	1	1	OK	6.85	6.85	-
30501ME320	CARRIER, BEARING GPI MK3A FOR TERTIARY W	G403	1	1	OK	120.00	120.00	-
30501ME321	O RING, GLAND SEAL 1K FOR TERTIARY WATER	G403	1	1	OK	243.00	243.00	-
30501ME322	SEAL FOR MODEL 1K3X2-62RV GROUP 1K TERTIA	G403	2	2	OK	196.52	393.03	-
30501ME323	HUB, FALK COUPLING 30T30 FOR SURFACE WATE	G403	1	1	OK	50.00	50.00	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
30501ME324	SPACER ASSEMBLY, COUPLING 1030T31 FOR SU	G403	0	0	OK	-	-	-
30501ME325	HUB, FALK COUPLING 1030T31/35 FOR SURFAC	G403	1	1	OK	50.00	50.00	-
30501ME326	IMPELLER-1K3X1.5-82RV FOR SURFACE WATER	G403	1	1	OK	503.88	503.88	-
11550ME049	RING, THRUST (Inactive)	G404	0	0	OK	-	-	-
30501ME327	Cover, rearfor Surf and Tert Water pumps	G404	1	1	OK	635.00	635.00	-
30501ME352	HUB, FALK COUPLING (for Dilution Water Pump) 1-1/8" Bore 02	G404	1	1	OK	76.81	76.81	-
30501ME353	IMPELLER 2K3X2-10A/OPEN FOR DILUTION WAT	G404	2	2	OK	999.00	1,998.00	-
30501ME355	SHAFT, GP2 WELDED FOR DILUTION WATER PUM	G404	0	0	OK	-	-	-
30501ME364	O RING, ADAPTOR GP2 FOR DILUTION WATER P	G404	1	1	OK	8.20	8.20	-
30501ME365	GASKET, FOLLOWER FLANGE GP2 O-RING FOR D	G404	1	1	OK	15.23	15.23	-
30501ME003	Drive, Rotomission	G406	1	1	OK	6,051.00	6,051.00	-
30501ME366	GLAND FOR MOD.2K3X2-10AOP DILUTION WATER	G501	2	2	OK	260.91	521.82	-
30501ME367	CARRIER, BEARING GP2 MK3A FOR DILUTION W	G501	1	1	OK	158.86	158.86	-
30501ME368	RETAINING RING, BCARR2K FOR DILUTION WAT	G501	2	2	OK	9.35	18.70	-
30501ME369	O RING 4 3/4" X 3/32 TH FOR DILUTION WAT	G501	1	1	OK	5.21	5.21	-
30501ME370	COMPLETE SEAL FOR MOD.2K3X2-10AOP DILUTI	G501	3	3	OK	485.00	1,455.00	-
30501ME400	DRAWBAND, OUTLET FOR LIME SILO LIVE BOTT (sign out by two's)	G501	3	3	OK	55.10	165.31	-
30501ME404	DRAWBAND, INLET - LIME SILO & SDA LIVE B	G501	4	5	CHECK	145.66	582.62	146
30501ME402	Inlet Exp Joint Sock (22' 6" long)	G502	2	2	OK	189.96	379.91	-
30501ME403	Outlet Exp Joint Sock (8' 3" long 2' DIA) (BOOT)	G502	1	1	OK	93.41	93.41	-
30501ME450	O-RING IMPELLAR FOR WARMAN LIME PREP SUM	G502	2	2	OK	8.04	16.07	-
30501ME451	BACK LINER FOR WARMAN LIME PREP SUMP PUM	G502	1	1	OK	272.70	272.70	-
30501ME452	STRAINER, LOWER FOR WARMAN LIME PREP SUM	G502	1	1	OK	129.13	129.13	-
30501ME453	STRAINER, UPPER FOR WARMAN LIME PREP SUM	G502	1	1	OK	38.51	38.51	-
30501ME454	IMPELLAR-SVO FOR WARMAN LIME PREP SUMP P	G502	1	1	OK	604.19	604.19	-
30501ME455	BEARING FOR WARMAN LIME PREP SUMP PUMP	G502	1	1	OK	376.26	376.26	-
30501ME456	BEARING, DRIVE END FOR WARMAN LIME PREP	G502	1	1	OK	395.15	395.15	-
30501ME457	END COVER, LOWER FOR WARMAN LIME PREP SU	G502	1	1	OK	92.60	92.60	-
30501ME458	GASKET, END COVER FOR WARMAN LIME PREP S	G502	1	1	OK	44.01	44.01	-
30501ME459	LOCKNUT, LABYRINTH FOR WARMAN LIME PREP S	G502	1	1	OK	26.10	26.10	-
30501ME460	LOCKWASHER, LABYRINTH FOR WARMAN LIME PRE	G502	1	1	OK	7.33	7.33	-
30501ME461	LABYRINTH	G502	1	1	OK	24.75	24.75	-
30501ME462	EJECTOR, SHAFT SLEEVE FOR WARMAN LIME PR	G502	1	1	OK	54.09	54.09	-
30501ME463	SEAL, BEARING FOR WARMAN LIME PREP SUMP P	G502	1	1	OK	42.17	42.17	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
30501ME464	FLINGER FOR WARMAN LINE PREP SUMP PUMP	G502	1	1	OK	105.43	105.43	-
30501ME465	O RING,END COVER FOR WARMAN LIME PREP SU	G502	1	1	OK	11.92	11.92	-
30501ME466	SHEAVE,MOTOR FOR WARMAN LIME PREP SUMP P	G502	0	0	OK	-	-	-
30501ME467	BUSHING,MOTOR FOR WARMAN LIME PREP SUMP	G502	1	1	OK	9.78	9.78	-
30501ME468	SHEAVE,PUMP FOR WARMAN LIME PREP SUMP PU	G502	2	2	OK	32.69	65.38	-
30501ME504	PIN FOR LIME SILO MODEL: WAPC-3798	G502	12	12	OK	11.50	138.00	-
30501ME602	DISC,COUPLING FOR EKATO LIME SLURRY TANK	G503	1	1	OK	261.00	261.00	-
30501ME603	SCREW, HEX CAP-M12 X 70 FOR EKATO LIME S	G503	4	4	OK	3.00	12.00	-
30501ME604	BOLT, HEX 3/8 X 1 1/4 FOR EKATO LIME SLU	G503	4	4	OK	1.00	4.00	-
30501ME605	BOLT, NEX M16 X 90 FOR EKATO LIME SLURRY	G503	8	8	OK	4.00	32.00	-
30501ME606	NUT, HEX M16 FOR EKATO LIME SLURRY TANK	G503	8	8	OK	3.00	24.00	-
30501ME607	NORDLOCK DISC PAIR M16 FOR EKATO LIME SL	G503	16	16	OK	1.00	16.00	-
30501ME620	DISC, END FOR EKATO WATER STORAGE TANK A	G503	1	1	OK	330.00	330.00	-
30501ME621	GASKET, FLAT FOR EKATO WATER STORAGE TANK	G503	1	1	OK	12.00	12.00	-
30501ME623	NUT,CAP M20 RUBBER COVER W/GASKET FOR EK	G503	1	1	OK	90.00	90.00	-
30501ME624	DISC,COUPLING FOR EKATO WATER STORAGE TA	G503	1	1	OK	221.00	221.00	-
30501ME626	BOLT,HEX 1/2 X 1 1/4" FOR EKATO WATER ST	G503	4	4	OK	3.00	12.00	-
30501ME627	STUD BOLT, M20 X 140 FOR EKATO WATER STO	G503	0	0	OK	-	-	-
30501ME628	NUT,HEX M20 FOR EKATO WATER STORAGE TANK	G503	1	1	OK	5.00	5.00	-
30501ME629	WASHER B20 FOR EKATO WATER STORAGE TANK	G503	2	2	OK	1.00	2.00	-
30503ME015	ALIGNER, ROD--FOR OUTLET DAMPER (20) POPPET	G504	17	17	OK	495.13	8,417.21	-
30503ME026	WASHER FOR FABRIC FILTER	G602	0	0	OK	-	-	-
30503ME027	HITCH PIN FOR FABRIC FILTER	G602	2803	2803	OK	0.62	1,741.63	-
30503ME028	WASHER FOR FABRIC FILTER	G602	1130	1130	OK	1.00	1,130.00	-
30504EI001	Motor, Carbon Rotary Feeder	G604	1	1	OK	232.50	232.50	-
30504ME006	Eductor, (15 to 30 lbs/hr of pac)	G701	1	1	OK	1,922.62	1,922.62	-
30504ME007	BEARING FOR CARBON ROTARY FEEDER MEYER M	G701	2	2	OK	67.70	135.40	-
30505ME003	O RING,VALVE SEAT, FOR NEPTUNE METERING	G702	7	7	OK	4.20	29.40	-
30505ME004	SPACER, DISCHARGE, FOR NEPTUNE METERING	G702	3	3	OK	12.30	36.90	-
30505ME005	SPRING,ANTI-SIPHON, FOR NEPTUNE METERING	G702	2	2	OK	44.47	88.94	-
30505ME007	STACK SPACER, FOR NEPTUNE METERING PUMP	G702	4	4	OK	29.40	117.60	-
30505ME008	SEAT, VALVE FOR NEPTUNE METERING PUMP 56	G702	3	3	OK	77.70	233.10	-
30505ME009	OVERHAUL KIT FOR NOX OUT WATER BOOSTER P	G702	1	1	OK	208.00	208.00	-
30505ME012	SPRING,ANTI SYPHON FOR NEPTUNE NOX OUT M	G702	4	4	OK	7.70	30.80	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
30505ME104	Rotometer, 1/2" Glass Tube	G702	1	1	OK	578.03	578.03	-
30505ME111	Kit. spring cage and knob, Watts	G703	1	1	OK	9.52	9.52	-
30512EI001	Motor, ID Fan Cooler Pump	G703	1	1	OK	198.98	198.98	-
30512ME004	PUMP, PARKER H49AA1B, 8 GPM,CCW ROTAION	G703	1	1	OK	418.00	418.00	-
30512ME005	PUMP, PARKER H49AA2B, 8 GPM,CW ROTAION F	G704	1	1	OK	418.00	418.00	-
30512ME006	VALVE, RELIEF FOR BUDZAR MOD.2LOC-80-8-2	G704	1	1	OK	114.00	114.00	-
30512ME007	FILTER, OIL FOR PARKER #12AT25CNXBBN (MO ID lube oil skid	G704	6	6	OK	29.90	179.38	-
30512ME008	Filter, Suction	G704	4	4	OK	23.89	95.54	-
35600EI001	RELAY, SPB ***PERM-3*** AUTO TRIP W/MODE	G704	3	3	OK	455.00	1,365.00	-
35600EI002	CAPACITOR, MEPCO/ELECTRA 7700UF - 10+, 5	G704	3	3	OK	83.70	251.10	-
35600EI003	CAPACITOR, AEROVOX 25MF 660V, PROTECTED	G704	1	1	OK	30.00	30.00	-
35600EI004	CAPACITOR, MEPCO	G704	1	1	OK	40.00	40.00	-
35600EI005	CAPACITOR, SHANGAMD	G704	2	2	OK	25.00	50.00	-
35600EI006	CAPACITOR, 300 VOLT, 10.0 MFD	G704	1	1	OK	183.86	183.86	-
35600EI007	CAPACITOR, 1056 OI 100 VAC, G.E. #61L37	G704	4	4	OK	124.12	496.46	-
35603EI001	ASSEMBLY, BEARING ***PERM-1*** (SIEMANS	G801	1	1	OK	370.50	370.50	-
35603EI002	BEARING, OUTBOARD ***PERM-1*** (SIEMANS	G801	1	1	OK	448.50	448.50	-
50003EI001	ELEMENT, PREFILTER FOR #3 AIR DRYER QRIA	G801	4	4	OK	432.85	1,731.40	-
50003EI002	KIT, ASCO 8345AC	G801	0	0	OK	-	-	-
50003EI003	FILTER ELEMENT FOR KEMP MOD. 310C	G801	1	1	OK	143.66	143.66	-
50003EI004	VALVE,SELENOID 8320G174/120V/60HS	G801	1	1	OK	91.81	91.81	-
50003EI005	THERMOSTAT, QRIAD II FOR #3 AIR DRYER, K	G801	1	1	OK	140.00	140.00	-
50003EI006	HEATER, CONTACTOR, #3 AIR DRYER, QRIAD I	G801	4	4	OK	45.00	180.00	-
50003EI007	INDICATOR, MOISTURE, QRIAD II FOR #3 AIR	G801	2	2	OK	25.00	50.00	-
50003EI008	KIT, ACTUATOR REPAIR, #3 AIR DRYER QRIAD	G801	3	3	OK	55.00	165.00	-
50003EI012	ELEMENT, AFTERFILTER FOR #3 AIR DRYER QR	G802	3	3	OK	1,568.57	4,705.71	-
50003EI013	Filter, air dryer inlet	G802	5	5	OK	48.19	240.95	-
50003EI014	Filter, air dryer outlet	G802	5	5	OK	75.39	376.96	-
50003ME001	Lock nut, impeller	G802	2	2	OK	9.68	19.36	-
50003ME002	Washer, Curved	G802	2	2	OK	30.26	60.51	-
50003ME003	O-Ring, Diffuser	G802	2	2	OK	15.74	31.47	-
50003ME004	Gasket, Casing	G802	2	2	OK	8.23	16.46	-
50003ME005	Seal, Mechanical	G802	2	2	OK	173.00	346.00	-
50003ME006	Sleeve, Shaft (Bronze)	G802	2	2	OK	59.28	118.56	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
50003ME007	Key, Impeller	G802	2	2	OK	2.93	5.86	-
50003ME008	Gasket, Suction Inlet	G802	7	7	OK	13.95	97.63	-
50003ME009	Valve, Check	G802	2	2	OK	91.96	183.91	-
50003ME010	Slinger	G802	2	2	OK	7.26	14.52	-
50003ME011	Kit, Impeller	G803	2	2	OK	1,055.00	2,110.00	-
50003ME050	SLEEVE, SHAFT FOR GOULDS PUMP MODEL:3656	G803	2	2	OK	76.00	152.00	-
50003ME051	KEY, IMPELLAR FOR GOULDS PUMP MODEL:3656	G803	1	1	OK	21.00	21.00	-
50003ME052	BOLT, IMPELLAR FOR GOULDS PUMP MODEL:365	G803	6	6	OK	31.00	186.00	-
50003ME053	WASHER, IMPELLAR FOR GOULDS PUMP MODEL:3	G803	4	4	OK	57.00	228.00	-
50003ME054	SEAL, MECHANICAL FOR GOULDS PUMP MODEL:3	G803	2	2	OK	82.00	164.00	-
50003ME055	O-RING FOR GOULDS PUMP MODEL:3656 3X4-8	G803	2	2	OK	9.00	18.00	-
50003ME101	GASKET, CHECK VALVE FOR ATLAS COPCO MOD.Z	G803	5	5	OK	69.54	347.70	-
50003ME102	GASKET, CHECK VALVE FOR ATLAS COPCO MOD.	G803	5	5	OK	37.30	186.52	-
50003ME103	GASKET, CHECK VALVE FOR ATLAS COPCO MOD.Z	G803	5	5	OK	70.32	351.58	-
50003ME108	DIAPHRAGM,HP BALANCE FOR ATLAS COPCO MOD	G803	3	3	OK	271.20	813.59	-
50003ME109	DIAPHRAGM,I.P BALANCE FOR ATLAS COPCO MOD	G803	4	4	OK	350.61	1,402.42	-
50003ME107	GASKET, OIL RECEIVER FOR ATLAS COPCO MOD.	G804	2	2	OK	0.78	1.56	-
50003ME111	KIT.PIPE SEAL DRAIN REGULATOR FOR ATLAS	G804	3	3	OK	39.01	117.03	-
50003ME114	BEARING THROTTLE VALVE FOR ATLAS COPCO M	G804	12	12	OK	20.71	248.46	-
50003ME116	HUMP HOSE FOR ATLAS COPCO AIR COMPRESSOR	G804	2	2	OK	376.20	752.40	-
50009ME100	Monitor, Fire, 3" flanged base, 150#	G804	3	3	OK	1,015.25	3,045.74	-
16450ME215	ROD, THRU, Shearmount Drive W/Spacer	H102	5	5	OK	78.00	390.00	-
16450ME223	BEARING, INSERT SEALMASTER 4 15/16	H201	2	2	OK	899.48	1,798.96	-
16450ME224	Sheave/Pulley, (VC-1.2) w/ 2 1/8 Bushing	H201	1	1	OK	111.35	111.35	-
16450ME302	Bushing, Taper Lock, 2-1/8	H201	1	1	OK	-	-	-
16450ME303	Bushing, Taper Lock, 1-5/16	H201	1	1	OK	-	-	-
16450ME305	Element, Elastomer Coupling, PX-80, 2012	H201	2	2	OK	108.50	217.00	-
16453EI009	Silencer, Solenoid Valve For SDA - Muffler	H202	223	223	OK	5.87	1,310.05	-
16453EI014	SOLENOID, SMC PNEUMATICS INC.NVSS000 SER	H202	1	1	OK	269.68	269.68	-
16453EI016	HEATER, HEATUBE-475-033-0070, 3KW 480V ,	H202	1	1	OK	508.00	508.00	-
16453ME100	Adapter, Gear Box	H204	2	2	OK	192.81	385.62	-
16453ME101	Seal, Adapter Lip	H204	4	4	OK	-	-	-
16453ME102	Ring, Adapter Seal Retaining	H204	4	4	OK	-	-	-
16453ME151	BEARING, HANGER, 2" HARD IRON	H204	15	15	OK	21.72	325.76	-

Schedule 16A - Spare Parts List

ITEM#	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
6453ME152	HANGER, 12" X 2" STYLE 326 FOR ECONO SCR	H204	2	2	OK	108.80	217.60	-
6453ME153	SHAFT STUB, 2" X 12" COUPLER 4 HOLE HARDE	H204	1	1	OK	25.19	25.19	-
6453ME175	HANGER ASSEMBLY, 14" x 3" STYLE 326. FOR FF	H301	2	2	OK	158.39	316.78	-
6453ME176	BALL BEARING, 3" DODGE PILLOW BLOCK FOR	H302	3	3	OK	190.82	572.46	-
6453ME177	SHEAVE, 2 GROOVE DRIVER FOR ASH COLLECT	H302	2	2	OK	281.40	562.80	-
6453ME178	SHEAVE, 2 GROOVE, DRIVEN FIR ASH COLLECT	H302	1	1	OK	199.76	199.76	-
6453ME180	COUPLING, 1/2 ACUSHNET SERIES 5803-K FOR	H303	0	0	OK	-	-	-
6453ME181	QD BUSHING SH Martin SH 1 3/8" BORE FOR ASH COLLECT	H303	2	2	OK	11.82	23.64	-
6453ME182	BUSHING SK X 2 1/4 BORE FOR ASH COLLECT	H303	0	0	OK	-	-	-
6453ME185	MOTOR MOUNT, FALK MM4307J-1 FOR ASH COLL	H303	1	1	OK	262.15	262.15	-
6453ME201	DRIVER SPROCKET, W/TORQUE LIMITER (80B19	H304	1	1	OK	120.11	120.11	-
6453ME211	Bearing, Pug Mill Discharge End P2BS2215RE Dodge	H401	1	1	OK	415.50	415.50	-
6453ME250	SHEAVE & BUSHING, DRIVER, SHEAVE#2TB90 &	H501	1	1	OK	60.71	60.71	-
6453ME251	SHEAVE & BUSHING, DRIVEN, SHEAVE#2TB70 &	H501	1	1	OK	80.07	80.07	-
6453ME252	BEARING DODGE#SC 1 15/16 AH, INSERT & 2 B	H501	2	2	OK	44.73	89.46	-
0300ME004	COUPLING-STEELFLEX-1050T HUB (1.8750 KW	H503	2	2	OK	57.86	115.72	-
0300ME005	FILTER, Hytrex GX05-30	H503	20	20	OK	23.51	470.20	-
0318ME001	STEM, #3 DA, CHICAGO HEATER	H504	1	1	OK	60.15	60.15	-
0318ME003	NUT, #3 DA, CHICAGO HEATER	H504	9	9	OK	21.10	189.90	-
0318ME005	GASKET, TEFLON FOR #3 DA, CHICAGO HEATER	H504	0	0	OK	-	-	-
0318ME006	VALVE, SPRAY, 1 1/2", 304 S/S, SERIES B.	H504	6	6	OK	235.00	1,410.00	-
0318ME007	RETAINER, #3 DA, CHICAGO HEATER	H504	2	2	OK	16.20	32.40	-
0318ME008	BODY, #3 DA, CHICAGO HEATER	H504	1	0	CHECK	76.70	76.70	(77)
0318ME009	GLASS, GAGE, SIZE 3	H504	10	10	OK	25.30	253.00	-
0318ME010	GASKET, CAGE, GLASS SET, 2 PER	H504	9	9	OK	2.00	18.00	-
0318ME011	GLASS, GAUGE D.A. TANK	H504	14	15	CHECK	42.78	598.85	43
0318ME012	GASKET, SET D.A. TANK JERGUSON	H504	6	6	OK	12.00	72.00	-
0318ME013	GLASS, TRANSPARENT JERGUSON SITE	H504	2	2	OK	218.00	436.00	-
0318ME014	GLASS, GAGE SIZE 4 JERGUSON REFLEX	H504	15	15	OK	29.58	443.75	-
0318ME015	MICA SHIELD FOR JERGUSON SITE GLASS	H504	4	4	OK	12.15	48.60	-
0318ME020	SCREW, SET INGERSOL RAND	H601	6	6	OK	1.85	11.10	-
0318ME021	BUSHING, THROTTLING FOR UNIT #3 FEEDWATE	H601	1	1	OK	3,538.00	3,538.00	-
0318ME022	SLEEVE, THROTTLING FOR #3 FEEDWATER PUMP	H601	1	1	OK	1,863.00	1,863.00	-
0318ME023	NUT, LOCK 1/R SKF N10	H601	2	2	OK	2.18	4.36	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
20318ME024	RING, OIL FOR UNIT #3 FEEDWATER PUMP 3X1	H601	2	2	OK	47.19	94.38	-
20318ME025	PIN, GROOVE FOR UNIT #3 FEEDWATER PUM 3X	H601	26	26	OK	5.28	137.40	-
20318ME026	PLUG, PIPE INGERSOL RAND	H601	4	4	OK	10.00	40.00	-
20318ME027	RING, CASING FOR #3 FEEDWATER PUMP MOD	H601	2	2	OK	1,483.00	2,966.00	-
20318ME028	SHIM, FOR I.R. FEEDWATER PUMP 4 X 11DAD	H601	4	4	OK	2.55	10.20	-
20318ME029	RING, SPLIT FOR #3 FEEDWATER PUMP, (2 PI	H601	0	0	OK	-	-	-
20318ME030	SLEEVE, JOURNAL	H601	1	1	OK	515.00	515.00	-
20318ME031	CLAMP, FEED PUMP, INGERSOLL RAND	H601	3	3	OK	17.50	52.50	-
20318ME032	SHIM INGERSOLL RAND	H601	4	4	OK	3.13	12.51	-
20318ME033	BEARING, BALL, THRUST, I/R. (2 PC.USED T	H601	4	4	OK	107.88	431.50	-
20318ME034	WASHER, LOCK I/R SKFW10	H601	4	4	OK	0.34	1.36	-
20318ME035	LINING, STL/BABBIT BEARING FOR UNIT #3 F	H601	0	0	OK	-	-	-
20318ME037	SHIM, ROUND .010 FOR #3 FEEDWATER PUMP	H601	12	12	OK	7.50	90.00	-
20318ME038	BUSHING, STUFFING BOX FOR UNIT #3 FEEDWA	H601	2	2	OK	309.00	618.00	-
20318ME040	BUSHING, CENTER ***PERM-2*** FOR UNIT #3	H602	2	2	OK	1,732.00	3,464.00	-
20318ME041	SHIM, FOR I.R. FEEDWATER PUMP 4 X 11DAD	H602	12	12	OK	2.86	34.32	-
20318ME042	EXCHANGER, HEAT MOD. 4X46-10 FEEDWATER,	H602	0	0	OK	-	-	-
20318ME043	SEAL, MECHANICAL FOR BFWP IR#62064670. J	H602	1	1	OK	2,781.00	2,781.00	-
20318ME050	RING, BFWP ***PERM-7***	H602	6	6	OK	60.00	360.00	-
20318ME051	RING, I/R ***PERM-4***	H602	2	2	OK	1,392.00	2,784.00	-
20318ME052	SLEEVE, SHAFT ***PERM-5*** FOR FEEDWATE	H603	1	1	OK	1,950.00	1,950.00	-
20318ME053	BUSHING, THROTTLE ***PERM-5***	H603	2	2	OK	1,500.00	3,000.00	-
20318ME054	BUSHING, CROSSOVER ***PERM-3***	H603	2	2	OK	1,142.00	2,284.00	-
20318ME055	SLEEVE, THROTTLING ***PERM-2*** 1/	H603	2	2	OK	1,142.90	2,285.80	-
20318ME056	FLINGER, I.R. FOR BOILER FEEDWATER PUMP	H603	2	2	OK	487.00	974.00	-
20318ME057	RING, CHANNEL ***PERM-11*** SER# 0481	H603	4	4	OK	1,098.93	4,395.71	-
20318ME058	BEARING, BALL ROLLER, 7312-BEGAM ONLY SK	H603	2	2	OK	111.69	223.38	-
20318ME059	SCREW, CAP INGERSOL RAND	H603	10	10	OK	2.50	25.00	-
20318ME060	O RING, 4 X 11 DA, I.R. PUMP PART#20A11	H603	3	3	OK	10.00	30.00	-
20318ME061	RING, RETAINING ***PERM-15***	H603	17	17	OK	57.00	969.00	-
20318ME062	BREATHER, 4X11 DAD FEED WATER PUMP INGER	H603	4	4	OK	32.87	131.48	-
20318ME063	SHIM, FOR FEEDWATER PUMP INGERSOL RAND	H603	18	18	OK	12.00	216.00	-
20318ME064	SHIM, INGERSOLL RAND	H603	47	47	OK	17.75	834.25	-
20318ME065	O RING, I/R, PART #20A11CM259	H603	4	4	OK	5.39	21.56	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
20318ME066	BEARING, LINING ***PERM-3*** I/R FOR B	H604	3	3	OK	883.17	2,649.50	-
20318ME067	PIN, INGERSOL RAND	H604	16	16	OK	1.83	29.31	-
20318ME068	O-ring, Journal bearing	H604	10	10	OK	2.00	20.00	-
20318ME069	O RING, I/R, STUFFING BOX, PART# 20A11CM	H604	9	9	OK	12.50	112.50	-
20318ME070	SHIM, FOR BFWP I.R.#91A11S224H260##NEW##	H604	10	10	OK	8.75	87.50	-
20318ME071	SHIM, INGERSOL RAND, FEEDWATER PUMP 4 X	H604	10	10	OK	8.75	87.50	-
20318ME072	PIN DOWEL, NEW#12A13T52, REF.#1417	H604	7	7	OK	34.50	241.50	-
20318ME073	PIN, DOWEL (CASTING) FOR #3 FEEDWATER PU	H604	11	11	OK	6.08	66.91	-
20318ME074	PIN DOWELL FEED PUMP	H604	6	6	OK	7.28	43.68	-
20318ME075	PIN, TAPER I.R. FOR FEEDWATER PUMP	H604	19	19	OK	8.07	153.36	-
20318ME076	SCREW, SET, I.R.#100A2T24	H604	12	12	OK	1.20	14.40	-
20318ME077	WASHER,LOCK INGERSOLL RAND	H604	7	7	OK	2.13	14.89	-
20318ME078	ROLL, PIN INGERSOL RAND	H604	8	8	OK	3.15	25.20	-
20318ME079	Sight Glass - FOR BOILER FEEDWATER PUMP	H604	6	6	OK	26.15	156.90	-
20318ME080	SCREW, SET INGERSOL RAND	H604	8	8	OK	2.40	19.20	-
20318ME081	SCREW, SET INGERSOL RAND FEEDWATER PUMP	H604	2	2	OK	0.65	1.30	-
20318ME082	PIN, DOWEL, FOR CHANNEL RING, I/R,	H604	3	3	OK	10.00	30.00	-
20318ME083	SHIM, FOR BFWP I.R.#91A11S224K260	H604	12	12	OK	7.88	94.50	-
20318ME100	SPRING, LEVER, TRIP LEVER SET, COPPUS	H701	2	2	OK	10.00	20.00	-
20318ME101	PIN, GROOVE, TRIP LEVER SET, COPPUS	H701	2	2	OK	3.00	6.00	-
20318ME102	RING, OIL ***PERM***	H701	2	2	OK	69.00	138.00	-
20318ME103	STOP,NASER COPPUS	H701	4	4	OK	3.00	12.00	-
20318ME104	RING, RETAINING ***PERM-5***	H701	2	2	OK	2.50	5.00	-
20318ME105	STRAINER, TURBINE, TYPE FLH.24, COPPUS	H701	1	1	OK	109.00	109.00	-
20318ME106	COUPLING, TRIP LEVER SET, COPPUS PART #S	H701	1	1	OK	163.00	163.00	-
20318ME107	PIN, CLEVIS, TRIP LEVER SET, COPPUS	H701	2	2	OK	29.00	58.00	-
20318ME108	BUSHING, TRIP LEVER SET, COPPUS	H701	3	3	OK	49.19	147.57	-
20318ME109	PIN, ROLL, TRIP LEVER SET, COPPUS	H701	2	2	OK	3.00	6.00	-
20318ME110	SHAFT -SAFETY TRIP- TRIP LVR SET ***PERM	H701	2	2	OK	264.00	528.00	-
20318ME111	TRIP, COLLAR, TRIP LEVER SET, COPPUS	H701	1	1	OK	69.00	69.00	-
20318ME112	PIN, COTTER, TRIP LEVER SET, COPPUS	H701	3	3	OK	6.15	18.45	-
20318ME113	PIN, LEVER, TRIP LEVER SET, COPPUS	H701	1	1	OK	22.37	22.37	-
20318ME114	LEVER, TRIP COLLAR, COPPUS #5-313628-00	H701	1	1	OK	96.00	96.00	-
20318ME115	COLLAR, ASSEMBLY, COPPUS PART #S041	H701	2	2	OK	205.00	410.00	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
20318ME116	SPRING, COLLAR ASSEMBLY, COPPUS NEW#A0	H701	2	2	OK	638.00	1,276.00	-
20318ME117	SLEEVE, SHAFT CLARIFIER SUMP PUMP GOULD	H701	2	2	OK	315.36	630.72	-
20318ME118	BOLT, SHANK, COLLAR ASSEMBLY, COPPUS	H701	2	2	OK	128.00	256.00	-
20318ME119	SET, SCREW, COLLAR ASSEMBLY, COPPUS	H701	2	2	OK	5.00	10.00	-
20318ME120	SLEEVE, SHAFT GRIT COLLECTOR SUMP PUMP #	H701	2	2	OK	305.44	610.88	-
20318ME121	SPRING, FLAT COPPUS	H701	2	2	OK	37.00	74.00	-
20318ME122	STOP,NASER COPPUS	H701	2	2	OK	3.21	6.42	-
20318ME123	BEARING, SLINGER	H701	1	1	OK	610.00	610.00	-
20318ME124	BABBIT BEARINGS ***PERM-2*** SAMPLE I.D.	H701	2	2	OK	1,200.00	2,400.00	-
20318ME125	BEARING, BALL, COPPUS, S/N 81H3134	H701	3	3	OK	132.00	396.00	-
20318ME126	SHAFT, CLAPPER VALVE #81H3134 COPPUS ENG	H702	2	2	OK	107.50	215.00	-
20318ME127	COTTER, PIN	H702	1	1	OK	1.00	1.00	-
20318ME128	HOUSING, FILTER CONO 40292 12	H702	2	2	OK	87.40	174.80	-
20318ME129	FILTER, CUNO FOR TURBINE, COPPUS, GEO.S.	H702	0	0	OK	-	-	-
20318ME130	FILTER, HOUSING CUNO FOR COPPUS TURBINE	H702	0	0	OK	-	-	-
20318ME131	SPRING, GARTER	H702	6	6	OK	12.00	72.00	-
20318ME200	SEAL, RING, FOR 6" AUTO RECIRC CONTROL V	H702	3	3	OK	23.00	69.00	-
20318ME201	O RING, FOR 6" AUTO RECIRC CONTROL VALVE	H702	0	0	OK	-	-	-
20318ME202	O RING, FOR 6" AUTO RECIRC CONTROL VALVE	H702	0	0	OK	-	-	-
20318ME203	O RING, FOR 6" AUTO RECIRC CONTROL VALVE	H702	0	0	OK	-	-	-
20318ME204	O RING, FOR 6" AUTO RECIRC CONTROL VALVE	H702	5	5	OK	1.50	7.50	-
20318ME205	O RING, FOR 6" AUTO RECIRC CONTROL VALVE	H702	12	12	OK	1.60	19.20	-
21350EI001	Motor, softener metering pumps	H702	0	0	OK	-	-	-
21350EI006	Motor, Clarifier lime slurry mixer	H702	1	1	OK	241.73	241.73	-
21350EI008	O-RING, CYLINDER TUBE -CHEMCO-LIME SOFTE	H702	0	0	OK	-	-	-
21350EI009	SEAL, PISTON -CHEMCO-LIME SOFTENER	H702	1	1	OK	117.00	117.00	-
21350EI007	VIBRATOR, PNEUMATIC -CHEMCO-LIME SOFTENE	H703	1	1	OK	332.00	332.00	-
21350EI010	O-RING, PISTON	H703	1	1	OK	52.00	52.00	-
21350EI011	FLOW METER, -LIME SOFTENER	H703	1	1	OK	138.50	138.50	-
21350EI012	Motor, 1/6 HP. softener polymer blender	H703	1	1	OK	374.90	374.90	-
21350EI013	VALVE, SOLENOID -LIME SOFTENER	H703	1	1	OK	307.42	307.42	-
21350EI014	CONTROLLER, REMOTE -LIME SOFTENER	H703	1	1	OK	486.00	486.00	-
21350EI015	LEVEL SWITCH, ROOF CHEMCO-LIME SOFTE	H703	2	2	OK	389.00	778.00	-
21350EI016	LEVEL SWITCH, SIDE - CHEMCO - LIME SOFTE	H703	2	2	OK	416.00	832.00	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
1350EI020	DRIVE CONTROL ASSEMBLY	H703	1	0	CHECK	2,020.00	2,020.00	(2,020)
1350EI021	SWITCH, PRESSURE - CHEMCO - LIME SOFTENE	H703	1	1	OK	98.00	98.00	-
1350EI100	Regulator, Vacuum	H704	0	0	OK	-	-	-
1350EI101	MODULE, AUTO SWITCHOVER -CAPITOL CONTRO	H704	1	1	OK	1,284.10	1,284.10	-
1350EI102	EJECTOR, VARIABLE ORFICE -CAPITOL CONTRO	H704	1	1	OK	1,296.40	1,296.40	-
1350EI103	BOLT, DIAPHRAGM -CAPITOL CONTROLS	H704	1	1	OK	77.10	77.10	-
1350EI104	DIAPHRAGM - CAPITOL CONTROLS	H704	1	1	OK	133.68	133.68	-
1350EI105	NUT, DIAPHRAGM -CAPITOL CONTROLS	H704	1	1	OK	37.30	37.30	-
1350EI106	PIN, GUIDE -CAPITOL CONTROLS	H704	1	1	OK	15.20	15.20	-
1350EI107	O-RING, UNION -CAPITOL CONTROLS	H704	1	1	OK	8.40	8.40	-
1350EI108	GUIDE, SHAFT -CAPITOL CONTROLS	H704	1	1	OK	15.00	15.00	-
1350EI109	O-RING, CAMSHAFT -CAPITOL CONTROLS	H704	2	2	OK	1.70	3.40	-
1350EI110	O-RING, GUIDE -CAPITOL CONTROLS	H704	2	2	OK	2.40	4.80	-
1350EI111	GASKET, FLANGE -CAPITOL CONTROLS	H704	2	2	OK	8.40	16.80	-
1350EI112	SHAFT ASSBY., CAM -CAPITOL CONTROLS	H704	1	1	OK	241.70	241.70	-
1350EI113	PLUG ASSBY., EJECTOR -CAPITOL CONTROLS	H704	1	1	OK	122.50	122.50	-
1350EI114	O-RING, BODY -CAPITOL CONTROLS	H704	1	1	OK	8.80	8.80	-
1350EI115	SPRING -CAPITOL CONTROLS	H704	1	1	OK	163.50	163.50	-
1350ME002	BEARING, BRASS, SLEEVE	H801	3	3	OK	55.00	165.00	-
1350ME003	BEARING, SHAFT ***PERM-7*** LINE COOLI	H801	3	3	OK	229.00	687.00	-
1350ME004	KEY, TIMP, 7/8 X 6, UNIT 3 COOLING TOWER	H801	3	3	OK	27.10	81.30	-
1350ME005	RING, RETAINING ***PERM-3*** MOD VTT-FF	H801	1	1	OK	120.46	120.46	-
1350ME006	BOLTS, CASING-FOR COOLING TOWER PUMP MOD	H801	10	10	OK	11.00	110.00	-
1350ME007	SLEEVE, UNIT # COOLING TOWER WATER PUMP,	H801	1	1	OK	2,565.00	2,565.00	-
1350ME008	BEARING, CT. PUMP ***PERM-2*** #B4206-1	H801	2	2	OK	412.53	825.06	-
1350ME009	BEARING, CT PUMP ***PERM-2***	H801	4	4	OK	124.76	499.04	-
1350ME100	CARTRIDGE, BIN VENT -CHEMCO-LIME SOFTENE	H801	8	8	OK	213.64	1,709.12	-
1350ME010	COUPLING, PUMP SHAFT, UNIT 3 COOLING TOW	H802	1	1	OK	886.00	886.00	-
1350ME011	SCREW, CAP (IMPELLER), UNIT 3 COOLING TO	H802	14	14	OK	8.65	121.10	-
1350ME012	RING, THR CT ***PERM-2*** MOD VTT-F	H802	1	1	OK	215.57	215.57	-
1350ME013	BEARING, BALL, UNIT 3 COOLING TOWER WATE	H802	1	1	OK	471.68	471.68	-
1350ME014	BEARING SUCTION CT ***PERM-1*** MOD V	H802	1	1	OK	597.17	597.17	-
1350ME015	COUPLING HUB ITEM # 614	H802	1	1	OK	1,990.00	1,990.00	-
1350ME016	ADJUSTING PLATE ITEM# 613	H802	1	1	OK	1,556.00	1,556.00	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
21350ME101	SEAL RING, CARTRIDGE -CHEMCO-LIME SOFTEN	H802	8	7	CHECK	32.00	256.00	(32)
21350ME102	VALVE, BIN VENT -CHEMCO-LIME SOFTENER	H802	1	1	OK	182.00	182.00	-
21350ME103	Motor, Clarifier Lime Bin Vent Fan	H802	2	2	OK	329.00	658.00	-
21350ME104	GASKET, BIN VENT -CHEMCO- LIME SOFTENER	H802	0	0	OK	-	-	-
21350ME105	VALVE, SOLENOID, ACID SYSTEM, 80 PSI	H802	3	3	OK	69.00	207.00	-
21350ME106	AUGER ASSEMBLY, LIME FEEDER -CHEMCO-LIME	H802	0	0	OK	-	-	-
21350ME107	VIBRATOR, FEEDER -CHEMCO-LIME SOFTENER	H802	1	1	OK	220.00	220.00	-
21350ME109	SPEED REDUCER, WORM GEAR / 215-15:1	H802	1	1	OK	486.00	486.00	-
21350ME110	IMPELLER KIT AURORA PUMP SER. 9315056	H803	3	3	OK	1,248.16	3,744.47	-
21350ME111	SEAL KIT AURORA PUMP SER. 9315056	H803	1	2	CHECK	181.42	181.42	181
21350ME112	RING, WEAR AURORA PUMP SER. 9315056	H803	3	3	OK	69.10	207.30	-
21350ME113	PUMP, DIAPHRAGM -LIME SOFTENER,HUDSON#A7	H803	0	0	OK	-	-	-
21350ME200	PARTS KIT -GOULDS- LIME SOFTENER	H803	1	1	OK	128.00	128.00	-
21350ME201	LINER, SUCTION -GOULDS- LIME SOFTENER	H803	1	1	OK	539.42	539.42	-
21350ME202	IMPELLER -GOULDS- LIME SOFTENER	H803	1	1	OK	1,060.99	1,060.99	-
21350ME203	RING, LANTERN (2 Rings to a set)	H803	1	1	OK	38.00	38.00	-
21350ME204	COUPLING -FOR GOULDS- LIME SOFTENER	H803	0	0	OK	-	-	-
21350ME205	BEARING, THRUST SKF #5208 A LIME SOF	H803	1	1	OK	32.69	32.69	-
21350ME206	BEARING, RADIAL SKF #208/C3 LIME SO	H803	1	1	OK	23.59	23.59	-
21350ME250	REBUILD KIT -NEPTUNE-LIME SOFTENER SER	H803	0	0	OK	-	-	-
21350ME251	REBUILD KIT -NEPTUNE- LIME SOFTENER SER	H803	1	1	OK	434.80	434.80	-
21350ME252	REBUILD KIT -NEPTUNE- LIME SOFTENER SER	H803	1	1	OK	497.95	497.95	-
21350ME275	FIXER KIT, MIXER -CHEMCO-LIME SOFTENER	H804	1	1	OK	445.19	445.19	-
21350ME280	BEARING, SEALED BALL -LIME SOFTENER	H804	1	1	OK	22.60	22.60	-
21350ME281	BEARING, THRUST -LIME SOFTENER	H804	1	1	OK	9.95	9.95	-
21350ME282	BEARING, FLANGE CARRIER -LIME SOFTENER	H804	1	1	OK	42.60	42.60	-
21350ME283	IMPELLER, SMALL FRAME -LIME SOFTENER	H804	1	1	OK	173.65	173.65	-
21350ME284	IMPELLER, SECONDARY -LIME SOFTENER	H804	1	1	OK	125.14	125.14	-
21350ME285	O-RING -LIME SOFTENER	H804	2	2	OK	2.86	5.71	-
21350ME286	PULLEY -LIME SOFTENER SER. 11236	H804	1	1	OK	40.00	40.00	-
21350ME287	SEAL, MECHANICAL -LIME SOFTENER	H804	0	0	OK	-	-	-
21350ME288	SHAFT, IMPELLER -LIME SOFTENER	H804	1	1	OK	56.00	56.00	-
21350ME289	VALVE, CHECK -LIME SOFTENER	H804	1	1	OK	81.22	81.22	-
21350ME290	PULLEY -LIME SOFTENER	H804	2	2	OK	17.21	34.41	-

Schedule 16A - Spare Parts List

ITEM#	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
21350ME291	BELT, TIMING 3/8" X 18 -LIME SOFTENER	H804	2	2	OK	5.66	11.32	-
21350ME292	MIXER, STATIC -LIME SOFTENER	H804	1	1	OK	150.88	150.88	-
21350ME293	SPLIT GLAND, STUFFING BOX -GOULDS-SER#77	H804	2	2	OK	876.50	1,753.00	-
21350ME295	SLEEVE FOR 5200 VALVE, 2X1, PURE GUM RUB	H804	3	3	OK	411.33	1,234.00	-
21350ME296	KIT, COMPLETE OVERHAUL KIT #KG4ADTTTB.	H804	3	3	OK	515.54	1,546.62	-
35600E1109	MAIN STOCK, ASSORTED, WESTINGHOUSE	HH201	6	6	OK	682.50	4,095.00	-
01159E1605	Pyrometer, IR	HH402	1	1	OK	3,205.00	3,205.00	-
01159ME689	Hose, Hydraulic w/Metric fitting 3/4" H42508 15C 15C	HOSERACK	7	8	CHECK	56.98	398.86	57
5109E1106	Contact, auxilliary, for vac. reversers	I102	2	2	OK	60.00	120.00	-
5109E1107	Relay, bridge overload	I102	1	1	OK	1,010.64	1,010.64	-
5109E1108	Relay, trolley overload	I102	2	2	OK	130.00	260.00	-
5109E1109	Relay, hold & close overload	I102	2	2	OK	62.43	124.85	-
5109E1110	Heater element, bridge	I102	2	2	OK	107.16	214.31	-
5109E1111	Heater element, trolley	I102	4	4	OK	15.43	61.72	-
5109E1112	Heater element, hoist	I102	1	0	CHECK	117.66	117.66	(118)
5109E1113	Heater element, hold & close	I102	1	1	OK	83.66	83.66	-
5109E1114	Transformer, current, hold & close	I102	0	0	OK	-	-	-
5109E1121	Operator, pushbutton	I102	2	2	OK	60.96	121.91	-
5109E1122	Operator, pushbutton	I102	2	2	OK	119.30	238.60	-
5109E1123	Pushbutton, 2-speed	I102	1	1	OK	57.00	57.00	-
5109E1124	Switch, selector	I102	3	3	OK	161.00	483.00	-
5109E1125	Switch, selector	I102	3	3	OK	160.10	480.30	-
5109E1126	Light, pilot	I102	3	3	OK	151.88	455.64	-
5109E1128	Module SCR, brake rectifier panel	I102	3	3	OK	326.75	980.25	-
5109E1115	Interrupter, circuit, hold & close	I103	1	1	OK	1,211.20	1,211.20	-
5109E1116	Resistor, trolley grid	I103	2	2	OK	1,172.50	2,345.00	-
5109E1117	Resistor, trolley forcing assembly	I201	2	2	OK	791.60	1,583.20	-
5109E1118	Resistor, trolley forcing assembly	I201	2	2	OK	463.40	926.80	-
5109E1119	Resistor, hold & close forcing assembly	I201	2	2	OK	342.20	684.40	-
5109E1120	Resistor, hold & close forcing assembly	I201	1	1	OK	517.00	517.00	-
5109E1130	SWITCH LEVER ACTION	I202	3	3	OK	22.00	66.00	-
5109E1131	CONTACTOR, FOR HOLDING HOIST, P/H	I202	0	0	OK	-	-	-
5109E1132	MODULE, CONTROL SQ.D 31123-514-50	I202	4	4	OK	1,525.00	6,100.00	-
5109E1133	ASSEMBLY, SHAFT, Z21545 ***PERM-6***	I202	6	6	OK	50.00	300.00	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
15109EI134	SWITCH, HOLDING HOIST OR TRAVERSE MOTION	I202	0	0	OK	-	-	-
15109EI135	CONTACTOR, P/H (RELAY)DO NOT ORDER	I202	1	1	OK	138.39	138.39	-
15109EI136	RESISTOR, THYRISTOR POWER SUPPLY, P&H	I202	2	2	OK	20.55	41.10	-
15109EI137	TRANSFORMER, P/H	I202	3	3	OK	185.00	555.00	-
15109EI139	TRANSFORMER ACME ELEC.	I202	3	3	OK	231.23	693.70	-
15109EI138	BRUSH, CARBON FOR CLOSING HOIST	I203	8	7	CHECK	53.67	429.34	(54)
15109EI140	CONTROL, BRAKE, P/H	I203	1	1	OK	1,177.53	1,177.53	-
15109EI143	RECTIFIER, P&H	I203	2	2	OK	132.05	264.10	-
15109EI144	TRANSFORMER, VARIABLE, P&H	I203	1	1	OK	3,527.26	3,527.26	-
15109EI145	COIL CRANE, MAGNET, STARTER, 125VDC	I203	1	1	OK	290.00	290.00	-
15109EI146	RESISTOR, CONTROL A43 (2000.2-4 WATT)	I203	2	2	OK	10.05	20.10	-
15109ME104	Bearing, Needle	I302	4	4	OK	73.57	294.28	-
15109ME107	Kit, holding & closing hoist	I302	1	0	CHECK	1,518.48	1,518.48	(1,518)
15109ME115	Bearing, drum pedestal	I302	2	2	OK	181.77	363.54	-
15109ME121	Coupling, semi-flex	I302	1	1	OK	1,295.51	1,295.51	-
15109ME122	Bearing, wheel	I302	2	2	OK	143.64	287.28	-
15109ME127	Coupling, adjustable	I302	1	1	OK	779.00	779.00	-
15109ME112	Shaft assembly, trolley motor	I303	1	1	OK	3,433.68	3,433.68	-
15109ME119	Shaft assembly, drive	I303	1	1	OK	798.00	798.00	-
15109ME130	Retainer, Inboard Bearing, Bridge	I303	1	1	OK	3,203.00	3,203.00	-
15109ME131	Spacer, Bridge Drive Pinion Shaft	I401	1	1	OK	325.00	325.00	-
15109ME132	Ring, Retaining, Bridge Drive	I401	2	2	OK	515.00	1,030.00	-
15109ME133	Bearing, Bridge Drive Pinion Inboard	I401	1	1	OK	132.00	132.00	-
15109ME134	Nut, Lock, Torque	I401	2	2	OK	98.92	197.84	-
15109ME140	ASSEMBLY, TORQUE BRAKE P/H	I402	1	1	OK	125.00	125.00	-
15109ME141	BEARING, TAPER, TIMKEN #OUTER RACE 29521	I402	6	6	OK	32.55	195.28	-
15109ME142	OIL SEAL, 31690 GARLOCK (17271), BEARING	I402	3	3	OK	3.31	9.93	-
15109ME143	BEARING, FAG 6306-27R-C3-L12	I402	2	2	OK	14.78	29.56	-
15109ME144	BEARING, TIMKEN 42343DE	I402	4	4	OK	228.37	913.46	-
15109ME146	BRAKE, WHEEL TROLLEY ***PERM-3***	I402	2	2	OK	405.00	810.00	-
15109ME147	RING, SNAP FOR BRIDGE DR. ASSM. P&H	I402	12	12	OK	0.64	7.68	-
15109ME148	GEAR, CRANE SPUR, P&H	I402	2	2	OK	7.15	14.30	-
15109ME149	SHAFT, PINION ***PERM-1*** SHAFT	I402	1	1	OK	1,178.00	1,178.00	-
15109ME150	Pinion, Bridge Truck	I403	2	1	CHECK	3,531.00	7,062.00	(3,531)

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
15109ME151	RETAINER, P&H FOR FOR BRIDGE DR. ASSM.	I403	2	2	OK	564.90	1,129.80	-
15109ME154	BEARING, NEEDLE P&H	I403	3	3	OK	51.00	153.00	-
15109ME155	RETAINER, BEARING FOR CRANE PINION, P&H	I403	2	2	OK	874.50	1,749.00	-
15109ME156	CAP, BEARING RETAINER FOR TH BRIDGE TRUC	I403	3	3	OK	544.00	1,632.00	-
15109ME157	BOLT, BODY, TIMKEN, P&H	I403	13	13	OK	8.00	104.00	-
15109ME158	BEARING, TROLLEY BRAKE ASSEMBLY, MCGILL	I403	14	14	OK	3.01	42.11	-
15109ME159	BEARING, TROLLEY BRAKE ASSEMBLY	I403	9	9	OK	6.78	60.99	-
15109ME160	BEARING, CRANE, P&H	I403	2	2	OK	20.35	40.70	-
15109ME161	SEAL, OIL P&H CRANE	I403	2	2	OK	15.17	30.34	-
15109ME153	BRAKE, WHEEL FOR BRIDGE ***PERM-I***	I404	3	3	OK	2,101.00	6,303.00	-
20318ME004	Relief valve, sentinel for DA tank	I443	0	0	OK	-	-	-
15109ME162	BEARING, ROLLER P&H CRANE	I501	1	1	OK	139.60	139.60	-
15109ME163	BEARING, CRANE, P&H	I501	1	1	OK	117.15	117.15	-
15109ME164	BEARING, CRANE, P&H	I501	1	1	OK	33.30	33.30	-
15109ME165	BEARING, PILLOW BLOCK P&H	I501	2	2	OK	115.88	231.76	-
15109ME166	BEARING, CRANE PINION / SKF Spherical Roller 22208 E/C3	I501	1	1	OK	87.77	87.77	-
15109ME167	BEARING, BALL, P&H, MOD 83	I501	6	6	OK	27.50	165.00	-
15109ME168	BEARING, SKF 25T 819-D17, P&H	I501	1	1	OK	149.25	149.25	-
15109ME169	BEARING	I501	2	2	OK	21.11	42.22	-
15109ME170	BEARING, CRANE, P&H	I501	3	3	OK	50.00	150.00	-
15109ME171	SEAL, OIL P&H CRANE	I501	3	3	OK	9.66	28.98	-
15109ME172	BEARING, TIMKEN P&H CRANE	I502	3	3	OK	86.25	258.75	-
15109ME173	BEARING, FEDERAL, do not RE-order	I502	2	2	OK	37.05	74.09	-
15109ME174	BEARING #22208LT (BID) FOR BRIDGE D	I502	2	2	OK	105.79	211.58	-
15109ME175	SEAL, P&H CRANE	I502	4	4	OK	10.00	40.00	-
15109ME176	BEARING, ROLLER P/H #25Z100D7	I502	6	6	OK	41.72	250.32	-
15109ME177	KIT, BOLT	I502	8	8	OK	16.69	133.48	-
15109ME178	BOLT, KIT, P&H	I502	3	3	OK	33.60	100.80	-
15109ME179	BEARING, (PI101416) INA	I502	1	1	OK	5.00	5.00	-
15109ME180	Nut, Torque Lock, 2.25"-8	I502	1	1	OK	578.57	578.57	-
5115ME007	Bearing, Sheave for Pt#22	I601	4	4	OK	319.96	1,279.85	-
5115ME010	Bushing, upper arm	I601	4	4	OK	142.55	570.19	-
5115ME011	Bushing, Lower Arm	I601	3	3	OK	185.62	556.86	-
5115ME012	Bushing, Tine Connector	I601	2	2	OK	224.86	449.72	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
15115ME022	WEDGE BECKET MCGINNIS	I601	6	6	OK	22.00	132.00	-
15115ME023	BEARING, MAIN SHEAVE INNER RACE, MCGINNE	I601	8	11	CHECK	23.72	189.79	71
15115ME024	Pin, (connects equalizer to triangle)	I601	5	6	CHECK	304.57	1,522.84	305
15115ME025	CLOSING PINS W/WASHER FOR GRAPPLE, TRU-A	I601	6		CHECK	86.10	516.60	(517
15115ME026	HOLDING PINS W/COLLAR FOR GRAPPLE, TRU-A	I601	8		CHECK	89.78	718.21	(718
15115ME027	BEARING, MAIN SHEAVE PART FOR REFUSE GRA	I601	7	10	CHECK	73.77	516.37	221
15115ME030	EQUALIZER, DEAD MCGINNIS	I604	1	1	OK	994.00	994.00	-
16450ME032	SCREWS, LOCKING ASSY. FOR TLT ASH EXPELLA	I701	36	36	OK	9.64	346.92	-
16450ME097	SIGHT GLASS FOR TLT ASH EXPELLARS HYD.	I702	2	2	OK	64.50	129.00	-
16450ME103	COUPLING, COOLING PUMP FOR TLT ASH EXPEL	I702	3	3	OK	359.00	1,077.00	-
16450ME125	BEARING, PILLOW BLOCK, EXPAND	I703	7	7	OK	681.18	4,768.23	-
16450ME126	BEARING, PILLOW BLOCK, FIXED	I704	4	4	OK	540.61	2,162.44	-
15109EI103	Rectifier, Brake for 16" to 23" SBE Assm	I800	0	1	CHECK	-	-	-
16450ME132	CHAIN, ROLLER #120 FOR RIDDLING WET & DR	I801	2	2	OK	1,239.00	2,478.00	-
16450ME133	SPROCKET, ROLLER CHAIN DRIVER, #120, 14T	I801	1	1	OK	218.00	218.00	-
16450ME134	NUT, ADJUSTING FOR TLT RIDDLING WET & DRY	I801	3	3	OK	415.50	1,246.49	-
16450ME136	BEARING, FLANGE FIXED 2-7/16"	I801	8	8	OK	208.82	1,670.58	-
01168ME007	Rod, Dwg 100136-6212114	I881	0	0	OK	-	-	-
11550ME060	GASKET, SET, G.E.	J101	4	4	OK	61.50	246.00	-
11550ME061	GASKET, UPPER STOP VALVE, G.E.,	J101	2	2	OK	56.00	112.00	-
11550ME062	GASKET D10E2 PART #03132J83P0001	J101	2	2	OK	29.95	59.90	-
11550ME063	GASKET #236B3492P0914	J101	2	2	OK	146.72	293.44	-
11550ME064	GASKET/SPIRAL (14"X900#)#04215J49009T	J101	1	1	OK	200.45	200.45	-
11550ME068	GASKET, STOP VALVE COVER, G.E., PART#637	J101	0	0	OK	-	-	-
11553EI001	BRACKET, G E	J102	2	2	OK	111.27	222.54	-
11553EI002	CLIP, G E	J102	1	1	OK	1.10	1.10	-
11553EI003	BUSHING	J102	1	1	OK	1.10	1.10	-
11553EI004	BUSHING	J102	1	1	OK	1.10	1.10	-
11553EI005	INSULATOR, BUSHING, G.E., TAG 225, ITEM	J102	1	1	OK	6.00	6.00	-
11553EI006	SCREW, GE	J102	6	6	OK	1.20	7.20	-
11553EI007	STRAP, PIPE, G E	J102	2	2	OK	2.10	4.20	-
11553EI008	BOLT	J102	2	2	OK	2.05	4.10	-
11553EI009	GRIP, CABLE, G.E., TAG 227, PART 643A355	J102	1	1	OK	6.25	6.25	-
11553EI010	SCREW, CAP	J102	9	9	OK	0.50	4.50	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
11553EI011	BEARING, GE	J102	0	0	OK	-	-	-
11553EI012	GRIP, SURFACE, G.E., TAG 228, ITEM 051	J102	1	1	OK	2.10	2.10	-
11553EI013	WASHER, GE	J102	2	2	OK	1.05	2.10	-
11553EI014	BOLT, STUD, SHORT	J102	10	10	OK	1.00	10.00	-
11553EI015	BOLT, STUD	J102	2	2	OK	1.10	2.20	-
11553EI016	BOLT, JACK	J102	2	2	OK	2.60	5.20	-
11553EI017	COUPLING, G.E. TAG 201	J102	2	2	OK	490.00	980.00	-
11553EI018	NUT, G.E.	J102	6	6	OK	14.00	84.00	-
11553EI019	SCREW, COPPER	J102	19	19	OK	82.00	1,558.00	-
11553EI020	NUT, G.E.	J102	2	2	OK	4.00	8.00	-
11553EI021	NUT, G.E.	J102	2	2	OK	3.50	7.00	-
11553EI024	PLATE 4 HOLE	J102	2	2	OK	250.00	500.00	-
11553EI025	POTENTIONMETER	J102	0	0	OK	-	-	-
11553EI026	TRANSDUCER	J102	0	0	OK	-	-	-
11553EI027	CAPACITOR, G.E. PART#075	J103	0	0	OK	-	-	-
11553EI028	Duplicate of item # 11553EI027 / Use That Number	J103	0	0	OK	-	-	-
11553EI029	SWITCH, ROTARY	J103	0	0	OK	-	-	-
11553EI030	WASHER	J103	12	12	OK	6.28	75.36	-
11553EI031	BOLT, SPLIT	J103	2	1	CHECK	8.00	16.00	(8)
11553EI032	HANDLE BRUSH PULLER	J103	2	2	OK	77.00	154.00	-
11553EI034	CONTACT, AUX FOR TURBINE, G.E.	J103	0	0	OK	-	-	-
11553EI035	BOARD, TERM. BLOCK	J103	0	0	OK	-	-	-
11553EI036	STABILIZER, VOLTAGE	J103	0	0	OK	-	-	-
11553EI037	TRANSFORMER, G.E.	J103	0	0	OK	-	-	-
11553EI038	COIL, G.E. PART#0366A803G16	J103	2	2	OK	309.00	618.00	-
11553EI039	SPRING	J103	0	0	OK	-	-	-
11553EI040	AMMETER, D C	J103	0	0	OK	-	-	-
11553EI041	HOLDER, BRUSH G.E.#0328B689P0001	J103	9	9	OK	293.46	2,641.14	-
11553EI042	COIL, G.E., 22D101-GCA	J103	0	0	OK	-	-	-
11553EI043	POTENTIOMETER, GE	J103	0	0	OK	-	-	-
11553EI044	STABILIZER, VOLTAGE	J103	0	0	OK	-	-	-
1550ME072	SEAL, GE	J104	0	0	OK	-	-	-
1556ME100	GASKET, RUBBER CONDENSER, G.E.	J104	6	6	OK	31.00	186.00	-
1553EI050	FILTER, AIR, TURBINE GENERATOR, 24.5" X 24.5" X 2"	J201	2	2	OK	73.39	146.78	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
11553ME001	BLADE, GENERATOR EXCITER FAN	J202	15	15	OK	86.00	1,290.00	-
11556ME001	SLEEVE, BRASS	J202	1	1	OK	27.50	27.50	-
11556ME002	BEARING, PIPE BRASS	J202	6	6	OK	20.00	120.00	-
11556ME003	BUSHING, PIPE	J202	1	1	OK	85.00	85.00	-
11556ME004	IMPELLER, BRASS ROTOR, I/R, PART# B6378A	J202	4	4	OK	334.00	1,336.00	-
11556ME005	BEARING, PIPE BRASS	J202	9	9	OK	15.64	140.75	-
11556ME006	BOWL, INTERMEDIATE FOR COND. PUMP ***PER	J202	2	2	OK	451.34	902.67	-
11562ME001	BREATHER, AIR MAZE MOD.#HSGA-1"	J203	2	2	OK	21.84	43.68	-
11562ME002	SEAL, OIL FILTER GASKET, G E	J203	7	7	OK	32.00	224.00	-
11562ME004	KIT, SHAFT SEAL (FOR PUMP) G.E.	J203	1	1	OK	450.00	450.00	-
11562ME010	FILTER, BAG FOR BOWSER	J203	39	39	OK	11.61	452.74	-
11562ME012	FILTER, SUCTION #2 TURBIN	J203	5	5	OK	108.10	540.52	-
11562ME011	FILTER, CARTRIDGE, KAYDON E5	J204	12	12	OK	104.96	1,259.48	-
11565EI001	SWITCH, MERCOID PRESSURE, MALCOLM-DUNCAN	J301	2	2	OK	303.39	606.77	-
11565EI002	SWITCH, MERCOID PRESSURE, MALCOLM DUNCAN	J301	1	1	OK	186.00	186.00	-
11565ME101	Flange, Flex Coupling 6S 1-5/8" bore	J301	5	5	OK	143.50	717.50	-
11565ME102	Flange, Flex Coupling 6S 1-1/4" bore	J301	5	5	OK	32.00	160.00	-
11565ME103	Sleeve, Flex Coupling 6S Hytrel / Martin Quadra-Flex 6H	J301	2	2	OK	49.70	99.39	-
11565ME001	KIT, PISTON CUP, HYD CYL STOP VALVE, G.E	J302	1	1	OK	332.00	332.00	-
11565ME002	KIT, PISTON CUP, VALVE GEAR, G.E. ITEM 0	J302	3	3	OK	296.80	890.40	-
11565ME003	KIT, ROD SEAL, G.E. ITEM 036	J302	1	1	OK	252.00	252.00	-
11565ME004	KIT, OILER, EHC, G.E. ITEM 081	J302	0	0	OK	-	-	-
11565ME005	SHAFT SEAL, KIT, G.E.	J302	2	2	OK	555.00	1,110.00	-
11565ME006	SPRING, GE FOR BEARING PR	J302	6	6	OK	61.00	366.00	-
11565ME007	GASKET, GE KIT, 3 PIECES ITEM 4	J302	3	3	OK	120.00	360.00	-
11565ME008	KIT, BEARING, INCL: 2796A225DIAA001.2796	J302	2	2	OK	601.35	1,202.70	-
11565ME009	CAP. TUBE, 1", G.E., PART 16FNTX-S PARKER	J302	2	2	OK	9.99	19.98	-
11565ME010	CAP. TUBE 1 1/2, G.E., 24FNTX-S PARKER	J302	2	2	OK	9.00	18.00	-
11565ME011	PLUG, TUBE	J302	2	2	OK	12.00	24.00	-
11565ME012	PLUG, TUBE	J302	2	2	OK	9.00	18.00	-
11565ME013	PLUG, TUBE	J302	1	1	OK	9.00	9.00	-
11565ME014	PLUG, TUBE	J302	5	5	OK	9.00	45.00	-
11565ME015	PLUG, TUBE	J302	4	4	OK	9.00	36.00	-
11565ME016	PLUG, TUBE	J302	4	4	OK	9.00	36.00	-

Schedule 16A - i Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
11565ME105	O RING, G.E. ITEM 55N, PART V437V761-029	J302	2	2	OK	9.00	18.00	-
11565ME106	O RING G.E. ITEM 55H, PART V437V761-024	J302	1	1	OK	9.00	9.00	-
11565ME107	O RING, STOP VALVE, G.E., MANF. TO CYL.	J302	2	2	OK	0.63	1.26	-
11565ME108	O RING, G.E., ITEM 55A, PART V437V761-01	J302	2	2	OK	9.00	18.00	-
11565ME109	O RING, STOP VALVE, G.E. SOL OPERATOR IT	J302	6	6	OK	6.00	36.00	-
11565ME111	O RING, G.E. ITEM 55E	J302	4	4	OK	15.00	60.00	-
11565ME112	O RING G.E.	J302	2	2	OK	2.00	4.00	-
11565ME113	O RING G.E. ITEM 035	J302	3	3	OK	7.00	21.00	-
11565ME115	O RING, G.E., ITEM 55	J302	2	2	OK	5.10	10.20	-
11565ME116	O RING, G.E., ITEM 55B	J302	2	2	OK	31.00	62.00	-
11565ME117	O RING, G.E., ITEM 55M, PART V437V761-02	J302	2	2	OK	10.00	20.00	-
11565ME118	O RING, G.E., ITEM 55R	J302	2	2	OK	45.00	90.00	-
11565ME119	O RING, G.E., ITEM 55S	J302	2	2	OK	45.00	90.00	-
11565ME120	O RING, G.E., ITEM 55P	J302	2	2	OK	31.00	62.00	-
11565ME121	O RING, G.E., ITEM 55Q	J302	2	2	OK	31.00	62.00	-
11565ME122	O RING, G.E., ITEM 55L	J302	2	2	OK	31.00	62.00	-
11565ME123	O RING, G.E., ITEM 55C	J302	6	6	OK	31.00	186.00	-
11565ME124	O RING, STOP VALVE, DUMP VALVE, G.E. ITE	J302	2	2	OK	6.25	12.50	-
11565ME125	O RING, STOP VALVE, G.E., SOL. TO MANF.,	J302	46	46	OK	0.24	11.04	-
11565ME126	O RING, STOP VALVE, G.E., SOL. OPERATOR	J302	6	6	OK	6.00	36.00	-
11565ME127	O RING G.E #0655A770P0126. VALVE GEAR #7	J302	2	2	OK	0.67	1.34	-
11565ME128	O RING, G.E., ITEM 034	J302	1	1	OK	13.00	13.00	-
11565ME129	KIT, O-RING, G.E., PART 45-586D-N	J302	0	0	OK	-	-	-
11565ME130	O RING, 2" S W, G.E., PART 2-228 PARKER	J302	1	1	OK	7.00	7.00	-
11565ME131	O RING SUCTION STRAINER, G.E., PART 2-23	J302	1	1	OK	30.00	30.00	-
11565ME132	O RING, 1/2 TUBE, G.E. PART 3-8 PARKER	J302	2	2	OK	9.00	18.00	-
11565ME133	O RING, 3/4 TUBE, G.E., PART 3-12 PARKER	J302	2	2	OK	9.00	18.00	-
11565ME134	O RING, SERVO VALVE, 50 GPM, G.E., PART	J302	4	4	OK	15.00	60.00	-
11565ME135	O RING, 1 1/4 TUBE, G.E., PART 3-20 PARK	J302	2	2	OK	14.00	28.00	-
11565ME136	O RING, FLUSHING VALVE ADAPTER, G.E., PA	J302	2	2	OK	31.00	62.00	-
11565ME137	O RING, 1 1/2 S W, G.E., PART 2-225 PARKE	J302	13	13	OK	7.00	91.00	-
11565ME138	O RING, 1" TUBE, G.E., PART 3-16 PARKER	J302	2	2	OK	15.00	30.00	-
11565ME139	O RING, SUCTION STRAINER, SIGHT GLASS, G.	J302	1	1	OK	30.00	30.00	-
11565ME140	O RING, 1/4" TUBE, G.E., PART 3-4 PARKER	J302	2	2	OK	9.00	18.00	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
11565ME141	O RING, SERVO JET TUBE, 25 GPM, G.E., PA	J302	3	3	OK	31.00	93.00	-
11565ME142	O RING, SERVO VALVE, PARKER #2-113 VITON	J302	14	14	OK	4.82	67.52	-
11565ME143	O RING, SERVO JET TUBE, 50 GPM, G.E., PA	J302	2	2	OK	31.00	62.00	-
11565ME144	O RING, 3/8 TUBE, G.E., PART 3-6 PARKER	J302	2	2	OK	11.00	22.00	-
11565ME145	O RING G.E.	J302	7	7	OK	3.00	21.00	-
11565ME146	O RING, G.E.	J302	12	12	OK	15.00	180.00	-
11565ME147	RING, HYDROGEN SEAL	J303	1	1	OK	1,908.85	1,908.85	-
11565ME149	SEAL, INNER	J303	1	1	OK	1,200.00	1,200.00	-
11565ME150	RING, HYDROGEN SEAL	J303	1	1	OK	1,000.00	1,000.00	-
11565ME151	RING, HYDROGEN SEAL	J303	1	1	OK	1,000.00	1,000.00	-
11565ME152	RINGS, HYDROGEN SEAL FOR #1 T/G	J304	1	1	OK	8,406.05	8,406.05	-
11565ME161	ELEMENT, FILTER, G E (#1 TG HYD. FILTER)	J401	2	2	OK	92.36	184.71	-
11565ME166	ELEMENT, FILTER, GE PL-718-6, 03110J93P0	J401	6	6	OK	30.49	182.94	-
11565ME160	ELEMENT, FILTER, G E (#1 TG HYD. FILTER)	J402	5	5	OK	50.53	252.65	-
11565ME162	STRAINER, G.E. #0100A374P0004 ITEM 53.	J402	3	2	CHECK	142.46	427.38	(142)
11565ME163	ELEMENT, FILTER, (EHC)	J402	2	2	OK	242.50	485.00	-
11565ME164	GASKET, G.E.	J402	18	18	OK	12.00	216.00	-
11565ME165	ELEMENT, FILTER 586A-25PN	J402	2	2	OK	29.05	58.10	-
12550ME001	GASKET-SPIRAL WOUND #236B3493P0008	J403	2	2	OK	19.67	39.34	-
12550ME002	NUT-COVERED #187C4483P0012	J403	1	1	OK	291.84	291.84	-
12550ME003	PIN-DOWEL #0169A971P0039	J403	4	4	OK	95.95	383.80	-
12550ME004	CAM ROLLER/BUSHING #0658A812P0001	J403	2	2	OK	162.45	324.90	-
12550ME005	PIN #0100A671P0003	J403	2	2	OK	110.20	220.40	-
12550ME006	NUT-COLLAR 306643355P0003	J403	4	4	OK	93.10	372.40	-
12550ME007	NUT-COVERED 3187V4482P0008	J403	3	3	OK	204.25	612.75	-
12550ME008	FILTER ELEMENT (6 MICRON) #03126J90P0002	J403	2	2	OK	150.00	300.00	-
12550ME009	BOLT HVY HX HD #N60HP37048	J403	5	5	OK	10.64	53.20	-
12550ME010	STUD (1.250"-8X8.76LI) #066432P0153	J403	1	1	OK	82.65	82.65	-
12550ME011	Seal, shaft, turning gear.	J403	0	0	OK	-	-	-
12550ME012	CAULKING STRIP #09448930P0001	J403	24	24	OK	12.54	300.96	-
12550ME013	SEAL #201A11B #2796A225DIAA0001-NTL	J403	1	1	OK	36.98	36.98	-
12550ME015	CRUSH PIN #04808190P0040	J403	4	4	OK	8.55	34.20	-
12550ME016	STUD 4.0-8 X 19.26LI #0826E714P0874	J404	1	1	OK	344.85	344.85	-
12550ME017	STUD 3.50-8X18.26LI #0926E714P0790	J404	1	1	OK	306.85	306.85	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
2550ME018	STUD 3.0-8 X 13.26LI #0926E714P0727	J404	2	2	OK	223.76	447.52	-
2550ME019	STUD 3.0-8 X 12.00LI #0926E714P0725	J404	1	1	OK	348.27	348.27	-
2550ME020	STUD 2.750-8 X 11.76LI #0926E714P0361	J404	1	1	OK	210.33	210.33	-
2550ME021	STUD 2.50-8 X 11.26LI #0926E714P0430	J404	2	2	OK	95.00	190.00	-
2550ME022	STUD 2.250-8 X 25.26LI #06643212P0477	J404	1	1	OK	281.20	281.20	-
2550ME023	NUT-COVER #224B1210P0001	J501	1	1	OK	423.13	423.13	-
2550ME024	NUT COVER #187C4483P0016	J501	6	6	OK	282.15	1,692.90	-
2550ME037	SHIM-THRUST #03136J44P001	J501	1	1	OK	1,249.25	1,249.25	-
2550ME038	SHIM-THRUST #03136J44P0002	J501	1	1	OK	1,249.25	1,249.25	-
2550ME025	SPRING (SPILL STRIP) #0635A260P0076	J502	1	1	OK	11.40	11.40	-
2550ME026	SPRING (SPILL STRIP) #0635A260P0079	J502	1	1	OK	11.40	11.40	-
2550ME027	SPRING (SPILL STRIP) #0635A260P0022B	J502	1	1	OK	11.40	11.40	-
2550ME028	SPRING (SPILL STRIP) #0635A260P0079A	J502	12	12	OK	11.40	136.80	-
2550ME029	SPRING (SPILL STRIP) #0635A260P0023A	J502	17	17	OK	11.40	193.80	-
2550ME030	SEAL #09499929P0033	J502	1	1	OK	1,877.20	1,877.20	-
2550ME031	BUSHING (BRONZE/GRAPHITE) #04808574P0059	J502	12	12	OK	18.72	224.64	-
2550ME032	WASHER, PLAIN #N402AP00017	J502	20	20	OK	0.60	12.00	-
2550ME033	GASKET-SPIRAL WOUND #236B3493P0008A	J502	1	1	OK	12.07	12.07	-
2550ME034	BEARING, DU #0655A709P0011	J502	2	2	OK	8.71	17.42	-
2550ME035	SCREW-SC HD(1.500-8X2.50) #0431B502P0050	J502	10	10	OK	146.30	1,463.00	-
2550ME036	NUT-COVERED #187C4483P0015	J502	2	2	OK	187.50	375.00	-
2550ME039	SPRING(PKG.RING) #01141J37P0014	J502	6	6	OK	37.05	222.30	-
2550ME040	CRUSH PIN #040808190P0013	J502	3	3	OK	9.69	29.07	-
2550ME041	SPRING (SPILL STRIP) #0635A260P0077	J502	1	1	OK	11.40	11.40	-
2550ME042	SPRING (SPILL STRIP) #0635A260P0020A	J502	1	1	OK	11.40	11.40	-
2550ME043	SPRING (SPILL STRIP) #0635A260P0022	J502	1	1	OK	11.40	11.40	-
2550ME044	SPRING (SPILL STRIP) #0635A260P0082	J502	25	25	OK	11.40	285.00	-
2550ME045	SPRING (SPILL STRIP) #0634A260P0080	J502	27	27	OK	11.40	307.80	-
2550ME046	CLAMP #01156J77P0001	J502	1	1	OK	281.20	281.20	-
2550ME047	SCREW-SC HD (1.250-XC3.00) #0431B502P003	J502	4	4	OK	151.81	607.24	-
2550ME048	PIN #04804857P0147	J502	1	1	OK	22.80	22.80	-
2550ME049	BOLT-JACKING #01078J88P0001	J503	8	8	OK	150.58	1,204.64	-
2550ME050	NUT-JACK HEX #N213P00044	J503	7	7	OK	5.70	39.90	-
2550ME051	LOWER LEAK/NITRILE #2796A150D1AA001	J503	1	1	OK	14.63	14.63	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND		REMARKS	Cost Per Unit	Total Cost	Difference
12550ME052	WASHER, LOCK B8A3X #0719A679P0016	J503	20	20	OK		3.71	74.20	-
12550ME053	HEAVY NUT #06643212P0153 AND #06643235P0	J503	2	2	OK		68.40	136.80	-
12550ME062	NUT #06643355P0003A	J503	4	4	OK		93.10	372.40	-
12550ME064	CAM ROLLER/BEARING #0658A812P0001	J503	1	1	OK		162.45	162.45	-
12550ME069	BL WS. ASM. #08483255P0001	J503	1	1	OK		624.15	624.15	-
12550ME070	SPRING, 01141J371P0019	J503	4	4	OK		37.81	151.24	-
12550ME071	SPRING #01141J37P0024A	J503	4	4	OK		37.81	151.24	-
12550ME072	SPRING #01141J37P0032A	J503	4	4	OK		46.04	184.14	-
12550ME073	STUD-TAP #0926E714P0432	J503	2	2	OK		96.90	193.80	-
12550ME074	STUD-THRU 06643212P0153A	J503	2	2	OK		82.65	165.30	-
12550ME077	NUT #06643235P0005	J503	4	4	OK		68.40	273.60	-
12550ME054	STUD-TAP 30926E714P0489	J504	1	1	OK		271.70	271.70	-
12550ME061	STUD-TAP #0926E714P0138A	J504	2	2	OK		40.66	81.32	-
12550ME063	RING-JACK #004135J22	J504	1	1	OK		838.00	838.00	-
12550ME065	STUD #0926E715P0487	J504	2	2	OK		160.55	321.10	-
12550ME076	STUD-TAP #0926E714P0435A	J504	1	1	OK		81.70	81.70	-
12550ME055	NUT #187C4483P0011	J601	1	1	OK		135.00	135.00	-
12550ME056	NUT #187C4483P0011	J601	1	1	OK		135.00	135.00	-
12550ME057	NUT #187C4483P0011B	J601	1	1	OK		135.00	135.00	-
12550ME058	NUT #187C4483P0011C	J601	1	1	OK		135.00	135.00	-
12550ME059	NUT #187C4483P0010B	J601	2	2	OK		81.70	163.40	-
12550ME060	NUT #187C4483P0013	J601	1	1	OK		152.00	152.00	-
12550ME066	NUT, 2.500-8 A194GR4 #007647E23	J601	2	2	OK		134.90	269.80	-
15115ME020	BUSHING, SPECIAL P/N 402-1-1S, 2" MAG.	J601	5	5	OK		115.14	575.71	-
12550ME078	WASHER-LOCK #04804854P0005	J602	2	2	OK		4.09	8.18	-
12550ME079	SPRING, 0635A260P0028B	J602	1	1	OK		11.59	11.59	-
12550ME080	SPRING #0635A260P0020B	J602	1	1	OK		11.59	11.59	-
12550ME081	SPRING, #0635A260P0029B	J602	1	1	OK		11.59	11.59	-
12550ME082	SPRING #0635A260P0024A	J602	1	1	OK		11.59	11.59	-
12550ME083	SPRING, #0635A260P0024B	J602	1	1	OK		11.59	11.59	-
12550ME084	SPRING, #0635A260P0020C	J602	1	1	OK		11.59	11.59	-
12550ME085	SPRING #0635A260P0021	J602	1	1	OK		11.59	11.59	-
12550ME086	SPRING, #0635A260P0024C	J602	1	1	OK		11.59	11.59	-
12550ME087	SPRING #0635A260P0027B	J602	1	1	OK		11.59	11.59	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
2550ME088	SPRING #0635A260P0029	J602	2	2	OK	11.59	23.18	-
2550ME089	SPRING, #0635A260P0030	J602	2	2	OK	11.59	23.18	-
2550ME090	SPRING, #0635A260P0022C	J602	1	1	OK	11.59	11.59	-
2550ME091	SPRING, #0635A260P0031A	J602	19	19	OK	11.59	220.21	-
2550ME092	SPRING #06351260P0023C	J602	16	16	OK	11.59	185.44	-
2550ME093	SPRING #0635A260P0032C	J602	17	17	OK	11.59	197.03	-
2550ME094	SPRING #0635A260P0028C	J602	23	23	OK	11.59	266.57	-
2550ME095	SPRING #0635A260P0028D	J602	21	21	OK	11.59	243.39	-
2550ME096	SPRING #0635A260P0024D	J602	15	15	OK	11.59	173.85	-
2550ME097	SPRING #0634A260P0027C	J602	15	15	OK	11.59	173.85	-
2550ME098	SPRING #0635A260P0030A	J602	15	15	OK	11.59	173.85	-
2550ME099	SPRING #0635A260P0032D	J602	15	15	OK	11.59	173.85	-
2550ME100	SPRING #0635A260P0033	J602	15	15	OK	11.59	173.85	-
2550ME101	SPRING #0635A260P0025D	J602	17	17	OK	11.59	197.03	-
2550ME102	BEARING, #04808574P0059	J602	2	2	OK	66.60	133.20	-
2550ME103	BEARING #04808574P0059	J602	2	2	OK	66.50	133.00	-
2550ME104	BEARING #04808574P0059	J602	2	2	OK	66.50	133.00	-
2550ME105	SCREW #N170P29044	J602	1	1	OK	0.38	0.38	-
2550ME106	PIN #04804857P0148	J603	2	2	OK	56.05	112.10	-
2550ME107	WASHER, INS. #314A3288P0003	J603	4	4	OK	7.41	29.64	-
2550ME108	LOCKPLATE, #0480485P0053	J603	21	21	OK	3.99	83.79	-
2550ME109	LOCK WASHER #S0637A987P0001	J603	10	10	OK	13.94	139.40	-
2550ME110	STEM GUIDE BRACKET #09480033P002	J603	2	2	OK	1,411.70	2,823.40	-
2550ME111	BEARING LINER-DU #0130A335P0002	J603	7	7	OK	73.15	512.05	-
2550ME112	SCREW SOCKET HD CAP #N170P33024	J603	8	8	OK	1.24	9.92	-
2550ME113	PIN #0658A834P0001	J603	3	3	OK	8.74	26.22	-
2550ME114	PIN #0100A671P0003A	J603	1	1	OK	110.21	110.21	-
2550ME115	BEARING-DU, #0655A709P0001	J603	1	1	OK	8.71	8.71	-
2550ME116	NUT-COVERED #187C4492P0011	J701	8	8	OK	204.25	1,634.00	-
2550ME117	SCREW, SCC. HD #0431B502P0001	J702	10	10	OK	218.50	2,185.00	-
2550ME118	NUT, JAM HEX #004135J22A	J702	12	12	OK	34.58	414.96	-
2550ME119	GASKET, 02186J30P0008	J702	4	4	OK	28.15	112.61	-
2550ME120	GASKET, 04215J47P006R	J702	1	1	OK	41.99	41.99	-
2550ME121	BOLT #06643028P0123	J702	5	5	OK	5.13	25.65	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
12550ME122	WASHER-LOCK #0480454P0005	J702	2	2	OK	4.09	8.18	-
12550ME123	SEAT #09499929P0004	J702	1	1	OK	1,902.85	1,902.85	-
12550ME124	UT-JACK #06643124P0008	J702	4	4	OK	1.26	5.04	-
12550ME126	GASKET #03120J11P0001	J702	4	4	OK	10.74	42.96	-
12550ME127	CAP SCREW #S0649A134P0001	J702	3	3	OK	36.29	108.87	-
12550ME128	SEAL KIT #04175J75P0200	J702	1	1	OK	86.45	86.45	-
12550ME129	GASKET KIT #01328J87P0002	J702	2	2	OK	150.63	301.25	-
12550ME130	CAULKING STRIP #09448939P0001A	J702	18	18	OK	28.03	504.54	-
12550ME125	INSULATOR #314A3289P0032	J703	0	0	OK	-	-	-
12556ME001	BEARING, DISCHG. CASE ***PERM-5*** 1/	J703	2	2	OK	213.00	426.00	-
12556ME002	BUSHING, THROTTLE ***PERM-2***	J703	2	2	OK	2.81	5.62	-
12556ME003	BUSHING, CARBON ***PERM-2***	J703	2	2	OK	93.00	186.00	-
12556ME004	RING, WEARING ***PERM-2***	J703	3	3	OK	151.00	453.00	-
12556ME006	BEARING, SLEEVE ***PERM-4*** SER# 1	J703	4	4	OK	16.50	66.00	-
12556ME007	IMPELLER, BRONZE, 10KA-H 6.50 DIA	J703	1	1	OK	179.00	179.00	-
12556ME008	SLEEVE, BEARING ***PERM-4*** 82078510	J703	2	2	OK	13.00	26.00	-
12556ME009	COUPLING,SHAFT 1 1/2 ***PERM-2*** SER#12	J703	2	2	OK	48.00	96.00	-
12556ME010	SEAL, MECH., JC. SER# 1280-9001	J703	1	1	OK	369.00	369.00	-
12562ME001	ELEMENT FILTER PALL, FOR TUBINE	J802	1	1	OK	337.76	337.76	-
12565ME001	ELEMENT FILTER PALL HYDRAULIC, FOR TURBI	J802	3	3	OK	109.23	327.69	-
12565ME002	FILTER, SPIN ON PALL, FOR TURBINE, HC740	J802	5	5	OK	70.54	352.71	-
01180ME002	COUPLING, HUB, FASTS 4.5 FM, 4.3710 BORE,	K224	3	3	OK	595.80	1,787.40	-
01180ME004	COUPLING SLEEVES (FLANGE), FASTS 4.5 FM	K224	3	3	OK	621.10	1,863.31	-
01180ME005	COUPLING HUB, FASTS 4.5 FM BORE 4.3710"	K334	1	1	OK	323.85	323.85	-
01180ME006	COUPLING HUB, FASTS 4.5 FM BORE 3.9970"	K334	1	1	OK	800.00	800.00	-
15109ME120	Coupling, semi-flex	K334	0	0	OK	-	-	-
15109ME129	Coupling, Semi-Flex, Bridge	K334	1	0	CHECK	2,574.37	2,574.37	(2,574)
15109ME124	Coupling, semi-flex (Trolley Mag)	K443	1	1	OK	687.00	687.00	-
15109ME126	Coupling, semi-flex (Trolley)	K443	1	1	OK	664.41	664.41	-
15115ME005	Shaft, Lower Arm w/rivets	K444 FLOOR	2	2	OK	262.84	525.68	-
15115ME006	Shaft, Upper Arm	K444 FLOOR	1	1	OK	253.30	253.30	-
15115ME008	Shaft, Lower Sheave	K444 FLOOR	1	1	OK	548.00	548.00	-
15115ME009	Shaft, Tine Connector w/rivets	K444 FLOOR	0	0	OK	-	-	-
15115ME021	PIN, UPPER SHEAVE FOR GRAPPLES OR CRANE.	K444 FLOOR	1	1	OK	325.00	325.00	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
6453ME150	SHAFT, DRIVE 2" #FO-SPCL DRW#98-50072-A2	K444 FLOOR	0	0	OK	-	-	-
6453ME154	SHAFT, END 2" FOR ECONO SCREW CONVEYOR	K444 FLOOR	0	0	OK	-	-	-
6453ME184	SHAFT END 1'8 3/8" LONG FOR ASH COLLECT	K444 FLOOR	2	2	OK	193.45	386.90	-
1201EI002	ASSEMBLY, CABLE	K551	1	1	OK	169.00	169.00	-
1201EI003	HEATER, OVERLOAD, G.E.	K551	3	3	OK	4.05	12.15	-
1201EI004	THERMOWELL MAIN STEAM	K551	2	2	OK	106.00	212.00	-
1201EI005	THERMOWELL ASHCROFT	K551	1	1	OK	39.00	39.00	-
1201EI006	THERMOWELL, 12" GORDON INC.	K551	6	6	OK	111.00	666.00	-
1550ME001	GASKET, 3585, G.E.	K551	2	2	OK	4.00	8.00	-
1550ME002	COVER, GASKET	K551	8	8	OK	3.61	28.88	-
1550ME003	BOLT, A/T, G E 1 1/4" X 1 1/4"	K551	1	1	OK	15.00	15.00	-
1550ME004	SPACER	K551	0	0	OK	-	-	-
1550ME005	BOLT, TURB.	K551	12	12	OK	1.56	18.72	-
1550ME006	SPRING, NOTCH	K551	6	6	OK	19.00	114.00	-
1550ME009	SPRING, PACKING	K551	5	5	OK	19.00	95.00	-
1550ME010	SPRING, PACKING	K551	4	4	OK	16.44	65.76	-
1550ME011	SPRING, PACKING	K551	6	3	CHECK	19.00	114.00	(57)
1550ME012	SPRING, PACKING	K551	6	6	OK	19.00	114.00	-
1550ME013	BOLT, STUD	K551	1	1	OK	14.00	14.00	-
0018EI011	LAMP, 250 WATT, PART# M250/PS/U Sylvania	K551	0	0	OK	-	-	-
1550ME014	WEIGHT, BALANCE, G E	K552	4	4	OK	110.00	440.00	-
1550ME015	WEIGHT, BALANCE, G E	K552	0	0	OK	-	-	-
1550ME016	WEIGHT, BALANCE, G E	K552	10	10	OK	140.00	1,400.00	-
1550ME017	WEIGHT, BALANCE, G E	K552	4	4	OK	160.00	640.00	-
1550ME018	WEIGHT BALANCE G.E.	K552	4	4	OK	21.00	84.00	-
1550ME019	WEIGHT, BALANCE, G E	K552	8	8	OK	140.00	1,120.00	-
1550ME020	WEIGHT, BALANCE, G E	K552	0	0	OK	-	-	-
1550ME021	WEIGHT, BALANCE, G E	K552	3	3	OK	160.00	480.00	-
1550ME022	WEIGHT, BALANCE, G E	K552	4	4	OK	149.00	596.00	-
1550ME023	BOLT, TURB.	K552	3	3	OK	50.00	150.00	-
1550ME024	WEIGHT BALANCE GE	K552	0	0	OK	-	-	-
1550ME025	BOLT TURB.	K552	2	2	OK	23.00	46.00	-
1550ME026	WEIGHT BALANCE G.E.	K552	0	0	OK	-	-	-
1550ME027	BOLT, TURB	K552	2	2	OK	25.00	50.00	-

Schedule 16A - Initial Spare Parts List

ITEM#	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
11550ME028	BOLT, TURBINE	K552	4	4	OK	15.00	60.00	-
11550ME029	BOLT, TURB	K552	2	2	OK	19.00	38.00	-
11550ME030	STUD	K552	0	0	OK	-	-	-
11550ME031	BOLT, TURB.	K552	31	31	OK	1.75	54.25	-
11550ME032	SCREW, SET	K552	9	9	OK	40.00	360.00	-
11550ME033	PIN, G E	K552	8	8	OK	32.10	256.80	-
11550ME034	LUBRICATOR, G E	K552	2	2	OK	17.60	35.20	-
11550ME035	LUBRICATOR, G E	K552	4	4	OK	17.60	70.40	-
11550ME036	FITTINGS, LUBRICANT, GE TAG 158	K552	2	2	OK	29.00	58.00	-
11550ME037	GASKET, LOWER STOP VALVE, G.E.#0236B3493	K552	0	0	OK	-	-	-
11550ME038	BOLT, KIT	K552	6	6	OK	13.60	81.60	-
11550ME039	BOLT, TURB, G.E., 1/2 X 1 1/4	K552	32	32	OK	1.76	56.32	-
11550ME043	SEAL, BEARING	K553	4	4	OK	22.74	90.96	-
11550ME044	BOLT, TURB.1 1/2"	K553	18	18	OK	3.00	54.00	-
11550ME045	BOLT, TURB, G.E., 1/2 X 1 1/2	K553	9	9	OK	1.67	15.03	-
11550ME047	NOZZLE, CERAMIC	K553	6	6	OK	83.00	498.00	-
11550ME066	RING, PACKING	K553	1	1	OK	31.00	31.00	-
11550ME067	RING, PACKING	K553	1	1	OK	11.00	11.00	-
11550ME040	RING, PACKING Item 004	K554	1	1	OK	1,350.00	1,350.00	-
11550ME041	RING, PACKING Item 003	K554	1	1	OK	2,100.00	2,100.00	-
11550ME042	RING, PACKING	K554	1	1	OK	1,326.00	1,326.00	-
11550ME048	RING, THRUST (Active)	K554	2	2	OK	3,903.48	7,806.96	-
01195ME001	PLUG, SUPERHEATER & FEEDWATER CONTROL VA	K662	1	1	OK	554.22	554.22	-
01201EI003	THERM-O-WELD, 36" HEIGHT TUBE, CERAMIC	K662	18	18	OK	64.90	1,168.16	-
01201EI004	THERM-O-COUPLE, THERMAL W/3" TERMINATION	K662	9	9	OK	82.05	738.45	-
01201EI005	THERM-O-COUPLE, PROBE REPLACEMENT FOR TY	K662	0	0	OK	-	-	-
01201EI006	THERMO -COUPLE CONNECTION HEAD	K662	1	1	OK	48.00	48.00	-
01201EI010	SWITCH, PRESSURE, Ashcroft B420S 1000psi IVA17003 011 15A, 1	K662	1	1	OK	308.28	308.28	-
15109ME108	Kit, trolley bearing/seal	K662	0	0	OK	-	-	-
15109ME116	Shaft, stub, drum pedestal	K662	0	0	OK	-	-	-
01201ME002	Sight Glass - ASSM.GASKET DIAMOND POWER	K663	2	2	OK	138.56	277.11	-
01201ME003	GUARD RING, DP ANGLE ISO VALVES	K663	8	8	OK	3.75	30.00	-
01201ME005	LOCKING FASTNER, DP ANGLE ISO VALVES	K663	5	5	OK	0.75	3.73	-
01201ME006	PACKING SET, DP ANGLE ISO VALVES	K663	12	12	OK	3.40	40.80	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
1201E1001	ROLLER STEEL ALLEN BRADLEY	K663	1	0	CHECK	12.00	12.00	(12)
5109ME123	Spring, brake	K664	0	0	OK	-	-	-
5109ME128	Wheel, drive/idler	K664	2	2	OK	1,045.76	2,091.52	-
01189ME106	Ring, Retaining, Ext Waldes Truarc Cs	K772	0	0	OK	-	-	-
01189ME107	Roller, Lance 3.5"	K772	13	13	OK	157.35	2,045.50	-
01189ME108	Washer, Thrust 1x1.562 Torrington	K772	10	10	OK	1.00	10.00	-
01189ME116	Bearing, scf emrl, McGill #CF-1-5	K772	23	23	OK	8.86	203.78	-
01189ME118	Plate, seal, item 6 (wallblower)	K772	5	5	OK	5.33	26.67	-
01189ME119	Spring, sleeve cup, item 7	K772	2	2	OK	12.05	24.10	-
01189ME128	Rod, Adjustable, MKIEX	K773	0	0	OK	-	-	-
01189ME129	HD Operator Assby, MKIEX	K773	1	1	OK	314.85	314.85	-
5109ME125	Coupling, semi-flex (Trolley)	K801	5	5	OK	565.00	2,825.00	-
01189ME127	Pin, Groove, 1/4 X 3/4 CS	K881	0	0	OK	-	-	-
01189ME131	Retaining, External, Waldes Truarc CS	K881	0	0	OK	-	-	-
01168ME005	Bracket, Plate, 1/4", 310SS	K882	54	54	OK	43.05	2,324.95	-
01168ME006	J-Bolt, 3/8" dia, Rod x 6-1/2" Lg., 310S	K882	54	54	OK	43.63	2,356.28	-
50018ME095	Sight Glass - WATER FLOW, BRASS	M104	2	2	OK	50.46	100.92	-
50018ME016	LINK, MASTER #60H	M105	5	5	OK	1.96	9.81	-
50018ME017	LINK, MASTER #40	M105	6	6	OK	0.92	5.51	-
50018ME018	LINK, MASTER #50	M105	13	13	OK	1.17	15.22	-
50018ME019	LINK, MASTER #80	M105	11	11	OK	1.60	17.60	-
50018ME020	LINK, MASTER #120	M105	8	8	OK	3.12	24.97	-
01159ME856	Fitting, Voss Mini Mess (for Martin Hyd)	M106	0	0	OK	-	-	-
6450ME149	TENSION SPRINGS (100mmx51mmx3.5mm) TLT	M113	100	100	OK	15.94	1,593.94	-
6450ME154	TENSION SPRINGS (80mmx41mmx3.0mm) TLT	M113	85	53	CHECK	4.21	357.66	(135)
50009ME101	COUPLER, BRASS FIRE HOSE ADAPTOR 1 1/2"	M113	7	7	OK	19.41	135.88	-
50018ME098	STRAINER 3/8"	M124	2	2	OK	13.33	26.65	-
6450ME130	COUPLING, CHAIN FOR TLT RIDDLING WET & D	M141	38	38	OK	213.72	8,121.30	-
11556ME012	GASKET, #1 BYPASS CONDENSER, SHELL & TUB	N WALL	3	3	OK	767.17	2,301.50	-
11562ME013	PUMP, LUBE OIL FOR GE MAIN TURBINE, 3 X	N WALL	1	1	OK	1,149.90	1,149.90	-
12556ME012	GASKET, #2 BYPASS CONDENSER 66 1/4"OD X	N WALL	20	20	OK	-	-	-
5109ME099	Cable, Crane, Swaged, 7/8" X 275'	N WALL	2200	2200	OK	3.03	6,666.00	-
6450ME155	CHAIN, 167 LINK PAIR	N WALL	1	1	OK	25,473.00	25,473.00	-
21350E1031	Pump, Storm Water Supply	N WALL	1	1	OK	3,310.00	3,310.00	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND		REMARKS	Cost Per Unit	Total Cost	Difference
22400ME001	Pump, 30hp Boiler Wash Down w/Motor	N WALL	1	1	OK		2,520.70	2,520.70	-
50009EI003	Motor, Electric Fire Pump, 250HP	N WALL	1	1	OK		5,160.00	5,160.00	-
50042ME011	CYLINDER, LOADER BOOM	N WALL	1	1	OK		2,835.88	2,835.88	-
01165ME101	GASKET, DRUM 1&2, 12 X 16 SPECIAL FLEX. M	N200	2	2	OK		57.85	115.69	-
03165ME100	GASKET, ROUND 16" ID Boiler Drum #3 (Riley) 17-1.2" OD	N200	4	2	CHECK	2 issued 12/10/13	57.81	231.25	(116)
20318ME016	GASKET, #2 DA, 12" X 16". CHICAGO HEATER	N200	3	3	OK		50.00	150.00	-
50018ME093	GASKET, BLOWDOWN HEAT EXCHANGE, SIZE 10-	N200	5	4	CHECK		29.17	145.84	(29)
35603EI004	FUSE, SEMICONDUCTOR, FOR SWITCH GEAR, 15	O506	10	10	OK		40.00	400.00	-
35603EI005	FUSE, 4.8 KV/6R FOR #3 SWITCHYARD (G.E.)	O509	2	2	OK		585.00	1,170.00	-
35603EI006	FUSE, 4.8KV/9R FOR #3 SWITCHYARD (G.E.)	O509	3	3	OK		535.50	1,606.50	-
01159ME859	Wall, compartment (B)	OS GRND	18	18	OK		1,062.36	19,122.51	-
01186ME003	Tile, Baffle, 10", Drwg# ZR010-0006	OS GRND	39	39	OK		28.93	1,128.22	-
01186ME050	Clip, 180 wrap, for 1 1/2" Shield, 309ss	OS GRND	202	202	OK		2.89	583.80	-
16450ME315	Idler, Troughing Picking 7" X 72" X 20 Degree, 73ASDX705-72G	OS GRND	0	0	OK		-	-	-
16450ME316	Idler, Troughing Impact 20 Degree SDX Extended Center Roll	OS GRND	0	0	OK		-	-	-
16450ME318	Idler, impact (M-15)	OS GRND	0	0	OK		-	-	-
16450ME319	Roller, return rubber disc (M-16)	OS GRND	0	0	OK		-	-	-
21350EI201	Motor, Cooling Tower Recirc	OS GRND	1	1	OK		8,641.25	8,641.25	-
30512EI002	MOTOR 1,000HP NEW ID FAN	OS GRND	1	1	OK		15,986.40	15,986.40	-
16450ME317	Idler, training (M-12)	OS110	0	0	OK		-	-	-
01165ME102	SHUTTER, FIRE DOOR PEEP HOLE	OS603	0	0	OK		-	-	-
16450EI157	Motor, for riddling drag gearbox	Q110	2	2	OK		206.98	413.95	-
50009EI001	Motor, Jockey Pump	Q110	2	2	OK		475.85	951.69	-
12556EI001	Motor, #2 TG Lube Oil 20 HP (3646 RPM C256LP10)	Q112	1	1	OK		2,140.00	2,140.00	-
20312ME101	Pump, Metering, Milton Roy 1/4HP/1725RPM/115V (Boiler Day T	Q112	1	1	OK		2,423.08	2,423.08	-
11562EI001	Motor, L.O. Conditioner Blower	R110	3	3	OK		101.51	304.52	-
11562EI002	Motor, #1 TG L.O. Tank Exhauster	R110	3	3	OK		167.72	503.16	-
12562EI001	Motor, #2 TG L.O. Exhauster	R110	2	2	OK		271.00	542.00	-
35603EI100	Motor, TR-01 cooling fan	R110	1	1	OK		-	-	-
12562EI002	Motor, #2 TG L.O. Cond. Trans Pump	R111	1	1	OK		430.45	430.45	-
21350EI019	GEARMOTOR, 3 HP (NEW UPGRADED MOTOR)	R111	1	1	OK		2,639.46	2,639.46	-
30501ME030	Auger, 5" O.D. x 39 1/8" long	R111	1	1	OK		976.31	976.31	-
15115ME033	EQUALIZER PIN FOR 5 TINE BUCKET, CENTRAL	R221	0	0	OK		-	-	-
50018EI300	Motor, Clarifier Sludge Pump	R221	3	3	OK		263.54	790.63	-

Schedule 16A - Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
0505ME113	Pump, SNCR water booster, w/motor	R223	0	0	OK	-	-	-
0009ME001	Pump, Jockey Fire	R223	1	1	OK	7,456.00	7,456.00	-
6453ME229	Reducer, gear, for Pug Mill (gearbox)	R330	1	1	OK	3,188.00	3,188.00	-
0303EC003	Motor, 20HP, 460V, (Pall Sys)	R330	0	0	OK	-	-	-
01180ME003	COUPLING HUB, FASTS 4.5 FM BORE 4.246 W	R331	0	0	OK	-	-	-
1565ME104	Pump, EHC Hydraulic, Viton Trim	R331	2	2	OK	1,726.34	3,452.67	-
0003EI100	Motor, Glycol Cooling Fan	R331	1	1	OK	390.22	390.22	-
2400EI001	Motor, Waste Water Pump	S220	1	1	OK	628.00	628.00	-
1350EI121	Pump, Softener effluent	S222	1	1	OK	4,027.06	4,027.06	-
1350ME500	PUMP, BOOSTER / AURORA SER. 9315056 COAT	S222	1	1	OK	490.00	490.00	-
01159EI625	FILTER, SCHRADER	T221	2	2	OK	99.59	199.17	-
01159EI626	FILTER, BELLOWS SHRADER	T221	6	6	OK	89.75	538.50	-
01159EI629	O RING, 4 1/2", MARTIN	T222	12	12	OK	2.00	24.00	-
01159EI630	O RING, 8 1/2", MARTIN	T222	14	14	OK	4.00	56.00	-
01159EI631	O RING, 5", MARTIN	T222	5	6	CHECK	2.00	10.00	2
01159EI632	O RING, 3 1/2", MARTIN	T222	32	32	OK	1.50	48.00	-
01159EI633	SEAL, 2", MARTIN	T222	5	5	OK	3.00	15.00	-
01159ME690	BEARING, BALL	T223	4	4	OK	12.00	48.00	-
01159ME696	RING, PISTON SEAL, MARTIN	T223	33	33	OK	6.00	198.00	-
01159ME694	ACCUMULATOR MARTIN	T224	2	1	CHECK	451.43	902.86	(451)
01159ME687	FILTER, FIBERGLASS, 24" WIDE, UNDERGRATE	T330	3	3	OK	16.06	48.18	-
01159EI634	TRANSFORMER, 1250VA, 220V & 5%, 24-26V/1	T331	1	1	OK	242.35	242.35	-
01159ME698	RING, PISTON SEAL, MARTIN	T332	5	5	OK	7.00	35.00	-
01159ME699	RING, PISTON SEAL, MARTIN	T332	0	0	OK	-	-	-
01159ME700	SEAL, 2" RUBBER LMS-100, MARTIN	T332	2	2	OK	12.00	24.00	-
01159ME701	RING, PISTON SEAL, MARTIN	T332	2	2	OK	12.00	24.00	-
01159ME703	SLEEVE SUREFLEX 11E (for Martin Pump)	T333	1	1	OK	133.00	133.00	-
01159ME704	BUSHING, TAPER, Q.D., SFX 40MM	T333	2	2	OK	25.13	50.26	-
01159ME705	FLANGE, SURE FLEX, WOODS	T333	6	6	OK	53.91	323.46	-
1550ME073	BEARING, HP LINING	W WALL	1	1	OK	8,487.00	8,487.00	-
1350ME108	DC Motor, Clarifier Lime Feed Screw	W100	1	1	OK	-	-	-
0303EI100	Motor, Treated Water Makeup, 7.5 HP	W102	1	1	OK	-	-	-
1350EI018	Motor, Clarifier Turb Drive	W102	1	1	OK	937.50	937.50	-
1350EI030	Motor, Eff. Tank Mixer	W102	1	1	OK	610.00	610.00	-

Schedule 16A - Initial Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
11562ME100	BLOWER, LAMSON W/MOTOR	W201	1	1	OK	1,980.00	1,980.00	-
11562ME101	BLOWER, LAMSON W/MOTOR	W201	1	1	OK	2,831.00	2,831.00	-
16450ME309	BEARING, HEAD SHAFT, PILLOW BLOCK, 6 1/2	W202	1	1	OK	1,808.12	1,808.12	-
16450ME310	BEARING, HEAD SHAFT, PILLOW BLOCK, 6 1/2	W202	1	1	OK	1,842.74	1,842.74	-
03180ME001	BEARING, THRUST #3 F.D. FAN	W301	2	2	OK	8,737.09	17,474.18	-
35600EI009	TRANSFORMER, DRY TYPE, PH-1, 240 X 480 H	W301	0	0	OK	-	-	-
16453ME155	GEARBOX FOR #1 & #2 ECONO. SCREW W/2"OUTPUT S	W302	2	2	OK	1,695.05	3,390.09	-
30501ME059	Pump, Seal Water, with Motor	W401	1	1	OK	1,552.00	1,552.00	-
11556ME007	SHAFT, COND.	W502	0	0	OK	-	-	-
15109EI101	Motor, Trolley w/ Magnetorque 25 HP	W502	1	1	OK	14,956.00	14,956.00	-
30501EI350	Motor, Lime Prep Sump Mixer	W502	1	1	OK	251.76	251.76	-
30501ME640	GEARBOX FOR EKATO LIME PREP SUMP AGITATO	W502	1	1	OK	823.53	823.53	-
15109ME111	Gear assembly, hoist drum	W503	3	3	OK	9,576.76	28,730.28	-
16453ME025	PNEUMATIC CYLINDER FOR SH FLAP GATES	W503	1	1	OK	593.42	593.42	-
21350EI200	MOTOR, 200HP CT Fan / Baldor ECP4407T-4E SEVERE DUTY with 11	W503	1	1	OK	4,992.00	4,992.00	-
01159ME860	Shield, Heat (Dog House) 2 per Run = set	WW101	2	2	OK	2,155.90	4,311.79	-
20300ME001	Pump, Potable Water Booster	WW102	2	2	OK	2,310.00	4,620.00	-
15109ME152	ASSEMBLY, BRAKE TROLLEY ***PERM-1***	WW201	2	2	OK	3,255.00	6,510.00	-
01180ME019	Housing, Bearing (Cast Iron)	WW202	2	2	OK	610.18	1,220.36	-
20303MC001	Pump, SSH 2-1/2 x 3-6 (Pall System)	WW202	1	1	OK	4,590.00	4,590.00	-
30500ME055	LANCE, SHORT WHEELA.DRW.#N092-157-2	X100	1	1	OK	4,791.20	4,791.20	-
20300ME002	Pump, RO Booster (High Pressure)	X101	0	0	OK	-	-	-
16450ME128	SPROCKET, ROLLER CHAIN, DRIVEN #120,60T,	X103	2	2	OK	3,995.00	7,990.00	-
21350ME001	Pump, #3 cooling water booster pump Goulds 4SH2J52D0	X402	2	2	OK	1,791.00	3,582.00	-
01153EI001	Motor, Gas burner Draft Fan	X403	1	1	OK	992.50	992.50	-
01180ME001	HOUSING, BEARING AMERICAN DAV	X403	2	2	OK	2,000.00	4,000.00	-
21350EI120	Motor, Softener effluent pump	X403	1	1	OK	977.10	977.10	-
11550ME074	BEARING, LP LINING	X502	2	2	OK	12,000.00	24,000.00	-
21350ME018	SHAFT, PUMP ***PERM-1*** FOR 24X36DHC	X503	1	1	OK	2,311.00	2,311.00	-
30501ME100	SCREEN ASSEMBLY (dilution) FOR SWECO MOD.XS40C128 W	XX101	1	1	OK	284.55	284.55	-
30501ME200	SCREEN ASSEMBLY (slaker) FOR SWECO MOD.XS48A5A020M	XX101	1	1	OK	227.00	227.00	-
30501ME201	BOTTOM PLATE FOR SWECO MOD.XS48C66 LIME	XX101	1	1	OK	760.00	760.00	-
30501ME102	BOTTOM PLATE FOR MOD.XS40C128 DILUTION W	XX201	7	7	OK	463.75	3,246.24	-
11565EI100	Motor, EHC Pump, 10 HP	XX202	2	2	OK	758.80	1,517.59	-

Schedule 16A - I. Spare Parts List

ITEM #	DESCRIPTION	PICKING SEQ	QTY ON HAND	QTY FOUND	REMARKS	Cost Per Unit	Total Cost	Difference
0501ME101	CLAMP RING ASSEMBLY FOR SWECO MOD.XS40C1	XX202	3	3	OK	222.00	666.00	-
6450ME311	BEARING, BEND & TAKE-UP SHAFT W/END CAP,	XX203	1	1	OK	954.08	954.08	-
5109ME096	ASSEMBLY, BRIDGE MOTOR PINION SHAFT ***P	Y102	1	1	OK	2,498.72	2,498.72	-
5109ME109	Shaft assembly, hoist motor	Y201	1	1	OK	9,942.00	9,942.00	-
6450ME026	PISTON ROD FOR TLT ASH EXPELLARS MOD.3.2	Y201	1	1	OK	2,063.00	2,063.00	-
6450ME160	Through Shaft Assembly	Y201	1	1	OK	7,824.00	7,824.00	-
0303ME001	Pump, Treated Water / Goulds SSH Size IX2-8 Part # 10SH2K5	Y301	1	1	OK	1,798.00	1,798.00	-
01159ME861	Tube, Protective, for Connecting Rod	Y302	6	6	OK	398.75	2,392.50	-
5109ME098	BRAKE, BRIDGE (12SBE550ASCIH) ***PERM-1*	Y403	1	1	OK	1,990.00	1,990.00	-
5600E1010	COIL, DEMAGNETIZING, 440 VOLT	Y501	1	1	OK	150.00	150.00	-
01350ME017	IMPELLER, BRASS GOULDS COATED BY T.	Y502	0	0	OK	-	-	-
01183ME001	NOZZLE, OVERFIRE AIR MARTIN (SO	YY101	17	17	OK	337.85	5,743.42	-
5115ME029	Pad, Holding Line Equalizer Bar (#51)	YY101	4	4	OK	469.00	1,876.00	-
5109ME095	ASSEMBLY, BRIDGE MOTOR GEAR SHAFT ****P	YY102	1	1	OK	2,935.00	2,935.00	-
1550ME075	BEARING, #3 UNIT 1	YY201	1	1	OK	16,487.00	16,487.00	-
5109E1102	Magnet Coil for Holding/Closing Brake Assembly	YY202	1	1	OK	5,336.00	5,336.00	-
5109ME105	Reducer, speed, hoist	YY203	1	1	OK	-	-	-
5115ME031	SHEAVE, MAIN BEARING & WASHER PART FOR R	Z100	1	1	OK	2,018.00	2,018.00	-
5109E1099	Motor, Crane Bridge Drive	Z103	1	1	OK	17,710.00	17,710.00	-
6450ME041	WEAR PLATE, CHUTE FLOOR FOR TLT ASH EXPE	Z303	0	0	OK	-	-	-
6450ME061	Plate, Wear, Expeller Door Area	Z303	8	8	OK	470.26	3,762.09	-
6450ME062	Plate, Wear, Expeller Door Area	Z303	8	8	OK	471.15	3,769.20	-
5109ME097	ASSEMBLY, BRIDGE DRIVE TRUCK WHEEL ASSM.	Z403	1	1	OK	19,776.00	19,776.00	-
0501ME625	SCREW HEX CAP M12 X 80 FOR EKATO WATER S	Z403	0	0	OK	-	-	-
5109ME102	Wheel, Brake (holding) Brake drum to gear box	Z501	1	1	OK	5,506.00	5,506.00	-
5109ME103	Wheel, Brake (closing) Brake drum to motor	Z501	1	1	OK	885.00	885.00	-
0503ME037	Bag, Baghouse Filter Thimbleless	ZZ101	67	67	OK	54.05	3,621.12	-
6450ME005	Seal Retainer, inner	ZZ202	2	2	OK	545.67	1,091.33	-
6450ME006	Seal Retainer, outer	ZZ202	2	2	OK	482.50	965.00	-
6450ME012	Housing, seal retainer	ZZ202	2	2	OK	727.50	1,455.00	-
5109E1149	Brake, Magnetorque Eddy Current Ser 503285-10/06 2408A	ZZ203	1	1	OK	25,378.00	25,378.00	-
5109ME113	Shaft assembly, trolley intermediate	ZZ401	1	1	OK	4,635.24	4,635.24	-
5109ME114	Shaft assembly, trolley output	ZZ401	1	1	OK	6,285.96	6,285.96	-
5109ME110	Shaft assembly, hoist intermediate	ZZ402	1	1	OK	10,650.00	10,650.00	-

SYSTEMS NUMBERING LEGEND

System # 1 ~ #1 Boiler

System # 2 ~ #2 Boiler

System # 3 ~ #3 Boiler

System # 11 ~ #1 TG & Gen

System # 12 ~ #2 TG & Gen

System # 15 ~ Fuel Handling

System # 16 ~ Residue Handling

System # 17 ~ Materials Recovery

System # 20 ~ Feedwater

System #21 ~ Cooling Water

System # 22 ~ Wastewater

System # 25 ~ Internal Steam Distribution

System # 30 ~ Emissions

System # 34 ~ Distributed Control (DCS)

System # 35 ~ Electrical Power

System # 50 ~ General Plant

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Boiler #1			
01-150	Feed Hopper and Feed Chute System #1		
01-150-100	Feed Hopper #1		
01-150-200	Chute, Upper Feed #1		
01-150-300	Chute, Transition #1		
01-150-400	Damper, Feed Chute #1		
01-153	Auxiliary Fuel System #1		
01-153-100	Gas Burner, North Wall #1		
01-153-200	Gas Burner, South Wall #1		
01-153-300	Gas Piping, Vents and Drains		
01-156	Ram Feeder #1		
01-156-100	Ram Feeder Castings and Framemork #1		
01-156-200	Ram Feeder Hydraulics #1		
01-159	Grate Boiler #1		
01-159-100	Grate Run #1, Boiler #1		
01-159-200	Grate Run #2, Boiler#1		
01-159-300	Grate Run #3, Boiler #1		
01-159-400	Grate Run #4, Boiler #1		
01-159-500	Grate Run #5, Boiler #1		
01-159-600	Grate Run #6, Boiler #1		
01-159-700	Clinker Roll #1		
01-159-800	Hoppers, Grate Riddlings #1		
01-159-900	Martin Grease System - Boiler #1		
01-162	Hydraulic System #1		
01-162-100	Pump station, Hydraulic #1		
01-162-101	Pump & Motor #1 - Boiler #1		
01-162-102	Pump & Motor #2 - Boiler #1		
01-162-103	Pump & Motor #3 - Boiler #1		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
01-162-106	Piping, Hydraulic System #1		
01-165	Furnace Pressure Parts #1		
01-165-100	Water Wells, Furnace #1		
01-165-125	Water Walls, 2nd Pass #1		
01-165-150	Water Walls, 3rd Pass #1		
01-165-200	Steam Drum #1		
01-165-300	Boiler Supports, Hangers & Stays #1		
01-165-400	View Ports and Manway Doors #1		
01-168	Superheater Section #1		
01-168-100	Super Heater, Primary #1		
01-168-200	Super Heater, Secondary #1		
01-168-300	Super Heater, Evaporator #1		
01-168-300	Super Heater, Final #1		
01-171	Generator Section #1		
01-174	Economizer Section #1		
01-175	Cleaning, Boiler #1		
01-177	Steam Coil Air Heater #1		
01-178	Scaffolding, Boiler #1		
01-180	Primary Air System #1		
01-180-100	Fan, Forced Draft #1		
01-180-150	Motor, Forced Draft Fan #1		
01-180-200	Ducts, Dampers, Exp. Joints, Pri Air #1		
01-183	Secondary Air System #1		
01-183-200	Ducts, Dampers, Exp. Joints, Sec Air #1		
01-186	Refractory and Insulation #1		
01-186-100	Refractory, Tile, and Plastic Ram #1		
01-186-200	Insulation and Lagging #1		
01-189	Sootblowers and Rappers #1		
01-189-100	Sootblowers and Rappers #1		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
01-192	Chute, Ash Discharge #1		
01-195	Control Valves #1		
01-195-FCV-1102	Feedwater Control Valve		
01-198	Pressure Relief Valves #1		
01-198-PSV-1416	Valve, Steam Drum Primary Safety, BWSV-1		
01-198-PSV-1418	Valve, Steam Drum Scondry Safety, BWSV-2		
01-198-PSV-1420	Valve, Supetheater Safety, BWSV-3		
01-200	Piping, Vents & Drains Boller #1		
01-201	Instrumentation and Controls - Boiler #1		
01-201-100	Grate System I&C Boiler #1		
01-201-200	Martin I&C - Boiler #1		
01-201-300	Steam ard Attemperator I&C #1		
01-201-400	Combustion Air I&C #1		
01-201-500	Flue Gas I&C #1		
01-201-600	Auxillary Fuel I&C #1		
01-201-800	Pyrometer-Martin System		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Boiler #2			
02-150	Feed Hopper and Feed Chute System #2		
02-150-100	Feed Hopper #2		
02-150-200	Chute, Upper Feed #2		
02-150-300	Chute, Transition #2		
02-150-400	Damper, Feed Chute #2		
02-153	Auxillary Fuel System #2		
02-153-100	Gas Burner, North Wall #2		
02-153-200	Gas Burner, South Wall #2		
02-153-300	Gas Piping, Vents and Drains #2		
02-156	Ram Feeder #2		
02-156-100	Ram Feeder Castings and Framework. #2		
02-156-200	Ram Feeder Hydraulics #2		
02-159	Grates, Boiler #2		
02-159-100	Grate Run #1, Boiler #2		
02-159-200	Grate Run #2 Boiler #2		
02-159-300	Grate Run #3, Boiler #2		
02-159-400	Grate Run #4, Boiler #2		
02-159-500	Grate Run #5, Boiler #2		
02-159-600	Grate Run #6, Boiler #2		
02-159-700	Clinker Roll #2		
02-159-800	Hoppers, Grate Riddlings		
02-159-900	Martin Grease System - Boiler #2		
02-162	Hydraulic System #2		
02-162-100	Pump Station, Hydraulic #2		
02-162-101	Pump & Motor #1, Boiler #2		
02-162-102	Pump & Motor #2, Boiler #2		
02-162-103	Pump & Motor #3, Boiler #2		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
02-162-106	Piping, Hydraulic System #2		
02-165	Furnace Pressure Parts #2		
02-165-100	Water Walls, Furnace #2		
02-165-125	Water Walls, 2nd Pass #2		
02-165-150	Water Walls, 3rd Pass #2		
02-165-200	Steam Drurn #2		
02-165-300	Boiler Supports, Hangers & Stays #2		
02-165-400	View Ports and Manway Doors #2		
02-168	Super Heater Section #2		
02-168-100	Super Heater, Primary #2		
02-168-200	Super Heater, Secondary #2		
02-168-300	Super Heater, Evaporator #2		
02-168-300	Super Heater, Final #2		
02-171	Generator Section #2		
02-174	Economizer Section #2		
02-175	Cleaning, Boiler #2		
02-177	Steam Coil Air Heater #2		
02-178	Boiler Scaffolding #2		
02-180	Primary Air System #2		
02-180-100	Fan, Forced Draft #2		
02-180-150	Motor, Forced Draft Fan #2		
02-180-200	Ducts, Dampers, Exp. Joints, Pri Air #2		
02-183	Secondary Air System		
02-183-200	Ducts, Dampers, Exp. Joints, Sec Air		
02-183-200	Ducts, Dampers, Exp Joints Pri Air #2		
02-186	Refractory and Insulation #2		
02-186-100	Refractory, Tde. and Plastic Ram #2		
02-186-200	Insulation and Lagging #2		
02-189	Sootblowers and Rappers #2		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
02-189-100	Sootblowers and Rappers #2		
02-192	Ash Chute Discharge #2		
02-195	Control Valves #2		
02-195-FCV-2102	Feedwater Control Valve #2		
02-198	Pressure Relief Valves #2		
02-198-PSV-2416	Valve, Steam Drum Primary Safety, BWSV-1		
02-198-PSV-2418	Valve, Steam Drum Primary Safety, BWSV-2		
02-198-PSV-2420	Valve, Superheater Safety, BWSV-3		
02-200	Piping, Vents and Drains #2		
02-201	Instrumentation and Controls #2		
02-201-100	Grate System I&C #2		
02-201-200	Martin I&C - Boiler #2		
02-201-300	Steam and Attemperator I&C #2		
02-201-400	Combustion Air I&C #2		
02-201-500	Flue Gas I&C #2		
02-201-600	Auxiliary Fuel I&C #2		
02-201-800	Pyrometer-Martin System		

Schedule 16A - Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Boiler #3			
03-150	Feed Hopper and Feed Chute System #3		
03-150-100	Feed Hopper #3		
03-150-200	Chute, Upper Feed #3		
03-150-300	Chute, Transition #3		
03-150-400	Damper, Feed Chute #3		
03-153	Auxillary Fuel System #3		
03-153-100	Gas Burner, North Wall #3		
03-153-200	Gas Burner, South Wall #3		
03-153-300	Gas Piping, Vents and Drains #3		
03-156	Ram Feeder System #3		
03-156-100	Ram Feeder Castings and Framework #3		
03-156-200	Ram Feeder Hydraulics #3		
03-159	Grates, Boiler #3		
03-159-100	Grate Run #1, Boiler #3		
03-159-200	Grate Run #2, Boiler #3		
03-159-300	Grate Run #3, Boiler #3		
03-159-400	Grate Run #4, Boiler #3		
03-159-500	Grate Run #5, Boiler #3		
03-159-600	Grate Run #6, Boiler #3		
03-159-700	Clinker Roll #3		
03-159-800	Hoppers, Grate Riddlings #3		
03-159-900	Martin Grease System - Boiler #3		
03-162	Hydraulic System #3		
03-162-100	Pump Station, Hydraulic #3		
03-162-101	Pump & Motor #1 - Boiler #3		
03-162-102	Pump & Motor #2 - Boiler #3		
03-162-103	Pump & Motor #3 - Boiler #3		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
03-162-106	Piping, Hydraulic System #3		
03-165	Furnace Pressure Pads #3		
03-165-100	Water Walls, Furnace #3		
03-165-125	Water Walls, 2nd Pass #3		
03-165-150	Water Walls, 3rd Pass #3		
03-165-200	Steam Drum #3		
03-165-300	Boiler Supports, Hangers & Stays #3		
03-165-400	View Ports and Manway Doors #3		
03-168	Superheater Section #3		
03-168-100	Super Heater, Primary #3		
03-168-200	Super Heater, Secondary #3		
03-168-300	Super Heater, Evaporator #3		
03-168-300	Super Heater, Final #3		
03-171	Generator Section #3		
03-174	Economizer Section #3		
03-175	Cleaning, Boiler #3		
03-177	Steam Coil Air Heater #3		
03-178	Boiler Scaffolding #3		
03-180	Primary Air System #3		
03-180-100	Fan, Forced Draft #3		
03-180-150	Motor, Forced Draft Fan #3		
03-180-200	Ducts, Dampers, Exp. Joints, Pri Air #3		
03-183	Secondary Air System		
03-183-200	Ducts, Dampers, Exp. Joints, Sec Air		
03-183-200	Ducts, Dampers, Exp Joints Pri Air #3		
03-186	Refractory and Insulation #3		
03-186-100	Reftctory, Tile, and Plastic Ram #3		
03-186-200	Insulation and Lagging #3		
03-189	Soothlowers, and Rappers #3		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
03-189-100	Sootblowers and Rappers #3		
03-192	Chute, Ash Discharge #3		
03-195	Control Valves #3		
03-195-FCV-2102	Feedwater Control Valve		
03-195-FCV-3102	Feedwater Control Valve #3		
03-198	Pressure Relief Valves #3		
03-198-PSV-2416	Valve, Steam Drum Primary Safety, BWSV-1		
03-198-PSV-2418	Valve, Steam Drum Primary Safety, BWSV-2		
03-198-PSV-2420	Valve, Superheater Safety, BWSV-3		
03-200	Piping, Vents & Drains #3		
03-201	Instrumentation and Controls		
03-201-100	Grate System I&C #3		
03-201-200	Martin I&C - B-103		
03-201-300	Steam and Attemperator I&C #3		
03-201-400	Combustion Air I&C #3		
03-201-500	Flue Gas I&C #3		
03-201-600	Auxillary Fuel I&C #3		
03-201-800	Pyrometer-Martin System		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Turbine Generator #1			
11-200	Piping, Vents and Drains TG#1		
11-201	Instrumentation and Controls TG#1		
11-201-100	TurboNet Turbine Control System TG #1		
11-201-200	Extraction System Control Valves TG #1		
11-201-300	Generator Instrumentation & Controls TG#1		
11-201-400	Turbine Auxiliary Instr. & Controls TG#1		
11-201-500	Bypass Condenser Instr. & Controls TG#1		
11-550	Turbine #1		
11-550-200	Turbine Valves, Drains, and Vents TG#1		
11-550-300	Turbine Extraction System Piping TG#1		
11-550-500	Turbine - Inspection and Testing TG#1		
11-553	Generator #1		
11-553-001	Generator Neutral Grounding Resistor, TG#1		
11-553-002	Generator Exciter System TG#1		
11-556	Turbine Condensate System TG#1		
11-556-100	Pump, Hotwell #1 TG#1		
11-556-200	Pump, Hotwell #2 TG#1		
11-556-250	Pump, Hotwell #3 TG#1		
11-556-300	Surface Condenser TG#1		
11-559-400	By-Pass Condenser TG#1		
11-562	Lube Oil System TG#1		
11-562-100	Pump, Turbine Lube Oil #1 TG#1		
11-562-200	Pump, Turbine Lube Oil #2 TG#1		
11-562-300	Pump, Turbine Lube Oil, Emergency TG#1		
11-562-400	Conditioner, Turbine Lube Oil TG#1		
11-562-500	Cooler, Turbine Lube Oil #1 TG#1		
11-562-600	Cooler, Turbine Lube Oil #2 TG#1		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
11-562-700	Extractor Turbine Lube Oil Vapor TG#1		
11-562-800	Hydrogen Seal Oil Control Unit TG#1		
11-562-810	Bearing Drain Enlargement Exhauster TG#1		
11-565	T/G Auxillaries TG#1		
11-565-100	EHC Control Oil System - TG#1		
11-565-200	Holding Ejector System - TG#1		
11-565-300	Hogging Ejector System -- TG#1		
11-565-400	Gland Steam System - TG#1		
11-565-500	Hydrogen System for Generator - TG#1		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Turbine Generator #2			
12-200	Piping, Vents and Drains TG #2		
12-201	Instrumentation and Controls TG #2		
12-201-100	Turbine Mark V Control System TG #2		
12-201-200	Extraction System Control Valves TG #2		
12-201-300	Generator Instrumentation & Controls TG#2		
12-201-400	Turbine Auxilliary Instr. & Controls TG#2		
12-201-500	Bypass Condenser Instr. & Controls TG#2		
12-550	Turbine #2		
12-550-200	Turbine Valves, Drains, and Vents TG#2		
12-550-300	Turbine Extraction System Piping TG#2		
12-550-500	Turbine - Inspection and Testing TG#2		
12-553	Generator #2		
11-553-001	Generator Neutral Grounding Resistor, TG#2		
12-553-002	Generator Exciter System TG#2		
12-556	Turbine Condensate System #2		
12-556-100	Pump, Hotwell #1 TG#2		
12-556-200	Pump, Hotwell #2 TG#1		
12-556-300	Surface Condenser TG#2		
12-559-400	By-Pass Condenser TG#2		
12-562	Lube Oil System #2		
12-562-100	Pump, Turbine Lube Oil #1 TG#2		
12-562-200	Pump, Turbine Lube Oil #2 TG#2		
12-562-300	Pump, Turbine Lube Oil Emergency TG#2		
12-562-400	Conditioner, Turbine Lube Oil TG#2		
12-562-500	Cooler, Turbine Lube Oil #1 TG#2		
12-562-600	Cooler, Turbine Lube Oil #2 TG#2		
12-562-700	Extractor, Turbine Lube Oil Vapor TG#2		

Schedule 16A - Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
12-565	T/G Auxilliaries #2		
12-565-100	EHC Control Oil System - TG#2		
12-565-200	Holding Ejector System - TG#2		
12-565-300	Hogging Ejector System - TG#2		
12-565-400	Gland Steam System - TG#2		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Fuel Handling			
15-109	Refuse Cranes		
15-109-100	South Refuse Crane (#1)		
15-109-121	Festoon System - Bridge - South (#1)		
15-109-122	Festoon System - Trolley - South (#1)		
15-109-140	Auxiliary Hoist (#1)		
15-109-160	Crane Controls, Elect. and Lighting (#1)		
15-109-180	Cables, #1 Crane		
15-109-200	Middle Refuse Crane (#2)		
15-109-221	Festoon System - Bridge - Middle (#2)		
15-109-222	Festoon System - Trolley - Middle (#2)		
15-109-260	Crane Controls, Elect. and Lighting (#2)		
15-109-280	Cables, #2 Crane		
15-109-300	North Refuse Crane (#3)		
15-109-321	Festoon System - Bridge - North (#3)		
15-109-322	Festoon System - Trolley - North (#3)		
15-109-360	Crane Controls, Elect. and Lighting (#3)		
15-109-380	Cables, #3 Crane		
15-109-500	Crane Pulpit - Refuse Cranes		Upgraded in 2001
15-109-600	Refuse Crane MCC Rm.& Resistor Bnks(1&2)		
15-109-650	Refuse Crane MCC Rm.& Resistor Banks (3)		
15-109-700	Crane Bridge Rails		
15-115	Grapples		
15-115-001	Grapple, #1 Refuse Crane		
15-115-002	Grapple, #2 Refuse Crane		
15-115-003	Grapple, #3 Refuse Crane		
15-118	Tipping Floor and Refuse Pit		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Residue Handling			
13-453-131	Valves, Dbl Dump, Super Heater Hoppers		
16-201	Instrumentation and Controls - Ash System		
16-201-101	Level Detector #1, Nuclear, Surge Bin #1		
16-201-102	Level Detector #2, Nuclear, Surge Bin #1		
16-201-103	Level Detector #3, Nuclear, Surge Bin #1		
16-201-201	Level Detector #1, Nuclear, Surge Bin #2		
16-201-202	Level Detector #2, Nuclear, Surge Bin #2		
16-201-203	Level Detector #3, Nuclear, Surge Bin #2		
16-450	Bottom Ash System		
16-450-100	Boiler #1 Bottom Ash System		
16-450-110	Hydraulic Station, Boiler #1 Expellers		
16-450-120	Expeller, Ram Ash #1A		
16-450-130	Expeller, Ram Ash #1 B		
16-450-200	Boiler #2 Bottom Ash System		
16-450-210	Hydraulic Station, Boiler #2 Expellers		
16-450-220	Expeller, Ram Ash #2A		
16-450-230	Expeller, Ram Ash #2B		
16-450-300	Boiler #3 Bottom Ash System		
16-450-310	Hydraulic Station, Boiler #3 Expellers		
16-450-320	Expeller, Ram Ash #3A		
16-450-330	Expeller, Ram Ash #3B		
16-450-500	Conveyor, Vib Bottom Ash Collecting #1		
16-450-520	Conveyor, Vib Bottom Ash Collecting #2		
16-450-540	Conveyor, Vib Bottom Ash Collecting #3		
16-450-600	Conveyor, Bottom Ash Incline Belt #1		
16-450-620	Conveyor, Vibrating Combined Ash Distribution		
16-450-640	Diverter Gate #1		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
16-450-CNV1.6	Conveyor, Wet Riddling Drag, Boiler #1		
16-450-CNV1.7	Conveyor, Dry Riddling Drag, Boiler #1		
16-450-CNV2.6	Conveyor, Wet Riddling Drag, Boiler #2		
16-450-CNV2.7	Conveyor, Dry Riddling Drag, Boiler #2		
16-450-CNV3.6	Conveyor, Wet Riddling Drag, Boiler #3		
16-450-CNV3.7	Conveyor, Dry Riddling Drag, Boiler #3		
16-453	Flyash System		
16-453-100	Boiler Fly Ash System		
16-453-110	Boiler #1 Fly Ash System		
16-453-111	Valves, Dbl Dump, Super Heater Hoppers, Boiler #1		
16-453-112	Conveyors, Econ. Screw, Bir #1		
16-453-114	Valves, Dbl Dump, Ash X-fer Screw Boiler #1		
16-453-115	Valve, Dbl Dump, SDA Breaching - Boiler #1		
16-453-120	Boiler #2 Fly Ash System		
16-453-121	Valves, Dbl Dump, Super Heater Hoppers, Boiler #2		
16-453-122	Conveyors, Econ. Screw, Boiler #2		
16-453-124	Valves, Dbl Dump, Ash X-fer Screw Boiler #2		
16-453-125	Valves Dbl Dump, SDA Breaching - Bir #2		
16-453-130	Boiler #3 Fly Ash System		
16-453-131	Valves, Dbl Dump, Super Heater Hoppers Boiler #3		
16-453-132	Conveyors, Econ. Screw, Boiler #3		
16-453-134	Valves, Dbl Dump, Ash X-fer Screw Boiler #3		
16-453-135	Valves, Dbl Dump, SDA Breaching - Boiler #3		
16-453-200	SDA FlyAsh System		
16-453-210	Boiler #1 SDA Ash System		
16-453-220	Boiler #2 SDA Ash System		
16-453-230	Boiler #3 SDA Ash System		
16-453-300	Fabric Filter Fly Ash System		
16-453-310	Boiler #1 Fabric Filter Ash System		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
16-453-312	Double Dump Valves, FF Ash Drag Conv #1A		
16-453-314	Conveyor, FF Flyash Collection Screw #1A		
16-453-316	Double Dump Valves, FF Ash Drag Conv #1B		
16-453-318	Conveyor, FF Flyash Collection Screw #1B		
16-453-320	Boiler #2 Fabric Filter Ash System		
16-453-322	Double Dump Valves, FF Ash Drag Conv #2A		
16-453-324	Conveyor, FF Flyash Collection Screw #2A		
16-453-326	Double Dump Valves, FF Ash Drag Conv #2B		
16-453-328	Conveyor, FF Flyash Collection Screw #2B		
16-453-330	Boiler #3 Fabric Filter Ash System		
16-453-332	Double Dump Valves, FF Ash Drag. Conv #3A		
16-453-334	Conveyor, FF Fly Ash Collection Screw #.3A		
16-453-336	Double Dump Valves, FF Ash Drag Conv #3B		
16-453-338	Conveyor, FF Fly Ash Collection Screw #3B		
16-453-400	Common Fly Ash System and Conditioner		
16-453-410	Flyash Conditioner Train #1		
16-453-411	Surge Bin, Fly Ash #1		
16-453-412	Feeder, Fly Ash Rotary #1		
16-453-413	Pug Mill, Fly Ash #1		
16-453-420	Fly Ash Conditioner Train #2		
16-453-421	Surge Bin, Fly Ash #2		
16-453-422	Feeder, Fly Ash Rotary #2		
16-453-423	Pug Mill, Fly Ash #2		
16-453-500	Vent System, Fly Ash Building		
16-453-510	Dust collector, Fly Ash Building		
16-453-520	Blower, Fly Ash Building Dust Collector		
16-453-CNV1.2	Conveyor, SDA #1 Drag		
16-453-CNV1.3	Conveyor, Fly Ash Transfer Drag #1		
16-453-CNV1.5	Conveyor, Economizer Transfer Drag #1		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
16-453-CNV2.2	Conveyor, SDA #2 Drag		
16-453-CNV2.3	Conveyor, Fly Ash Transfer Drag #2		
16-453-CNV2.5	Conveyor, Economizer Transfer Drag #2		
16-453-CNV3.2	Conveyor, SDA #3 Drag		
16-453-CNV3.3	Conveyor, Fly Ash Transfer Drag #3		
16-453-CNV3.5	Conveyor, Economizer Transfer Drag #3		
16-453-CNV4	Conveyor, Inclined Transfer Drag		
16-458	WES-Phix System		
16-458-100	Tank Phos Acid		
16-458-201	Pump, Phos Acid Metering #1		
16-458-202	Pump, Phos Acid Metering #2		
16-458-203	Pump, Phos Acid Metering #3		
16-458-500	Piping, Vents, and Drains		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Feedwater System			
20-201	Instrumentation and Controls, Feedwater		
20-201-100	Feedwater Pump & Motor Instr. & Controls		
20-201-200	Demin System Instr. & Controls		
20-201-300	Deaerator Instr. & Controls		
20-201-400	Process Water Instr. & Controls		
20-201-500	Chem Feed System & Lab Instr. & Controls		
20-300	City / Process Water System		
20-300-100	Pump, City Water Booster #1		
20-300-101	Pump, City Water Booster #2		
20-300-103	Pump, RO Booster #1		
20-200-104	Pump, RO Booster #2		
20-300-105	Pump, RO Acid		
20-300-200	Filters, Mixed Media		
20-300-201	Pump, Mixed Media Filters Backwash		
20-300-202	Blower, Mixed Media Filters Backwash		
20-300-210	Filters, Sand		
20-300-220	Filters, Cuno		
20-300-231	RO #1		
20-300-232	Pump, RO High Pressure #1		
20-300-233	RO #2		
20-300-234	Pump, RO High Pressure #2		
20-300-235	Pump, RO cleaning		
20-300-236	Tank, RO cleaning		
20-300-240	Subsystem Decarbonator		
20-300-241	Pump, Decarbonator #1		
20-300-242	Pump, Decarbonator #2		
20-300-300	Pump, Potable Water A		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
20-300-400	Pump, Potable Water B		
20-300-430	Backflow Preventer, City Water		
20-300-500	Piping, Vents and Drains - City Water		
20-303	Demin System		
20-303-100	Demineralized Water System		
20-303-101	Tank, Storage #1, Treated Water		
20-303-102	Tank Storage #2, Treated Water		
20-303-110	Pump #1, Treated Water Make Up		
20-303-120	Pump #2, Treated Water Make Up		
20-303-130	Pump #3, Treated Water Make Up		
20-303-140	Pump #4, Treated Water Make Up		
20-303-150	Pump #5, Treated Water Make Up		
20-303-160	Pump #6, Treated Water Make Up		
20-303-190	Piping, Demin Water		
20-303-200	Demineralizer, Caustic Regeneration Sys		
20-303-210	Tank, Caustic Storage		
20-303-211	Pump, Caustic Regen #1		
20-303-212	Pump, Caustic Regen #2		
20-303-221	Vessel, Anion #1		
20-303-222	Vessel, Anion #2		
20-303-290	Piping, Caustic System		
20-303-300	Demineralizer Acid Regeneration System		
20-303-310	Tank, Acid Storage		
20-303-311	Pump, Acid Regen #1		
20-303-312	Pump Acid Regen #2		
20-303-321	Vessel, Cation #1		
20-303-322	Vessel, Cation #2		
20-303-390	Piping, Acid System		
20-303-400	Demineralized Neutralization System		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
20-303-410	Tank, Neutralization		
20-303-411	Pump, Neutralization Caustic		
20-303-412	Pump, Neutralization Acid		
20-303-413	Pump, Neutralization Mixing		
20-303-490	Piping, Neutralization System		
20-303-500	Pall Trinity Micro Filters		
20-303-600	Herc-1 50 RO System		
20-312	Boiler Chemical Treatment System		
20-312-100	Tank Chemical Feed, Boiler #1		
20-312-110	Pump, Chemical Feed "A", Boiler #1		
20-312-120	Pump, Chemical Feed "B", Boiler #1		
20-312-130	Tank, Chemical Feed, Boiler #2		
20-312-140	Pump, Chemical Feed "A", Boiler #2		
20-312-150	Pump, Chemical Feed "B", Boiler #2		
20-312-200	Tank Chemical Feed, Boiler #3		
20-312-210	Pump, Chemical Feed #1, Boiler #3		
20-312-220	Pump, Chemical Feed #2, Boiler #3		
20-318	Feed Systems		
20-318-201	Heater, #1 Feed Water		
20-318-202	Heater, #2 Feed Water		
20-318-210	Pump, Elect.Feed Water #1- Boilers #1 & #2		
20-318-220	Purrip, Steam Feed Water #2- Boilers #1 & #2		
20-318-230	Pump, Elect- Feed Water #3- Boiler #3		
20-318-240	Pump, Steam Feed Water #4- Boiler #3		
20-318-300	Deareator System		
20-318-301	Deareator #1, Boilers #1 & #2		
20-318-302	Deareator #2, Boiler #3		
20-318-303	Tank, Deaerator Chemical Feed #1		
20-318-304	Pump #1, Deaerator Chemical Feed		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
20-318-305	Pump #2, Deaerator Chemical Feed		
20-318-306	Tank, Deaerator Chemical Feed #2		
20-318-307	Pump #3, Deaerator Chemical Feed		
20-318-308	Pump #4, Deaerator Chemical Feed		
20-318-500	Piping - Feedwater System		
20-320-500	Pall Water Treatment system		
20-320-501	Permeate Water Tank		
20-320-502 & 503	Permeate Water Pumps (2)		
20-320-510	Microfiltration Module		
20-320-520	Feed Tank		
20-320-530	Recirculation Pump		
20-320-540	Air Receiver		
20-320-550	RO		
20-320-555	RO Pump		
20-320-560	Filtrate Water Tank		
20-320-561 & 562	Filtrate Tank Feed Pumps (2)		
20-530-535	Reverse Filtration Pump		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Cooling Water System			
21-200	Cooling Water Systems		
21-201	Instrumentation & Controls, Cooling Water		
21-201-100	Cooling Tower Instr. & Control		
21-201-200	C.T. Chem Feed Sys. Instr & Control		
21-201-300	Component Cooling Instr. & Controls		
21-201-400	Water Softener Inst. & Control		
21-201-AI206	Water Softener Clarifier Discharge Turbidity		
21-201-AIC 207	Water Softener Reaction Chamber pH		
21-201-AIC 306	Water Softener Clarifier Effluent pH		
21-201-AT 206	Water Softener Clarifier Discharge Turbidity		
21-201-AT-207	Water Softener Reaction Chamber pH		
21-201-AT-306	Water Softener Clarifier Effluent pH		
21-201-FI 100	Water Softener Storm Water Flow		
21-201-FI-101	Water Softener Tertiary Flow		
21-201-FIC 100	Water Softener Storm Water Flow		
21-201-FIC 400	Water Softener Carbon Filter Discharge Flow		
21-201-FR 1	Water Softener Flow Recorder (Main Control Room)		
21-201-FR 2	Water Softener Flow Recorder (WS MCC Room)		
21-201-FR 90	Water Softener Storm Flow Recorder (Pump Station)		
21-201-FT 100	Water Softener Storm Water Flow		
21-201-FT 101	Water Softener Tertiary Inlet Flow		
21-201-FT 400	Water Softener Carbon Filter Discharge Flow		
21-201-FT 90	Water Softener Storm Water Flow (pump sta.)		
21-201-FY 100	Water Softener Storm Water Flow		
21-201-I/I 102/	Water Softener Penalty Gal/Effluent ph		
21-201-I/I 102/3	Water Softener Pen. Gal/Effluent ph		
21-201-I/I 90	Water Softener Chrt. Recorder Current Isolator		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
21-201-LIC 1433	#1 Cooling Tower Level Indicating Controller		
21-201-LT 1433	Cooling Water Sump Level X-mtr		
21-201-PG 1433a	Cooling Water Pump "A" Press Gauge		
21-201-PG 1433b	Cooling Water Pump "B" Press Gauge		
21-201-PG 1433c	Cooling Water Pump "C" Press Gauge		
21-201-PI 1441	#1 Cooling Water Supply Header Press		
21-201-PT 1441	#1 Cooling Water Supply Header Press		
21-201-TI 1010	Water Soft. Clarifier Torque		
21-201-TI 113/1	#2 TG Bypass Cond. Cooling Water Temps		
21-201-TI 126	#2 TG Cooling Water Temp		
21-201-TI1432.5	#1 Cooling Water Supply/Return		
21-201-TT 1010	Water Softener Clarifier Torque		
21-201-TT1432-1	#1 Cooling Water Return		
21-201-TT1432-2	#1 Cooling Water Supply Temp		
21-201-TY 113a	#2 TG Bypass Cond. Cooling Water Inlet Temp		
21-201-TY 113b	#2 TG Bypass Cond. Cooling Water Inlet Temp		
21-201-TY 114a	#2 TG Bypass Cond. Cooling Water Inlet Temp		
21-201-TY 126a	#2 TG Cooling Water Temperature		
21-201-TY 126b	#2 TG Cooling Water Temperature		
21-350	Cooling Water System		
21-350-100	Cooling Tower Structure		
21-350-210	Pump, Cooling Tower Circulating Water #1		
21-350-220	Pump, Cooling Tower Circulating Water #2		
21-350-230	Pump, Cooling Tower Circulating Water #3		
21-350-310	Pump, Cooling Water Booster #1		
21-350-320	Pump, Cooling Water Booster #2		
21-350-410	Fan #1, Cooling Tower		
21-350-420	Fan #2, Cooling Tower		
21-350-430	Fan #3, Cooling Tower		

Schedule 16A - Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
21-350-440	Fan #4, Cooling Tower		
21-350-450	Fan #5, Cooling Tower		
21-350-510	Motor, Cooling Tower Fan #1		
21-350-520	Motor, Cooling Tower Fan #2		
21-350-530	Motor, Cooling Tower Fan #3		
21-350-540	Motor, Cooling Tower Fan #4		
21-350-550	Motor, Cooling Tower Fan #5		
21-350-800	Storm Water System		
21-350-801	Generator, Storm Water Emergency		
21-350-804	Pump #1, Storm Water Supply		
21-350-805	Pump #2, Storm Water Supply		
21-350-806	Storm Water Chlorine Injection System		
21-350-810	Pump, Chlorine Ejector Booster		
21-350-820	Tank, Softener Clarifier		
21-350-821	Turbine Drive, Clarifier		
21-350-822	Rake Drive, Clarifier		
21-350-823	Tank, Clarifier Effluent		
21-350-824	Tank Mixer, Clarifier Effluent		
21-350-825	Pump #1, Clarifier Effluent		
21-350-826	Pump #2, Clarifier Effluent		
21-350-827	Filter #1, Water Softener Carbon		
21-350-828	Filter #2, Water Softener Carbon		
21-350-829	Pump #1, Clarifier Sludge Underflow		
21-350-830	Pump #2, Clarifier Sludge Underflow		
21-350-831	Tank, Clarifier Sludge Settling		
21-350-832	Pump #1, Clarifier Sludge Transfer		
21-350-833	Pump #2, Clarifier Sludge Transfer		
21-350-834	Silo, Softener Hydrated Lime		
21-350-835	Vent, Bin, Softener Lime Silo		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
21-350-836	Feeder, Softener Lime		
21-350-837	Tank, Softener Lime Slurry		
21-350-838	Mixer, Softener Lime Slurry Tank		
21-350-839	Pump #1, Softener Lime Slurry Feed		
21-350-840	Pump #2, Softener Lime Slurry Feed		
21-350-841	Tank, Softener/Acid		
21-350-842	Pump #1, Softener Acid		
21-350-843	Pump #2, Softener Acid		
21-350-844	Tank, Softener Ferric Chloride		
21-350-845	Pump #1, Softener Ferric Chloride		
21-350-846	Pump #2, Softener Ferric Chloride		
21-350-847	Tank, Softener Sodium Carbonate		
21-350-848	Pump #1, Softener Sodium Carbonate		
21-350-849	Pump #2, Softener Sodium Carbonate		
21-350-850	Tank, Softener Polymer		
21-350-851	Blender, Softener Polymer		
21-350-852	Pump #1, Softener Polymer Feed		
21-350-853	Pump #2, Softener Polymer Feed		
21-350-900	Piping & Valves, Cooling Water		
21-353	Cooling Water Treatment Systems		
21-353-100	Chlorination System, Cooling Water		
21-353-210	Pump, CW Corrosion Inhibitor		
21-353-250	Tank, CW Corrosion Inhibitor Storage		
21-353-310	Pump, CW Dispersant		
21-353-350	Tank, CW Dispersant		
21-353-410	Pump, CW Acid		
21-353-450	Tank, CW Acid		
21-353-900	Piping, CW Treatment		

Schedule 16A - Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Wastewater System			
22-201	Instrumentation and Controls		
22-400	Contact Water System		
22-400-100	Sump, Contact Water		
22-400-110	Pump 1A, Contact Water		
22-400-120	Pump 1B, Contact Water		
22-400-130	Pump 2A, Contact Water		
22-400-140	Pump 2B, Contact Water		
22-400-200	Tank, Contact Water Storage		
22-400-210	Pump, Waste Water #1		
22-400-220	Pump, Waste Water #2		
22-400-300	Tank, Continuous Blow Down		
22-400-300	Tank, Intermittent Blow Down		
22-400-310	Sump, Blow Down		
22-400-311	Pump #1, Blow Down Sump		
22-400-312	Pump #2, Blow Down Sump		
22-400-400	Pump #1, Basin Lift		
22-400-410	Pump #2, Basin Lift		
22-400-500	Pump, Boiler Washdown		
22-400-600	Blowdown Heat Exchanger		
22-400-650	Blowdown Heat Exchanger		
22-400-900	Piping, Washdown		
22-407	Sanitary System		
22-407-100	Pump, Sanitary Lift (Maintenance Shop)		
22-407-900	Piping, Sanitary Above and Below Ground		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Internal Steam Distribution			
25-201	Steam & Condensate Instr. and Controls		
25-201-101	Flow Element Boiler #1, Orifice Plates		
25-201-102	Flow Element Boiler #2, Orifice Plates		
25-201-103	Flow Element Boiler #3, Venturi		
25-250	Steam and Condensate System		
25-250-100	High Pressure Steam		
25-250-101	Main Steam, Boiler #1		
25-250-102	Main Steam, Boiler #2		
25-250-103	Main Steam, Boiler #3		
25-250-200	Condensate System		
25-250-201	Condensate System, Boiler #1		
25-250-202	Condensate System, Boiler #2		
25-250-203	Condensate System, Boiler #3		
25-250-300	Low Pressure Steam		
25-250-301	Low Pressure Steam, Boiler #1		
25-250-302	Low Pressure Steam, Boiler #2		
25-250-303	Low Pressure Steam, Boiler #3		
25-250-400	Steam Traps		
25-250-500	Condensate System and Vessels		
25-250-590	Piping, Condensate		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Emissions System			
30-201	Instrumentation and Controls		
30-201-011	#1 SDA Instr. & Controls		
30-201-012	#2 SDA Instr. & Controls		
30-201-013	#3 SDA Instr. & Controls		
30-201-021	#1 FF Instr. & Controls		
30-201-022	#2 FF Instr. & Controls		
30-201-023	#3 FF Instr. & Controls		
30-201-FF1-1	Level Detector #1, Nuclear, FF #1		
30-201-FF1-2	Level Detector #2, Nuclear FF #1		
30-201-FF1-3	Level Detector #3, Nuclear FF #1		
30-201-FF1-4	Level Detector #4, Nuclear FF #1		
30-201-FF1-5	Level Detector #5, Nuclear FF #1		
30-201-FF1-6	Level Detector #6, Nuclear FF #1		
30-201-FF1-7	Level Detector #7, Nuclear FF #1		
30-201-FF1-8	Level Detector #8, Nuclear FF #1		
30-201-FF1-9	Level Detector #9, Nuclear FF #1		
30-201-FF1-10	Level Detector #10, Nuclear, FF #1		
30-201-FF1-11	Level Detector #11, Nuclear FF #1		
30-201-FF1-12	Level Detector #12, Nuclear FF #1		
30-201-FF2-1	Level Detector #1, Nuclear, FF #2		
30-201-FF2-2	Level Detector #2, Nuclear FF #2		
30-201-FF2-3	Level Detector #3, Nuclear FF #2		
30-201-FF2-4	Level Detector #4, Nuclear FF #2		
30-201-FF2-5	Level Detector #5, Nuclear FF #2		
30-201-FF2-6	Level Detector #6, Nuclear FF #2		
30-201-FF2-7	Level Detector #7, Nuclear FF #2		
30-201-FF2-8	Level Detector #8, Nuclear FF #2		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
30-201-FF2-9	Level Detector #9, Nuclear FF #2		
30-201-FF2-10	Level Detector #10, Nuclear, FF #2		
30-201-FF2-11	Level Detector #11, Nuclear FF #2		
30-201-FF2-12	Level Detector #12, Nuclear FF #2		
30-201-FF3-1	Level Detector #1, Nuclear, FF #3		
30-201-FF3-2	Level Detector #2, Nuclear FF #3		
30-201-FF3-3	Level Detector #3, Nuclear FF #3		
30-201-FF3-4	Level Detector #4, Nuclear FF #3		
30-201-FF3-5	Level Detector #5, Nuclear FF #3		
30-201-FF3-6	Level Detector #6, Nuclear FF #3		
30-201-FF3-7	Level Detector #7, Nuclear FF #3		
30-201-FF3-8	Level Detector #8, Nuclear FF #3		
30-201-FF3-9	Level Detector #9, Nuclear FF #3		
30-201-FF3-10	Level Detector #10, Nuclear, FF #3		
30-201-FF3-11	Level Detector #11, Nuclear FF #3		
30-201-FF3-12	Level Detector #12, Nuclear FF #3		
30-201-I/I100/1	Water, Storm Water/Effluent Flow		
30-201-PI867B	Lime Prep. Seal Water Press Gauge		
30-201-PI871A	Lime Prep. Seal Water Press Gauge		
30-201-PI871B	Lime Prep. Seal Water Press Gauge		
30-201-PT098	#1 SDA Outlet D.P.		
30-201-TT3117	Transmitter, Temp. Boiler #3		
30-500	Spray Dryer Absorbers		
30-500-100	Spray Dryer #1		
30-500-110	Live Bottom, Spray Dryer #1		
30-500-115	Spray Dryer #1 Live Bottom Vibrator		
30-500-120	Spray Dryer #1, Slide Gates, Drag Conveyor		
30-500-140	Spray Dryer #1, Hopper Nuclear Level Detector		
30-500-160	Spray Dryer #1. Hopper Heater		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
30-500-200	Spray Dryer #2		
30-500-210	Live Bottom, Spray Dryer #2		
30-500-215	Spray Dryer #2 Live Bottom Vibrator		
30-500-220	Spray Dryer #2, Slide Gates, Drag Conveyor		
30-500-240	Spray Dryer #2, Hopper Nuclear Level Detector		
30-500-260	Spray Dryer #2. Hopper Heater		
30-500-300	Spray Dryer #3		
30-500-310	Live Bottom, Spray Dryer #3		
30-500-315	Spray Dryer #3 Live Bottom Vibrator		
30-500-320	Spray Dryer #3. Slide Gates, Drag Conveyor		
30-500-340	Spray Dryer #3. Hopper Nuclear Level Detector		
30-500-360	Spray Dryer #3. Hopper Heater		
30-501	Lime Slurry Systems		
30-501-100	Slaker Train A		
30-501-110	Slaker A		
30-501-120	Feeder, Lime A		
30-501-140	Blower, Lime Slaker A		
30-501-150	Grit Screen A		
30-501-200	Slaker Train B		
30-501-210	Slaker B		
30-501-220	Feeder, Lime B		
30-501-240	Blower, Lime Slaker B		
30-501-250	Grit Screen B		
30-501-300	Silo, Pebble Lime		
30-501-301	Bin Vent, Pebble Lime Silo		
30-501-302	Live Bottom, Pebble Lime Silo		
30-501-400	Tank, Dilution Water		
30-501-410	Mixer, Dilution Tank		
30-501-420	Pump, Dilution Water A		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
30-501-430	Pump, Dilution Water B		
30-501-440	Screen, Dilution Water Grit		
30-501-500	Tank, Lime Slurry Storage		
30-501-501	Mixer, Lime Slurry Storage Tank		
30-501-520	Pump, Lime Slurry A1		
30-501-525	Pump, Lime Slurry A2		
30-501-530	Pump, Lime Slurry B1		
30-501-535	Pump, Lime Slurry B2		
30-501-540	Pump, Lime Prep Sump		
30-501-545	Mixer, Lime Prep Sump		
30-501-550	Pump, Seal Water #1		
30-501-555	Pump, Seal Water #2		
30-501-560	Pump, Service Water A		
30-501-565	Pump, Service Water B		
30-501-570	Pump, Tertiary Water Make Up #1		
30-501-575	Pump, Tertiary Water Make Up #2		
30-501-600	Lime Slurry Injection, Spray Dryer #1		
30-501-700	Lime Slurry injection, Spray Dryer #2		
30-501-800	Lime Slurry Injection, Spray Dryer #3		
30-501-900	Piping, Lime Slurry		
30-503	Fabric Filter System		
30-503-100	Fabric Filter Unit 1		
30-503-101	Compartment, FF 1-1		
30-503-102	Compartment, FF 1-2		
30-503-103	Compartment, FF 1-3		
30-503-104	Compartment, FF 1-4		
30-503-105	Compartment, FF 1-5		
30-503-106	Compartment, FF 1-6		
30-503-107	Compartment, FF 1-7		

Schedule 16A - Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
30-503-108	Compartment, FF 1-8		
30-503-109	Compartment, FF 1-9		
30-503-110	Compartment, FF 1-10		
30-503-111	Compartment, FF 1-11		
30-503-112	Compartment, FF 1-12		
30-503-150	Dampers, Deflation #1		
30-503-160	Fan, Deflation, FF #1		
30-503-170	Level Detector, FF #1		
30-503-171	Hopper Vibrators, FF #1		
30-503-172	Hopper Heaters, FF #1		
30-503-173	Shaker Motors, FF #1		
30-503-200	Fabric Filter Unit 2		
30-503-201	Compartment, FF 2-1		
30-503-202	Compartment, FF 2-2		
30-503-203	Compartment, FF 2-3		
30-503-204	Compartment, FF 2-4		
30-503-205	Compartment, FF 2-5		
30-503-206	Compartment, FF 2-6		
30-503-207	Compartment, FF 2-7		
30-503-208	Compartment, FF 2-8		
30-503-209	Compartment, FF 2-9		
30-503-210	Compartment FF, 2-10		
30-503-211	Compartment FF, 2-11		
30-503-212	Compartment FF, 2-12		
30-503-250	Dampers, Deflation #2		
30-503-260	Fan, Deflation, FF #2		
30-503-261	Level Detector, FF #2		
30-503-262	Hopper Vibrators, FF #2		
30-503-263	Hopper Heaters, FF #2		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
30-503-264	Shaker Motors, FF #2		
30-503-300	Fabric Filter Unit 3		
30-503-301	Compartment, FF 3-1		
30-503-302	Compartment, FF 3-2		
30-503-303	Compartment, FF 3-3		
30-503-304	Compartment, FF 3-4		
30-503-305	Compartment, FF 3-5		
30-503-306	Compartment, FF 3-6		
30-503-307	Compartment, FF 3-7		
30-503-308	Compartment, FF 3-8		
30-503-309	Compartment, FF 3-9		
30-503-310	Compartment, FF 3-10		
30-503-311	Compartment, FF 3-11		
30-503-312	Compartment, FF 3-12		
30-503-350	Dampers, Deflation #3		
30-503-360	Fan, Deflation, FF #3		
30-503-361	Level Detector, FF #3		
30-503-362	Hopper Vibrators, FF #3		
30-503-363	Hopper Heaters, FF #3		
30-503-364	Shaker Motors, FF #3		
30-504	Carbon Injection System		
30-504-???	Blower #1, Silencer		
30-504-???	Blower #2, Silencer		
30-504-???	Blower #3, Silencer		
30-504-???	Blower #4, Silencer		
30-504-001	Silo, Carbon		
30-504-002	Bin Vent, Carbon Silo		
30-504-003	Control Panel, Carbon Injection		
30-504-100	Carbon Injection Train #1		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
30-504-110	Blower #1, Carbon Injection		
30-504-131	Feeder, Rotary #1, Carbon Injection		
30-504-140	Hoppers, Surge and Support for Carbon Injection #1		
30-504-150	Feeder, Screw #1, Carbon Injection		
30-504-152	Eductor #1, Carbon Injection		
30-504-200	Carbon Injection Train #2		
30-504-210	Blower #2, Carbon Injection		
30-504-231	Feeder, Rotary #2, Carbon Injection		
30-504-240	Hoppers, Surge and Support for Carbon Injection #2		
30-504-250	Feeder, Screw #2, Carbon Injection		
30-504-252	Eductor #2, Carbon Injection		
30-504-300	Carbon Injection Train #3		
30-504-310	Blower #3, Carbon Injection		
30-504-331	Feeder, Rotary #3, Carbon Injection		
30-504-340	Hoppers, Surge and Support for Carbon Injection #3		
30-504-350	Feeder, Screw #3, Carbon Injection		
30-504-352	Eductor #3, Carbon Injection		
30-504-400	Carbon Injection Train #4		
30-504-410	Blower #4, Carbon Injection		
30-504-430	Feeder, Screw #4, Carbon Injection		
30-504-431	Feeder, Rotary #4, Carbon Injection		
30-504-440	Hoppers, Surge and Support for Carbon Injection #4		
30-504-452	Eductor #4, Carbon Injection		
30-504-500	Valves & Piping, Carbon Injection		
30-505	SNCR NOx-Out Urea Injection System		
30-505-001	Control System		
30-505-100	SNCR Train #1		
30-505-110	SNCR Metering Module Train #1		
30-505-111	Pump, SNCR Metering #1A		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
30-505-112	Pump, SNCR Metering #1B		
30-505-113	Pump, SNCR Water Booster #1A		
30-505-114	Pump, SNCR Water Booster #1B		
30-505-121	Module, SNCR Distribution #1A		
30-505-122	Module, SNCR Distribution #1B		
30-505-123	Module, SNCR Distribution #1C		
30-505-124	Module, SNCR Distribution #1D		
30-505-130	Injectors, SNCR - Boiler #1		
30-505-200	SNCR Train #2		
30-505-210	SNCR Metering Module Train #2		
30-505-211	Pump, SNCR Metering #2A		
30-505-212	Pump, SNCR Metering #2B		
30-505-213	Pump, SNCR Water Booster #2A		
30-505-214	Pump, SNCR Water Booster #2B		
30-505-221	Module, SNCR Distribution #2A		
30-505-222	Module, SNCR Distribution #2B		
30-505-223	Module, SNCR Distribution #2C		
30-505-224	Module, SNCR Distribution #2D		
30-505-230	Injectors, SNCR - Boiler #2		
30-505-300	SNCR Train #3		
30-505-310	SNCR Metering Module Train #3		
30-505-311	Pump, SNCR Metering #3A		
30-505-312	Pump, SNCR Metering #3B		
30-505-313	Pump, SNCR Water Booster #3A		
30-505-314	Pump, SNCR Water Booster #3B		
30-505-321	Module, SNCR Distribution #3A		
30-505-322	Module, SNCR Distribution #3B		
30-505-323	Module, SNCR Distribution #3C		
30-505-324	Module, SNCR Distribution #3D		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
30-505-330	Injectors, SNCR - Boiler #3		
30-505-500	Tank, SNCR / Urea Storage		
30-505-510	Circulation Module, Urea, SNCR System		
30-505-511	Pump, SNCR Urea Circulation #1		
30-505-512	Pump, SNCR Urea Circulation #2		
30-505-515	Heater, Urea / SNCR System		
30-505-800	Instrumentation, Urea / NOx-Out Urea Sys		
30-505-900	Valves & piping, SNCR, NOx-Out Urea Sys		
30-509	Emissions Monitoring System CEMS		
30-509-???	CEM Enclosure		
30-509-???	Data Acquisition System		
30-509-101	CEMS, Unit #1		
30-509-102	CEMS, Unit #2		
30-509-103	CEMS, Unit #3		
30-509-201	Opacity Monitor, Unit #1		
30-509-202	Opacity Monitor, Unit #2		
30-509-203	Opacity Monitor, Unit #3		
30-512	I.D. Fans		
30-512-100	Fan, I.D. #1		
30-512-110	Motor, I.D. #1		
30-512-150	Lube Oil System, I.D. #1		
30-512-200	Fan, I.D. #2		
30-512-210	Motor, I.D. #2		
30-512-250	Lube Oil System, I.D. #2		
30-512-300	Fan, I.D. #3		
30-512-310	Motor, I.D. #3		
30-512-350	Lube Oil System, I.D. #3		
30-515	Stack		
30-515-100	Obstruction Lighting System		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Distributed Control System			
34-201	Instrumentation and Controls		
34-201-100	Controls, Gas Burners		
34-201-DCS	Bailey - Control Room Components		
34-201-PCU1	Process Control Unit #1 - Boiler #1		
34-201-PCU2	Process Control Unit #2 - Boiler #2		
34-201-PCU3	Process Control Unit #3 - Boiler #3		
34-201-PCU5	Process Control Unit #5 - Boiler Common		
34-201-PCU6	Process Control Unit #6 - T/G & Aux.		
34-201-PCU7	Process Control Unit #7 - G.E. Interface		
34-201-PCU8	Process Control Unit #8 - WAPC		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Electrical Power System			
35-600	Internal Power		
35-600-900	Lighting System		
35-600-BAT1	Station Batteries, #1		
35-600-BAT2	Station Batteries, #2		
35-600-CHGR1	Battery Charger, #1		
35-600-CHGR2	Battery Charger, #2		
35-600-BDTG1	Buss Duct, #1 TG		
35-600-BDTG2	Buss Duct, #2 TC		
35-600-MCC101	Motor Control Center, MCC-101 4160V		
35-600-MCC102	Motor Control Center, MCC-102 480V		
35-600-MCC103	Motor Control Center, MCC-103 4160V		
35-600-MCC104	Motor Control Center, MCC-104 480V		
35-600-MCC105	Motor Control Center, MCC-105 480V		
35-600-MCC106	Motor Control Center, MCC-106 480V		
35-600-MCC1	Motor Control Center, MCC-1 480V		
35-600-MCC2	Motor Control Center, MCC-2 480V		
35-600-MCC3	Motor Control Center, MCC-3 480V		
35-600-MCC4	Motor Control Center, MCC-4 480V		
35-600-RR01	Motor Control Center, R&R RR-01		
35-600-RR02	Motor Control Center, R&R RR-02		
35-600-SWG1	Switchgear 13.8 KV #1		
35-600-SWG2	Switchgear 13.8 KV #2		
35-600-TR-101	Transformer, TR-101 13.8 KV - 4160V		
35-600-TR-102	Transformer, TR-102 13.8 KV - 480V		
35-600-TR-103	Transformer, TR-103 13.8 KV - 480V		
35-600-TR-104	Transformer, TR-104 13.8 KV - 4160V		
35-600-TR-105	Transformer, TR-105 13.8 KV - 480V		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
35-600-TR-106	Transformer, TR-106 13.8 KV - 480V		
35-600-TR-109	Transformer, TR-109 480V-120/480V		
35-600-UPS1	UPS #1		
35-600-UPS2	UPS #2		
35-603	External Power/Switch Yard		
35-603,CCPT2	Coupling Capacitor, Pot. Trans. #2		
35-603-AS01	Switch, Air S-01		
35-603-AS02	Switch, Air S-02		
35-603-AS03	Switch, Air S-03		
35-603-AS04	Switch, Air S-04		
35-603-CCPT1	Coupling Capacitor, Pot. Trans. #1		
35-603-CCPT3	Coupling Capacitor, Pot. Trans. #3		
35-603-LPS	Lightning Protection		
35-603-NG01	Transformer, Neutral Grounding #1		
35-603-NG02	Transformer, Neutral Grounding #2		
35-603-NGR1	Resistor, Neutral Grounding #1		
35-603-NGR2	Resistor, Neutral Grounding #2		
35-603-OCB1	Circuit Breaker, Oil #1		
35-603-GCB2	Circuit Breaker, Gas #2		
35-603-TR01	Transformer, Main Step Up #1		
35-603-TR02	Transformer, Main Step Up #2		
35-606	Electrical Relays and Metering		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
General Plant			
50-001	HVAC System		
50-001-100	AC Units, Water and Air Cooled		
50-001-136	Piping, Drains & Vents		
50-001-300	Fans, Building Supply and Exhaust		
50-001-ADMIN	AC Unit, Admin Building		
50-001-Process	HVAC Units, Process Building		
50-001-REMOTE	HVAC Units, Remote		
50-003	Compressed Air System		
50-003-100	Air Compressors		
50-003-110	Compressor, Process Air, A		
50-003-120	Compressor, Process Air, B		
50-003-130	Compressor, Process Air, C		
50-003-200	Receivers, Air		
50-003-201	Receiver A, Air Compressor		
50-003-202	Receiver B, Air Compressor		
50-003-300	Driers, Instrument Air		
50-003-301	Dryer, Spray Dryer, Instrument Air		
50-003-302	Dryer, Process Building Instrument Air		
50-003-303	Dryer, Instrument Air Refrigerant		
50-003-400	Cooling System, Air Compressor		
50-003-410	Pump A, Compressor Coolant		
50-003-420	Pump B, Compressor Coolant		
50-003-430	Cooler A, Air Compressor		
50-003-440	Cooler B, Air Compressor		
50-003-450	Heat Exchanger A, Air Compressor		
50-003-460	Heat Exchanger B, Air Compressor		
50-003-500	Piping, Process Air		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
50-003-510	Piping, Instrument Air		
50-006	Communications System		
50-006-100	Plant Telephone System		
50-006-200	Plant Paging System		
50-009	Fire Protection System		
50-009-100	Firewater Pumping System		
50-009-110	Pump, Fire Protection - Electric		
50-009-120	Pump, Fire Protection - Diesel		
50-009-121	Tank, Diesel for Fire Protection Pump		
50-009-130	Pump, Fire Protection - Jockey		
50-009-150	Building, Fire Pump House		
50-009-200	Above Ground Fire Water System		
50-009-210	Piping, Tipping Floor - Fire Protection		
50-009-220	Piping, Refuse Pit - Fire Protection		
50-009-230	Piping, Warehouse - Fire Protection		
50-009-235	Piping, Maint. Shop - Fire Protection		
50-009-240	Piping, Admin. Building - Fire Protection		
50-009-250	Piping, Process Building - Fire Protection		
50-009-260	Piping, Turbine Area - Fire Protection		
50-009-270	Piping, Miscellaneous - Fire Protection		
50-009-290	Piping, Ash House - Fire Protection		
50-009-300	Piping, Below Ground Fire Water		
50-009-400	Portable Extinguishers - Fire Protection		
50-009-500	Alarms & Controls - Fire Protection		
50-015	Administration Building		
50-018	Process Building		
50-018-100	Elevator, Freight		
50-018-200	Overhead Doors		
50-018-400	Control Room		

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
50-018-500	Building, Roofing and Siding		
50-018-600	Floors & Grating, Process Building		
50-024	Lighting System - Internal & External		
50-024-100	Lighting System - Internal		
50-024-150	Lighting System, Emergency		
50-024-200	Lighting System - External		
50-030	Machine Shop Bldg.		
50-031	Warehouse Bldgs (2)		

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Material Recovery System - RSPB			
17-462	Building, ASPB Material Recovery Bldg		
17-462-018	Structure, ASPB Roof Floor & Walls		
17-462-024	Lighting, ASPB		
17-462-300	Dust Collector, ASPB		(Scrubber)
17-462-410	Diverter Gate #1		(Item 1)
17-462-420	Vibratory Conveyor #1		(Item 2)
17-462-430	Belt Conveyor #1		(Item 3)
17-462-440	Diverter Gate #2		(Item 4)
17-462-450	Vibratory Conveyor #2		(Item 5)
17-462-600	Electrical Power, ASPB Internal		

Need to update this to reflect equipment in new RSPB (this list is for old ASPB).

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Mobile & Portable Equipment			
Lifts			
	Fork Lift – Skid Steer	Hyster/50	
	Hand Pallet Truck		
	Hand Pallet Truck		
Front End Loaders			
50-042-110	Front End Loader	Volvo BM/L120C	Tipping Floor
50-042-120	Front End Loader	John Deere/644E	Tipping Floor
50-042-130	Front End Loader	Volvo/L220E	Tipping Floor
Skid Steer Loaders			
	Skid Steer Loader	Bobcat/763	
Misc. Mobile Equip.			
50-042-001	Tank, Diesel Fuel Storage		
50-042-002	Tank, Unleaded Fuel Storage		
50-042-301	Truck, Ford F-150		
Machine Shop			
	Pipe Threader	Rigid/535	Machine Shop
	Band Saw	HYD-Mech/S-20	Machine Shop
	Grinder	Baldor/1245W (2 HP)	Pedestal Mounted – Machine Shop
	Grinder	Baldor/8107 WD (¾ HP)	Pedestal Mounted – Machine Shop
	Drill Press	UCIMU/139772	Hydraulic – Machine Shop
	Drill Press	Wilton	Electric – Machine Shop
	Lathe	Tarnow/TUJ50M	Machine Shop
	Power Band Saw (Hand)	Milwaukee	

Schedule 16A - Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
Welding Machines			
	Welding Machine	Miller Gold Star 452	SN KJ126036
	Welding Machine	Miller Gold Star 452	SN KJ126035
Miscellaneous			
	Oxy-Acetylene cutting rig w/tips	Victor	
	One ton chain fall		
	2 - power puller come-a-long		
	Telephones and intercoms		
Computers			
	Computers DCS Control System	Dell	3 clients / 2 servers
			4 - 20" flat screen monitor
			2 - 32" flat panel monitors
			HP 4650 graphics Printer
			Pintex alarm printer
	Martin Engineering Computer w /monitor	Dell	w/monitor
	Laptop Computer	DELL	E&I Shop (A-B PLC interface)
	Laptop Computer	Compaq	
	TG#1 Turbo Net I	HMI Interface/monitor/printer	
	TG#2 Turbo Net I	HMI Interface/monitor	
	CEMS Operator Interface	Dell	
	CEM ESC Computer/printer	Dell	
	Feed Chute CCTV Cameras		
	Engineering Workstation for DCS	Dell	Client (w/monitor)
E&I Test Equipment			
	Pressure Calibrator	Fluke/718-100G	E&I Shop (Provided as part of CRP)

Schedule 16A - Initial Equipment List

Equipment List	Equipment Description	Manufact./Model (Capacity)	Comment
	Multifunction Process Calibrator	Fluke/725	E&I Shop (Provided as part of CRP
	Instrument Communicator	Hart/275	E&I Shop (Interface with Rosemount and Fisher)

SCHEDULE 16B

CRITICAL SPARE PARTS

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
01153E1003	SCANNER FIREYE #45UV5-1009 SELF-CHECK UV	instrument	\$1,167.05	Whse	Each		FF400	Classic Controls Inc
01159E1605	Pyrometer, IR	instrument	\$6,470.00	Whse	Each		BB100	Wintronics Inc.
01159E1607	Switch, proximity type IF5811	Electric	\$143.33	Whse	Each		BB601	Excelebrate
01159E1617	Valve, proportional, 4/3, NG6 (grates)	Hydrauli	\$2,653.00	Whse	Each		BB101	GULF CONTROLS
01159ME824	CYLINDER, SMALL CLINKER ROLL DRIVE, 80 X	Hydrauli	\$741.51	Whse	Each		Z100	HYDRAULICS & FABRICATION
	GRATE DRIVE HYDRAULIC PUMP							
	GRATE DRIVE HYDRAULIC PUMP MOTOR							
NO 1 F. D. FAN								
01180E1001	MOTOR, FD FAN, 1000 HP, 1200 RPM, 4160 V	Motor	\$11,484.00	Whse	Each		W100	
01180ME001	HOUSING, BEARING AMERICAN DAV	Bearing	\$2,000.00	Whse	Each		S110	
01180ME018	Housing, Bearing (Cast Steel)	Bearing	\$2,061.44	Whse	Each		CC603	KAMAN INDUSTRIAL TECHNOLOGIES
01180ME019	Housing, Bearing (Cast Iron)	Bearing	\$610.18	Whse	Each		CC603	
	ROTOR							
SECONDARY AIR								
01183ME010	SPROCKET #1/450075K2-20MM	Sprocket	\$40.00	Whse	Each		BB401	
01183ME011	SPROCKET #1/4675911K10-20MM	Sprocket	\$40.00	Whse	Each		BB401	
I&C								
01201E1013	PANEL CONTROL MARTIN	Board	\$932.90	Whse	Each		BB401	
01201E1014	MOTOR W/GEAR BOX MARTIN	Motor	\$759.60	Whse	Each		BB403	
01201E1015	CHAIN TENSIONER 320Z3 MARTIN	Grates	\$60.00	Whse	Each		BB500	
01201E1040	DIRECTIONAL VALVE, REXROTH D05H W/PILOT C	Hydrauli	\$503.54	Whse	Each		FF502	
	ATTEMPER VALVE PARTS							
NO 3 F. D. FAN								
03180ME001	BEARING, THRUST #3 F.D. FAN	Bearing	\$8,737.09	Whse	Each		W301	
	ROTOR							
NO 1 TURBINE								
11550ME014	WEIGHT, BALANCE, G E	Turbine	\$110.00	Whse	Each		G103	
11550ME015	WEIGHT, BALANCE, G E	Generato	\$150.00	Whse	Each		G103	
11550ME016	WEIGHT, BALANCE, G E	Generato	\$140.00	Whse	Each		G103	
11550ME017	WEIGHT, BALANCE, G E	Generato	\$160.00	Whse	Each		G103	
11550ME018	WEIGHT BALANCE G.E.	Generato	\$21.00	Whse	Each		G103	
11550ME019	WEIGHT, BALANCE, G E	Turbine	\$140.00	Whse	Each		G103	
11550ME020	WEIGHT, BALANCE, G E	Generato	\$110.00	Whse	Each		G103	
11550ME021	WEIGHT, BALANCE, G E	Generato	\$160.00	Whse	Each		G103	
11550ME022	WEIGHT, BALANCE, G E	Generato	\$149.00	Whse	Each		G103	
11550ME024	WEIGHT BALANCE GE	Generato	\$49.00	Whse	Each		G103	
11550ME026	WEIGHT BALANCE G.E.	Generato	\$39.00	Whse	Each		G103	
11550ME040	RING, PACKING Item 004	Turbine	\$1,350.00	Whse	Kit		G203	
11550ME041	RING, PACKING Item 003	Turbine	\$2,100.00	Whse	Kit		G203	Turbo Parts
11550ME042	RING, PACKING	Turbine	\$1,326.00	Whse	Kit		G203	
11550ME048	RING, THRUST (Active)	Turbine	\$2,990.88	Whse	Each		G403	
11550ME049	RING, THRUST (Inactive)	Turbine	\$50.00	Whse	Each		G403	
11550ME071	Diaphragm, Blowout(#1)	Turbine	\$1,906.66	Whse	Each		F802	
11550ME073	BEARING, HP LINING	Bearing	\$8,487.00	Whse	Each		Y503	
11550ME074	BEARING, LP LINING	Bearing	\$12,000.00	Whse	Each		Y503	
11550ME075	BEARING, #3 UNIT 1	Bearing	\$16,487.00	Whse	Each		Y503	
	SERVO VALVE							
	PROXIMITY PROBES							
	TRIP SOLENOID							

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
	BEARING NO 4 AIR ASSIST CHECK VALVES							
GENERATOR NO 1								
11553E1026	TRANSDUCER	instrument	\$1,550.00	Whse	Each		G103	
11553E1045	Brush Carbon, Type 634	Turbine	\$25.00	Whse	Each		G403	Turbo Parts
CONDENSATE NO 1								
11556E1001	Motor, #1 TG condensate, 30 hp	Motor	\$3,033.33	Whse	Each		S221	Tampa Armature Works
11556ME002	BEARING, PIPE BRASS	Bearing	\$20.00	Whse	Each		I552	
11556ME004	IMPELLER, BRASS ROTOR, 1/R, PART# B6378A	Pumps	\$334.00	Whse	Each		I552	
11556ME005	BEARING, PIPE BRASS	Bearing	\$15.64	Whse	Each		I662	
11556ME006	BOWL, INTERMEDIATE FOR COND. PUMP ***PER	Pumps	\$451.34	Whse	Each		G303	
11556ME007	SHAFT, COND	Pumps	\$200.00	Whse	Each		W502	
11556ME008	Seal, Mechanical, John Crane	Seal	\$1,324.00	Whse	Each		G403	Hudson Pump
11556ME012	GASKET, #1 BYPASS CONDENSER, SHELL & TUB	Gasket	\$767.17	Whse	Each		W100	
11556ME100	GASKET, RUBBER CONDENSER, G.E.	Gasket	\$31.00	Whse	Each		Y503	
11556ME101	Pump, Condensate, 4 stage	Pumps	\$10,199.20	Whse	Each		Behind Warehous	
LUBE OIL NO 1								
11562E1001	Motor, L.O. Conditioner Blower	Motor	\$101.51	Whse	Each	HPRPMFRAME 1/41725GA48	Q111	
11562E1002	Motor, #1 TG L.O. Tank Exhauster	Motor	\$167.72	Whse	Each	HPRPMFRAME 1.503480143T	Q111	
11562ME100	BLOWER, LAMSON W/MOTOR	Pumps	\$1,980.00	Whse	Each		W201	
11562ME101	BLOWER, LAMSON W/MOTOR DC LUBE OIL PUMP DC MOTOR	Pumps	\$2,831.00	Whse	Each		W201	
AUX TURBINE NO 1								
11565E1100	Motor, EHC Pump, 10 HP	Motor	\$758.80	Whse	Each	HPRPMFRAME 10.001170256T	S222	
11565ME104	Pump, EHC Hydraulic, Viton Trim	Pumps	\$1,964.52	Whse	Each		F604	
11565ME147	RING, HYDROGEN SEAL	Generato	\$1,908.85	Whse	Kit		G203	
11565ME149	SEAL, INNER	Seal	\$1,200.00	Whse	Each		G303	
11565ME150	RING, HYDROGEN SEAL	Turbine	\$1,000.00	Whse	Each		G303	
11565ME151	RING, HYDROGEN SEAL	Generato	\$1,000.00	Whse	Each		G303	
11565ME152	RINGS, HYDROGEN SEAL FOR #1 T/G	Turbine	\$8,406.05	Whse	Each		G403	
TURBINE NO 2								
12201E1001	PROBE, PROXIMITY TRANSDUCER, BENTLEY NEV	instrument	\$105.50	Whse	Each		DD100	
12201E1002	PROXIMITOR, TRANSDUCER, BENTLEY NEVADA	instrument	\$427.85	Whse	Each		DD100	
12201E1003	PROBE, VIBE PART# 2096J15-0	Turbine	\$267.00	Whse	Each		DD100	
12201E1004	PROBE PROXIMITY	Turbine	\$88.00	Whse	Each		DD100	
12201E1005	PROBE, PROXIMITY TRANSDUCER, BENTLEY NEV	instrument	\$121.00	Whse	Each		DD200	
12201E1006	PROBE PROXIMITY TRANSDUCER, BENTLEY NEV	instrument	\$349.00	Whse	Each		DD200	
12201E1008	PROBE #300-03-00-33-24-01	instrument	\$525.00	Whse	Each		DD200	
12201E1009	PROBE, PROXIMITY, BENTLEY NEVADA	instrument	\$525.00	Whse	Each		DD200	
12201E1010	CABLE, EXTENSION, (TRANSDUCERS) BENTLY N	instrument	\$110.00	Whse	Each		DD200	
12201E1011	PROBE PROX. BENTLY NEVADA #21505-00-28	instrument	\$145.00	Whse	Each		DD200	
12201E1012	CABLE, EXTENSION G.E.	instrument	\$36.00	Whse	Each		DD200	
12201E1013	CONTROL, PICK UP MAG SPD FOR #2 TG DL-09	Turbine	\$406.00	Whse	Each		DD400	
12201E1029	BOARD, INVERTER 120VT ***PERM-2*** COP	Board	\$750.00	Whse	Each		DD500	
12201E1030	BOARD, PC ASSEMBLY INVERT ***PERM-1***	Board	\$200.00	Whse	Each		DD500	

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
12201E1042	PROBE AXIAL	instrument	\$123.00	Whse	Each		DD500	
12201E1044	DIRECTIONAL VALVE & COIL ASSM. #2 TURBIN	Turbine	\$10,076.85	Whse	Each		DD501	
12201E1048	GEAR, MOTOR, GE	Gearbox	\$429.51	Whse	Each		DD503	
12201E1051	Valve, Servo, #2 T/G	Turbine	\$5,059.14	Whse	Each		DD600	Turbo Parts
	BEARING NO 1							
	BEARING NO 2							
	BEARING NO 3							
	BEARING NO 4							
	BRUSHES (EXCITER)							
	TRIP SOLENOID							
	AIR ASSIST CHECK VALVES							
TURBINE NO 2								
12550ME030	SEAL #09499929P0033	Seal	\$1,877.20	Whse	Each		G202	
12550ME037	SHIM-THRUST #03136J44POO1	Turbine	\$1,249.25	Whse	Each		G203	
12550ME038	SHIM-THRUST #03136J44P0002	Turbine	\$1,249.25	Whse	Each		G203	
12550ME110	STEM GUIDE BRACKET #09480033P002	Turbine	\$1,411.70	Whse	Each		G302	
12550ME123	SEAT #09499929P0004	Turbine	\$1,902.85	Whse	Each		G401	
12550ME140	DIAPHRAGM, BLOWOUT(#2)	Turbine	\$950.00	Whse	Each		F802	Turbo Parts
CONDENSATE NO2								
12556E1001	Motor, #2 TG condensate, 20 HP	Motor	\$1,817.00	Whse	Each	HPRPMFRAME 20.003646C256LP10	S221	
12556ME007	IMPELLER, BRONZE, 10KA-H 6.50 DIA	Pumps	\$179.00	Whse	Each		I773	
LUBE OIL NO 2								
12562E1001	Motor, #2 TG L.O. Exhauster	Motor	\$271.00	Whse	Each	HPRPMFRAME 2.003460145T	Q111	
12562E1002	Motor, #2 TG L.O. Cond. Trans Pump	Motor	\$266.39	Whse	Each	HPRPMFRAME 1.501740145T	Q111	
	DC LUBE OIL PUMP							
	DC MOTOR							
	EHC PUMP							
	EHC MOTOR							
T/G AUXILIARIES NO 2								
12565ME003	Pump, Screw IMO-3, Steel Case W-C-flange Mount	Pumps	\$3,989.00	Whse	Each	IMO 3-Screw Pump Model C3EBCS-200 with steel case and c-flange mount	Floor	Hudson Pump
REFUSE CRANE								
15109E1099	Motor, Crane Bridge Drive	Motor	\$8,462.37	Whse	Each		Y203	Tampa Armature Works
15109E1100	Motor, Crane Hoist/Close	Motor	\$22,497.65	Whse	Each		S222	Tampa Armature Works
15109E1101	Motor, Trolley w/ Magnetorque 25 HP	Motor	\$4,500.00	Whse	Each		R332	Tampa Armature Works
15109E1102	Coil, Magnet	Electric	\$5,336.00	Whse	Each		T444	MORRIS MATERIAL HANDLING
15109E1103	Rectifier, Brake for 16" to 23" SBE Assm	Electric	\$2,786.16	Whse	Each		T223	MORRIS MATERIAL HANDLING
15109E1104	Vacuum reversers, bridge & trolley	Electric	\$3,585.21	Whse	Each		K661	MORRIS MATERIAL HANDLING
15109E1105	Vacuum reverser, Hold & close	Electric	\$5,991.00	Whse	Each		T333	MORRIS MATERIAL HANDLING
15109E1107	Relay, bridge overload	Electric	\$1,010.64	Whse	Each		K772	MORRIS MATERIAL HANDLING
15109E1114	Transformer, current, hold & close	Electric	\$1,028.50	Whse	Each		K772	MORRIS MATERIAL HANDLING
15109E1115	Interrupter, circuit, hold & close	Electric	\$1,211.20	Whse	Each		K661	MORRIS MATERIAL HANDLING
15109E1116	Resistor, trolley grid	Electric	\$1,172.50	Whse	Each		K662	MORRIS MATERIAL HANDLING
15109E1117	Resistor, trolley forcing assembly	Electric	\$791.60	Whse	Each		K771	MORRIS MATERIAL HANDLING
15109E1118	Resistor, trolley forcing assembly	Electric	\$463.40	Whse	Each		K771	MORRIS MATERIAL HANDLING

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
15109ME125	Coupling, semi-flex (Trolley)	Coupling	\$565.00	Whse	Each		K774	
15109ME126	Coupling, semi-flex (Trolley)	Coupling	\$664.41	Whse	Each		K663	
15109ME128	Wheel, drive/idler	Mechanic	\$1,045.76	Whse	Each		K664	
15109ME129	Coupling, Semi-Flex, Bridge	CranePar	\$2,574.37	Whse	Each		K662	
15109ME130	Retainer, Inboard Bearing, Bridge	CranePar	\$2,157.00	Whse	Each		K771	MORRIS MATERIAL HANDLING
15109ME143	BEARING, FAG 6306-27R-C3-L12	Bearing	\$14.78	Whse	Each		K112	KAMAN INDUSTRIAL TECHNOLOGIES
15109ME144	BEARING, TIMKEN 42343DE	Bearing	\$228.37	Whse	Each		K112	KAMAN INDUSTRIAL TECHNOLOGIES
15109ME146	BRAKE, WHEEL TROLLEY ***PERM-3***	CranePar	\$405.00	Whse	Each		K441	
15109ME149	SHAFT, PINION ***PERM-1*** SHAFT	CranePar	\$1,233.56	Whse	Each		K224	
15109ME150	Pinion, Bridge Truck	CranePar	\$2,422.00	Whse	Each		K224	MORRIS MATERIAL HANDLING
15109ME152	ASSEMBLY, BRAKE TROLLEY ***PERM-1***	CranePar	\$2,777.00	Whse	Each		K224	
15109ME153	BRAKE, WHEEL FOR BRIDGE ***PERM-1***	CranePar	\$2,101.00	Whse	Each		K332	MORRIS MATERIAL HANDLING
15109ME154	BEARING, NEEDLE P&H	Bearing	\$51.00	Whse	Each		K332	
15109ME155	RETAINER, BEARING FOR CRANE PINION, P&H	Bearing	\$555.28	Whse	Each		K333	
15109ME156	CAP, BEARING RETAINER FOR TH BRIDGE TRUC	Bearing	\$367.40	Whse	Each		K333	MORRIS MATERIAL HANDLING
15109ME158	BEARING, TROLLEY BRAKE ASSEMBLY, MCGILL	Bearing	\$3.01	Whse	Each		K443	
15109ME159	BEARING, TROLLEY BRAKE ASSEMBLY	Bearing	\$6.78	Whse	Each		K443	
15109ME160	BEARING, CRANE, P&H	Bearing	\$20.35	Whse	Each		K551	
15109ME161	SEAL, OIL P&H CRANE	Seal	\$15.17	Whse	Each		K551	
15109ME162	BEARING, ROLLER P&H CRANE	Bearing	\$139.60	Whse	Each		K551	
15109ME163	BEARING, CRANE, P&H	Bearing	\$117.15	Whse	Each		K551	
15109ME164	BEARING, CRANE, P&H	Bearing	\$33.30	Whse	Each		K551	
15109ME165	BEARING, PILLOW BLOCK P&H	Bearing	\$115.88	Whse	Each		K551	
15109ME166	BEARING, CRANE PINION	Bearing	\$48.06	Whse	Each		K551	
15109ME167	BEARING, BALL, P&H, MOD 83	Bearing	\$27.50	Whse	Each		K551	
15109ME168	BEARING, SKF 25T 819-D17, P&H	Bearing	\$149.25	Whse	Each		K551	
15109ME169	BEARING	Bearing	\$21.11	Whse	Each		K551	
15109ME170	BEARING, CRANE, P&H	Bearing	\$50.00	Whse	Each		K552	
15109ME171	SEAL, OIL P&H CRANE	Seal	\$9.66	Whse	Each		K552	
15109ME172	BEARING, TIMKEN P&H CRANE	Bearing	\$86.25	Whse	Each		K552	
15109ME173	BEARING, FEDERAL, NDH #A1208TS	Bearing	\$37.04	Whse	Each		K552	
15109ME174	BEARING #22208LT (BID) FOR BRIDGE D	Bearing	\$66.19	Whse	Each		K552	
15109ME175	SEAL, P&H CRANE	Seal	\$10.00	Whse	Each		K553	
15109ME176	BEARING, ROLLER P/H #252100D7	Bearing	\$41.72	Whse	Each		K553	
15109ME179	BEARING, (PI101416) INA	Bearing	\$5.00	Whse	Each		K553	
15109ME180	Nut, Torque Lock, 2.25"-8	CranePar	\$425.48	Whse	Each		K112	
15109ME184	Bearing, Sealed Needle CABLE DRUM	CranePar	\$134.00	Whse	Each		T331	MORRIS MATERIAL HANDLING
GRAPPLE								
15115ME004	Grapple, Crane	CranePar	\$27,413.00	Whse	Each		Maint Shop	Mack Manufacturing Inc
15115ME005	Shaft, Lower Arm w/rivets	CranePar	\$262.84	Whse	Each		T441	Mack Manufacturing Inc
15115ME006	Shaft, Upper Arm	CranePar	\$253.30	Whse	Each		T441	
15115ME007	Bearing, Sheave for Pt#22	Coupling	\$319.96	Whse	Each		T442	
15115ME008	Shaft, Lower Sheave	CranePar	\$406.11	Whse	Each		T222	
15115ME009	Shaft, Tine Connector w/rivets	CranePar	\$320.53	Whse	Each		T221	
15115ME023	BEARING, MAIN SHEAVE INNER RACE, MCGINNE	Bearing	\$23.72	Whse	Each		K551	
15115ME027	BEARING, MAIN SHEAVE PART FOR REFUSE GRA	Bearing	\$73.77	Whse	Each		K113	
15115ME030	EQUALIZER, DEAD MCGINNIS	CranePar	\$1,145.00	Whse	Each		T112	
15115ME031	SHEAVE, MAIN BEARING & WASHER PART FOR R	Bearing	\$932.42	Whse	Each		T112	
BOTTOM ASH								
16450E1001	Motor, Gallery Belt, 50 HP	Motor	\$3,398.50	Whse	Each	Frame: 326T, 1800RPM, 50 HP Severe Duty	S112	KAMAN INDUSTRIAL TECHNOLOGIES

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
15109EI119	Resistor, hold & close forcing assembly	Electric	\$342.20	Whse	Each		K771	MORRIS MATERIAL HANDLING
15109EI120	Resistor, hold & close forcing assembly	Electric	\$517.00	Whse	Each		K771	MORRIS MATERIAL HANDLING
15109EI127	Thyristor, Power Supply	PwrSuppl	\$3,172.31	Whse	Each		BB100	MORRIS MATERIAL HANDLING
15109EI128	Module SCR, brake rectifier panel	CranePar	\$312.01	Whse	Each		K772	MORRIS MATERIAL HANDLING
15109EI132	MODULE, CONTROL SQ.D 31123-514-50	Electric	\$1,525.00	Whse	Each		K221	Excelerate
15109EI140	CONTROL, BRAKE, P/H	CranePar	\$1,186.00	Whse	Each		K552	MORRIS MATERIAL HANDLING
15109EI144	TRANSFORMER, VARIABLE, P&H	Electric	\$1,966.12	Whse	Each		K552	MORRIS MATERIAL HANDLING
15109EI145	COIL CRANE, MAGNET, STARTER, 125VDC	Electric	\$290.00	Whse	Each		K552	
15109EI149	Brake, Mag, 2408A, Serial# RW101936	CranePar	\$14,481.00	Whse	Each		S222	
15109EI150	RELAY, PNEUMATIC TIMER SERIES B	Electric	\$600.08	Whse	Each		AA600	MORRIS MATERIAL HANDLING
15109EI151	MODULE, METER	instrument	\$1,266.00	Whse	Each		BB200	MORRIS MATERIAL HANDLING
15109EI152	MODULE, FREQUENCY DETECTOR	instrument	\$3,094.00	Whse	Each		BB200	MORRIS MATERIAL HANDLING
15109EI153	MODULE, BIAS, P/H	Electric	\$1,258.64	Whse	Each		BB200	MORRIS MATERIAL HANDLING
15109EI154	MODULE, MAGNEGARD CONTROL, P/H, PART#79U	instrument	\$1,429.11	Whse	Each		BB200	
15109EI155	MODULE, STABILITY,P&H, #79U797	CranePar	\$1,264.50	Whse	Each		BB200	
15109EI156	MODULE, PLUGGING CONTROL, P&H, #79U-9	CranePar	\$583.64	Whse	Each		BB200	MORRIS MATERIAL HANDLING
15109EI157	MODULE, MAGNETIC AMPLIFIER, P/H, PART 79	CranePar	\$3,166.00	Whse	Each		BB200	MORRIS MATERIAL HANDLING
15109EI158	MODULE, OFF POSITION	Electric	\$2,207.00	Whse	Each		BB201	MORRIS MATERIAL HANDLING
15109EI159	Relay w/3 NO Contact Blocks	Electric	\$73.19	Whse	Each		BB201	MORRIS MATERIAL HANDLING
15109EI160	CONTACT BLOCK, RELAY	Electric	\$216.01	Whse	Each		BB201	
15109EI161	JOYSTICK, MASTER SWITCH ASSEMBLY TYPE SJ	CranePar	\$3,367.00	Whse	Each		BB300	
15109EI162	JOYSTICK, MASTER SWITCH ASSEMBLY TYPE SJ	Electric	\$3,270.00	Whse	Each		BB300	
15109EI163	TRANSFORMER, ANODE ***PERM-2*** 75251	Electric	\$410.00	Whse	Each		BB301	
15109EI164	TRANSFORMER, TROLLEY BRAKE **PERM-2***	Electric	\$370.35	Whse	Each		BB301	
15109EI165	TRANSFORMER,HOLD/CLOSE***PERM-1***	Electric	\$635.00	Whse	Each		BB301	
15109EI166	BRAKE, CONTROL	CranePar	\$1,020.00	Whse	Each		FF908	
15109EI167	BOARD, PC ASSEM. BRK CNTRL ***PERM-4***	Board	\$909.00	Whse	Each		FF908	MORRIS MATERIAL HANDLING
15109ME095	ASSEMBLY, BRIDGE MOTOR GEAR SHAFT ****P	CranePar	\$2,935.00	Whse	Each		Z402	
15109ME096	ASSEMBLY, BRIDGE MOTOR PINION SHAFT ***P	CranePar	\$2,498.72	Whse	Each		Z202	
15109ME097	ASSEMBLY, BRIDGE DRIVE TRUCK WHEEL ASSM.	CranePar	\$22,660.00	Whse	Each		Z501	
15109ME098	BRAKE, BRIDGE (12SBE550ASCIH) ***PERM-1*	CranePar	\$1,990.00	Whse	Each		Z501	
15109ME099	Cable, Crane, Swaged, 7/8" X 275'	CableSte	\$1.88	Whse	Foot		Z100	FLORIDA ROPE & SUPPLY
15109ME100	Brake, Hoist 23" SBE	Mechanic	\$399.00	Whse	Each		W402	Deshazo Service Company LLC
15109ME102	Wheel, Brake (holding)	Mechanic	\$6,100.00	Whse	Each		W401	MORRIS MATERIAL HANDLING
15109ME103	Wheel, Brake (closing)	Mechanic	\$4,187.60	Whse	Each		W401	MORRIS MATERIAL HANDLING
15109ME104	Bearing, Needle	Mechanic	\$73.57	Whse	Each		K772	
15109ME105	Reducer, speed, hoist	Gearbox	\$43,700.00	Whse	Each		W403	
15109ME107	Kit, holding & closing hoist	Gearbox	\$1,518.48	Whse	Kit		K771	
15109ME108	Kit, trolley bearing/seal	Gearbox	\$1,010.80	Whse	Kit		K662	
15109ME109	Shaft assembly, hoist motor	Gearbox	\$9,942.00	Whse	Each		W402	MORRIS MATERIAL HANDLING
15109ME110	Shaft assembly, hoist intermediate	Gearbox	\$11,463.84	Whse	Each		W401	
15109ME111	Gear assembly, hoist drum	Gearbox	\$9,576.76	Whse	Each		W402	
15109ME112	Shaft assembly, trolley motor	Gearbox	\$3,433.68	Whse	Each		K662	
15109ME113	Shaft assembly, trolley intermediate	Gearbox	\$4,635.24	Whse	Each		W402	
15109ME114	Shaft assembly, trolley output	Gearbox	\$6,285.96	Whse	Each		W402	
15109ME115	Bearing, drum pedestal	Bearing	\$181.77	Whse	Each		K661	
15109ME116	Shaft, stub, drum pedestal	Mechanic	\$486.40	Whse	Each		K662	
15109ME117	Coupling, floating shaft, holding	Coupling	\$988.00	Whse	Each		W403	
15109ME118	Coupling, floating shaft, holding	Coupling	\$1,254.00	Whse	Each		W403	
15109ME119	Shaft assembly, drive	Mechanic	\$798.00	Whse	Each		K664	
15109ME120	Coupling, semi-flex	Coupling	\$779.00	Whse	Each		K774	MORRIS MATERIAL HANDLING
15109ME121	Coupling, semi-flex	Coupling	\$1,295.51	Whse	Each		K663	
15109ME122	Bearing, wheel	Bearing	\$143.64	Whse	Each		K661	
15109ME124	Coupling, semi-flex (Trolley Mag)	Coupling	\$687.00	Whse	Each		K774	MORRIS MATERIAL HANDLING

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
16450ME219	Bearing, Flange, GK VC	Bearing	\$2,290.00	Whse	Each		E504	General Kinematics
16450ME223	BEARING, INSERT SEALMASTER 4 15/16	Bearing	\$899.48	Whse	Each		E501	
16450ME300	DUAL TWIST TENSIONERS, MARTIN ENG (EPPEP	Grates	\$902.12	Whse	Each		H334	
16450ME306	Belt, 72" wide, 3 ply, 600#, (585' long)	Conveyor	\$38,317.50	Whse	Each		Behind Warehouse	Conviber Co. Inc
16450ME307	BEARING, HEADSHAFT, PILLOW BLOCK, 7" DIA	Bearing	\$3,295.14	Whse	Each		W202	
16450ME308	BEARING, HEADSHAFT, PILLOW BLOCK, W/END	Bearing	\$3,348.46	Whse	Each		W202	
16450ME309	BEARING, HEAD SHAFT, PILLOW BLOCK, 6 1/2	Bearing	\$1,808.12	Whse	Each		W202	
16450ME310	BEARING, HEAD SHAFT, PILLOW BLOCK, 6 1/2	Bearing	\$1,842.74	Whse	Each		W202	
16450ME311	BEARING, BEND & TAKE-UP SHAFT W/END CAP.	Bearing	\$954.08	Whse	Each		W202	
16450ME312	BEARING, TAIL & TAKE-UP SHAFT, 5 15/16,W	Bearing	\$2,498.50	Whse	Each		W302	KAMAN INDUSTRIAL TECHNOLOGIES
16450ME313	BEARING, BEND & TAKE-UP SHAFT, 5 7/16, W	Bearing	\$1,998.50	Whse	Each		W302	KAMAN INDUSTRIAL TECHNOLOGIES
16450ME314	TORSION, ARM V-PLOW, FOR ASH BELT, M-23	Conveyor	\$1,483.00	Whse	Each		Z100	
16450ME315	Idler, troughing (M-11)	Conveyor	\$574.46	Whse	Each		Z100	
16450ME316	Idler, impact (M-14)	Conveyor	\$1,143.30	Whse	Each		Z100	EPPERSON & COMPANY
16450ME317	Idler, training (M-12)	Conveyor	\$1,303.00	Whse	Each		Z100	EPPERSON & COMPANY
16450ME318	Idler, impact (M-15)	Conveyor	\$1,361.07	Whse	Each		Z100	EPPERSON & COMPANY
16450ME319	Roller, return rubber disc (M-16)	Conveyor	\$437.27	Whse	Each		Z100	EPPERSON & COMPANY
16450ME320	REDUCER, DODGE #303110, FOR ASH BELT	Gearbox	\$6,882.00	Whse	Each		Z502	
16450ME321	Roller Assy, 7"x75, 3/4	Conveyor	\$350.00	Whse	Each		Z100	EPPERSON & COMPANY
16450ME322	Idler, 7", 72BW	Conveyor	\$830.00	Whse	Each		Z100	EPPERSON & COMPANY
FLYASH								
16453EI017	Motor, 5HP Flyash Drag and Econo Screw	Motor	\$630.46	Whse	Each	Frame: 184T, 1715 RPM 5 HP	D204	KAMAN INDUSTRIAL TECHNOLOGIES
16453EI018	Motor, 3HP Flyash Drag Conveyor	Motor	\$586.30	Whse	Each	Frame: 182T, 1725 RPM, 3HP	D304	
16453EI019	Motor, Ash Collection Screw, 7.5 HP	Motor	\$769.33	Whse	Each	Frame: 213T, 1720 RPM, 7.5 HP	S110	
16453EI020	Motor, 2 speed for Flyash Rotary Feeder	Motor	\$934.31	Whse	Each	Frame: 213T, 1725 RPM, 1.5/37 HP Seimens RGZESD, part number 1LA91451YK701VT With special C face	Q112	Tampa Armature Works
16453EI021	Motor, 7.5HP Flyash Drag Conveyor	Motor	\$357.93	Whse	Each	Frame: 213T, 1745RPM, 7.5 HP	Q113	Tampa Armature Works
16453ME011	Flapper for F.F Flap gates	Valve	\$1,036.40	Whse	Each		F205	Plattco
16453ME016	Clevis Assembly	Valve	\$160.26	Whse	Each		F205	Plattco
16453ME017	Seat	Mechanic	\$1,522.03	Whse	Each		R222	Plattco
16453ME100	Adapter, Gear Box	Conveyor	\$142.74	Whse	Each		E402	
16453ME150	SHAFT DRIVE 2" #FO-SPCL DRW#98-50072-A2	Conveyor	\$625.20	Whse	Each		E204	
16453ME153	SHAFT STUB 2" X 12" COUPLER 4 HOLE HARDE	Conveyor	\$48.83	Whse	Each		E204	
16453ME154	SHAFT, END 2" FOR ECONO SCREW CONVEYOR	Conveyor	\$164.87	Whse	Each		E204	
16453ME155	GEARBOX FOR #3 ECONO. SCREW W/2"OUTPUT S	Gearbox	\$1,396.52	Whse	Each		E402	KAMAN INDUSTRIAL TECHNOLOGIES
16453ME186	GEAR BOX, FALK FOR FF SCREW CONVEYOR,IN	Gearbox	\$4,816.00	Whse	Each		S112	
16453ME200	DRIVEN SPROCKET FOR ASHTECH FLYASH ROTOA	Sprocket	\$481.75	Whse	Each		D103	Ashtech
16453ME201	DRIVER SPROCKET, W/TORQUE LIMITER (80B19	Sprocket	\$120.11	Whse	Each		D101	
16453ME202	CHAIN 80 PITCH W/LINK FOR ASHTECH FLYASH	Chain	\$130.18	Whse	Each		D103	Ashtech
16453ME206	DRIVE VARI-SPEED Pug Mill Rotary Feeder	Gearbox	\$5,186.50	Whse	Each		D104	
16453ME210	TEETH SEGMENTS, SETS - 14MM, 10T FOR FLY	Sprocket	\$1,000.00	Whse	Each		D202	Ashtech
16453ME213	SPUR GEAR MATCHED SET FOR ASHTECH FLYASH	Gearbox	\$1,332.50	Whse	Each		D104	Ashtech
16453ME214	Coupling, Gear	Coupling	\$943.00	Whse	Each		D101	Ashtech
16453ME227	PULLEY, CONVEYOR FOR FLYASH DRAG CONVEYO	Conveyor	\$1,079.09	Whse	Each		Q112	
16453ME228	PULLEY, CONVEYOR FOR FLYASH DRAG CONVEYO	Conveyor	\$734.63	Whse	Each		Q112	
16453ME229	Reducer, gear, for Pug Mill	Gearbox	\$2,880.00	Whse	Each		R330	KAMAN INDUSTRIAL TECHNOLOGIES
16453ME232	SPROCKET, DRIVEN - 160SP27 44T 1/2" DIA.	Sprocket	\$2,802.10	Whse	Each		X102	
16453ME233	CHAIN, 14MM - (17 LINK MATCHED PAIR) FOR	Conveyor	\$37.99	Whse	Each		W102	
16453ME234	Bar, Flight (48" long) Ashtech	Conveyor	\$122.25	Whse	Each		W102	
16453ME235	CHAIN, 14MM - (11 LINK MATCHED PAIR) FOR	Conveyor	\$58.53	Whse	Each		W102	Ashtech
16453ME236	Bar, Flight (24" long) Ashtech	Conveyor	\$93.50	Whse	Each		W102	Ashtech

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
16450E1101	Motor, Supply Pump For TLT Expellers	Motor	\$3,494.00	Whse	Each	Frame: 284TC , 1760 RPM, 25 HP	S112	
16450E1104	Motor, Cooling Pump For TLT Expellers	Motor	\$894.00	Whse	Each	frame: 145TC 1740 RPM, 2 HP	D302	
16450E1157	Motor, for riddling drag gearbox	Motor	\$206.98	Whse	Each	frame: IMB5 Flange , 1.1 KW, 1690 RPM	Q112	
16450E1213	MOTOR, 30HP Vibrating Conveyor	Motor	\$2,018.38	Whse	Each	Frame: 326T 1200RPM 30 HP	S112	Tampa Armature Works
16450ME001	Locking Assembly, w/bolts	Conveyor	\$2,472.00	Whse	Each		R221	
16450ME002	Locking Assembly, w/bolts	Conveyor	\$1,846.42	Whse	Each		R221	TLT-Babcock
16450ME003	Bearing Housing, Fixed	Bearing	\$3,531.08	Whse	Each		R221	KAMAN INDUSTRIAL TECHNOLOGIES
16450ME004	Bearing Housing, Floating	Bearing	\$3,514.11	Whse	Each		R221	KAMAN INDUSTRIAL TECHNOLOGIES
16450ME007	Retainer, fixed bearing inner	Bearing	\$1,624.33	Whse	Each		R221	TLT-Babcock
16450ME008	Retainer, fixed bearing outer	Bearing	\$1,599.25	Whse	Each		R221	TLT-Babcock
16450ME009	Retainer, floating bearing inner	Bearing	\$1,825.00	Whse	Each		R221	TLT-Babcock
16450ME010	Retainer, floating bearing outer	Bearing	\$1,625.00	Whse	Each		R221	TLT-Babcock
16450ME016	Bearing, expeller trunion	Bearing	\$2,694.85	Whse	Each		R221	KAMAN INDUSTRIAL TECHNOLOGIES
16450ME022	CYLINDER, HYDRAULIC COMPLETE FOR ASH EXP	Hydrauli	\$1,689.11	Whse	Each		Z100	HYDRAULICS & FABRICATION
16450ME026	PISTON ROD FOR TLT ASH EXPELLARS MOD.3.2	Hydrauli	\$2,063.00	Whse	Each		Y102	
16450ME100	SUPPLY PUMP FOR TLT ASH EXPELLARS HYD.	Hydrauli	\$2,465.00	Whse	Each		D402	
16450ME105	PUMP, COOLING FOR TLT ASH EXPELLAR HYD.	Pumps	\$715.00	Whse	Each		D402	
16450ME125	BEARING, PILLOW BLOCK, EXPAND FOR WET &	Bearing	\$681.18	Whse	Each		D404	
16450ME126	BEARING, PILLOW BLOCK, FIXED FOR WET & D	Bearing	\$540.61	Whse	Each		D404	
16450ME128	SPROCKET,ROLLER CHAIN, DRIVEN #120,60T,	Sprocket	\$2,559.00	Whse	Each		Y102	
16450ME129	Pin, Shear, 11/16 (TLT Wet/Dry Drags)	Conveyor	\$3.50	Whse	Each		M105	TRU-ARC MACHINE
16450ME130	COUPLING, CHAIN FOR TLT RIDDLING WET & D	Coupling	\$155.15	Whse	Each		M141	TLT-Babcock
16450ME131	Flight, TLT Drag (Wet Drag)	Conveyor	\$169.69	Whse	Each		Z103	
16450ME132	CHAIN, ROLLER #120 FOR RIDDLING WET & DR	Sprocket	\$1,239.00	Whse	Each		D403	TLT-Babcock
16450ME133	SPROCKET, ROLLER CHAIN DRIVER,#120,14T T	Sprocket	\$218.00	Whse	Each		D403	
16450ME135	GEAR REDUCER W/O MOTOR FOR TLT RIDDL	Gearbox	\$5,166.00	Whse	Each		Z301	
16450ME136	BEARING,FLANGE FIXED 2-7/16"	Bearing	\$208.82	Whse	Each		D403	KAMAN INDUSTRIAL TECHNOLOGIES
16450ME137	BEARING,FLANGE EXPAND 2-7/16"	Bearing	\$177.20	Whse	Each		D403	
16450ME138	IDLER SHAFT-OVERHUNG FOR TLT RIDDLING WE	Conveyor	\$1,049.88	Whse	Each		D303	TLT-Babcock
16450ME139	IDLER PULLEY-OVERHUNG FOR TLT RIDDLING W	Conveyor	\$2,072.00	Whse	Each		D304	
16450ME141	BEARING,IDLER FOR RIDDLING WET & DRY DRA	Bearing	\$118.66	Whse	Each		D403	TLT-Babcock
16450ME146	SHAFT, TENSIONER FOR TLT RIDDLING WET &	Conveyor	\$1,053.50	Whse	Each		D303	TLT-Babcock
16450ME150	SCREW,ADJUSTING FOR TLT RIDDLING WET & D	Conveyor	\$1,448.00	Whse	Each		D303	TLT-Babcock
16450ME152	BEARING,PILLOW BLOCK- EXP. FOR RIDDLING	Bearing	\$132.21	Whse	Each		D303	
16450ME153	BEARING,PILLOW BLOCK-FIXED FOR RIDDLING	Bearing	\$423.71	Whse	Each		D303	
16450ME155	CHAIN, 167 LINK PAIR	Conveyor	\$22,084.00	Whse	Set	Includes 140ea HV chani 16x64 G80 E10 L-167-70.131 ft/pr. 2pr=4pc HV chain 16x64 G80 E10 L=147 1pr=2pc VHV 16x64 G80 E10 chain connecting links KFB 16x64 flight attachments	D900	PEWAG
16450ME156	Flight, TLT Drag (Dry Drag)	Conveyor	\$160.00	Whse	Each		Z103	ABRASION RESISTANT SPEC INC
16450ME160	Through Shaft Assembly	Conveyor	\$7,824.00	Whse	Each		Y201	
16450ME163	Overhung Idler Assembly	Conveyor	\$10,326.00	Whse	Each		Y101	
16450ME164	Overhung Idler Assembly	Conveyor	\$13,960.00	Whse	Each		Y101	TLT-Babcock
16450ME201	BEARING, PILLOW BLOCK, GK VC	Beangng	\$625.00	Whse	Each	Rec. 4 ea on 7-13-07. These were ordered through the old manula system, not MP2. SD	E501	General Kinematics
16450ME205	BELT, VC-3, GENERAL KINEMATICS	Belt	\$563.67	Whse	Each		Belt rack	General Kinematics
16450ME206	SHAFT, ECCENTRIC, GK VC	Conveyor	\$1,702.43	Whse	Each		Z100	General Kinematics
16450ME207	Sprocket, driven, GK VC	Sprocket	\$217.57	Whse	Each		E504	General Kinematics
16450ME208	BELT, VC-1 & VC-2, GK	Belt	\$655.41	Whse	Each		Belt rack	General Kinematics

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
16453ME237	CHAIN, 14MM - (09 LINK MATCHED PAIR) FOR	Conveyor	\$3.54	Whse	Each		W102	
16453ME238	Bar, Flight (18" long) Ashtech	Conveyor	\$78.50	Whse	Each		W102	Ashtech
16453ME239	Bar, Flight (36" long) Ashtech	Conveyor	\$91.44	Whse	Each		W102	
16453ME240	REDUCER, CHH4195- RATIO 187:1 FOR FLYASH	Gearbox	\$9,532.50	Whse	Each		Y502	
16453ME241	REDUCER, CHH4195 - RATIO 258:1 FOR FLYAS	Gearbox	\$3,465.18	Whse	Each		Y502	
16453ME242	REDUCER, CHH4186 - RATIO 258:1 FOR FLYAS	Gearbox	\$6,385.75	Whse	Each		Z502	
MATERIAL RECOVERY								
17100EI005	Processor, Compact Logix Ethernet	Electnc	\$2,760.00	Whse	Each	A-B	EE201	Excelerate
17100EI008	Drive, 5HP AC	Electnc	\$1,184.00	Whse	Each	A-B	EE210	Excelerate
17100EI010	Panelview Plus CE, 1500 Touch Screen	Electric	\$8,162.00	Whse	Each	A-B	EE103	Excelerate
17100EIV001	Motor, 7.5 HP with Fastener Kit	Motor	\$21,803.60	Whse	each	GK	default	General Kinematics
17100EIV003	Motor, 5.0 HP with Fastener Kit	Motor	\$13,055.56	Whse	each	GK	default	General Kinematics
17100EIV004	Motor, 2.0 HP with Fastener Kit	Motor	\$10,382.72	Whse	each	GK	default	General Kinematics
17100MEC001	Idler, 72" 20 degree Trough Impact	Conveyor	\$495.00	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC002	Idler, 72" 20 degree Trough	Conveyor	\$242.22	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC003	Idler, 72" 35 degree Trough	Conveyor	\$242.22	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC004	Idler, 72" rubber disk return	Conveyor	\$208.90	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC005	Idler, 60" 20 degree Trough	Conveyor	\$180.05	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC006	Idler, 60" 35 degree Trough	Conveyor	\$180.05	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC007	Idler, 60" 20 degree Trough Impact	Conveyor	\$387.55	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC008	Idler, 60" 35 degree Trough Impact	Conveyor	\$344.40	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC009	Idler, 60" rubber disk return	Conveyor	\$153.35	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC010	Idler, 60" rubber disk return trainer	Conveyor	\$365.95	Whse	each	PRECISION	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC011	Bar, Slider (-48)	Conveyor	\$79.00	Whse	each	Cribmaster	default	Conviber Co. Inc.
17100MEC012	Bar, Impact (-48)	Conveyor	\$155.00	Whse	each	Cribmaster	default	Conviber Co. Inc.
17100MEC013	Bar, Slider (-60)	Conveyor	\$94.00	Whse	each	Cribmaster	default	Conviber Co. Inc.
17100MEC014	Bar, Impact (-60)	Conveyor	\$206.00	Whse	each	Cribmaster	default	Conviber Co. Inc.
17100MEC024	Reducer, TXT 825T Shaft Mount	Gearbox	\$6,248.60	Whse	each	Dodge	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC025	Reducer, TXT 625T Shaft Mount	Gearbox	\$2,991.20	Whse	each	Dodge	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC028	Belt, Drive 5VX1180	Belt	\$52.41	Whse	each	Dodge	belt rack	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC029	Belt, Drive 5VX850	Belt	\$23.30	Whse	each	Dodge	belt rack	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC032	Tensioner, Belt Cleaner	Conveyor	\$920.00	Whse	each	Matrin	default	Conviber Co. Inc.
17100MEC033	Blade, Belt Cleaner 72"	Conveyor	\$850.00	Whse	each	Matrin	default	Conviber Co. Inc.
17100MEC034	Blade, Belt Cleaner 60"	Conveyor	\$710.00	Whse	each	Matrin	default	Conviber Co. Inc.
17100MEC035	Belting, Conveyor 4-440 X 72" Wide	Conveyor	\$0.21	Whse	ft	Goodyear	default	Conviber Co. Inc.
17100MEC036	Belting, Conveyor 4-440 X 60" Wide	Conveyor	\$0.11	Whse	ft	Goodyear	default	KAMAN INDUSTRIAL TECHNOLOGIES
17100MEC037	Drive unit, Shuttle Conveyor	Gearbox	\$0.00	Whse	each	Argo	default	
17100MEE001	Gearmotor	Gearbox	\$5,620.00	Whse	Each	ERIEZ	default	
17100MEE003	Sprocket, Driven	Sprocket	\$2,040.00	Whse	Each	ERIEZ	default	
17100MEE004	Chain, Drive (10' Long)	Chain	\$950.00	Whse	Each	ERIEZ	default	
17100MEG001	Belt, conveyor	Belt	\$3,950.00	Whse	Each	STEINERT	Floor	STEINERT US LLC
17100MEG007	Shell, Drum Rotor	Hardware	\$4,700.00	Whse	Each	STEINERT	Floor	STEINERT US LLC
17100MEG008	Motor, Gear Conveyor	Motor	\$1,715.00	Whse	Each	STEINERT	Floor	STEINERT US LLC
17100MEG009	Motor, Rotor Drive	Motor	\$1,080.00	Whse	Each	STEINERT	Floor	STEINERT US LLC
17100MEV008	Screen Deck, 3/8"	Conveyor	\$1,642.00	Whse	Each	GK	default	General Kinematics
PROCESS WATER								
20300EI001	Motor, RO HP Pump 75 HP	Motor	\$1,083.20	Whse	Each	Frame: 365TS, 3535RPM, 75 HP	S112	
20300ME002	Pump, RO Booster	Pumps	\$0.00	Whse	Each		S111	
DEMIN SYSTEM								
20303EC003	Motor, 20HP, 460V, (Pall Sys)	Motor	\$0.00	Whse	Each	Frame: 256TCZ 3523 RPM, 20 HP	R330	Systems Components Corp
20303EC004	Processor, Versa View, (Pall Sys)	Electric	\$0.00	Whse	Each		EE103	Systems Components Corp

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
20303EC006	Supply, Power, 100 watt (Pall System)	Electric	\$0.00	Whse	Each		EE202	Systems Components Corp
20303EC007	Converter, Interface, (Pall System)	Electric	\$0.00	Whse	Each		EE202	Systems Components Corp
20303EC008	Module, Input Analog I/O (Pall System)	Electric	\$0.00	Whse	Each		EE202	Systems Components Corp
20303EC009	Module, Output Analog I/O (Pall System)	Electric	\$0.00	Whse	Each		EE202	Systems Components Corp
20303EC010	Relay, Isolated Output (Pall System)	Electric	\$0.00	Whse	Each		EE202	Systems Components Corp
20303EC011	Memory, 1500 CPU 12K (Pall Sys)	Electric	\$0.00	Whse	Each		EE201	Systems Components Corp
20303EC012	Base, Memory (Pall Sys)	Electric	\$0.00	Whse	Each		EE201	Systems Components Corp
20303EC013	Processor, (Pall System)	Electric	\$0.00	Whse	Each		EE202	Systems Components Corp
20303EC014	Module, Input, (Pall System)	Electric	\$0.00	Whse	Each		EE202	
20303EC015	Module, Output (Pall system)	Electric	\$0.00	Whse	Each		EE202	Systems Components Corp
20303EI001	Display, Hydroranger	instrument	\$1,467.94	Whse	Each		EE501	
20303EI100	Motor, Treated Water Makeup, 7.5 HP	Motor	\$0.00	Whse	Each		S220	
20303MC001	Pump, SSH 2-1/2 x 3-6 (Pall System)	Pumps	\$4,590.00	Whse	Each		R330	Systems Components Corp
20303ME001	Pump, Treated Water	Pumps	\$1,548.00	Whse	Each		S111	Hudson Pump
BOILER CHEMICAL TREATMENT								
20312E1100	Motor, BFW chem. Mixer	Motor	\$111.71	Whse	Each		Q112	
20312ME101	Pump, Metering, Acid, 1/4HP/1725RPM/115V	Pumps	\$2,019.50	Whse	Each		Q112	KAMAN INDUSTRIAL TECHNOLOGIES
FEED								
20318ME126	SHAFT, CLAPPER VALVE #81H3134 COPPUS ENG	Pumps	\$107.50	Whse	Each		I663	
20318ME206	DISC, Yarway	Valve	\$1,332.00	Whse	Each		G803	
BOILER FEED WATER PUMP								
BOILER FEED WATER PUMP MOTOR								
COOLING WATER								
21201E1001	ELECTRODE, ROSEMOUNT MODEL 396P-01-10-54	instrument	\$1,392.00	Whse	Each		DD502	METRO ELECTRIC SUPPLY, INC.
21201E1002	ANALYZER,ROSEMOUNT MODEL 1054B PH-01-20	instrument	\$1,326.00	Whse	Each		DD502	
21201E1007	pH Sensor, Cooling Tower	instrument	\$454.00	Whse	each	Rosemount Analytical pH sensor AccuGlass Model-Option number 399-14, Part number 399-14 Assy, SNSR (54, 1055) GPLR HEMI BULB 32' CA S/N B08-553682, Mfg. Order: 211540	FF501	Key Controls of Tampa
COOLING WATER								
21350E1006	Motor, Clarifier lime slurry mixer	Motor	\$1,209.50	Whse	Each		H552	
21350E1012	Motor, 1/6 HP, softener polymer blender	Motor	\$374.90	Whse	Each		H553	KAMAN INDUSTRIAL TECHNOLOGIES
21350E1018	Motor, Clarifier Turb Drive	Motor	\$937.50	Whse	Each		S220	
21350E1019	GEARMOTOR, 3 HP (NEW UPGRADED MOTOR)	Gearbox	\$2,639.46	Whse	Each		S111	
21350E1020	DRIVE CONTROL ASSEMBLY	Gearbox	\$2,020.00	Whse	Each		H883	
21350E1030	Motor, Eff. Tank Mixer	Motor	\$610.00	Whse	Each		S220	
21350E1031	Pump, Storm Water Supply	Pumps	\$11,965.00	Whse	Each	HYDROMATIC S6LX2000M6-4 Submersible pump with 30' power cord 9.81" impeller 6" discharge 20 HP 1750 RPM 460 Volt. Pump Serial number S16607	S222	Tampa Armature Works
21350E1100	Regulator, Vacuum	instrument	\$3,374.00	Whse	Each		H114	KAMAN INDUSTRIAL TECHNOLOGIES
21350E1101	MODULE, AUTO SWITCHOVER -CAPITOL CONTRO	instrument	\$1,284.10	Whse	Each		H114	
21350E1102	EJECTOR, VARIABLE ORFICE -CAPITOL CONTRO	instrument	\$1,296.40	Whse	Each		H114	
21350E1120	Motor, Softener effluent pump	Motor	\$977.10	Whse	Each		S110	
21350E1200	MOTOR, 200HP CT Fan	Motor	\$3,222.18	Whse	Each		R332	Tampa Armature Works
21350E1201	Motor, Cooling Tower Recirc	Motor	\$24,545.08	Whse	Each		W100	

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
21350ME001	Pump, #3 cooling water booster pump	Pumps	\$1,524.00	Whse	Each		I554	Hudson Pump
21350ME017	IMPELLER, BRASS GOULDS COATED BY T	Pumps	\$2,350.00	Whse	Each		W502	
21350ME018	SHAFT, PUMP ***PERM-1*** FOR 24X36DHC	Pumps	\$2,311.00	Whse	Each		Z103	
21350ME100	CARTRIDGE, BIN VENT -CHEMCO-LIME SOFTENE	Filters	\$235.00	Whse	Each		I881	Chemco Systems
21350ME103	Motor, Clarifier Lime Bin Vent Fan	Motor	\$329.00	Whse	Each		I882	
21350ME107	VIBRATOR, FEEDER -CHEMCO-LIME SOFTENER	Conveyor	\$220.00	Whse	Each	115 Volt, Phase 1, 3200vpm, force max 60 lb.	I883	KAMAN INDUSTRIAL TECHNOLOGIES
21350ME108	Motor, Clarifier Lime Feed Screw	Motor	\$917.98	Whse	Each		I883	KAMAN INDUSTRIAL TECHNOLOGIES
21350ME110	IMPELLER KIT AURORA PUMP SER 9315056	Pumps	\$1,248.16	Whse	Kit		H113	
21350ME113	PUMP, DIAPHRAGM -LIME SOFTENER,HUDSON#A7	Pumps	\$484.57	Whse	Each		H113	
21350ME202	IMPELLER -GOULDS- LIME SOFTENER	Pumps	\$1,060.99	Whse	Each		H224	
21350ME283	IMPELLER, SMALL FRAME -LIME SOFTENER	Pumps	\$173.65	Whse	Each		H553	
21350ME284	IMPELLER, SECONDARY -LIME SOFTENER	Pumps	\$125.14	Whse	Each		H553	
21350ME285	O-RING -LIME SOFTENER	O-rings	\$2.85	Whse	Each		H553	KAMAN INDUSTRIAL TECHNOLOGIES
21350ME286	PULLEY -LIME SOFTENER SER. 11236	Pumps	\$25.46	Whse	Each		H553	KAMAN INDUSTRIAL TECHNOLOGIES
21350ME288	SHAFT, IMPELLER -LIME SOFTENER	Pumps	\$28.35	Whse	Each		H553	KAMAN INDUSTRIAL TECHNOLOGIES
21350ME289	VALVE, CHECK -LIME SOFTENER	Valve	\$81.22	Whse	Each		H553	
21350ME290	PULLEY -LIME SOFTENER	Pumps	\$11.75	Whse	Each		H553	KAMAN INDUSTRIAL TECHNOLOGIES
21350ME291	BELT, TIMING 3/8" X 18 -LIME SOFTENER	Belt	\$5.66	Whse	Each		H553	KAMAN INDUSTRIAL TECHNOLOGIES
21350ME292	MIXER, STATIC -LIME SOFTENER	Pumps	\$150.88	Whse	Each		H553	
21350ME293	SPLIT GLAND, STUFFING BOX -GOULDS-SER#77	Pumps	\$252.98	Whse	Each		H553	
21350ME300	IMPELLER -GOULDS- LIME SOFTENER	Pumps	\$601.18	Whse	Each		H554	
21350ME363	IMPELLER -CHEMCO-LIME SOFTENER	Pumps	\$1,689.00	Whse	Each		H884	
21350ME375	REPAIR KIT, MIXER -LIME SOFTENER-	Pumps	\$1,254.00	Whse	Kit		H884	
21350ME408	SPROCKET, DRIVER	Sprocket	\$70.21	Whse	Each		H883	
21350ME409	SPROCKET, DRIVEN	Filters	\$183.39	Whse	Each		H883	
21350ME412	CHAIN, ROLLER	Sprocket	\$15.60	Whse	Foot		H883	KAMAN INDUSTRIAL TECHNOLOGIES
21350ME414	SCREW, ADJUSTING	Filters	\$58.50	Whse	Each		H883	
21350ME415	SPRING, DISC	Filters	\$21.15	Whse	Each		H883	
21350ME458	REDUCER, GEAR	Gearbox	\$607.00	Whse	Each		H774	
21350ME500	PUMP BOOSTER AURORA SER 9315056 COAT	Pumps	\$2,018.90	Whse	Each		S110	
CONTACT WATER								
22400EI001	Motor, Waste Water Pump	Motor	\$628.00	Whse	Each		S220	
22400ME101	SHAFT FOR GOULDS PUMP MODEL 3196 MTX 3X	Pumps	\$377.00	Whse	Each		E101	
22400ME202	IMPELLAR FOR NAGLE 2.5 WASTE WATER SUMP	Pumps	\$1,414.50	Whse	Each		E403	
22400ME210	IMPELLAR FOR NAGLE 4.0 WASTE WATER SUMP	Pumps	\$2,769.00	Whse	Each		E404	
22400ME218	SHAFT FOR NAGLE 2.5 WASTE WATER SUMP PUM	Pumps	\$3,146.00	Whse	Each		W100	
22400ME219	SHAFT FOR NAGLE 4.0 WASTE WATER SUMP PUM	Pumps	\$3,744.50	Whse	Each		W100	RME
STEAM & CONDENSATE								
25250ME001	VALVE, FISHER BODY TYPE 1WD	Valve	\$5,220.40	Whse	Each		Z201	
SPRAY DRYER ABSORBER								
30500EI400	Motor, Bin Vibrator	Motor	\$2,899.00	Whse	Each	1.5 HP, Frame 184, 1800 RPM. TENV	Default	KAMAN INDUSTRIAL TECHNOLOGIES
30500ME001	Seal, Retainer	Conveyor	\$2,008.93	Whse	Each		F303	Plattco
30500ME003	Cylinder, Air, #2,3 DSA	Conveyor	\$1,500.00	Whse	Each		F303	HYDRAULICS & FABRICATION
30500ME004	Seat, Gate	Conveyor	\$2,677.82	Whse	Each		F303	Plattco
30500ME013	AIR CYLINDER FOR ASHTECH FLYASH KNIFE GA	Cylinder	\$1,007.10	Whse	Each		R222	Ashtech
30500ME014	Knife Gate, DSA	Valve	\$59,345.00	Whse	Each	G-2452 SAOGOR-2424 AEDZJ	Outside	Plattco
30500ME050	Cap, Universal Retaining, SS(nozzle nut)	Hardware	\$77.09	Whse	Each		E601	Wheelabrator
30500ME051	NOZZLE, 7MM CERAMIC WHEELA, DRW#TWC01	Filters	\$178.80	Whse	Each		E601	Wheelabrator
LIME SLURRY								

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
30501EI052	VALVE, CLARKSON FOR SDA	CntrlVal	\$9,780.00	Whse	Each		E106	KAMAN INDUSTRIAL TECHNOLOGIES
30501EI054	AUTO FLOW RATE CONTROLLER : SER #48431	CntrlVal	\$2,694.00	Whse	Each		E106	
30501EI100	Motor, Slaker Blower	MobilEqu	\$0.00	Whse	Each		Q111	
30501EI101	Motor, Lime Slurry Pump	Motor	\$719.18	Whse	Each		S220	KAMAN INDUSTRIAL TECHNOLOGIES
30501EI208	Motor, MOTION GENERATOR, 2 1/2 HP 460V, CHEMICA	Motor	\$2,774.00	Whse	Each		G704	SWECO
30501EI250	Motor, Lime Slurry Mixer	Motor	\$538.00	Whse	Each	5 HP, frame 184TC, 1760 RPM	S110	
30501EI300	Motor, Dilution Water Tank Mixer	Motor	\$786.00	Whse	Each		S110	
30501EI350	Motor, Lime Prep Sump Mixer	Motor	\$251.76	Whse	Each	7.5 HP, 213T, 1750 RPM	W502	KAMAN INDUSTRIAL TECHNOLOGIES
30501ME003	Drive, Rotomission	Gearbox	\$3,762.00	Whse	Each		F304	
30501ME007	Seal, outboard	Seal	\$272.28	Whse	Each		F304	
30501ME009	Sleeve, shaft	Conveyor	\$232.78	Whse	Each		F303	
30501ME010	Valve, Torque Actuated	Valve	\$6,549.68	Whse	Each		F304	
30501ME031	Gear Reducer, 30:1 2.62 CDSM 56C 1 1/8B	Bearing	\$1,335.27	Whse	Each		R110	
30501ME059	Pump, Seal Water, w/Motor 5HP, TEFC	Pumps	\$1,150.00	Whse	Each		I333	KAMAN INDUSTRIAL TECHNOLOGIES
30501ME065	IMPELLER 5VOG FOR WARMAN MOD.1.5/1 BAH-A	Pumps	\$252.89	Whse	Each		E203	
30501ME074	COVER, END FOR WARMAN MOD.1.5/1 BHA-A	Pumps	\$168.25	Whse	Each		E203	
30501ME077	LABYRINTH FOR WARMAN MOD.1.5/1 BAH-A	Pumps	\$77.41	Whse	Each		E203	
30501ME079	LOCKNUT, LABYRINTH FOR WARMAN MOD.1.5/1 B	Pumps	\$53.07	Whse	Each		E203	
30501ME083	Shaft, Pump	Pumps	\$478.48	Whse	Each		E203	
30501ME213	Spring Spool For Sweco Mod XS40C128	Conveyor	\$12.00	Whse	Each		G802	SWECO
30501ME215	SPRING SST FOR SWECO MOD.XS40C128 WATER	Conveyor	\$15.00	Whse	Each		G802	SWECO
30501ME216	MOTOR WEDGE FOR SWECO MOD.XS40C128 WATER	Motor	\$25.00	Whse	Each		G802	
30501ME304	IMPELLER, 1K3X2-62RV P/N MY50729A62/KE103	Pumps	\$540.00	Whse	Each		E103	
30501ME306	SHAFT-GP1K SOLID HOOK SLEEVE FOR TERTIAR	Pumps	\$194.00	Whse	Each		E103	
30501ME326	IMPELLER-1K3X1.5-82RV FOR SURFACE WATER	Pumps	\$503.88	Whse	Each		E104	
30501ME353	IMPELLER 2K3X2-10A/OPEN FOR DILUTION WAT	Pumps	\$999.00	Whse	Each		E105	Flowserve Corporation
30501ME355	SHAFT, GP2 WELDED FOR DILUTION WATER PUM	Pumps	\$300.46	Whse	Each		E105	
30501ME371	Housing, Impeller, (Dilution Pump)	Pumps	\$1,909.24	Whse	Each		S112	
30501ME373	Pump, (Dilution)	Pumps	\$1,833.00	Whse	Each		S112	Flowserve Corporation
30501ME454	IMPELLAR-SVO FOR WARMAN LIME PREP SUMP P	Pumps	\$604.19	Whse	Each		E602	
30501ME466	SHEAVE, MOTOR FOR WARMAN LIME PREP SUMP P	Pumps	\$31.52	Whse	Each		E602	
30501ME600	GEARBOX, FALK 273AFXD2-AS FOR EKATO LIME	Gearbox	\$4,675.00	Whse	Each		W502	
30501ME640	GEARBOX FOR EKATO LIME PREP SUMP AGITATO	Gearbox	\$823.53	Whse	Each		W502	
FABRIC FILTER								
30503ME019	CYLINDER, AIR-MOSIER MODEL J333-C-1-26-2	FF Bag	\$836.65	Whse	Each		D104	
30503ME020	CYLINDER, AIR - MOSIER MODEL J333-E-1-26 (Outlet)	Cylinder	\$1,540.00	Whse	Each		D104	HYDRAULICS & FABRICATION
30503ME021	CYLINDER, AIR - MOSIER MODEL J333-C-1-26	FF Bag	\$886.00	Whse	Each		D104	
30503ME023	Bag, Filter	FF Bag	\$37.30	Whse	Each		W101	Menardi Mikropul
30503ME033	SHAKER ARM ASSEMBLY FOR LIME SILO MODEL:	Filters	\$84.65	Whse	Each		E703	
30503ME034	CONNECTING ROD ASSEMBLY FOR LIME SILO MO	Filters	\$91.95	Whse	Each		E703	
30503ME035	SHAFT, ECCENTRIC FOR LIME SILO MODEL: WA	Filters	\$440.00	Whse	Each		E703	
30503ME037	Bag, Filter, Thimbleless	FF Bag	\$48.30	Whse	Each		W501	Menardi Mikropul
CARBON INJECTION								
30504EI001	Motor, Carbon Rotary Feeder	Motor	\$232.50	Whse	Each	HPRPMFRAME 1/31750EB56C	F402	
30504EI002	Motor, Carbon Feed Screw	Motor	\$296.53	Whse	Each	1/2 HP frame 56c, 1725 RPM, 90 Volt DC	F402	KAMAN INDUSTRIAL TECHNOLOGIES
30504EI003	Motor, Carbon Blower	Motor	\$445.00	Whse	Each	HPRPMFRAME 10.001750215T	S220	
30504ME010	GEAR REDUCER, GROVE MOD HMQ1175 FOR CARB	Gearbox	\$293.58	Whse	Each		F402	
30504ME012	AUGER, FEED FOR CARBON SCREW FEEDER CHEM	Conveyor	\$653.78	Whse	Each		F402	
30504ME013	PACKING SET FOR CARBON SCREW FEEDER CHEM	Seal	\$48.00	Whse	Each		F402	

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
30504ME014	SEAL STRIP, ROTOR FOR CARBON ROTARY FEED	Mechanic	\$12.00	Whse	Each		F402	
30504ME015	HOLDER, SEAL STRIP FOR CARBON ROTARY FEE	Mechanic	\$13.50	Whse	Each		F402	
SNCR NOX OUT UREA INJECTION								
30505E1100	Motor, SNCR water booster	Motor	\$0.00	Whse	Each		Q113	
30505E1101	Motor, SNCR Recirc Pump	Motor	\$170.13	Whse	Each		Q111	
30505E1102	HEATER ELEMENT, WARREN ELECTRIC FOR NALC	Heaters	\$1,126.40	Whse	Each		AA603	
30505ME001	KIT, COMPLETE PUMP OVERHAUL FOR NEPTUNE M	Pumps	\$845.87	Whse	Each	Model: 547-D-N3-FA Serial: 105453	E202	
30505ME011	OVERHAUL KIT FOR NEPTUNE NOX OUT METERIN	Pumps	\$339.96	Whse	Each	Model: 547-D-N3-FA Serial: 105453	E202	
30505ME050	INJECTOR, 38" STANDARD WALL FOR NALCO SNC	Chemical	\$1,400.67	Whse	Each		AA602	
30505ME113	Pump, SNCR water booster, w/motor	Pumps	\$1,822.48	Whse	Each		Q112	Hudson Pump
I, D FAN								
30512E1001	Motor, ID Fan Cooler Pump	Motor	\$453.00	Whse	Each		D101	
30512E1002	MOTOR 1.000HP NEW ID FAN	Motor	\$15,986.40	Whse	Each		OUTSIDE	
30512ME004	PUMP, PARKER H49AA1B, 8 GPM, CW ROTATION	Pumps	\$418.00	Whse	Each		D101	
30512ME005	PUMP, PARKER H49AA2B, 8 GPM, CW ROTATION F	Pumps	\$418.00	Whse	Each		D101	
30512ME026	BEARING, INBOARD FIXED, DODGE RTL SLEEVE	Bearing	\$7,988.00	Whse	Each		Z102	
30512ME027	BEARING, OUTBOARD FLOAT, DODGE RTL SLEEVE ROTOR RADIATOR	Bearing	\$6,370.00	Whse	Each		Z102	
I&C								
34201E1001	REMOTE TERMINATION FOR BAILEY DRY FLU GA	instrument	\$1,124.05	Whse	Each		CC402	
34201E1002	TERMINATION MODULE FOR BAILEY DRY FLU GA	instrument	\$600.00	Whse	Each		CC402	
34201E1003	LOOP INTERFACE MODULE FOR BAILEY DRY FLU	instrument	\$4,484.00	Whse	Each		CC402	
34201E1004	NETWORK PROCESS MODULE FOR BAILEY DRY FL	instrument	\$4,844.00	Whse	Each		CC402	
34201E1005	POWER MODULE FOR BAILEY DRY FLU GAS DESU	instrument	\$2,968.00	Whse	Each		CC402	
34201E1006	CARD, ANALOG INPUT BAILEY CONTROLS	Board	\$1,180.85	Whse	Each		CC402	
34201E1007	CARD, DIGITAL INPUT BAILEY CONTROLS	Board	\$605.15	Whse	Each		CC402	
34201E1008	CARD, DIGITAL OUTPUT BAILEY CONTROLS	Board	\$967.15	Whse	Each		CC402	Excelerate
34201E1009	POWER ENTRY PANEL FOR BAILEY DRY FLU GAS	instrument	\$2,456.00	Whse	Each		CC403	
34201E1010	ASSEMBLY AC MODULE FOR 1EPEP03, FOR BAIL	Board	\$484.23	Whse	Each		CC500	
34201E1011	ASSEMBLY BUS MONITOR MODULE FOR BAILEY D	Board	\$403.52	Whse	Each		CC500	
34201E1012	ENTRY CIRCUIT BREAKER FOR BAILEY DRY FLU	instrument	\$440.00	Whse	Each		CC500	
34201E1013	POWER SUPPLY MODULE FOR BAILEY DRY FLU G	instrument	\$1,076.00	Whse	Each		CC500	
34201E1014	MODULE ASSEMBLY, POWER SUPPLY, FOR BAILE	instrument	\$1,436.00	Whse	Each		CC500	
34201E1015	SYSTEM POWER MODULE FOR BAILEY DRY FLU G	instrument	\$6,573.50	Whse	Each		CC500	Excelerate
34201E1019	ASSEMBLY PCB IEMMU21 FOR BAILEY DRY FLU	Board	\$366.00	Whse	Each		CC501	
34201E1020	ASSEMBLY PCB, IEMMU21 FOR BAILEY DRY FLU	Board	\$219.00	Whse	Each		CC501	
34201E1021	PRINT HEAD FOR 11PRT02, FOR BAILEY DRY F	instrument	\$1,614.10	Whse	Each		CC501	
34201E1100	Processor module, multifunction	Electric	\$2,000.00	Whse	Each		CC400	ABB INC
34201E1101	Module, analog output	Electric	\$401.37	Whse	Each		CC400	
34201E1102	Module, digital input	Electric	\$695.59	Whse	Each		CC400	
34201E1103	Module, digital output	Electric	\$726.62	Whse	Each		CC400	
34201E1104	Module, Analog Input	Electric	\$708.78	Whse	Each		CC400	
34201E1110	Module, Loop Interface	Electric	\$3,825.25	Whse	Each		CC400	
34201E1111	Module, Network Processing	Electric	\$3,935.75	Whse	Each		CC400	
34201E1120	Assembly, PCB, IEMMU21	Electric	\$284.05	Whse	Each		CC401	
34201E1121	Module, Communication Port	Electric	\$1,754.34	Whse	Each		CC401	
INTERNAL POWER								

Schedule 16B - Critical Spare Parts List

Item No.	Description	Type	Average Unit Cost	Site	UOM	NOTES	Location	Vendor Name
35600E1002	CAPACITOR, MEPCO/ELECTRA 7700UF - 10+, 5	Electric	\$83.70	Whse	Each		F103	
35600E1003	CAPACITOR, AEROVOX 25MF 660V, PROTECTED	Electric	\$30.00	Whse	Each		F103	
35600E1004	CAPACITOR, MEPCO	Electric	\$40.00	Whse	Each		F103	
35600E1005	CAPACITOR, SHANGAMD	Electric	\$25.00	Whse	Each		F103	
35600E1006	CAPACITOR, 300 VOLT, 10.0 MFD	Electric	\$183.86	Whse	Each		F103	
35600E1007	CAPACITOR, 1056 OI 100 VAC, G.E. #61L37	Electric	\$124.12	Whse	Each		F103	
35600E1008	TRANSFORMER ***PERM-1***	Electric	\$250.00	Whse	Each		W301	
35600E1009	TRANSFORMER, DRY TYPE, PH-1, 240 X 480 H	Electric	\$869.00	Whse	Each		W301	
35600E1011	DIODE, SOLID STATE CONTROL, #60074, #3 S	Electric	\$41.18	Whse	Each		CC601	
35600E1017	SCR ***PERM-4*** PART 611105/110550N80	Electric	\$66.15	Whse	Each		CC601	
35600E1050	OVERLOAD RELAY-S21 FOR G.E. SWITCHGEAR E	Electric	\$64.83	Whse	Each		EE200	
35600E1051	GROUND FAULT SENSOR FOR G.E. SWITCHGEAR	Electric	\$264.81	Whse	Each		EE200	
35600E1052	GRD. FAULT RELAY FOR G.E. SWITCHGEAR EQU	Electric	\$283.45	Whse	Each		EE200	
35600E1057	MOT STAB ASM 2&3 HI FOR G.E. SWITCHGEAR	Electric	\$940.50	Whse	Each		EE401	
35600E1064	HV BUSH, MALE 3HI FOR G.E. SWITCHGEAR EQ	Electric	\$10.17	Whse	Each		EE401	
35600E1065	HV BUSH, FEMALE 3HI FOR G.E. SWITCHGEAR	Electric	\$3.73	Whse	Each		EE402	
35600E1083	ASSEMBLY, CABLE ***PERM-1***	Turbine	\$63.18	Whse	Each		EE500	
35600E1084	REGULATOR ***PERM-j***	instrument	\$104.29	Whse	Each		EE500	KAMAN INDUSTRIAL TECHNOLOGIES
35600E1085	PROXIMITOR #2 TG ***PERM-3*** G E #2096J	instrument	\$2,601.00	Whse	Each		EE500	
35600E1086	DIODE, TG, GE. 2088570-001	Electric	\$37.50	Whse	Each		EE500	
35600E1140	INVERTER, DC, FOR INVERTER SCI(UPS)SOLID	Electric	\$1,090.00	Whse	Each		FF907	
35600E1141	BOARD, VOLTAGE & CURRENT REGULATOR, GOUL SIZE ONE STARTER	Board	\$644.50	Whse	Each		FF907	
	SIZE TWO STARTER							
EXTERNAL POWER								
35603E1050	Disk, rupture 72-183-253-002	Electric	\$360.00	Whse	Each		CC602	Excelerate
35603E1052	Coil, close 41-211-176-023	Electric	\$458.00	Whse	Each		CC600	Excelerate
35603E1053	Coil, open 41-211-176-034	Electric	\$458.00	Whse	Each		CC600	Excelerate
35603E1054	Motor, with gear 41-211-208-032	Motor	\$1,600.00	Whse	Each		CC600	Excelerate
35603E1100	Motor, TR-01 cooling fan	Motor	\$0.00	Whse	Each		Q112	
50003E1100	Motor, Glycol Cooling Fan	Motor	\$390.22	Whse	Each		Q112	
50003ME011	Kit, Impeller	Pumps	\$1,055.00	Whse	Kit		I222	
50003ME118	Valve, Check	Valve	\$1,225.00	Whse	Each		E803	
FIRE PROTECTION								
50009E1001	Motor, Jockey Pump	Motor	\$475.85	Whse	Each	HPRPMFRAME 5.003450184TC	Q112	
50009E1003	Motor, Electric Fire Pump, 250HP	Motor	\$8,868.05	Whse	Each	250 HP Fire Pump Motor, Vertical, RPM:1770, Frame:445TPA, Volts:460 S/N:7258NO3L266R155R-2	S112	Tampa Armature Works
50009ME001	Pump, Jockey Fire	Pumps	\$0.00	Whse	Each		S111	

SCHEDULE 17

TRANSITION PLAN

This Schedule will be the Transition Plan contained in the Contractor's Proposal that was prepared in accordance with the Final RFP and appended upon County approval.

SCHEDULE 18

DESIGN AND CONSTRUCTION MONITORING AND REVIEW

Part 1 General.

This Schedule 18 sets forth the more detailed design and construction monitoring rights and obligations pursuant to the County's design and construction monitoring rights set forth in Section 10.5 in the Service Agreement for all projects implemented pursuant to Section 10 of the Service Agreement.

Part 2 Work Progress.

During the design and construction period for all projects undertaken pursuant to Section 10 of the Service Agreement, the Contractor's Authorized Representative shall prepare and submit to the County's Authorized Representative and the Consulting Engineer by the tenth (10th) Day of each Billing Month a written report addressing all such projects, including an updated project schedule for each project, that contains, or, as applicable, describes:

- (a) the status of design, procurement and construction activities;
- (b) the status of Permit applications and approvals;
- (c) the status of equipment and material deliveries;
- (d) listing of contractors working on site and their staffing levels, including the percentages of the Work as to each project completed up to and including the last Day of the immediately preceding Billing Month;
- (e) the percentage of such Work completed, including the nature of the Work completed allocated among major categories of Work, such as electrical, mechanical,

structural, testing, labor, equipment and materials that are committed to these major categories;

(f) the Work planned to be completed in the then current month in such major Work categories; and

(g) as long as construction progress is viewable from the exterior of the Facility, three (3) varying aerial color photographs from directions selected by the County's Authorized Representative, and photographs of equipment installation and other major construction and Work progress events that occurred on the Facility Site during the previous Billing Month.

During the design and construction period for each project undertaken pursuant to Section 10 of the Service Agreement, the Contractor shall meet with the County's Authorized Representative and the Consulting Engineer Monthly. The purpose of these meetings is to review the material contained in the Monthly Reports, discuss problems and corrective actions planned, identify any planned impacts to existing operations, inspect the construction site and generally keep the County's Authorized Representative and the Consulting Engineer up-to-date on all issues related to the Work. The Contractor shall prepare a formal meeting agenda and submit the same to the County's Authorized Representative and the Consulting Engineer as least five (5) Business Days prior to such meeting. The Contractor shall prepare minutes of each meeting and distribute the same to all attendees within five (5) Business Days after the occurrence of such meeting.

Part 3 Notices and Monitoring Procedure.

The Contractor shall neither be obligated nor permitted by this Schedule 18 to delay any Work (including, but not limited to, procurement and construction activities) undertaken or

planned to be undertaken pursuant to the terms and provisions of Section 10 to the Service Agreement; provided, however, that if the Contractor proceeds or causes any Subcontractor to proceed with any Work without allowing the County's Authorized Representative or the Consulting Engineer, or both, at least five (5) Business Days prior written notice for the County's Authorized Representative or the Consulting Engineer, or both, to perform its monitoring services, then the Contractor shall proceed with any such Work solely at its own risk. Timely delivery of a detailed Work schedule by the Contractor's Authorized Representative to the County's Authorized Representative and the Consulting Engineer prior to the commencement of construction shall satisfy such five (5) Business Day notice requirement, provided that, if the Contractor proposes to make any changes to such Work schedule, the Contractor's Authorized Representative shall notify in writing the Consulting Engineer and the County's Authorized Representative at least five (5) Business Days in advance of such proposed change or proceed at the Contractor's sole risk.

The Contractor shall make available to the County's Authorized Representative and the Consulting Engineer the plans, shop drawings, specifications, schedules, critical path analysis and all other documents at any stage of the development of the project(s) prepared in the Contractor's and Subcontractors' ordinary course of business that are reasonably necessary to enable the County's Authorized Representative and the Consulting Engineer to review the design, engineering, procurement, construction, installation and testing in order to assure the County that the Work is being performed in substantial compliance with the applicable amendment to the Service Agreement, the requirements contained in the applicable amendment, and with respect to projects undertaken pursuant to Section 10.4 of the Service Agreement, the changes approved by the County's Authorized Representative.

Part 3.1 Design Review.

The Contractor shall make available to the County's Authorized Representative and the Consulting Engineer all of the design drawings and specifications for the projects. The County's Authorized Representative and the Consulting Engineer shall review and comment on these documents for conformance with the requirements of the applicable amendment to the Service Agreement and with respect to projects undertaken pursuant to Section 10.4 of the Service Agreement, the changes approved by the County's Authorized Representative. The Contractor shall make the design documents for each project available to the County's Authorized Representative and the Consulting Engineer for review and comment, as required by the applicable amendment to the Service Agreement and at the thirty percent (30%), seventy percent (70%) and one-hundred percent (100%) completion stages of design for such project. Any drawings released, in whole or in part, for construction shall be submitted five (5) Business Days before release. The design documents for review and comment shall include, at a minimum, those specified in the applicable amendment to the Service Agreement for each project. In addition, the Contractor shall provide to the County's Authorized Representative and the Consulting Engineer with respect to each project, the following, as applicable:

- (1) Summary of required project permits.
- (2) Any survey information, including topography which is obtained by the Contractor.
- (3) Any geotechnical (soil or subsurface, or both) reports or information or investigation results obtained by the Contractor.

All design documents made available to the County's Authorized Representative and the Consulting Engineer for review pursuant to this Schedule 18, and to which comments are made

by the County's Authorized Representative or Consulting Engineer, shall be returned to the Contractor within a reasonable time. Unless otherwise disputed, the Contractor shall address each such comment and proceed with requisite modifications so as to reasonably comply with the requirements of the applicable amendment to the Service Agreement. The Contractor's Authorized Representative shall provide all revisions to the design documents to the County's Authorized Representative and the Consulting Engineer. The County's Authorized Representative or the Consulting Engineer shall, within five (5) Business Days of the County's Authorized Representative's and the Consulting Engineer's receipt of such revisions, advise the Contractor's Authorized Representative in writing of the acceptability of such revisions. The various design reviews, any comments made by the County's Authorized Representative and Consulting Engineer on the plans, specifications, drawings, schedules and the like, or changes made by the Contractor resulting therefrom, shall not relieve the Contractor from any of its obligations under the Service Agreement.

Unless otherwise specified, reasonable time for review and comment by the County's Authorized Representative and the Consulting Engineer under this Schedule 18 shall be defined to mean ten (10) Business Days. Failure by the County's Authorized Representative or the Consulting Engineer, or both, to provide comments to the Contractor within ten (10) Business Days after its receipt of the Contractor's Authorized Representative's documents for review shall constitute a waiver of any comments or objections thereto; provided, however, that if within such ten (10) Business Day period, the County's Authorized Representative or the Consulting Engineer, or both, notifies the Contractor's Authorized Representative in writing that additional review time is required, a failure of the County's Authorized Representative or the Consulting Engineer, or both, to return such document shall not constitute a waiver unless such failure

continues until the expiration of fifteen (15) Business Days after the County's Authorized Representative or the Consulting Engineer, or both's, receipt of the documents to be reviewed.

Part 3.2 Construction Review.

The County's Authorized Representative or the Consulting Engineer, or both, shall be the County's agent on the Facility Site during construction. The Contractor's Authorized Representative shall provide the County's Authorized Representative and the Consulting Engineer access to the following information, as applicable, at the Facility Site during construction:

- (1) Shop drawings and samples;
- (2) Manufacturer's operation and maintenance manuals;
- (3) Material test reports;
- (4) Shop test reports;
- (5) Performance Test Plan;
- (6) Any submittals required by the applicable amendment to the Service Agreement; and
- (7) All permits and related correspondence received by or from the Contractor and/or permitting authority.

All construction documents provided to the County's Authorized Representative and the Consulting Engineer for review pursuant to this Service Agreement, and to which comments are made by the County's Authorized Representative and the Consulting Engineer, shall be returned to the Contractor's Authorized Representative within a reasonable time. Unless otherwise disputed, the Contractor's Authorized Representative shall address each comment and make the requisite modifications so as to comply with the requirements of the applicable amendment to the

Service Agreement, and with respect to projects undertaken pursuant to Section 10.4 of the Service Agreement, the changes approved by the County's Authorized Representative. The Contractor's Authorized Representative shall provide all revisions to the construction documents to the County's Authorized Representative and the Consulting Engineer. The County's Authorized Representative or the Consulting Engineer, or both, shall advise the Contractor's Authorized Representative in writing within five (5) Business Days of the Consulting Engineer's receipt of such revisions. The various construction reviews and any comments made by the County's Authorized Representative or the Consulting Engineer, or both, on the construction documents shall not relieve the Contractor from any of its obligations under the Service Agreement.

Unless otherwise specified, reasonable time for review and approval by the County's Authorized Representative and the Consulting Engineer under this Part 3.2 shall be defined to mean ten (10) Business Days. Failure by the County's Authorized Representative and/or the Consulting Engineer to provide comments to the Contractor's Authorized Representative within ten (10) Business Days after its receipt of the Contractor's Authorized Representative construction documents for review shall constitute a waiver of any comments or objections thereto; provided, however, that if, within ten (10) Business Days after receipt of the documents from the Contractor's Authorized Representative's, the County's Authorized Representative or the Consulting Engineer, or both, notifies the Contractor's Authorized Representative in writing that additional review time is required, a failure of the County's Authorized Representative or the Consulting Engineer, or both, to return such document shall not constitute a waiver unless such failure continues until the expiration of fifteen (15) Business Days after the County's

Authorized Representative or Consulting Engineer, or both's, receipt of the documents to be reviewed.

The County's Authorized Representative and the Consulting Engineer shall be notified at least ten (10) Business Days in advance of any planned shop tests and shall have the right to attend and witness such shop tests. The Contractor shall provide a copy of the shop test plans and procedures to the County's Authorized Representative and the Consulting Engineer at the time of notice.

The County's Authorized Representative and the Consulting Engineer's monitoring and review, as set forth above, shall not in any way be construed as relieving the Contractor of any of its obligations, responsibilities or liabilities under the Service Agreement.

Part 4 Revisions to Review and Comment Periods.

Notwithstanding the review and comment periods specified in Part 3.1 and 3.2 of this Schedule 18, the Authorized Representatives are authorized to revise, as necessary and appropriate, such review and comment periods to facilitate the Contractor's compliance with its design and construction schedule in each applicable amendment. To the extent both of the Authorized Representatives agree to revisions, if any, they shall formalize such agreement by a written letter executed by such Authorized Representatives and such letter shall serve to revise such review and comment periods. To the extent both of the Authorized Representatives cannot agree on any revision, such disagreement shall be deemed a dispute and subject to dispute resolution in accordance with Section 14 of the Service Agreement.

Part 5 Monitoring Information.

The Contractor agrees to make available information reasonably necessary to permit such monitoring activities, and the Contractor's Authorized Representative shall review the design

and construction of each project with the County's Authorized Representative and the Consulting Engineer.

SCHEDULE 19

TECHNICAL RECOVERY PLAN

Overview

The purpose of this Schedule 19, in conjunction with Sections 8.7, 8.8 and 10.6 of the Service Agreement, is to allow the Contractor to perform Projects during the Transition Period, if authorized by the County, and Initial Operating Period in order to bring the Facility up to industry standard performance levels, including for availability, throughput, energy generation, utility and reagent utilization, that can and should be achieved under “normal and customary” operation and maintenance practices in accordance with the Service Agreement, including the Standards of Maintenance and the Performance Guarantees. As set forth in, and in accordance with, Sections 8.7 and 8.8 of the Service Agreement, the County will reimburse the Contractor for the costs of such Projects separately from the Service Fee.

Without limiting the generality of other applicable provisions of the Service Agreement, all Projects undertaken pursuant to this Schedule 19 shall (a) comply with all applicable Codes and Standards, (b) be designed in accordance with the requirements of Section 10.3 of the Service Agreement, and (c) comply with the design and construction monitoring requirements of Section 10.5 of the Service Agreement.

The listing of TRP Projects, Facility systems and Equipment to be tested as provided in this Schedule 19 does not indicate or suggest any order of priority or any sequencing of Work. The Contractor shall sequence and schedule the Projects so as to maintain the On-Peak Capacity Factor and the Total Capacity Factor in accordance with Section 10.6.7.1 and shall deliver to, and coordinate with, the County’s Authorized Representative such sequence and schedule along with Monthly updates during the Transition Period, if applicable, and Initial Operating Period.

This Schedule 19 contains the following four parts:

- **Part A** sets forth a preliminary list of TRP Projects;
- **Part B** specifies the Facility systems and particular pieces of Equipment that the Contractor shall test, or cause to be tested, in accordance with the stated test procedures to determine if there are defects that, in accordance with the stated criteria, qualify such Facility system or piece of Equipment as a LDC Project;
- **Part C** attaches the results of the most current Consulting Engineer's Inspection Report, dated _____, setting forth noted deficiencies; and
- **Part D** attaches the Contractor's technical approach to the Technical Recovery Plan that was submitted in accordance with the FRFP.

To the extent feasible, the Contractor is encouraged to include as many Cures for the deficiencies noted in Part C within the scopes of Work for either the TRP Projects or LDC Projects.

If a LDC Project is proposed, approved by the County and implemented based upon testing in Part B of this Schedule 19, the Contractor shall be precluded from claiming a LDC Project on such piece of Equipment following implementation of such LDC Project.

All inspections, evaluations and testing prescribed in this Schedule 19 shall be at the sole cost and expense of the Contractor and such costs and expenses shall be included in the Technical Recovery Plan Management Fee.

The Technical Recovery Plan Management Fee shall be the only compensation the Contractor is entitled to receive in connection with the performance of its Project Management Services for all Projects identified or developed pursuant to this Schedule 19. Further, such

Technical Recovery Plan Management Fee includes the cost of any Subcontractor performing such Project Management Services by or on behalf of the Contractor, including all personnel costs including insurance premiums (e.g., workman's compensation) and any other such related costs or expenses: provided, however, the Contractor may be entitled to receive additional compensation for such Project Management Services for Project(s) completed after expiration of the Initial Operating Period, all in accordance with Section 10.6.9.2 of the Service Agreement.

For purposes of this Schedule 19, the term "Project Management Services" means (a) all project scoping (including preparation of Preliminary Scopes of Work and Final Scopes of Work), organization, scheduling, testing, assessment, directing, controlling, monitoring, planning, procurement (including preparation of bid packages and bid evaluations), management, oversight, administration, accounting and assessment and evaluation of activities (including preparation of business case analysis and Statements of Consequences), whether performed on or off Facility Site, and whether with respect to Contractor's employees or its Affiliates' employees, or those of its Subcontractors; and (b) all transition activities, including the development of a fully populated computerized maintenance and operations management system, developing or adapting standard operating procedures to the Facility, and conducting, administering and presenting Contractor's corporate employee training programs, as may be applicable to each new Contractor employee. Upon request, all such Project Management Services shall be documented and demonstrated to the County's Authorized Representative

Unless otherwise waived in advance in writing by the County's Authorized Representative, the following shall each be provided, in reasonable detail, for each Project as part of the Preliminary Scope of Work and Final Scope of Work developed in accordance with Section 10.6 of the Service Agreement:

1. Project name, brief description and summary report as described in Part A of this Schedule 19;
2. Timing and schedule under which the subject Project shall be undertaken;
3. Maximum Project Price (to be specified for purposes of the Final Scope of Work);
4. Payment type (e.g., lump sum or Direct Cost) and specified milestone payments (by specific milestone) if appropriate and agreed to by the County's Authorized Representative;
5. Criteria for Project completion and acceptance;
6. Impact, if any, on the Performance Guarantees and Utilization Allowances if the Project completion date is reasonably expected to extend beyond the term of the Initial Operating Period;
7. List of any additional insurance (by type, coverage amount and deductible) or other security instruments (payment and performance bonds) to be obtained by the Contractor as may be required by the County's Authorized Representative;
8. Statement of Consequences if the Project is not completed; and
9. Business case analysis, as described in Part A of this Schedule 19 if new Facility system or Equipment is proposed.

SCHEDULE 19

PART A

COUNTY PROPOSED TECHNICAL RECOVERY PROJECTS

The purpose of this Part A of this Schedule 19 is to provide a preliminary list of TRP Projects identified by the County for Contractor's evaluation during the TRP Inspection Period. The Contractor shall prepare (a) for each Project, a summary report documenting the findings of their inspections and recommended scope, budget, and schedule for any of the Projects which they determine to be needed to restore the Facility to a normal operating condition and (b) a master schedule of all Projects and update such master schedule on a Monthly basis. If the Contractor recommends the Replacement of the Facility system or Equipment in the summary report (rather than the Repair of such Facility system or Equipment), the Contractor shall present a business case analysis, in reasonable detail, for the County's consideration which sets forth, at a minimum, the Facility capital and operating costs and impact on Facility performance associated with the alternatives of (i) making the Repairs, (ii) Replacing the Facility system(s) or Equipment, as proposed by the Contractor (in lieu of Repairing the same) and (iii) not making such Repair or Replacement, and the projected twenty (20) year life-cycle costs of the three alternatives. Each TRP Project identified below shall be considered to be preceded by the phrase "unless completed by or on behalf of the Prior Contractor" or "to the extent not completed by or on behalf of the Prior Contractor."

1. CIVIL / SITE /BUILDINGS

- 1.1 Residue Storage and Processing Building ("RSPB") Internal Repairs – The Contractor shall power wash and clean all structural steel elements inside of the RSPB (girts, purlins,

columns, brackets, grating, etc.) and Repair or Replace the structural steel and any protective coatings as necessary. The Contractor shall install (a) additional lighting in southwest corner of the RSPB over stairways, landings, and grating decks around grizzly scalpers and (b) new lighting in overhead, or along south wall of building, to provide improved lighting of metal recovery system equipment, such that it is accessible for periodic bulb/fixture maintenance. The Contractor shall ensure that all areas of the RSPB are illuminated to meet at least the applicable Codes and Standards.

- 1.2. RSPB External Repairs – The Contractor shall Repair and Replace the corroded metal roofing system in areas where needed, especially above operating machinery and Equipment along western and southern portions of the building.
- 1.3. Demolish Lime Softening System – The Contractor shall demolish the old lime softening system located north of the cooling tower including removal and proper disposal of the contents of any tanks or storage vessels, removal of the foundations (if any), proper termination of all utilities, and restore the site to grade with clean fill and sod, mulch or crushed shell.
- 1.4 Contractor laydown area – The Contractor shall clear the area north of the lime softening system, and pave (porous material preferred) both the LSS and adjacent area to provide additional storage for equipment after optimization of storage in existing warehouse. The Equipment storage area shall be fenced. The Contractor may propose constructing a storage structure in lieu of the fenced storage area.
- 1.5 Clean, remove and repair concrete flooring under ash conveyors, evaluate drainage and column condition – The Contractor shall clean, remove and Repair unsound concrete from all damaged structural columns/supports between the vibrating conveyors and ash

dischargers from between the economizer fly ash drag chain conveyers and the ash dischargers with appropriate sloping to provide good drainage. Patch concrete with structural mortar and clean and paint the lower three (3) feet of steel supports with coal tar epoxy or County approved corrosion resistant coating.

2. REFUSE RECEIVING AND STORAGE AREAS

- 2.1. Refuse Pit Repairs – The Contractor shall inspect areas of erosion and exposed and missing reinforcing steel on upper portions of front wall of the Pit under the seven tipping bays and prepare a plan to Repair such areas. The Contractor shall engage an independent structural engineer to perform a structural analysis to evaluate structural adequacy of the damaged areas, and develop plans for Repairs if it is determined that Repairs are required.
- 2.2. Refuse Crane Repair – Kone inspected the cranes during fall 2013 outage, and Kone's report is available from the County. The Contractor may either rely on that report or engage the services of the OEM or an independent qualified third party knowledgeable in these types of cranes and this type of service to inspect grapples, festoon cables, and controls and repair as necessary for continuing long-term service. The Contractor shall engage the services of the OEM or an independent qualified third party knowledgeable in these types of cranes and this type of service to (i) evaluate the option for replacement of controls and motors with VFD drives if units are deemed to be suitable for long-term service, (ii) inspect the main rails, beams and supports, and bridge rails for cracks/damage, and (iii) perform thorough structural analysis of refuse crane support system based upon inspection results and make recommendations for the Repair or

Replacement of such Equipment. If the results of inspection and structural analysis do not support long-term service, replace existing three (3) refuse cranes with new cranes with larger capacity grapples. Evaluation should also include festoon cables and power supply to all three cranes.

2.3 Crane Pulpit Chairs - The Contractor shall inspect the chairs and their placement and devise a plan to replace the three (3) existing crane operator chairs with ergonomically designed chairs in a new position that allows full viewing of refuse pit unloading area without strain for operator.

2.4. Improved Lighting around Refuse Crane Pulpit – The Contractor shall add high efficiency lighting along the foot path between the boiler area and the refuse crane pulpit to improve illumination for safe passage by all personnel.

3. STOKER, GRATES, BOILERS AND COMBUSTION CONTROL

3.1. Boiler and Header Support and Hanger Replacement - The Contractor shall engage the services of the OEM or an independent qualified third party knowledgeable in these types of boilers to inspect and make recommendations as to the need to Repair or Replace the hangers and supports and to make recommendations as to the type of Repair or Replacement. The Contractor shall develop a scope of work, schedule and budget for the recommended work.

3.2. Boiler Tubing Assessment – The Contractor shall perform ultrasonic thickness testing of all waterwall, evaporator, superheater and economizer tubes as well as all headers, releaser, downcomers and circulating piping. Test points shall be spaced at a maximum of six (6) feet apart with readings being taken as close as possible to end points of all tubes/piping. Tubes and piping with only one side exposed to the flue gas shall have

three readings taken (left, center, and right side of the tube) at each test point. Tubes or piping outside the flue gas path shall be tested.. Results shall be assessed for corrosion and potential for stress cracking. Any areas exhibiting corrosion or stress cracking shall be subject to Repair or Replacement in accordance with ASME procedures, together with removal and replacement of insulation and lagging, as necessary. It is recognized that it may not be possible to assess the condition of all tubing in the superheater, evaporator and economizer sections of the boiler and waterwalls as such may be subject to stress cracking or waterside corrosion, and the County desires to maximize the remaining useful life of these assets prior to replacement. Projects to replace these boiler elements at the time such are required whether or not such time is after the Initial Operating Period, will be approved by the County subject to approved scopes of work.

- 3.3. Boiler Supports and Penthouse Inspection and Repairs – The Contractor shall remove sufficient quantities of exterior lagging and insulation to enable and provide representative inspections of the boiler penthouse casing via visual and UT examination. The Contractor shall Repair casing as needed, along with Replacement of new insulation and lagging. The Contractor shall Repair or Replace “cans” around boiler support rods, as needed. The Contractor shall investigate, identify, and seal/repair all areas of boiler penetrations through roof which can contribute to leakage of hot flue gas into penthouse roof area. Contractor shall inspect boiler supports and thermal expansion guides and Repair or Replace as necessary.
- 3.4. Grate Bars - The Contractor shall provide one full set of Grate Bars for Martin Stoker for one (1) unit.

- 3.5. Stoker – The Contractor shall evaluate the stoker system for each combustion unit and related controls and Repair or Replace as necessary.
- 3.6. Gas Burners – The Contractor shall have a third party evaluate gas burners and Repair or Replace as necessary.
- 3.7. Man Ways, Inspection Ports and Doorways -- The Contractor shall Repair or Replace all defective man ways, inspection ports, and doorways, and protect inside with insulating refractory on all three combustion units.
- 3.8. Silencers -- Evaluate condition of all Silencers and Repair or Replace as necessary.

4. AIR POLLUTION CONTROLS

- 4.1. Stack Liner Repair – The Contractor shall Repair each of three (3) flue gas liners to bridge over gaps from construction misfit which was temporarily repaired with refractory. The Contractor shall determine the means and methods to Repair or Replace the flue gas liners. The gaps were observed by Industrial Access by Chimney Solutions at location approximately 103 feet and documented in their report (December 2011).
- 4.2. Controls for Air Pollution Control System Repair and/or Replacement – The Contractor shall engage the services of the OEM or an independent qualified third party knowledgeable in these types of Controls for the APC systems to inspect and make recommendations as to the need to Repair or Replace the Controls and mechanical ancillary equipment, for the APC systems and to make recommendations as to the type of Repair or Replacement. The Contractor shall also replace one of the lime slaking systems and restore the lime slurry piping system to provide redundancy to each SDA. The Contractor shall develop a scope of work, schedule and budget for the recommended work.

- 4.3 Carbon Flow Monitoring and Tie Alarm – The Contractor shall restore operation of secondary carbon flow monitoring, and tie alarm for low/no flow to control room.
- 4.4 Spray Dry Absorbers (SDAs) - The Contractor shall perform visual and ultrasonic thickness testing of the hopper and vessel and duct work (inlet and outlet). Test points shall be located at a maximum vertical spacing of six (6) feet and a minimum of eight (8) locations circumferentially at each test elevation. Areas, exhibiting more than thirty percent (30%) loss of wall thickness from original design wall thickness and any holes detected by visual examination, shall be repaired with plate overlay to bring the area up to the original design wall thickness. Depending upon the extent of areas requiring repair, the Contractor may recommend replacing the hopper or the vessel or both and duct work subject to presentation of the business case specified in the first paragraph of this Part A.
- 4.5 Fabric Filter Baghouses - The Contractor shall perform visual and ultrasonic thickness testing of the inlet plenum, hoppers, compartments and outlet plenum and duct work up to the stack inlet breaching. Test points shall be located at a maximum linear spacing of six (6) feet and a minimum of eight (8) perimeter readings taken at each test point. Areas, exhibiting holes or more than thirty percent (30%) loss of wall thickness from original design wall thickness, shall be repaired with plate overlay to bring the area up to the original design wall thickness. The Contractor shall also evaluate the control systems for operation of the fabric filter baghouses. Depending upon the extent of areas requiring repair, the Contractor may recommend replacing one or more baghouses subject to presentation of the business case specified in the first paragraph of this Part A.

5. TURBINE GENERATOR

- 5.1. TG-1 Steam Path Replacement and Maintenance – The Contractor shall support the Steam path supplier (General Electric or GE) with the installation of the steam path as such “owner support” is identified in the steam path installation scope by GE. The Contractor shall also perform the five-year outage maintenance from stop valve to the Non-return valve including inspection and required repairs as part of this project. Normal five-year outage work on turbine generator auxiliary equipment (lube oil system, hydraulic oil system, bearings, the hydrogen generator cooling system, hogging air ejectors, etc.), and all other work outside of the scope above associated with the five-year turbine 1 outage shall be at the Contractor’s sole cost and expense. The County intends to issue a purchase order for the new steam path from General Electric (GE) in August 2014 with anticipated delivery of new components in time for a fall 2015 outage. GE has indicated that they will be able to support a fall 2015 outage to install the new steam path.

6. ASH COLLECTION, TRANSFER, AND TREATMENT SYSTEMS

- 6.1. Pugmills – The Contractor shall Repair or Replace pugmills and pugmill controls with improved components (Dustmizer or other).
- 6.2. Ash Conveyance Systems – The Contractor shall Repair or Replace ash conveyance systems as necessary based on evaluation from OEM or independent qualified third party knowledgeable of those systems.

7. INSTRUMENTATION AND CONTROLS

- 7.1. Distributed Control System - The Contractor shall review the ABB report (to be issued August or September 2014) and additional inspections and evaluation from ABB performed after such date, available from the County and recommendations and evaluate

need for a new Distributed Control System (DCS). The Contractor shall report its findings to the County.

- 7.2. CEMS- The Contractor shall upgrade CEMS software and hardware as necessary to ensure reliable operation.
- 7.3 DCS/CEMS Connections - The Contractor shall review and upgrade connection between DCS, CEMS, etc. to hard wire vs remote connection.
- 7.4. Data Connection to Facility – The Contractor shall provide the County with access to view and download data from the Facility (DCS and CEMS) utilizing either the existing “Citect” system or a replacement system with direct connection to County via fiber optic system, or through software as a service (Enviance). The County shall also have capability to incorporate other County data sources (i.e., Industrial Water Treatment Plant).

8. ELECTRICAL SYSTEMS

- 8.1. Cable Tray and Conduit Inspection and Repairs – The Contractor shall clean all cable trays and conduits, inspect for proper grounding and corrosion and adequate support, and Repair or Replace as necessary. Where appropriate, new cable tray covers shall be installed to minimize accumulation of foreign matter.
- 8.2. Electrical Receptacle / Junction Box Inspections and Repairs – The Contractor shall locate, inspect, and test all 120 and 480 VAC outlets throughout the Facility and Repair or Replace as needed. All receptacles in potentially wet environments shall be checked to ensure that they are on GFCI circuits and have covers with gaskets installed. Those that do not meet the above requirement shall be Repaired or Replaced. The Contractor shall inspect all junction boxes for structural adequacy and Repair or Replace as required.

- 8.3. Lighting Improvements – The Contractor shall locate plans for existing lighting systems, and inventory, and inspect such systems. The Contractor shall (i) modify controls to place some lights on photocells for automatic operation, with others on switches for constant or interruptible operations, (ii) conduct a lighting survey and identify areas in need of additional lighting in order to make all areas of the Facility at least meet current Codes and Standards for illumination, and (iii) develop plans for lighting system modifications and improvements, including the use of LED (preferred) or other types of lighting, and implement.
- 8.4. Emergency Lighting Replacement – The Contractor shall identify and Replace all non-functional emergency lights with outdoor type water resistant fixtures. The Contractor shall conduct a system wide inspection and add additional emergency lights and exit signs at locations in need of service in order to make all areas of the Facility at least meet current Codes and Standards for emergency illumination.
- 8.5. Grounding System Inspections and Repairs – The Contractor shall (a) inspect all grounding system connections for equipment, cable trays, conduits, and structural steel and (b) Replace damaged cables and connections based upon inspection results.
- 8.6. Cooling Tower Lightning Protection -- The Contractor shall expand lightning protection to include the cooling tower.
- 8.7. 13kV Breaker Replacement – The Contractor shall replace 13kV switchgear located in MCC room near the Switchyard with new vacuum breaker switchgear due to reliability and safety concerns. It is presently contemplated that this Project will retain the existing switchgear frame, with each breaker cubicle being retrofitted to accommodate a new vacuum breaker.

- 8.8. 4160 Volt Breaker Replacements – The Contractor shall install a “spare” breaker 4kV Switchgear Bus 101.
- 8.9. BUS Upgrade – The Contractor shall install transfer switches for BUS 102 to BUS 103 and BUS 105 to 106 for greater operating flexibility.

9. MECHANICAL SYSTEMS

- 9.1. Piping Inspection, Repair, Insulation and Lagging – The Contractor shall engage the services of the OEM or an independent qualified third party knowledgeable in these types of piping systems to inspect and make recommendations as to the need to Repair or Replace the piping systems and to make recommendations as to the type of Repair or Replacement. The above scope of work shall include the inspection (visually, UT, or other special NDE examinations) of all pressure piping systems (condensate, feedwater, steam). The Contractor shall develop a scope of work, schedule and budget for the recommended work.
- 9.2. Cooling Tower Fill and Basin Refurbishment – The Contractor shall inspect and Repair or Replace (i) all cooling tower fill and supports, and (ii) Drain basin, clean, inspect and repair all deteriorated concrete surfaces.
- 9.3. Circulation Water Spare Pump – The Contractor shall purchase new spare pump and motor for circulating cooling water system.
- 9.4. Painting – The Contractor shall clean corrosion, repair as required, prime, and paint structural steel, handrails, and supports for electrical and mechanical equipment throughout the Facility.

- 9.5. Parasitic Load Reduction – The Contractor shall evaluate options to reduce parasitic load at the Facility including the option to install VFD on all 3 ID fans and FD fans and present a proposed scope, budget, schedule and payback analysis to the County.
- 9.6. Service Air Additions – The Contractor shall provide hard pipe service air with multiple valve stations and quick-disconnect fittings on all deck levels between Boilers No. 1 and 2, between Boilers No. 2 and 3, and at deck levels associated with SDAs and Fabric Filters for ease of maintenance.
- 9.7. Water Service Additions – The Contractor shall provide hard pipe water service with multiple valve stations and quick-disconnect fittings on all deck levels between Boilers No. 1 and 2, between Boilers No. 2 and 3, and at deck levels associated with SDAs and Fabric Filters for ease of maintenance.
- 9.8. Plant-wide Communication System – The Contractor shall restore and expand existing or install new public address system to all areas of Facility for routine and emergency communications. The Contractor shall also purchase and install additional communications Equipment as identified in the Communications Plan prepared in accordance with Section 3.33 of the Service Agreement.
- 9.9. Underground and Aboveground Fire Protection System Piping Repair and/or Replacement – The Contractor shall engage the services of an independent qualified third party knowledgeable in these types of underground and aboveground fire protection systems to inspect and make recommendations as to the need to Repair or Replace the underground and aboveground fire protection system and to make recommendations as to the type of Repair or Replacement. The Contractor shall develop a scope of work, schedule and budget for the recommended work.

- 9.10 Review Recommendations from Several Studies of the Compressed Air System – The Contractor shall (a) make improvements to air compressor building vents as needed for temperature control and to improve reliability of service air, (b) modify instrument air system to provide lower pressure drop (loop design or larger air supply pipes) and improve ability of system to provide dry clean air with low point drip legs and automatic drain valves, and (c) remove two existing inoperable air dryers.
- 9.11. Wastewater Management – The Contractor shall evaluate the condition of all tanks, basins, piping, pumps, valves and controls to transfer wastewater between various on site uses and reuses (wastewater tank, contact sump, cooling tower, boiler blowdown sump), and make necessary Repairs or Replacements to return system to good operating condition so as to minimize water use and sewer discharge. The Contractor shall work with the County and their Consultants in developing wastewater modifications that will benefit the Facility.

SCHEDULE 19

PART B

**DETERMINATION OF
LATENT DEFECT CURE PROJECTS**

The purpose of this Part B of this Schedule 19 is to identify:

1. the Equipment and Facility systems pursuant to Section 10.6 of the Service Agreement that are and shall be subject to testing or inspections by or on behalf of the Contractor at the Contractor's sole cost and expense during the LDC Testing Period;
2. the nondestructive test(s) or inspections to be performed on each such piece of Equipment or Facility system to establish its condition;
3. the criteria or standards to be used in conjunction with the test or inspection result(s) to determine whether such piece of Equipment or Facility system qualifies for and warrants Repair or Replacement as a LDC Project; and
4. the guidelines for such Repair or Replacement if the results of such tests or inspections do not meet the applicable criteria or standard set forth herein.

All inspections, evaluations and testing prescribed in this Schedule 19 shall be at the sole cost and expense of the Contractor, the costs of which are intended to be included in the Technical Recovery Plan Management Fee. The Contractor shall be responsible for the cost of such LDC Project if the estimated Repair or Replacement cost of such Facility system or Equipment is less than or equal to twenty thousand dollars (\$20,000). The County shall be responsible for the cost of such LDC Project, consistent with Section 10.6.8, if the estimated

Repair and Replacement cost of such Facility system or Equipment is greater than twenty thousand dollars (\$20,000).

The Contractor shall retain one or more qualified and independent technical, testing, inspection or engineering firms to conduct the nondestructive tests or inspections and to evaluate the test/inspection results to determine if the applicable criteria or standards established below for the following Equipment and Facility systems have been met.

Whenever this Part B of this Schedule 19 calls for testing or inspections, the Contractor shall: (a) provide the County's Authorized Representative and the Consulting Engineer the opportunity to witness the tests or inspections as provided for in Section 10.6 of the Service Agreement, and (b) promptly supply a copy of the results of such testing or inspections to the County's Authorized Representative, including (i) the nondestructive test results, (ii) the evaluation of the tests or inspections and (iii) any recommendations for Repair or Replacement of Equipment.

1. Surface Condensers

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for surface condenser No. 1 and surface condenser No. 2:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Ultrasonic thickness testing of the shell, heads and end caps. Test points shall be located a maximum of two (2) linear feet along the length of the shell and at a minimum of eight (8) locations circumferentially, with a minimum of eight (8) points being tested on each head and end cap.	Minimum wall thickness for the design pressure as calculated using the American Society of Mechanical Engineers ("ASME") Code for Boilers and Pressure Vessels and the National Board Inspection Code ("NBIC") guidelines.	Any areas failing to meet the criteria or standard shall be subject to Repair or Replacement in accordance with ASME procedures as a LDC Project.
b) One hundred percent (100%) inspection of the tube bundle using the eddy current non-destructive test method.	Tubes with greater than thirty percent (30%) loss of wall thickness.	Repair or plug all tubes exhibiting a loss of wall thickness greater than thirty percent (30%) in accordance with ASME Code Section V, Article 8.
c) Pressure test of the tube bundle at design pressure in accordance with ASME test procedures.	A total of at least twenty percent (20%) of the tubes either leak or were previously plugged.	If greater than twenty percent (20%) of the tubes either leak or were previously plugged, then the entire tube bundle shall be replaced as a LDC Project.
d) Magnetic particle testing of the shell and heads. Magnetic particle testing of the shell and heads may be performed when tube bundles are being Replaced in accordance with item (c) above.	ASME Boiler and Pressure Vessel Code and NBIC requirements for the Repair of cracks or Replacement of the shell and heads.	Any areas failing to meet the criteria or standard shall be subject to Repair or Replacement in accordance with ASME and NBIC procedures as a LDC Project.

2. Bypass Condensers

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for bypass condenser No. 1 and bypass condenser No. 2:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Ultrasonic thickness testing of the shell, heads and end caps. Test points shall be located a maximum of two (2) linear feet along the length of the shell and a minimum of eight (8) locations circumferentially, with a minimum of eight (8) points being tested on each head and end cap.	Minimum wall thickness for the design pressure as calculated using the ASME Code for Boilers and Pressure Vessels and NBIC guidelines.	Any areas failing to meet the criteria or standard shall be subject to Repair or Replacement in accordance with ASME procedures as a LDC Project.
b) One hundred percent (100%) inspection of the tube bundle using the eddy current non-destructive test method.	Tubes with greater than thirty percent (30%) loss of wall thickness.	Repair or plug all tubes exhibiting a loss of wall thickness greater than thirty percent (30%) in accordance with ASME Code Section V, Article 8.
c) Pressure test of the tube bundle at design pressure in accordance with ASME test procedures.	A total of at least twenty percent (20%) of the tubes either leak or were previously plugged	If greater than twenty percent (20%) of the tubes either leak or were previously plugged, then the entire tube bundle shall be replaced as a LDC Project
d) Magnetic particle testing of the shell and heads. Magnetic particle testing of the shell and heads may be performed when tube bundles are being replaced in accordance with item (c) above.	ASME Boiler and Pressure Vessel Code and NBIC requirements for the repair of cracks or replacement of the shell and heads.	Any areas failing to meet the criteria or standard shall be subject to Repair or Replacement in accordance with ASME and NBIC procedures as a LDC Project

3. Steam Turbine-Generators

TG No. 2 will have its 5 year outage and maintenance in the fall of 2014. The generator portion of TG No. 1 will have its generator five year maintenance done in the fall of 2014 and the turbine portion of that unit will have a new steam path installed in the fall of 2015. No testing is required on either of these units, outside of that testing being performed in conjunction with the outages referred to above.:

Nondestructive testing or inspections of the turbine-generator No. 1 may be performed even if such work has been performed by the Prior Contractor prior to the Commencement Date. Additionally, the Contractor shall replace the generator retaining rings and re-wind the field on generator No. 1 as a LDC Project only if such work has not been performed by the Prior Contractor prior to the Commencement Date.

4. **Feedwater Heaters**

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for feedwater heater No. 1 and feedwater heater No. 2:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Ultrasonic thickness testing of the shell, heads and end caps. Test points shall be located at a maximum of two (2) linear feet along the length of the shell and at a minimum of eight (8) locations circumferentially, with a minimum of eight (8) points being tested on each head and end cap.	Minimum wall thickness for the design pressure as calculated using the ASME Code for Boilers and Pressure Vessels and NBIC guidelines.	Any areas failing to meet the criteria or standard shall be subject to Repair or Replacement in accordance with ASME procedures as a LDC Project.
b) One hundred percent (100%) inspection of the tube bundle using the eddy current non-destructive test method.	Tubes with greater than thirty percent (30%) loss of wall thickness.	Repair or plug all tubes exhibiting a loss of wall thickness greater than thirty percent (30%) in accordance

		with ASME Code Section V, Article 8.
c) Pressure test of the tube bundle at design pressure in accordance with ASME test procedures.	A total of at least twenty percent (20%) of the tubes either leak or were previously plugged.	If greater than twenty percent (20%) of the tubes either leak or were previously plugged, then the entire tube bundle shall be Replaced as a LDC Project.
d) Magnetic particle testing of the heads. Magnetic particle testing of the shell may be performed when tube bundles are being replaced in accordance with item (c) above.	ASME Boiler and Pressure Vessel Code and NBIC requirements for the Repair of cracks or replacement of heads.	Any areas failing to meet the criteria or standard shall be subject to Repair or Replacement in accordance with ASME and NBIC procedures as a LDC Project.

5. Deaerators

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for deaerator No. 1 and deaerator heater No. 2:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Ultrasonic thickness testing of the shell and end caps. Test points shall be located at a maximum of two (2) linear feet along the length of the shell and at a minimum of eight (8) locations circumferentially, with a minimum of eight (8) points being tested on each end cap.	Minimum wall thickness for the design pressure as calculated using the ASME Code for Boilers and Pressure Vessels and NBIC guidelines.	Any areas failing to meet the criteria or standard shall be subject to Repair or Replacement in accordance with ASME procedures as a LDC Project.
b) Visual inspection of the trays and other internal components.	Customary Repairs as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices.	Repair items identified by the independent third party inspection firm shall be subject to Repair or Replacement as a LDC Project.
c) Magnetic particle testing of the shell and heads.	ASME Boiler and Pressure Vessel Code requirements for the repair of cracks or	Any areas failing to meet the criteria or standard shall be subject to Repair

	replacement of shell and heads.	or Replacement in accordance with ASME and NBIC procedures as a LDC Project.
d) Visual inspection of the external nozzles, attachments, and their supports,	Customary Repairs or Replacement as recommended by the independent third party inspection firm consistent with Prudent Industry Practices.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to repair as a LDC Project.

6. Steam Drums

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for steam drum No. 1, steam drum No. 2 and steam drum No. 3:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Ultrasonic thickness testing of the shell and end caps. Test points shall be located at a maximum of two (2) linear feet along the length of the shell and at a minimum of eight (8) locations circumferentially, with a minimum of eight (8) points being tested on each end cap and equidistant to the extent practical. The Contractor shall strive to test at these locations to the extent practicable. If obstructions interfere at these locations, the closest available points should be tested.	Minimum wall thickness for the design pressure as calculated using the ASME Code for Boilers and Pressure Vessels and NBIC guidelines.	Any areas failing to meet the criteria or standard shall be subject to Repair or Replacement in accordance with ASME procedures as a LDC Project.
b) Visual inspection of the steam separators, vortex eliminators, drain lines and all other internal components.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices.	Repair or Replacement items identified by the independent qualified third party inspection firm shall be subject to repair as a LDC Project.
c) Magnetic particle testing of	ASME Boiler and Pressure	Any areas failing to meet

the shell and heads, and all weldments.	Vessel Code and NBIC requirements for the Repair of cracks or Replacement of shell and heads. Testing in accordance with NACE Recommended Practice 0590-96.	the criteria or standard shall be subject to Repair or Replacement in accordance with ASME and NBIC procedures as a LDC Project.
d) UT shearwave or time of flight analysis of girth welds	ASME Boiler and Pressure Vessel Code and NBIC requirements for the Repair of cracks.	Any areas failing to meet the criteria or standard shall be subject to Repair in accordance with ASME and NBIC procedures as a LDC Project.

7. Electrical Transformers

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for electrical transformers TR-101, TR-102, TR-103, TR-104, TR-105, TR-106, TR01, and TR02:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Visual inspections of exterior of transformers, bushings, connections and grounding resistors.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to Repair or Replacement as a LDC Project.
b) Insulation resistance test. winding-to-winding and winding-to-ground.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to Repair or Replacement as a LDC Project.
c) Oil sampling and analysis for dielectric breakdown	Customary Repairs or Replacement as	Repair or Replacement of items identified by the

voltage, acid neutralization number, interfacial tension, color, visual condition, water in insulating fluid and dissolved gas analysis.	recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes.	independent qualified third party inspection firm shall be subject to Repair or Replacement as a LDC Project.
d) Insulation power factor test for transformers TR01, TR02, TR-101 and TR-104	Customary Repairs or Replacement as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to repair or replacement as a LDC Project.

8. 480V Motor Control Centers and Refuse Crane Control Panels

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for 480V motor control centers MCC 102, MCC 103, MCC-105A, MCC-105B, MCC 106A, MCC 106B, 1MCC, 2MCC, 3MCC, 4MCC, MCC4 and the three refuse crane control panels:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Thermographic survey of internal components and connections under load conditions.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to repair or replacement as a LDC Project.
b) Visual inspection of exterior and interior components and connections.	Customary Repairs or Replacement as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and	Repair or Replacement items identified by the independent qualified third party inspection firm shall be subject to repair as a LDC Project.

	Standards.	
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9. 4.16kV Motor Control Centers and Switchgear, and 480V Switchgear

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for the MCC 101, MCC 104, 4.16kV Switchgear, 480V Switchgear 105, and 480V Switchgear 106:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Insulation resistance test of buswork and draw-out breakers and/or contactors.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to Repair or Replacement as a LDC Project of any medium voltage breaker or contactor shall be with a vacuum type unit rather than air type.
b) Visual inspection of exterior and internal components and connections.	Customary Repairs or Replacement as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement items identified by the independent qualified third party inspection firm shall be subject to repair as a LDC Project.
c) Contact resistance test of draw-out breakers and/or contactors.	Customary Repairs or Replacement as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to repair or replacement as a LDC Project. Replacement of any medium voltage breaker or contactor shall be with a vacuum type unit rather than air type.
d) Protective device tests of all trip units and/or relays.	Customary Repairs or Replacement as recommended by the	Repair or Replacement items identified by the independent qualified third

	independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	party inspection firm shall be subject to repair as a LDC Project. Any replacement units shall be electronic, solid state state-of-the art type.
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10. 230kV Circuit Breakers and Switches in Main Switchyard

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for the two 230kV circuit breakers and associated switches in the main switchyard:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Insulation resistance tests for circuit breakers.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to repair or replacement as a LDC Project.
b) Oil sampling and analysis for dielectric breakdown voltage, color and visual condition for oil filled circuit breakers; vacuum bottle integrity for vacuum circuit breakers; gas analysis for SF6 circuit breakers.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to repair or replacement as a LDC Project.
c) Thermographic survey of equipment and connection points under load.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to Repair or Replacement as a LDC Project.

	Standards.	
d) Visual inspection of equipment and connections.	Customary Repairs or Replacements as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair or Replacement of items identified by the independent qualified third party inspection firm shall be subject to repair or replacement as a LDC Project.

11. Lightning Protection System

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for the Facility lightning protection system:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Visual inspection of air terminals, exposed conductors, and exposed fasteners and connectors.	Customary Repairs, Replacements or additions as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair, Replacement or addition of items identified by the independent qualified third party inspection firm shall be subject to Repair, Replacement or addition as a LDC Project.
b) Electrical continuity tests as required to certify complete system as UL Master Labeled.	Customary Repairs, Replacements or additions as recommended by the independent qualified third party inspection firm consistent with Prudent Industry Practices and applicable Codes and Standards.	Repair, Replacement or addition of items identified by the independent qualified third party inspection firm shall be subject to Repair or Replacement as a LDC Project.

12. Electrical Power Systems Documentation and Analysis

The following nondestructive tests, criteria or standards and Repair or Replacement guidelines have been established for the facility electrical power system documentation and analysis:

Test/Inspection Requirements	Criteria or Standards	Repair or Replacement Guidelines
a) Compile comprehensive Facility wide electrical one line diagram(s) using existing record drawings, Project additions and field inspection as required. One line diagrams to start at utility interconnection down to motor control center level, showing all loads connected to motor control centers.	Documentation to be done by independent qualified third party engineer, consistent with Prudent Industry Practices and applicable Codes and Standards.	National Electrical Code deficiencies identified by the independent qualified third party engineer shall be subject to Repair or Replacement as a LDC Project.
b) Computer generated short circuit study, based on documentation from part a) above. Study shall be in accordance with ANSI and IEEE standard C37.	Study to be done by independent qualified third party engineer, consistent with Prudent Industry Practices and applicable Codes and Standards.	Inadequate equipment short circuit ratings identified by the independent qualified third party engineer shall be subject to Repair or Replacement as a LDC Project.
c) Computer generated protective device coordination study, based on documentation from part a) above.	Study to be done by independent qualified third party engineer, consistent with Prudent Industry Practices and applicable Codes and Standards.	Adjustments to existing protective devices identified by the independent qualified third party engineer shall be subject to adjustment as a LDC Project. Additional protective devices or replacement of protective devices recommended by the independent qualified third party engineer shall not be considered as a LDC Project.

SCHEDULE 19

PART C

CONSULTING ENGINEER'S INSPECTION REPORT

Attached hereto is a copy of the Consulting Engineer's Inspection Report dated August 14, 2014 (the "CDM Inspection Report").

To the extent practical, the Contractor shall include the Repairs or Replacements of the items identified in the CDM Inspection Report with other related TRP Projects or LDC Projects. For particular items identified in the CDM Inspection Report that cannot be included with other TRP Projects or LDC Projects, the Contractor shall be responsible for performing the Repair or Replacement at its own cost and expense if the cost of such Repair or Replacement of the particular item is less than or equal to ten thousand dollars (\$10,000). The County shall be responsible for reimbursing the Contractor pursuant to Section 8.7 and 8.8 for the Repair or Replacement of such item(s) specified in the CDM Inspection Report which are not incorporated within other TRP Projects or LDC Projects where the cost of such Repair or Replacement exceeds ten thousand dollars (\$10,000).

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CEIR Number	OGPL Number	Description	Projected completion date	Priority 1-5	System	Department	Cost	County Approval/ Date	Status/Comments	Photograph
1074	9/13-267	Replace louvers on the east and north sides of the RSPB that are starting to corrode.	2/28/2014	4	16	Belt			Belt quoted to replace all 10 louvers with FRP material for \$31,800	
1133	11/13-349	Replace the gutter on the east side of the economizer on Boiler Unit No. 1.	4/30/2014	2	1	Contractor			Belt Quoted \$7,875 but must be coordinated with roof replacement during outage	
1158	11/13-380	Reinstall the missing splash guard on top of the grit screen in the southeast corner of the lime silo on the 2nd level.	2/28/2014	3	50	Contractor			On Hold Operations is evaluating	
1171	11/13-393	Clean up the significant accumulation of ash on the road between the baghouse area and the switchyard to prevent carryover into the switchyard area.	7/30/2014	4	50	Operations			Elwyn obtained a quote to clean up the area excavate the dirty gravel and replace with new gravel for approximately \$12,000. We are waiting on 2 other quotes	

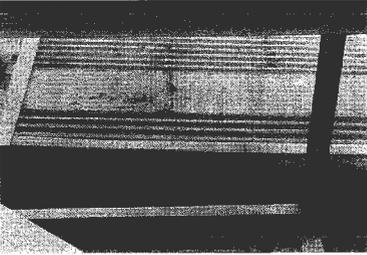
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1190		Replace demister media in #1 steam drum.	12/30/2014	2	1	Outage			C. Neu is working on getting material for Spring outage. Postponed until fall outage	No Picture
1191		Replace demister media in #2 steam drum.	12/30/2014	2	2	Outage			C. Neu is working on getting material for Spring outage. Postponed until fall outage	No Picture
1192		Replace demister media in #3 steam drum.	12/30/2014	2	3	Outage			C. Neu is working on getting material for Spring outage. Postponed until fall outage	No Picture
1202	02/14-003	The TG-2 drain flash tank is exhibiting advanced corrosion. Remove insulation and lagging and inspect for structural integrity. Clean, prime and paint tank and reinsulate and lag. Alternate inspection through manway may be considered.	12/30/2014	3	12	Contractor			We will evaluate replacing the tank during the TG overhaul in the fall	

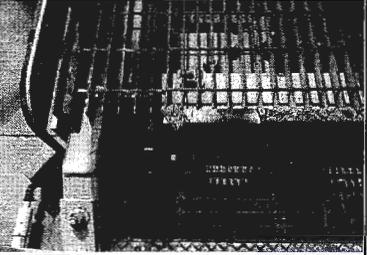
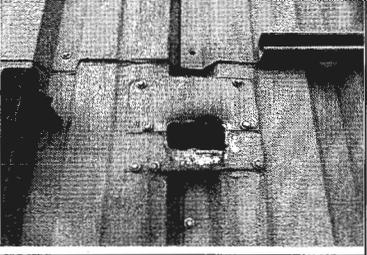
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1224	02/14-029	Repair holes in the top of the roof of the flyash conditioning building in the southwest corner.	12/30/2014	5	16	Contractor			Open	
1225	02/14-030	Clean ash from the gutter at top of economizer No. 1 that is completely plugged and make repairs where needed.	8/30/2014	3	1	Contractor			Open	No Picture
1228	02/14-034	Remove insulation and lagging from the top and bottom portions of the flash tank located on the south side of Unit No. 3 at elevation 20', inspect for structural damage to vessel due to corrosion, make repairs and replace insulation and lagging. Alternate inspection from inside of tank may be considered.	7/30/2014	3	3	Contractor			Insulation was stripped and we are looking at replacing the tank.	
1233	GCS	Organize facility documentation including OEM manuals, drawings, prints, reports and other historical information.	12/30/2014	5	50	Operations			Richard has started the process	No Picture

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1276	05/14-204	There are three small areas (25-40 SF) on grade under the TG island where concrete has been removed for installation of pipe supports for a steam interconnect piping system. These areas of the floor need to be replaced with reinforced concrete of the same specification as original construction.	12/30/2014	5	50	Contractor			Belt	
1280	05/14-208	There is a section of edging at the top of the short run of stairs on south side of TG-2 that has broken off and needs repaired (Tag No. 143).	12/30/2014	3	50	Contractor			DCR	
1282	05/14-210	There is a small abandoned penetration into the sheet metal siding on building under the control room which needs sealed to prevent moisture and insect entry.	10/30/2014	5	50	Contractor			ASI	
1286	06/14-215	Evaluate modifying the drainage system for Broadway to gravity drain to contact sump.	2015	5	50	Contractor				

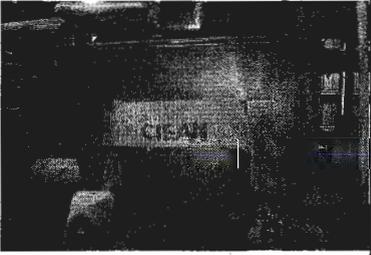
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CEIR Number	OGPL Number	Description	Projected completion date	Priority 1-5	System	Department	Cost	County Approval/ Date	Status/Comments	Photograph
1301	06/14-236	Replace the missing fire hose below TG 2.	8/30/2014	1	50	Operations				
1302	06/14-237	Replace the missing fire extinguisher on the No. 2 ID fan platform.	8/30/2014	1	50	Operations				
1305	06/14-241	Repair the rusted and corroded ladder on the treated water tank that is chained off.	1/12/1900	4	20	Contractor				
1319	06/14-255	The No. 3 steam boiler feed pump is not properly lined up and ready for standby service. Ensure written startup procedures for hot standby are posted by the pump to avoid risk of water hammer and damaging equipment.	9/30/2014	3	20	Operations				

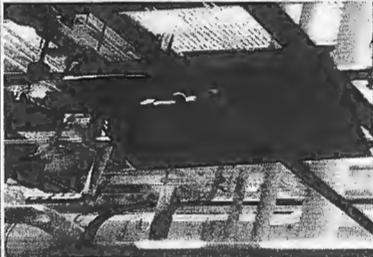
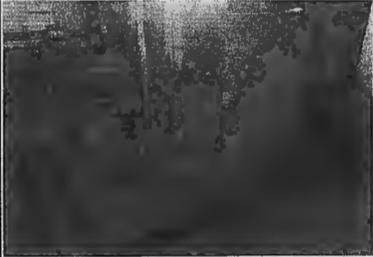
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1321	06/14-257	Replace the filter for the No. 3 electric boiler feed pump motor.	9/30/2014	2	20	Maintenance				
1325	06/14-261	Repair the Baghouse No. 3 outlet ductwork, expansion joint and reinstall insulation and lagging.	10/30/2014	2	3	Contractor				
1326	06/14-262	Duplex strainers and hoses present a tripping and access hazard. Provide hose restraints to keep strainer off fittings while keeping pathways clear.	12/30/2014	4	1,2,3	Contractor			DCR	
1327	06/14-263	Clean up the trip hazards from the decking on Baghouse No. 3.	8/30/2014	1	50	Safeway				

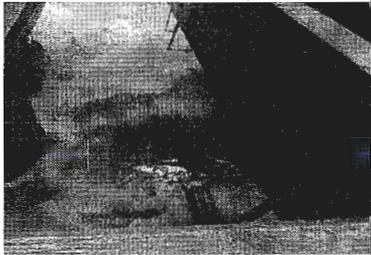
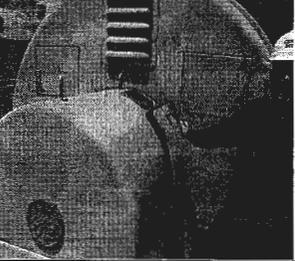
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1328	06/14-264	Properly store v-belts for the shaker motor on the northeast side of Baghouse No. 3 at the top level.	7/30/2014	3	3	Maintenance				
1330	06/14-266	Properly orient splash shield above TG 1 lube oil tank.	8/30/2014	3	11	Contractor			DCR	
1331	06/14-267	Investigate the status of the RO cleaning skid on the ground floor near the lab that does not appear to be in service.	8/30/2014	3	20	Operations				
1332	06/14-268	Investigate the status of the demin skid on the ground floor near the lab that does not appear to be in service.	8/30/2014	3	20	Operations				

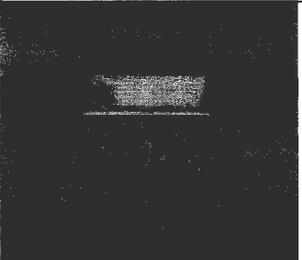
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CEIR Number	OGPL Number	Description	Projected completion date	Priority 1-5	System	Department	Cost	County Approval/ Date	Status/Comments	Photograph
1333	06/14-269	Clear the sump pump lowpoint of debris in the sulfuric acid tank containment area and remove standing water.	7/30/2014	3	20	Operations				
1336	07/14-272	There are some very thick pieces of rust on steel boiler hangers for Unit No. 3. Corrective action is needed.		3	3	Contractor			DCR	
1338	07/14-274	Install the rotary soot blower that is missing on Unit No. 3 on the south end, Level 4.		3	3	Maintenance				
1339	07/14-275	Secure the latch on the northeast panel of TG 1.		1	11	Maintenance				

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1344	07/14-280	Relocate the feed hopper cameras on all three units.		3	15	Contractor				No Picture
1345	07/14-281	All of the new supports for VC-3 need to be grouted.		1	16	Contractor				
1346	07/14-282	The two hydrex 2,000 tanks on the south side of the cooling tower do not have any tie downs. Provide tie-down straps for tanks.		1	21	Maintenance				No Picture
1348	07/14-284	Replace the maxon natural gas valves on all three units.		1	50	Contractor				No Picture

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1351	07/14-287	Replace the handle on the valve for the permeate control panel in the inside boiler water treatment area that currently has a D clamp installed on the valve stem.		1	50	Maintenance				
1352	07/14-288	The connection for the sulfuric acid tank feed line on the south side of the cooling tower is heavily rusted. Replace the feed connection.		1	50	Maintenance				
1353	07/14-289	There are drums full of oil that are being stored on the top of the cooling tower and signs of spilled oil were observed. Move oil drums to appropriate storage area.		1	50	Maintenance				
1354	07/14-290	Unit No. 1 third hydraulic pump is missing one of the rubber support grommets. Replace grommet.		1	50	Maintenance				

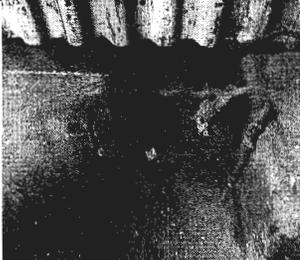
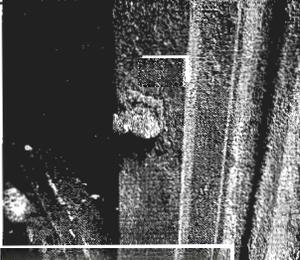
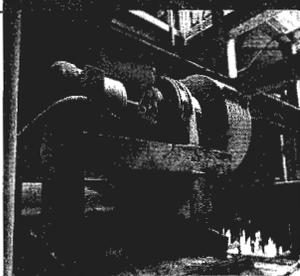
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1356	07/14-292	The second set of hydraulic lines on Unit No. 3 from south to north, positioner #3 for under fire air cannot find a "home" and is constantly in motion. Repair.		1	50	Maintenance				
1357	07/14-293	Cover the large opening around the vertical cable tray on the north end of the hallway.		1	50	Contractor			ASI	
1361	07/14-297	Clean ash/dust from inside of duct in overhead of firing aisle at north end of refuse building and restore operation of fan to allow unit to deliver ambient air to this area of the plant (excessively hot with visible emissions around feed hopper for Unit No. 3). Additional wall mounted ventilation fans should be considered to draw hot air from firing aisle and discharge into boiler area between		1	50	Operations				
1364	07/14-300	Remove supports for abandoned fire extinguisher from column on east wall of FF No. 1 area (3 rd column from the south) to eliminate potential head knocker safety concern and obstruction to personnel.		1	50	Contractor			DCR	

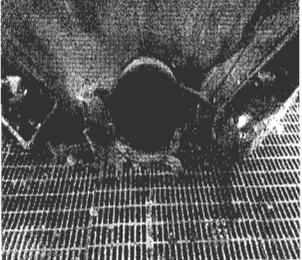
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1365	07/14-301	Remove abandoned metal from two support feet for relocated electrical panels at east end of FF No. 2 to eliminate tripping hazard.		1	50	Contractor			DCR	
1366	07/14-302	Remove attachment from column from abandoned fire extinguisher along east wall of FF Unit No. 3 to eliminate obstacle and allow safe passage.		1	50	Contractor			DCR	
1367	07/14-303	Add 45 degree angle on bottom of 6-inch diameter drain pipe on NE corner of FF Unit No. 3 to deflect rainwater splash away from new electrical transformer.		1	50	Contractor			DCR	
1368	07/14-304	Investigate noisy motor or coupling for SDA No. 1 drag chain collector conveyor and replace missing coupling guard.		1	50	Maintenance				

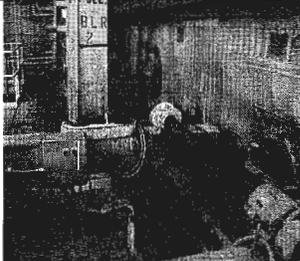
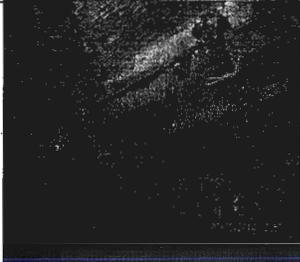
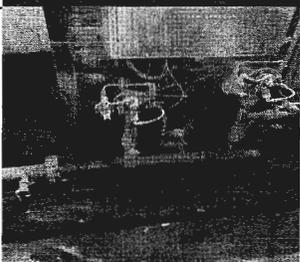
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1369	07/14-305	Replace missing coupling guard on SDA No. 3 collector drag chain conveyor.		1	50	Maintenance				
1370	07/14-306	Replace the missing covers on the inspection ports for the SDA No. 2 hopper.		1	50	Operations				
1372	07/14-308	Windows on the view ports to the exciters are aged. Replace the 2 view ports on TG 1 and 4 view ports on TG 2.		1	50	Maintenance				No Picture
1373	07/14-309	A helium bottle is sitting outside the control room door on the turbine deck. Move bottle to proper storage area.		1	50	Operations				No Picture

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1374	07/14-310	Replace the chain guard on the retractable soot blower located on the south side of Unit No. 2 at Level 6.		1	50	Maintenance				
1378	07/14-314	There is a temporary wood plank platform covered in ash in the southwest corner of the RSPB. Remove wood platform.		3	50	Operations				
1379	07/14-315	The southwest corner of the RSPB was ankle deep with water and ash. Clean area.		3	50	Operations				
1381	07/14-317	Replace the heavily corroded pan for the eyewash booster pump station located on the east side of Broadway.		3	50	Contractor			DCR	

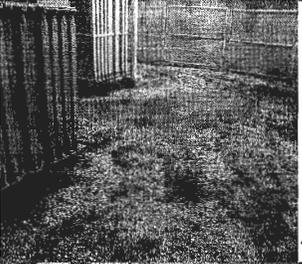
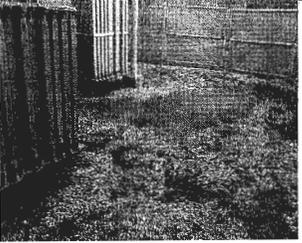
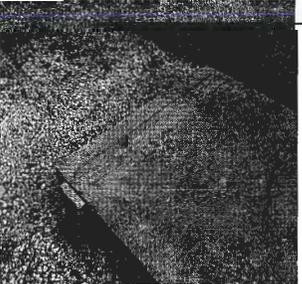
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1386	07/14-322	The cable spread room needs cleanup in general.		3	50	Operations				
1387	07/14-323	Several hydraulic lines for Unit No. 2 have broken supports at 20' elevation. Replace supports.		3	50	Maintenance				
1388	07/14-324	Provide supports for the two small diameter pipes in the overhead on the south side of Unit No. 3 at 20' elevation.		3	50	Contractor			DCR	
1389	07/14-325	Remove all of the debris on the north end of the hallway that is stacked around the vertical cable tray.		3	50	Operations				

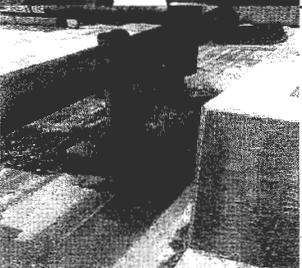
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1392	07/14-328	Remove vegetation and accumulated sediment from substation area inside of fence and replace with landscape soil fabric and layer of new rock at a minimum depth of 4".		3	50	Contractor				
1394	07/14-330	Replace missing nut and washer on baseplate of pole support in substation area in vicinity of abandoned transformer foundation.		3	50	Maintenance				
1395	07/14-331	Remove lone anchor bolt from abandoned transformer foundation in substation to eliminate potential tripping hazard.		3	50	Maintenance				
1397	07/14-333	Replace heavily corroded and missing sections of angle support system under PP-RO in water lab area to provide adequate support and prevent entry by rodents and vermin.		3	50	Contractor			DCR	

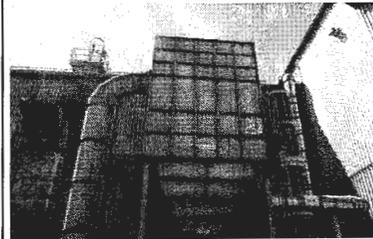
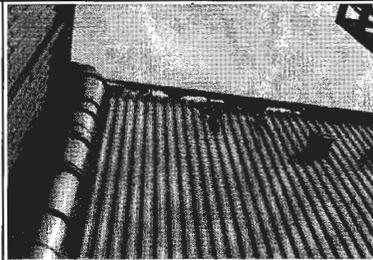
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1399	07/14-335	Repair/replace mangled bracket for zero speed switch on SDA No. 3 drag chain transfer conveyor.		3	50	Maintenance				
1400	07/14-336	Replace corroded end bell on motor for N-S transfer drag chain conveyor on east end.		3	50	Maintenance				
1412	07/14-348	The supports for the fire water piping on the south side of the cooling tower are severely corroded. Repair or replace supports.		5	50	Contractor				
1413	07/14-349	The concrete supports for the fire water piping on the south side of the cooling tower have significant cracking. Repair supports.		5	50	Contractor				

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1414	07/14-350	The air system in the cable spread room has blowers and motors with the belts hung on the ductwork. Restore or remove unit.		5	50	Maintenance				
5010	03/13-090	The RSPB baghouse bags do not appear to be cleaning properly. Refurbish B/H and restore to operating condition	12/15/2014	1	16	Contractor			Structural repairs needed in addition to bag replacement , reinstallation of air line, verification of valve operation and replacement of rotary valve. After further evaluation this has turned into a full blown project and will require additional planning. William to write scope of work for repairs.	
5017	9/13-283	Replace all corroded siding on the windwall area with non-corroding material.	8/30/2014	2	50	Contractor			Waiting for requotes.	
5022	9/13-268	Replace the severely corroded gutter on the south side of the RSPB preferably with non-corroding material.	6/30/2014	2	16	Contractor			The roof metal is corroded to the point that new gutter cannot be attached. We are pricing a new stainless steel repair to the roof and FRP gutter system. Mike to obtain quotes	

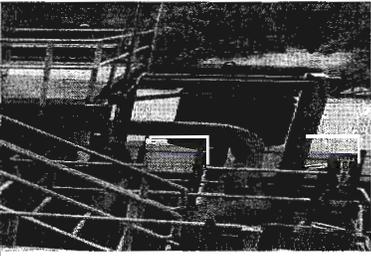
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5037		Upgrade HVAC in Compressor building to keep temp. less than 10 degrees F above ambient	5/30/2014	2	50	Contractor			An amendment to the final drawing is being produced in order to modify the hood so the side doors can open unobstructed. Bids will follow shortly after	No Picture
5038		Demo existing SDA floor drain system and install straight down drains on all 3 units	8/30/2014	3	50	Contractor			Mike to write work scope for replacing drain system in PVC	No Picture
5047		Alternate fly ash system -modify ash conveyance system to keep fly ash and bottom ash separated until after metals recovery	7/8/1905	5	16	Contractor				No Picture
5090		Install additional O2 analyzer at economizer outlet on each boiler.	9/30/2014	1	30	Contractor	\$42,307.00		In progress. Existing ports were found and will be used. Chris Neu is obtaining pricing for access platforms. Leo has specified the analyzers and they have been approved and ordered.	No Picture

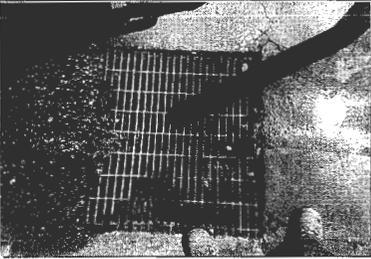
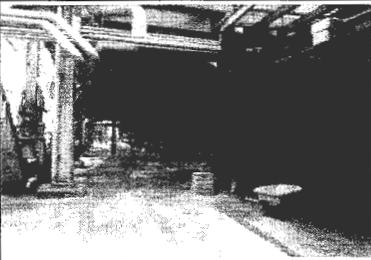
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5104	03/14-052	Inspect the silencer on the southwest side of TG-2 and make repairs or replace as needed. Note that internals are heavily corroded and silencing material is no longer in its proper place.	7/7/1905	5	12	Contractor			Visual inspection revealed that internal baffle material is in poor condition	
5112		Fabricate and install boiler view port platforms on all three units (six total).	9/30/2014	1	50	Belt	\$85,525.00		Paperwork approved for Belt to install	No Picture
5113		Replace A/C units in MCC #1 and #3	12/30/2014	2	50	Trane	\$41,212.00		Waiting for power system study. PO was issued 7/9/14 to Compressed Air Systems to perform the study	No Picture
5114	05/14-214	Repair the area of erosion and depressed concrete on the southwest side of the turbine area, and modify drainage to prevent reoccurrence.	7/7/1905	4	50	Contractor			Belt	

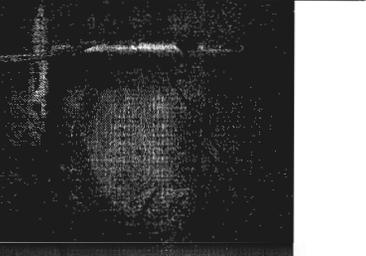
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5115	06/14-216	Re-route the outside RO reject water to the contact water sump (currently discharges to the stormwater system).	7/7/1905	2	22	Contractor				
5116	06/14-217	Reroute the inside RO reject water discharge to the contact water sump (currently discharges behind the Unit No. 3 FD fan).	7/7/1905	2	22	Contractor				No Picture
5117	06/14-220	Install support structure for stack testing equipment on all three stack platforms to facilitate stack testing.	9/30/2014	1	50	Contractor			Russ to complete	No Picture
5121		"JSJ Specialty Coatings" & "Stantec Civil Engineering Firm" has initiated the process of inspecting, surveying, and producing initial drawings in reference to Concrete Floor Repairs CRR 5004.	9/30/2014	1	50	JSJ	\$25,000.00		Paperwork submitted to the county for approval, however JSJ is revising their proposal to provide a more specific work scope.	

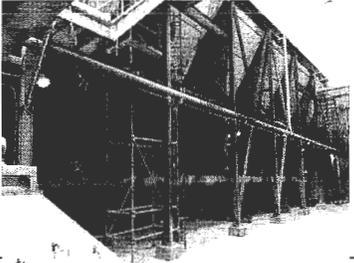
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August 14, 2014

CEIR Number	OGPL Number	Description	Projected completion date	Priority 1-5	System	Department	Cost	County Approval/ Date	Status/Comments	Photograph
5124	06/14-218	Repair/replace the Tri-Mer Whirl Wet dust collector in the fly ash conditioning building that has been inoperable for some time.			16					
5127	07/14-351	Concrete is spalling on the west wall on Broadway. Evaluate and make needed repairs.		5	50	Contractor				
5136	7/14-347	Provide oil change/fueling station for Facility.		5	50	Contractor				No Picture
1270		Make repairs to instrument air system including all leaks and deficient equipment as identified during May punch list inspection (see separate tab listing items).		1	50	DCR			57 punch list items covered under this CRR item - see separate worksheet	No Picture

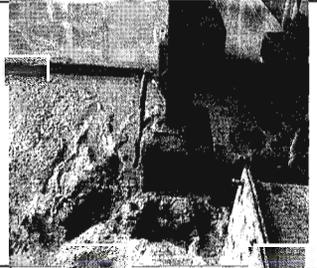
Consulting Engineer's Inspection Report

August 14, 2014

CEIR Number	OGPL Number	Description	Projected completion date	Priority 1-5	System	Department	Cost	County Approval/ Date	Status/Comments	Photograph
5046		Lighting repairs/replacements throughout the facility.	7/30/2014	1	50	Electrical	\$110,174.00		51 items punch list items covered under this grouping - see separate worksheet	
5048		Cleaning, prepping and painting repairs throughout the facility.	12/30/2014	5	50	Paint			6 punch list items covered under this grouping - see separate worksheet	No Picture
5111		Replace/repair structural steel deficiencies throughout facility.	9/30/2014	3	50	Contractor			24 items punch list items covered under this grouping - see separate worksheet	No Picture
5122		Repair damaged handrail throughout the facility with FRP material.	12/30/2014	2	50				9 punch list items covered under this grouping - see separate worksheet	No Picture

Consulting Engineer's Inspection Report

August 14, 2014

CEIR Number	OGPL Number	Description	Projected completion date	Priority 1-5	System	Department	Cost	County Approval/ Date	Status/Comments	Photograph
5128		Repair electrical conduit throughout facility.			35				83 punch list items covered under this grouping - see separate worksheet	No Picture
5129		Repair grounding cables throughout the facility.			35				5 punch list items (Items 07/14-356-358, 365 and 370) covered under this grouping - see separate worksheet	
5130		Miscellaneous electrical repairs throughout the facility.							120 punch list items covered under this grouping - see separate worksheet	No Picture
5131		E&I repairs throughout the facility.							27 punch list items covered under this grouping - see separate worksheet	No Picture

Consulting Engineer's Inspection Report

August 14, 2014

CEIR Number	OGPL Number	Description	Projected completion date	Priority 1-5	System	Department	Cost	County Approval/ Date	Status/Comments	Photograph
5132		Insulation and lagging repairs throughout the facility.							23 punch list items covered under this grouping - see separate worksheet	No Picture
5133		Piping repairs/replacements throughout facility.							11 punch list items covered under this grouping - see separate worksheet	No Picture
5134		Repair of miscellaneous leaks including steam, water and oil leaks throughout facility.		1	50	Contractor			14 punch list items covered under this grouping - see separate worksheet	No Picture
5135		Repair/replacement of doors and door components throughout facility.							8 punch list items covered under this grouping - see separate worksheet	No Picture

SCHEDULE 19

PART D

CONTRACTOR'S APPROACH TO EXECUTION OF TECHNICAL RECOVERY PLAN

This Part D of Schedule 19 will be the Contractor's approach to execution of the Technical Recovery Plan contained in the Contractor's Proposal that was prepared in accordance with the Final RFP and appended upon approval.

SCHEDULE 20

COUNTY'S MINIMUM WATER QUALITY DELIVERY STANDARDS

The County shall deliver treated Pond A water from the Industrial Water Treatment Facility to the Facility such that the quality of the Pond A water does not exceed the Maximum values shown in Table 20.1 contained in this Schedule 20. Pond A water shall be delivered by the County to connections at the Facility's cooling tower and the main Facility Service Water line.

Table 20.1

Water Quality Parameter	Maximum²
pH	6.5 – 7.5
Conductivity	1200.0 µmhos
Calcium	167.0 ppm
Total Alkalinity	70.0 ppm
Turbidity	10.0 ntu

² **Note** ¹ Monitoring shall be by the County using continuous monitoring instrumentation where commercially feasible. Parameters not tested continuously shall be tested on at least a Monthly basis by the County using standard laboratory test procedures.

SCHEDULE 21

FORM OF AFFIDAVIT AND RELEASE

COUNTY OF PINELLAS)

STATE OF FLORIDA)

Before me, the undersigned authority, personally appeared _____
_____, who after being duly sworn, deposes and says:

(1) In accordance with this Agreement dated as of _____, 2014 and in consideration of \$ _____ paid, _____ ("Contractor") releases and waives for itself and its Subcontractors, materialmen, successors and assigns, all claims demands, damages, costs and expenses, against the Board of County Commissioners of Pinellas County, Florida, Ex officio the governing Board of the Pinellas County (the "County") relating in any way to the performance of projects and improvements at the Facility for the period from the date of the commencement of Work relative to the (specify applicable Work) through completion and acceptance of the Work by the Consulting Engineer and the County pursuant to (as applicable, Section 10.1, 10.2, or 10.6).

(2) The Contractor certifies for itself and its Affiliates, Subcontractors, materialmen, successors and assigns, that all charges for labor, materials, supplies, lands, licenses and other expenses for the above-specified Work for which the County might be sued or for which a lien or a demand against any payment bond might be filed, have been fully satisfied and paid. The Contractor further agrees to indemnify, defend and save harmless the County from all demands or suits, actions, claims of liens or other charges filed or asserted against the County in connection with the matters certified herein.

(3) This Release and Affidavit is given in connection with Contractor's invoice for payment for Work relative to Work performed for the Billing Month with respect to the above-specified Item(s).

CONTRACTOR

By: _____

Its: _____ Officer

Date: _____

WITNESS

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20_, by _____, as _____ of _____, a _____ corporation, on behalf of the corporation. He/she is personally known to me or has produced _____ as identification and did (did not) take an oath.

My Commission Expires: _____

Name: _____

(Legibly Printed)

(AFFIX OFFICIAL SEAL)

Notary Public, State of _____

Serial No., If Any: _____

SCHEDULE 22

CODES AND STANDARDS

The Work shall be undertaken in conformance with the latest editions of all applicable codes, standards and regulations including, but not limited to, the following:

1. Air Conditioning and Refrigeration Institute (ARI)
2. Air Moving and Conditioning Association (AMCA)
3. American Concrete Institute (ACI), including without limitation,
 - ACI 318 – Structural Concrete Building Code
 - ACI 350 – Environmental Engineering Concrete Structures
4. American Institute of Steel Construction (AISC) , including without limitation,
 - Manual for Steel Construction
 - Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings
 - Specifications for the Design of Cold-Formed Steel Structural Members
5. Americans With Disabilities Act Accessibility Guidelines (ADAAG)
6. American Gear Manufacturer's Association (AGMA)
7. American Society of Heating, Refrigeration and Air Conditioning (ASHRAE)
8. American Society of Mechanical Engineers (ASME)
9. American Society for Testing and Materials (ASTM)
10. American National Standards Institute (ANSI)
11. American Plywood Association (APA)
12. American Water Works Association (AWWA)
13. American Welding Society (AWS)
14. American Wood Preservers Bureau (AWPB)

15. Conveyor Equipment Manufacturer's Association (CEMA)
16. Concrete Reinforcing Steel Institute (CRSI) Handbook
17. Copper Development Association (CDA)
18. Factory Mutual (FM)
19. Florida Accessibility Code for Building Construction
20. Florida Building Code
21. Florida Building Commission for Product Approval
22. Florida Department of Transportation (FDOT)
23. Florida Energy Efficiency Code for Building Construction
24. Florida Fire Prevention Code
25. Florida Mechanical Code
26. Florida Plumbing Code
27. Institute of Electrical and Electronic Engineers (IEEE)
28. InterNational Electrical Testing Association (NETA) , including without limitation,
 - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems
 - Maintenance Testing Specifications for Electrical Power Distribution Equipment and Systems
29. National Board of Boiler and Pressure Vessel Inspectors (NBBI) , including without limitation,
 - National Board Inspection Code (NBIC)
30. National Electric Manufacturers Association (NEMA)
31. National Fire Protection Association (NFPA) , including without limitation,
 - NFPA 70 - National Electrical Code (NEC)

- NFPA 72 – National Fire Alarm Code
 - NFPA 90A – Standard for Installation of Air Conditioning and Ventilation Systems
 - NFPA 704 – Standard System for the Identification of Hazard Materials for Emergency Response
 - NFPA 780 – Standard for the Installation of Lightning Protection Systems
32. National Electrical Contractors Association (NECA)
 33. National Roofing Contractors Association (NRCA)
 34. Northeastern Lumber Manufacturers Association (NELMA)
 35. Occupational Safety and Health Act (OSHA)
 36. Pinellas County Amendments to the Florida Building Code
 37. Sheet Metal and Air Conditioning Contractors National Association (SMACNA), including without limitation,
 - HVAC Duct Construction Standards Metal and Flexible
 - Thermoset FRP Duct Construction Manual
 38. Southern Pine Inspection Bureau (SPIB)
 39. Steel Structures Painting Council (SSPC)
 40. Underwriters' Laboratories (UL)
 41. Western Wood Products Association (WWPA)
 42. Facility Permits and associated State and Federal regulations
 43. All other applicable codes and standards

SCHEDULE 23

DISCLOSURES

Section 15.15.1 of the Service Agreement contains the County's representations to the Contractor. Those representations are made subject to the below listed exceptions. As to any matter described herein, the description reflects the County's good faith summary of what the matter involves. The Contractor should not rely upon these summaries and instead should conduct its own investigation of the pleadings or claims to make its own determination of the exposure arising out of the matter.

Pending Lawsuits:

- GCS Energy Recovery of Pinellas, Inc. v. Pinellas County. Circuit Court of the Sixth Judicial Circuit in and for Pinellas County, Florida, Case No. 2014-005220-CI-13. Complaint for declaratory judgment, injunctive relief and damages for breach of contract, breach of the implied covenant of good faith and fair dealing, and fraudulent inducement for alleged actions by the County relating to the service agreement with plaintiff and the subject procurement for operation and maintenance of the Facility.

APPENDIX H

Financing Plan

Municipality of Anchorage, Alaska
Waste to Energy Project (\$400 Million - 40 Year Amortization)



Sources of Funds	Current Market Rates			Current Market Rates +100bps		
	Tax Exempt	Taxable	Total	Tax Exempt	Taxable	Total
	Bonds	Bonds		Bonds	Bonds	
Par Amount	\$ 338,405,000	\$ 21,765,000	\$ 360,170,000	\$ 368,600,000	\$ 21,945,000	\$ 390,545,000
Premium	75,597,031	-	75,597,031	47,347,371	-	47,347,371
Total Sources	\$ 414,002,031	\$ 21,765,000	\$ 435,767,031	\$ 415,947,371	\$ 21,945,000	\$ 437,892,371

Uses of Funds	Current Market Rates			Current Market Rates +100bps		
	Tax Exempt	Taxable	Total	Tax Exempt	Taxable	Total
	Bonds	Bonds		Bonds	Bonds	
Project Fund Deposit	\$ 380,000,000	\$ 20,000,000	\$ 400,000,000	\$ 380,000,000	\$ 20,000,000	\$ 400,000,000
Capitalized Interest	11,400,000	600,000	12,000,000	11,400,000	600,000	12,000,000
Debt Service Reserve Fund	19,724,250	979,915	20,704,165	21,483,500	1,161,015	22,644,515
Cost of Issuance	845,613	54,387	900,000	849,428	50,572	900,000
Underwriter's Discount	2,030,430	130,590	2,161,020	2,211,600	131,670	2,343,270
Additional Proceeds	1,738	108	1,846	2,843	1,743	4,586
Total Uses	\$ 414,002,031	\$ 21,765,000	\$ 435,767,031	\$ 415,947,371	\$ 21,945,000	\$ 437,892,371

Bond Statistics	Current Market Rates			Current Market Rates +100bps		
	Tax Exempt	Taxable	Total	Tax Exempt	Taxable	Total
	Bonds	Bonds		Bonds	Bonds	
Dated & Delivery Date	6/1/25	6/1/25	6/1/25	6/1/25	6/1/25	6/1/25
First Coupon	12/1/25	12/1/25	12/1/25	12/1/25	12/1/25	12/1/25
Last Maturity	12/1/65	12/1/65	12/1/65	12/1/65	12/1/65	12/1/65
Arbitrage Yield	2.4740%	3.2296%	2.4740%	3.4722%	4.2935%	3.4722%
True Interest Cost (TIC)	3.6633%	3.2668%	3.6437%	4.1974%	4.3343%	4.2043%
All-In TIC	3.6765%	3.2824%	3.6571%	4.2112%	4.3500%	4.2182%
Average Life (years)	27.122	24.941	26.991	27.122	26.150	27.068
Total Interest	458,919,375	17,674,114	476,593,489	499,860,250	24,845,855	524,706,105
Total Debt Service	797,324,375	39,439,114	836,763,489	868,460,250	46,790,855	915,251,105
Maximum Annual Debt Service	19,724,250	979,915	20,703,093	21,483,500	1,161,015	22,643,623
Average Annual Debt Service	19,687,022	973,805	20,660,827	21,443,463	1,155,330	22,598,793

Municipality of Anchorage, Alaska

Waste to Energy Project (\$400 Million - 40 Year Amortization - Current Market Rates)



Year Ending December 1	Tax Exempt Bonds			Taxable Bonds			Total		
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
2025	\$ -	\$ 8,460,125	\$ 8,460,125	\$ -	\$ 335,963	\$ 335,963	\$ -	\$ 8,796,088	\$ 8,796,088
2026	2,800,000	16,920,250	19,720,250	305,000	671,926	976,926	3,105,000	17,592,176	20,697,176
2027	2,940,000	16,780,250	19,720,250	310,000	666,314	976,314	3,250,000	17,446,564	20,696,564
2028	3,090,000	16,633,250	19,723,250	315,000	660,486	975,486	3,405,000	17,293,736	20,698,736
2029	3,245,000	16,478,750	19,723,750	325,000	654,343	979,343	3,570,000	17,133,093	20,703,093
2030	3,405,000	16,316,500	19,721,500	330,000	647,648	977,648	3,735,000	16,964,148	20,699,148
2031	3,575,000	16,146,250	19,721,250	335,000	640,520	975,520	3,910,000	16,786,770	20,696,770
2032	3,755,000	15,967,500	19,722,500	345,000	632,983	977,983	4,100,000	16,600,483	20,700,483
2033	3,940,000	15,779,750	19,719,750	355,000	624,875	979,875	4,295,000	16,404,625	20,699,625
2034	4,140,000	15,582,750	19,722,750	360,000	616,284	976,284	4,500,000	16,199,034	20,699,034
2035	4,345,000	15,375,750	19,720,750	370,000	607,392	977,392	4,715,000	15,983,142	20,698,142
2036	4,565,000	15,158,500	19,723,500	380,000	597,883	977,883	4,945,000	15,756,383	20,701,383
2037	4,790,000	14,930,250	19,720,250	390,000	587,927	977,927	5,180,000	15,518,177	20,698,177
2038	5,030,000	14,690,750	19,720,750	400,000	577,514	977,514	5,430,000	15,268,264	20,698,264
2039	5,285,000	14,439,250	19,724,250	410,000	566,434	976,434	5,695,000	15,005,684	20,700,684
2040	5,545,000	14,175,000	19,720,000	425,000	554,872	979,872	5,970,000	14,729,872	20,699,872
2041	5,825,000	13,897,750	19,722,750	435,000	542,462	977,462	6,260,000	14,440,212	20,700,212
2042	6,115,000	13,606,500	19,721,500	450,000	528,673	978,673	6,565,000	14,135,173	20,700,173
2043	6,420,000	13,300,750	19,720,750	465,000	514,408	979,408	6,885,000	13,815,158	20,700,158
2044	6,740,000	12,979,750	19,719,750	480,000	499,667	979,667	7,220,000	13,479,417	20,699,417
2045	7,080,000	12,642,750	19,722,750	495,000	484,451	979,451	7,575,000	13,127,201	20,702,201
2046	7,435,000	12,288,750	19,723,750	510,000	468,760	978,760	7,945,000	12,757,510	20,702,510
2047	7,805,000	11,917,000	19,722,000	525,000	452,083	977,083	8,330,000	12,369,083	20,699,083
2048	8,195,000	11,526,750	19,721,750	545,000	434,915	979,915	8,740,000	11,961,665	20,701,665
2049	8,605,000	11,117,000	19,722,000	560,000	417,094	977,094	9,165,000	11,534,094	20,699,094
2050	9,035,000	10,686,750	19,721,750	580,000	398,782	978,782	9,615,000	11,085,532	20,700,532
2051	9,485,000	10,235,000	19,720,000	595,000	379,816	974,816	10,080,000	10,614,816	20,694,816
2052	9,960,000	9,760,750	19,720,750	615,000	360,359	975,359	10,575,000	10,121,109	20,696,109
2053	10,460,000	9,262,750	19,722,750	635,000	340,249	975,249	11,095,000	9,602,999	20,697,999
2054	10,980,000	8,739,750	19,719,750	660,000	319,484	979,484	11,640,000	9,059,234	20,699,234
2055	11,530,000	8,190,750	19,720,750	680,000	297,902	977,902	12,210,000	8,488,652	20,698,652
2056	12,105,000	7,614,250	19,719,250	700,000	275,666	975,666	12,805,000	7,889,916	20,694,916
2057	12,715,000	7,009,000	19,724,000	725,000	252,076	977,076	13,440,000	7,261,076	20,701,076
2058	13,350,000	6,373,250	19,723,250	750,000	227,644	977,644	14,100,000	6,600,894	20,700,894
2059	14,015,000	5,705,750	19,720,750	775,000	202,369	977,369	14,790,000	5,908,119	20,698,119
2060	14,715,000	5,005,000	19,720,000	800,000	176,251	976,251	15,515,000	5,181,251	20,696,251
2061	15,450,000	4,269,250	19,719,250	830,000	149,291	979,291	16,280,000	4,418,541	20,698,541
2062	16,225,000	3,496,750	19,721,750	855,000	121,320	976,320	17,080,000	3,618,070	20,698,070
2063	17,035,000	2,685,500	19,720,500	885,000	92,507	977,507	17,920,000	2,778,007	20,698,007
2064	17,890,000	1,833,750	19,723,750	915,000	62,682	977,682	18,805,000	1,896,432	20,701,432
2065	18,785,000	939,250	19,724,250	945,000	31,847	976,847	19,730,000	971,097	20,701,097
Total	\$ 338,405,000	\$ 458,919,375	\$ 797,324,375	\$ 21,765,000	\$ 17,674,114	\$ 39,439,114	\$ 360,170,000	\$ 476,593,489	\$ 836,763,489

Municipality of Anchorage, Alaska

Waste to Energy Project (\$400 Million - 40 Year Amortization - Current Market Rates)



Year Ending December 1	Chugach Sales	Metal Recovery	Biosolid Tipping Fees	Other Fees	Total Fees	Tons/Day	Fee/Ton	Days	Tipping Revenue	Total Revenue	Operating Expenses	Net Revenue	Debt Service	Coverage
2025	\$ 12,000,000	\$ 1,900,000	\$ 3,100,000	\$ -	\$ 17,000,000	1,200	\$ 66	260	\$ 20,592,000	\$ 37,592,000	\$ 16,400,000	\$ 21,192,000	\$ 8,796,088	2.41
2026	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,697,176	1.02
2027	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,696,564	1.02
2028	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,736	1.02
2029	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,703,093	1.02
2030	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,699,148	1.02
2031	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,696,770	1.02
2032	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,700,483	1.02
2033	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,699,625	1.02
2034	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,699,034	1.02
2035	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,142	1.02
2036	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,701,383	1.02
2037	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,177	1.02
2038	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,264	1.02
2039	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,700,684	1.02
2040	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,699,872	1.02
2041	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,700,212	1.02
2042	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,700,173	1.02
2043	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,700,158	1.02
2044	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,699,417	1.02
2045	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,702,201	1.02
2046	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,702,510	1.02
2047	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,699,083	1.02
2048	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,701,665	1.02
2049	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,699,094	1.02
2050	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,700,532	1.02
2051	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,694,816	1.02
2052	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,696,109	1.02
2053	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,697,999	1.02
2054	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,699,234	1.02
2055	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,652	1.02
2056	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,694,916	1.02
2057	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,701,076	1.02
2058	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,700,894	1.02
2059	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,119	1.02
2060	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,696,251	1.02
2061	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,541	1.02
2062	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,070	1.02
2063	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,698,007	1.02
2064	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,701,432	1.02
2065	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	20,701,097	1.02
Total	\$ 492,000,000	\$ 77,900,000	\$ 127,100,000	\$ -	\$ 697,000,000				\$ 844,272,000	\$ 1,541,272,000	\$ 672,400,000	\$ 868,872,000	\$ 836,763,489	

Municipality of Anchorage, Alaska

Waste to Energy Project (\$400 Million - 40 Year Amortization - Current Market Rates+100bps)



Year Ending December 1	Tax Exempt Bonds			Taxable Bonds			Total		
	Principal	Interest	Total	Principal	Interest	Total	Principal	Interest	Total
2025	\$ -	\$ 9,215,000	\$ 9,215,000	\$ -	\$ 457,321	\$ 457,321	\$ -	\$ 9,672,321	\$ 9,672,321
2026	3,050,000	18,430,000	21,480,000	245,000	914,642	1,159,642	3,295,000	19,344,642	22,639,642
2027	3,205,000	18,277,500	21,482,500	250,000	907,684	1,157,684	3,455,000	19,185,184	22,640,184
2028	3,365,000	18,117,250	21,482,250	260,000	900,484	1,160,484	3,625,000	19,017,734	22,642,734
2029	3,530,000	17,949,000	21,479,000	265,000	892,814	1,157,814	3,795,000	18,841,814	22,636,814
2030	3,710,000	17,772,500	21,482,500	275,000	884,705	1,159,705	3,985,000	18,657,205	22,642,205
2031	3,895,000	17,587,000	21,482,000	285,000	876,015	1,161,015	4,180,000	18,463,015	22,643,015
2032	4,090,000	17,392,250	21,482,250	290,000	866,753	1,156,753	4,380,000	18,259,003	22,639,003
2033	4,295,000	17,187,750	21,482,750	300,000	857,038	1,157,038	4,595,000	18,044,788	22,639,788
2034	4,510,000	16,973,000	21,483,000	310,000	846,778	1,156,778	4,820,000	17,819,778	22,639,778
2035	4,735,000	16,747,500	21,482,500	320,000	836,021	1,156,021	5,055,000	17,583,521	22,638,521
2036	4,970,000	16,510,750	21,480,750	335,000	824,597	1,159,597	5,305,000	17,335,347	22,640,347
2037	5,220,000	16,262,250	21,482,250	345,000	812,470	1,157,470	5,565,000	17,074,720	22,639,720
2038	5,480,000	16,001,250	21,481,250	360,000	799,808	1,159,808	5,840,000	16,801,058	22,641,058
2039	5,755,000	15,727,250	21,482,250	370,000	786,236	1,156,236	6,125,000	16,513,486	22,638,486
2040	6,040,000	15,439,500	21,479,500	385,000	772,102	1,157,102	6,425,000	16,211,602	22,636,602
2041	6,345,000	15,137,500	21,482,500	400,000	757,010	1,157,010	6,745,000	15,894,510	22,639,510
2042	6,660,000	14,820,250	21,480,250	420,000	740,330	1,160,330	7,080,000	15,560,580	22,640,580
2043	6,995,000	14,487,250	21,482,250	435,000	722,816	1,157,816	7,430,000	15,210,066	22,640,066
2044	7,345,000	14,137,500	21,482,500	455,000	704,677	1,159,677	7,800,000	14,842,177	22,642,177
2045	7,710,000	13,770,250	21,480,250	475,000	685,703	1,160,703	8,185,000	14,455,953	22,640,953
2046	8,095,000	13,384,750	21,479,750	490,000	665,896	1,155,896	8,585,000	14,050,646	22,635,646
2047	8,500,000	12,980,000	21,480,000	515,000	644,973	1,159,973	9,015,000	13,624,973	22,639,973
2048	8,925,000	12,555,000	21,480,000	535,000	622,982	1,157,982	9,460,000	13,177,982	22,637,982
2049	9,370,000	12,108,750	21,478,750	560,000	600,138	1,160,138	9,930,000	12,708,888	22,638,888
2050	9,840,000	11,640,250	21,480,250	580,000	576,226	1,156,226	10,420,000	12,216,476	22,636,476
2051	10,335,000	11,148,250	21,483,250	605,000	551,460	1,156,460	10,940,000	11,699,710	22,639,710
2052	10,850,000	10,631,500	21,481,500	635,000	525,626	1,160,626	11,485,000	11,157,126	22,642,126
2053	11,390,000	10,089,000	21,479,000	660,000	498,512	1,158,512	12,050,000	10,587,512	22,637,512
2054	11,960,000	9,519,500	21,479,500	690,000	470,330	1,160,330	12,650,000	9,989,830	22,639,830
2055	12,560,000	8,921,500	21,481,500	720,000	440,867	1,160,867	13,280,000	9,362,367	22,642,367
2056	13,190,000	8,293,500	21,483,500	750,000	410,123	1,160,123	13,940,000	8,703,623	22,643,623
2057	13,845,000	7,634,000	21,479,000	780,000	376,598	1,156,598	14,625,000	8,010,598	22,635,598
2058	14,540,000	6,941,750	21,481,750	815,000	341,732	1,156,732	15,355,000	7,283,482	22,638,482
2059	15,265,000	6,214,750	21,479,750	855,000	305,301	1,160,301	16,120,000	6,520,051	22,640,051
2060	16,030,000	5,451,500	21,481,500	890,000	267,083	1,157,083	16,920,000	5,718,583	22,638,583
2061	16,830,000	4,650,000	21,480,000	930,000	227,300	1,157,300	17,760,000	4,877,300	22,637,300
2062	17,670,000	3,808,500	21,478,500	970,000	185,729	1,155,729	18,640,000	3,994,229	22,634,229
2063	18,555,000	2,925,000	21,480,000	1,015,000	142,370	1,157,370	19,570,000	3,067,370	22,637,370
2064	19,485,000	1,997,250	21,482,250	1,060,000	96,999	1,156,999	20,545,000	2,094,249	22,639,249
2065	20,460,000	1,023,000	21,483,000	1,110,000	49,617	1,159,617	21,570,000	1,072,617	22,642,617
Total	\$ 368,600,000	\$ 499,860,250	\$ 868,460,250	\$ 21,945,000	\$ 24,845,855	\$ 46,790,855	\$ 390,545,000	\$ 524,706,105	\$ 915,251,105

Municipality of Anchorage, Alaska

Waste to Energy Project (\$400 Million - 40 Year Amortization - Current Market Rates+100bps)



Year Ending December 1	Chugach Sales	Metal Recovery	Biosolid Tipping Fees	Other Fees	Total Fees	Tons/Day	Fee/Ton	Days	Tipping Revenue	Total Revenue	Operating Expenses	Net Revenue	Debt Service	Coverage
2025	\$ 12,000,000	\$ 1,900,000	\$ 3,100,000	\$ -	\$ 17,000,000	1,200	\$ 66	260	\$ 20,592,000	\$ 37,592,000	\$ 16,400,000	\$ 21,192,000	\$ 9,672,321	2.19
2026	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,642	0.94
2027	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,640,184	0.94
2028	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,642,734	0.94
2029	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,636,814	0.94
2030	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,642,205	0.94
2031	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,643,015	0.94
2032	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,003	0.94
2033	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,788	0.94
2034	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,778	0.94
2035	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,638,521	0.94
2036	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,640,347	0.94
2037	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,720	0.94
2038	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,641,058	0.94
2039	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,638,486	0.94
2040	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,636,602	0.94
2041	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,510	0.94
2042	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,640,580	0.94
2043	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,640,066	0.94
2044	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,642,177	0.94
2045	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,640,953	0.94
2046	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,635,646	0.94
2047	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,973	0.94
2048	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,637,982	0.94
2049	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,638,888	0.94
2050	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,636,476	0.94
2051	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,710	0.94
2052	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,642,126	0.94
2053	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,637,512	0.94
2054	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,830	0.94
2055	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,642,367	0.94
2056	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,643,623	0.94
2057	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,635,598	0.94
2058	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,638,482	0.94
2059	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,640,051	0.94
2060	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,638,583	0.94
2061	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,637,300	0.94
2062	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,634,229	0.94
2063	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,637,370	0.94
2064	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,639,249	0.94
2065	12,000,000	1,900,000	3,100,000	-	17,000,000	1,200	66	260	20,592,000	37,592,000	16,400,000	21,192,000	22,642,617	0.94
Total	\$ 492,000,000	\$ 77,900,000	\$ 127,100,000	\$ -	\$ 697,000,000				\$ 844,272,000	\$ 1,541,272,000	\$ 672,400,000	\$ 868,872,000	\$ 915,251,105	

MUNICIPALITY OF ANCHORAGE

Office of the Chief Fiscal Officer



Phone: (907) 343-6610

Alexander Slivka

DATE: February 24, 2020

TO: Alex Slivka, CFO

FROM: Ross Risvold, Public Finance & Investments Division Manager

In consultation with:

**Cynthia M. Weed, K&L Gates, LLP
(Bond Counsel to the Municipality)**

and

**Steven Kantor, Hilltop Securities, LLC
(Financial Advisor to the Municipality)**

**SUBJECT: Solid Waste Services (SWS) & Anchorage Water & Wastewater Utility (AWWU)
Waste To Energy Plant
Plan of Finance**

PLAN OF FINANCE - WASTE TO ENERGY PLANT

Background and Purpose

Upon review with outside consultants, it has been determined that it is in the best interests of the Municipality to construct and operate a Waste To Energy (WTE) Plant (the "Plant") within the Municipality. There are many possible ways to finance such a Plant in Anchorage. This memo outlines a plan of finance that is referred to as 'go it alone'. This means we are financing the Plant without outside financing assistance or grants from private parties, federal, state or other local entities.

Information Needed to Develop a Plan of Finance

In order to establish the most appropriate and most cost effective Plan of Finance the Public Finance & Investments Division needs the following information:

- 1 How much money does the Project need,
- 2 What will the funds be spent on and
- 3 When are the funds required.

We have received this preliminary information from SWS and their design contractor.

Financing Need

Currently, the cost of the WTE Plant is estimated to be \$350 - \$400 million. This Plan of Finance assumes the Plant will cost \$400 million. The Municipality will need an additional \$36 million for the payment of costs of debt issuance, interest expense during the construction period and the establishment of a Debt Service Reserve Fund (DSRF). The total cost for the WTE Plant is forecasted to be \$436 million.

Current and Best Practice Alternative – Revenue Debt

Without having sought or solicited the State of Alaska or federal grant funding sources, revenue debt secured by the revenues of the WTE Plant are a Best Practice for financing facilities such as this Plant. Due to the long construction period, estimated to be at least 30 months, the alternative of a using a Short Term Borrowing Program (STBP) during the construction period is a common, efficient and economical way to finance the construction costs for projects such as this Plant. Once the construction period is complete and the Plant is up and running, the STBP outstanding debt would then be refinanced with Long Term Revenue Refunding Bonds (LTRRB) in the capital marketplace. Tax-exempt LTRRB will be used to the extent possible. Should a taxable portion of debt be required, to be determined by the Municipality's bond counsel, the appropriate taxable financing alternative will be determined by the CFO in discussion with the Municipality's Financial Advisor and Public Finance Manager.

The Municipality has used numerous STBPs since 2008 for interim financing for many of the Municipality's utilities and enterprises. STBPs have been and are currently being utilized for Municipal Light & Power, Anchorage Wastewater Utility, Anchorage Water Utility, the Port of Alaska and the Solid Waste Disposal Utility. STBP are generally variable, short term interest rates based upon a short term interest index. Interest rates have historically been between 1% and 3% below the cost of revenue bonds and have brought dramatic savings to the Municipality. The aggregate savings among all STBPs since 2008 exceeds \$100 million.

Plan of Finance Timing

Short Term Borrowing Program

Oct 2021	Introduce to the Municipal Assembly an ordinance establishing one or more borrowing programs for the financing of the construction of the Plant in an amount not to exceed \$436 million and delegate to the CFO responsibilities related to such borrowing programs
Nov 2021	Hold one or more Assembly Work Sessions on this Plant and Financing
Oct 2021	Hold Public Hearing for the ordinance
March & April 2022	Solicit the marketplace for one or more providers of a Short Term Borrowing Program (STBP)
May 2022	Implement a STBP
June 2022	Begin drawing on STBP to pay cost of issuance, initial payments for material and other related capital expenditures
Oct 2022	Begin paying lender monthly or quarterly interest on the STBP with draws from the STBP (borrowing for the interest payments during the construction period is a common Best Practice and is referred to as 'capitalized interest')
April 2024	This is the 30 th month in a forecasted 30-month construction period
May 2024	Retire the STBP outstanding debt and close the STBP upon the issuance of long term revenue refunding bonds

Memorandum to Alex Slivka
Waste To Energy Plant – Plan of Finance
February 24, 2020

Long Term Revenue Bonds

Feb 2024 Prepare a Financing Schedule for the issuance of Long Term Revenue Refunding Bonds (LTRRB)
The original ordinance in Oct 2021 will authorize both the STBP and the LTRRB

March & April 2024 Work with Financial Advisor and Bond Counsel on preparing to sell LTRRB

May 2024 Sell and close LTRRB and refund the STBP outstanding debt and pay costs of issuance

