

**Detroit  
Edison**

**B. Ralph Sylvia**  
Senior Vice President

6400 North Dixie Highway  
Newport, Michigan 48166  
(313) 586-4150

May 1, 1990  
NRC-90-0070

**U. S. Nuclear Regulatory Commission**  
Attention: Document Control Desk  
Washington, D. C. 20555

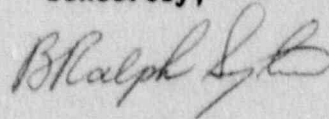
**Reference:** Fermi 2  
NRC Docket No. 50-341  
NRC License No. NPF-43

**Subject:** Annual Non-Radiological Environmental Operating Report

Pursuant to section 5.4.1 of the Environmental Protection Plan, please find attached the 1989 Annual Non-Radiological Environmental Operating Report for Fermi 2.

If you should have any questions or comments regarding this report, please contact Barbara Siemasz, Compliance Engineer, at (313) 586-1683.

Sincerely,



Enclosure

cc: A. B. Davis  
R. W. DeFayette  
W. G. Rogers  
J. F. Stang  
Region III

9005040077 891231  
PDR ADOCK 05000341  
R FDC

*IF25*  
11

1989 Annual Nonradiological Environmental Operating  
Report for Fermi 2

(In accordance with Appendix B to Facility Operating  
License No. NIF-43)

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Section I  
Executive Summary

## Executive Summary

Fermi 2 operated at over five percent power for over 65 percent of 1989 and completed its first refueling outage (September-December 1989). For the year, Fermi 2 generated power for over 208 effective full power days and had an overall capacity factor of 55 percent.

The Environmental Protection Plan (EPP) provides for protection of environmental values during any additional construction and the operation of Fermi 2. The principal objectives of the EPP are as follows:

1. Verify that Fermi 2 is operated in an environmentally acceptable manner, as established by the Final Environmental Statement (FES) and environmental impact assessments.
2. Coordinate NRC requirements and maintain consistency with other Federal, State and local requirements for environmental protection.
3. Keep the NRC informed of the environmental effects of facility construction and operation and of actions taken to control those effects.

Environmental concerns identified in the FES which relate to water quality matters are regulated by way of Fermi's National Pollutant Discharge Elimination System (NPDES) permits. As such, water quality issues are not addressed in this report.

The components of the EPP are:

1. A terrestrial monitoring program to detect long-term or sudden changes in vegetation due to operation of Fermi 2.
2. A program to establish the controlled use of herbicides on transmission rights-of-way.
3. A program to ensure that potential changes to Fermi's design or operation, and potential tests or experiments are adequately reviewed, prior to implementation, to avoid potential adverse environmental impacts not previously evaluated. Changes in plant design, operation or the performance of tests or experiments which do not effect the environment or which are required to achieve compliance with other Federal, State or local environmental regulations, are not subject to the requirements of this EPP.
4. Routine monitoring for evidence of unusual or important environmental events.

A terrestrial monitoring program was conducted to measure key terrestrial parameters after startup of the Fermi 2 facility for comparison with corresponding measurements obtained prior to startup. This study focuses on effects due to the operation of the cooling towers at Fermi 2. The Fermi 2 Environmental Protection Plan requires aerial remote sensing during the first July-September period after the station has been in operation for one year. Because this type of study focuses on effects caused by the operation of cooling towers at the Fermi 2 site, Detroit Edison's first post-operational survey was performed during the July-September, 1987 period and the first followup of the survey program was performed during the July to September, 1988 period. Additional followup surveys are required to be performed in 1990, 1992, and 1994. As such, aerial remote sensing was not required, consequently, it was not conducted in 1989.

The use of herbicides at Fermi 2 must conform to the approved use of selected herbicides as registered by the Environmental Protection Agency, approved by State authorities, and applied in accordance with State requirements. Records are maintained at the site concerning herbicide use. These records include the following information: commercial and chemical names of material used, concentration of active material in formulations diluted for field use; diluting substances other than water; rates of application; method and frequency of application; location; and the date of application.

Before engaging in additional construction or operational activities which might affect the environment, Fermi 2 would prepare and record an environmental evaluation of such activity. If the evaluation should indicate that the proposed activity would involve an unreviewed environmental question, Detroit Edison would provide a written evaluation of the activity and obtain prior approval from the Director, Office of Nuclear Reactor Regulation. Activities are excluded from this requirement if all measurable, non-radiological effects are confined to the on-site areas previously disturbed during site preparation and plant construction. During the period covered by this report, there were no changes to station design or operation, tests, or experiments which involved potentially significant unreviewed environmental issues.

Any unusual occurrence or important event which indicates, or could result in, significant environmental impact causally related to plant operation is reported to the NRC within 24 hours followed by a written report. The following are considered examples of unusual or important environmental events: excessive bird impaction events, onsite plant or animal disease outbreaks, mortality unusual occurrence of any species protected by the Endangered Species Act, fish kills, and an increase in nuisance organisms or conditions. During this period several environmental incidents / concerns occurred, none of which posed any significant environmental impact causally related to plant operation. As such, they did not warrant classification as unusual or important environmental events (Appendix B to Facility Operating License No. NPF-33, section 4.1). Accordingly no non-routine reports were submitted. However, these incidents are noted in this report to provide an all-encompassing record of environmental incidents at Fermi 2. These are summarized below:

- o Six spills occurred at Fermi 2 during the reporting period. The spills were reported by telephone to the Michigan Department of Natural Resources and Nuclear Regulatory Commission. Follow-up written reports (Appendix I) were sent to the Michigan Department of Natural Resources. Spill incident summary is as follows:

<u>Date</u>	<u>Material</u>	<u>Qty (Gallons)</u>	<u>Location</u>
1/27/89	Make-Up Demin Regeneration Waste Water (pH-2.2)	50	Stone sponge adjacent to Neutralization Tank
2/18/89	Main Condenser Cooling Water	Undetermined	Cooling Towers
7/13/89	Chlorinated General Service Water	600 - 800	Feral I Overflow Canal
10/27/89	Non PCB Transformer Oil	50	Stone sponge adjacent to transformer 2A
10/31/89	Raw Sewage	200	Storm Drain adjacent to sewage forwarding station
12/27/89	50% Ethylene Glycol/Water Mixture	75	South Cooling Tower Basin

Spill sources were secured immediately upon discovery. Cleanup of spills involving soil area consisted of:

1. Soil scraping of affected area.
2. Disposal of affected soil in a permitted landfill by certified environmental cleanup contractor.
3. Addition of clean fill to excavated area.

In all cases spill incidents were minor and did not cause any environmental problems. Corrective actions to prevent reoccurrence of these incidents are being implemented.

- o On November 24, 1989 the Daily Maximum Effluent Limitation of 0.2 mg/l total residual chlorine was exceeded for Circulating Water reservoir blowdown effluent. The noncompliance was reported by telephone to the Michigan Department of Natural Resources and the Nuclear Regulatory Commission. A follow-up written report (Appendix II) was sent to the Michigan Department of Natural Resources. The calculated daily maximum total residual chlorine concentration was 0.24 mg/l. No single analysis exceeded the 0.3 mg/l limitation. There was no observable environmental impact to the receiving waters as a result of this incident.



- o In late August 1989 Zebra mussels, Dreissena polymorpha were discovered colonizing cement walls of the General Service Water (GSW) intake structure. The mussels were observed by divers conducting routine monitoring in support of the Corbicula (asiatic clam) monitoring program (Appendix III). Populations of 5000-10000 individuals per square meter were observed (all were juveniles, 2-5 mm in length). Subsequent inspections of Fermi 2 raw water system components conducted throughout the first refueling outage revealed the presence of juvenile mussels in Reactor Building Closed Cooling Water heat exchangers, Turbine Lube Oil Coolers, General Service Water (GSW) pump housings, GSW pump pit and GSW relief valves (Appendix III). No tube blockage occurred as a result of zebra mussel infestation of the aforementioned heat exchangers. Monitoring of Residual Heat Removal reservoirs and Circulating Water reservoir indicated no presence of zebra mussels.

A molluscide was applied to GSW system and Fire Protection system ring header on November 23, 1989. This treatment resulted in approximately 70% Zebra mussel mortality. Future molluscide treatments of GSW and Fire Protection systems are scheduled for spring and fall of each year. Frequency of treatments may be altered depending on future monitoring results. Information on the zebra mussel situation has been provided to the Nuclear Regulatory Commission Senior Resident Inspector.

An application for renewal of Fermi's National Pollutant Discharge Elimination System (NPDES) Permit No. MI0037028 was submitted to the Michigan Department of Natural Resources in October 1989 (Appendix IV). NPDES Permit reapplication is submitted for review in accordance with Appendix B to Facility Operating License No. NPF-33, Section 3.2.

**Section II**

**Appendices**

## Appendix 1

Appendix 1 consists of follow-up spill reports as submitted to the Michigan Department of Natural Resources for spill events that occurred in 1989. Reports contained herein are as follows:

- o January 27, 1989 spill of demineralizer regenerant due to overfilling of the neutralization tank.
- o February 18, 1989 spill of an undetermined amount of condenser cooling water from the cooling towers due to cooling tower ice melt.
- o July 13, 1989 spill of chlorinated General Service Water to the Fermi 1 overflow canal due to leaking strainer backwash valves.
- o October 27, 1989 spill of non-PCB transformer oil to ground adjacent to transformer 2A during oil transfer operations.
- o October 31 , 1989 spill of raw sewage to storm sewer due to a failure of the sewage forwarding pump.
- o December 27, 1989 spill of 50 percent ethylene glycol/water mixture to the Circulating Water reservoir as a result of a failed hydraulic control line.

Detroit  
Edison

2000 Second Avenue  
Detroit, Michigan 48226  
(313) 237-8000

February 3, 1989

Mr. P. D. Zugger, Chief  
Surface Water Quality Division  
Michigan Dept. of Natural Resources  
Stevens T. Mason Building  
Lansing, MI 48909

Re: Spill Notification Follow-Up Report  
Ferri-2 Power Plant  
NPDES Permit No. MI 0037028

Dear Mr. Zugger:

In accordance with Part IIA6 of NPDES Permit No. MI 0037028 (permit), the Detroit Edison Company is hereby submitting to you this follow-up report on a spill notification made to MDNR Operator 20 on January 30, 1989. In the evening of January 27, 1989 the Neutralization Tank at the Ferri-2 Power Plant was inadvertently overfilled resulting in a wastewater spill of 30 to 50 gallons on the ground in the vicinity of the tank. The wastewater consisted of demineralizer regenerants and had a pH of 2.2. The wastewater immediately soaked into the ground at the tank location.

Earlier in January, the high level indicator/alarm had been removed from the Neutralization Tank and returned to the manufacturer to be rebuilt because it had malfunctioned. Since that time, visual observations had been used to track tank levels. Prior to each addition of wastewater to the tank, operators made a determination as to whether the remaining tank capacity was sufficient for the anticipated wastewater addition. However, in this case, before the regeneration cycle was completed, the tank was observed overflowing and the regeneration cycle was immediately terminated. The level in the tank was lowered sufficiently to allow the contents of the tank to be treated after which the wastewater was discharged in accordance with Part IA3 of the permit.

It is expected that before the end of February, the level indicator/alarm will be returned from the manufacturer and reinstalled. During the interim period, the operators will be using other installed indicators to prevent recurrence of this event as well as maintaining greater vigilance.

If you have any questions relative to this report or this incident, please contact me on (313) 237-7021.

Sincerely,



Arthur Heidrich, Jr.  
Administrator  
Water & Land Use Programs

AH:pp

cc: C. Morse  
R. Schrameck

bcc: J. Flynn, D. Grimes, W. Terrasi  
M. Sterling

February 27, 1989

Mr. P. D. Zuger, Chief  
Surface Water Quality Division  
Michigan Dept. of Natural Resources  
P. O. Box 30028  
Lansing, MI 48909

Re: Spill Report Follow-up Report  
Fermi-2 Power Plant  
NPDES Permit No. MI 0037028

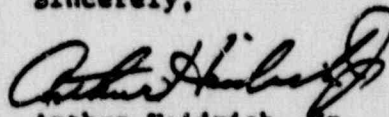
Dear Mr. Zuger:

On February 18, 1989, at approximately 1530 hours an operator at Detroit Edison Company's (Company) Fermi-2 Power Plant (Plant) reported the loss of an undetermined amount of non-contact cooling water from the Plant's closed-cycle condenser cooling system (cooling tower system) to MDNR Operator No. 19. The report was made in accordance with Part IIA6 of NPDES Permit No. MI 0037028 (Permit). An investigation of the circumstances of the report by Plant personnel found that the source of the water that was reported lost was an ice accumulation on and about the cooling towers which melted due to warm weather and by flowing down a grade to a low point, entered Swan Creek. A flowrate of one to two gallons per minute was estimated, however, the total time of discharge or total quantity of discharge could not be determined. Plant personnel took immediate steps to prevent further run-off from the area flowing to Swan Creek. Later, an earth dike was erected to block drainage at the low point. No further remedial action was deemed necessary.

A review of the Part V Rules of the Michigan Water Resources Commission (MWRC) and the specific language of Part IIA6, "Spill Notification", of the above cited Permit as well as the definitions found in the "Industrial and Commercial Wastewater Discharge Application" leads the Company to the belief that this entire incident was not reportable under State law since it involved the loss of "non-contact cooling water", a category of material neither cited in the Part V Rules of the MWRC nor Part IIA6 of the Permit. Therefore, in the future, the Company will no longer report similar losses of non-contact cooling water at the Plant under the State's spill reporting regulations.

If you have any questions relative to the incident or comments or objections to the position taken by the Company in this matter, please contact me on (313) 237-7021.

Sincerely,



Arthur Heidrich, Jr.  
Administrator,  
Water & Land Use Programs

AH:pp

cc: C. S. Morse, R. Schrameck

bc: S. Boyd, J. Flynn, D. Grimes,  
P. Marquardt, M. Sterling, W. Terrasi

**Detroit  
Edison**

3000 Second Avenue  
Detroit, Michigan 48226  
(313) 237-8000

July 21, 1989

Mr. P. D. Zugger, Chief  
Surface Water Quality Division  
Michigan Dept. of Natural Resources  
P. O. Box 30028  
Lansing, MI 48909

Re: Spill Report Follow-Up  
Fermi-2 Power Plant  
NPDES Permit No. MI 0037028

Dear Mr. Zugger:

On July 13, 1989, at approximately 1730 hours, Detroit Edison personnel reported to the Michigan Department of Natural Resources the inadvertent discharge of chlorine to the discharge canal of the Fermi I Power Plant while chlorinating the Fermi-2 Power Plant intake water. This follow-up report is being submitted by Detroit Edison in conformance with Part IIA6 of NPDES Permit No. MI 0037028.

During the scheduled chlorination cycle on July 13, 1989, it was determined that the General Service Water strainer backwash valves in the Fermi-2 Power Plant intake structure did not isolate the system and allowed chlorinated water to flow to the Fermi I Power Plant overflow canal. The normal strainer backwash flow is to the Fermi I Power Plant overflow canal except during chlorination periods. Upon confirmation of the situation, chlorination was terminated. Upon investigation it was determined that the valves in question were leaking past their seats and were in need of repair. Based on the concentration of chlorine in the water leaking by the valves and the other normal flows in the Fermi I Power Plant overflow canal, it was calculated that the concentration of chlorine in the discharge from the Fermi I Power Plant overflow canal would have been in compliance with the chlorine discharge limitations of Part IAI of NPDES Permit No. MI 0001830 had the discharge been monitored.

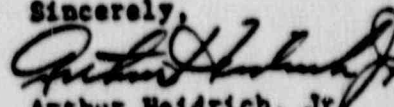
Plant personnel are inspecting and replacing the backwash valves to prevent recurrence of the problem. In the interim period, because Fermi-2 Power Plant must chlorinate to prevent damage to plant systems, there is and will continue to be a discharge of chlorinated water to

P. D. Zegger  
July 21, 1989  
Page 2

Ferri I Power Plant overflow canal while Ferri-2 Power Plant is chlorinating its intake water. The Ferri I Power Plant overflow canal discharge is being monitored in accordance with Part IAI of NPDES Permit No. MI 0001830 and is in compliance with the chlorine limitations specified in that Permit.

If additional information relative to this temporary operating situation is required, or you have any questions relative to it, please contact me on (313) 237-7021.

Sincerely,



Arthur Heidrich, Jr.  
Administrator  
Water & Land Use Programs

AH:pp

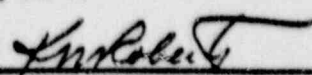
cc: R. Schrameck

bcc: J. Flynn  
D. Gipson  
D. Grimes  
M. Sterling  
W. Terrasi

STATE OF MICHIGAN  
DEPARTMENT OF NATURAL RESOURCES

## REPORT OF OIL, SALT OR POLLUTING MATERIAL LOSSES

Pursuant to the provisions of Act 245 of the Public Acts of Michigan 1929 as amended, regulations have been issued which require that all owners, managers or operators of vessels, oil storage or on land facilities shall notify the Water Resources Commission or his authorized representative of oil, salt and polluting material losses. This notification shall be made promptly by telephone or telegraph, giving briefly the particulars, and by mail, giving a detailed account of events and conditions.

Date <b>OCTOBER 27, 1989</b>		Company Name <b>DETROIT EDISON COMPANY</b>	
Location of Loss (Be Specific) <b>FERMI 2 POWER PLANT 6400 N. DIXIE HWY.</b>			
<b>FRENCHTOWN TWP.</b>		<b>MONROE</b>	
Material Lost <b>NON-PCB OIL</b>	Amount <b>50.00 GALLON(S)</b>	Name of Surface Water Involved <b>NONE</b>	
Date Loss was Discovered <b>10/21/89</b>		Time of Discovery <b>1900 HOURS</b>	
Name of Department of Natural Resources Representative Contacted <b>PEAS OPERATOR - 6</b>			
Telephoned or Telegraphed by Whom <b>MR. F. LEHMANN</b>			Time <b>1445 HRS. - 10/23/89</b>
Cause of Loss (include Type of Equipment and Other Details) <b>TRANSFORMER- HEATER RELIEF VLV - PUMP RELIEVED WHILE EMPTYING TRANSFORMER</b>			
Nature of Loss (include Complete Description of Damage) <b>SPILL FLUID CONTACTED - THE STONE SPONGE NEAR THE EQUIPMENT.</b>			
Additional Comments (include Method of Control, Plans for Prevention of Recurrence, etc.) <b>CLEAN-UP IS UNDERWAY AND MATERIAL WHICH IS APPARENTLY CONTACTED WAS AND/OR WILL BE CLEANED, AND IF APPROPRIATE, REMOVED AND DISPOSED OF IN AN APPROVED MANNER.</b>			
Company name <b>DETROIT EDISON</b>		By (Signature) 	

Return this form to: Michigan Water Resources Commission  
Attention: Executive Secretary

Box 30028  
Lansing, Mi 48909  
24 hr. Emergency Notification Number  
1-800-292-4706



Detroit Edison

November 7, 1989

Mr. P. D. Zugger, Chief  
Surface Water Quality Division  
Department of Natural Resources  
P.O. Box 30028  
Lansing, MI 48909

Re: Spill Notification Follow-up Report  
Fermi-2 Power Plant  
NPDES Permit No. MI 0037028

Dear Mr. Zugger:

On October 31, 1989, at approximately 0200 hours, an operator at the Fermi-2 Power Plant discovered a sewage tank had overflowed spilling an estimated 200 gallons of raw sewage into a storm sewer. The storm sewer discharges to Swan Creek through Outfall 002 and the Fermi 1 Overflow Canal. Plant personnel immediately notified MDNR Operator No. 12 of the spill. The immediate remedial action taken was to manually start a backup sewage pump.

The cause of the spill appeared to be the failure of the sewage pump to start when it received an automatic start signal. The situation was further compounded by the failure of an alarm system to alert the control room operators of the pump's malfunction.

Plant personnel are presently investigating the incident including the testing of the pump's auto-start system and the functioning of the tank high level alarms. Further corrective action will be developed and implemented to prevent a recurrence of this incident.

If you have any questions regarding the incident or this report, please contact me on (313) 237-7021.

9

Sincerely,



Arthur Heidrich, Jr.  
Administrator  
Water & Land Use Programs

AH:pp

cc: R. Schrameck  
M. Yoon

bcc: J. Flynn

F. Lehmann

M. Sterling

W. Terrasi

January 6, 1990

Mr. Paul Zugger, Chief  
Surface Water Quality Division  
Michigan Department of Natural Resources  
Stevens T. Mason Building  
P. O. Box 30028  
Lansing, MI 48909

Re: Enrico Fermi Power Plant NPDES Permit No. MI0037028

Dear Mr. Zugger:

Recently staff of the Enrico Fermi Power Plant reported a spill to the Emergency Response Center even though the spilled substance is not included under the listings provided by the Spill Notification provisions of Part IIA6 of the above captioned permit. The spilled substance is neither a product, by-product, intermediary product, oil, solvent, waste material, or polluting material as defined by the Part 5 rules of the Michigan Water Resources Commission Act. However, since the call was made the Company wishes to provide the following complete report on the incident.

On December 27, 1989 at 2145 hours, operators at Detroit Edison's Fermi 2 Power Plant reported to the MDNR Operator 22, that approximately 75 gallons of 50 percent ethylene glycol/water mixture leaked into the Circulating Water Reservoir via the South Cooling Tower. The reservoir was continuously decanting to Lake Erie (Outfall 001) at the time of occurrence.

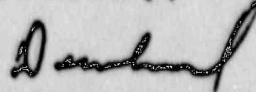
The spill was determined to be caused by leaking hydraulic lines which control de-icing valves on the south Cooling Tower. The hydraulic control fluid, a 50 percent mixture of ethylene glycol and water, is contained in a 75 gallon tank. When cooling towers were placed in de-icing mode with hydraulic lines were pressurized to open 85 valves supplying warm water to the towers. Several of the hydraulic lines which service these valves had developed leaks which cause the entire contents of the tank to drain to the South Cooling Tower basin.

Immediate actions were taken to repair the leaking hydraulic lines. Future corrective actions will involve increasing the frequency of preventative maintenance on the de-icing system hydraulic lines.

Mr. Paul Zuger, Chief  
January 8, 1990  
Page 2

Please call me at 237-8714 if you have any questions.

Sincerely,



Dennis Leonard  
Environmental Protection

DL/11

bcc: A. Weidrich  
F. Lehmann

## Appendix 2

Appendix 2 contains a noncompliance notification for National Pollutant Discharge Elimination System Permit No. MI 0037028 Circulating Water Decant effluent (outfall 001) submitted to the Michigan Department of Natural Resources on December 11, 1989. The noncompliance was due to exceedance of the daily maximum effluent limitation for total residual chlorine which took place on November 24, 1989.

**Detroit  
Edison**

2000 Second Avenue  
Detroit, Michigan 48226  
(313) 237-2000

December 11, 1989

Mr. P. D. Zegger, Chief  
Surface Water Quality Division  
Michigan Dept. of Natural Resources  
P. O. Box 30028  
Lansing, MI 48909

Re: Noncompliance Notification  
Fermi-2 Power Plant  
NPDES Permit No. MI0037028

Dear Mr. Zegger:

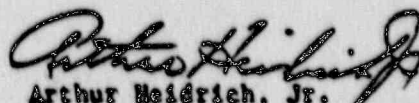
On December 6, 1989, at the Fermi-2 Power Plant (Plant) during a review of Plant operating data for preparation of the November 1989 Discharge Monitoring Report, it was discovered by Plant staff that on November 24, 1989, the Daily Maximum Effluent Limitation of 0.2 mg/l of Total Residue Chlorine, as specified in part 1A1 of NPDES Permit No. MI0037028, may have been exceeded. Evaluation of the analytical data obtained during the chlorine discharge period indicated a calculated daily maximum total residual chlorine concentration of 0.24 mg/l in the discharge from Outfall 001. No single analysis exceeded the 0.3 mg/l limitation.

A review of the circumstances associated with this chlorination period indicated two significant factors contributed to the possible noncompliance. First, the General Service Water System which supplies make-up water to the Plant's circulating Water System had been treated with a molluscicide the previous day which may have substantially reduced the chlorine demand in the system. Plant staff had not anticipated this effect and did not compensate for it. Secondly, the Plant had been out of service and there was no heat load on the system, therefore, the cooling towers were being bypassed. This resulted in lower than normal chlorine losses from the system through aeration.

To prevent reoccurrence of this incident in the future, the Plant will suspend chlorination for a longer duration following treatment with a molluscicide and will initiate chlorination at a reduced level when it is resumed.

If you have any questions relative to this incident or this report, please contact me on (313) 237-7021.

Sincerely,

  
Arthur Heidrich, Jr.  
Administrator  
Water & Land Use Programs

AM:pp

cc: R. Schramck  
M. Yoon

bcc: J. Flynn, P. Lehmann, M. Sterling, W. Terrasi

### Appendix 3

Appendix 3 contains a copy of Fermi's Program for Detection, Prevention, and Control of Corbicula (asiatic clam). This Implementation Plan describes the monitoring locations and methodologies used to detect the presence of Corbicula and Zebra mussels for raw water cooling systems at Fermi. Appendix 3 also contains Nuclear Plant Chemistry memo NP-CH-89-0099 which describes the status of the Zebra mussel infestation and associated treatment program at Fermi.

**Formal-2 Program for  
Detection, Prevention, and Control  
of Corbicular (Asiatic Elm)**

**Implementation Plan**

**Revision 6, 13 November 1986  
Written by: J. Kaye**

**200/23033/10.0  
211486**

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## I. PURPOSE

This document is intended to provide the specifics necessary to implement the "Fermi-2 Program for the Detection, Prevention, and Control of Corbicula." The individual sections of this implementation plan describe the who, where, how, when, and what if of the Corbicula issue at Fermi.

Corbicula is a tiny clam (about a half inch long when mature) which likes to breed in warm, gently flowing water. This is of particular concern when the environment is a "safety related" cooling system of a nuclear power plant.

Accordingly, we are implementing the monitoring program contained herein. Additional monitoring will be accomplished as deemed necessary.

Section X is a matrix which provides an overview of how the individual elements of this plan fit together.

## II. RESPONSIBILITIES

- A. Scheduling - Program activity scheduling will be the responsibility of Nuclear Production's Maintenance Group. Scheduling will be implemented via the Preventive Maintenance (PM) Program, the Surveillance Program, and the Performance Evaluation Program (P.E.P). These programs will schedule, conduct, track, and document work activities.

If reasonably possible, scheduling should be accomplished such that sample media is forwarded for processing or analysis during normal working hours. Appropriate maintenance instructions and procedures will be revised to require inspection and sampling of heat exchangers, including the main condenser during corrective maintenance.

- B. Sampling/Monitoring (locations are listed in Section III)

1. Heat exchanger inspection/cleaning sampling is the responsibility of Nuclear Production's Maintenance Group.
2. Flush samples of the Fire Protection System are the responsibility of Nuclear Production's Operations Group.
3. All other sampling/monitoring is the responsibility of the Environmental Programs Coordinator (EPC).

- C. Documentation - each time an inspection for Corbicula is performed, whether or not Corbicula is found, the effort must be documented. A copy of that documentation must be expeditiously forwarded to the EPC for his use in preparing the annual report.

- D. Sampling Processing and Transport - is the responsibility of the EPC. However, it is the responsibility of each Group to forward to the EPC samples for which they are responsible.
- E. Sample Media and Videotape Analysis - is the responsibility of the Aquatic Biologist, Engineering Research (ER).
- F. Corrective Action
  - 1) Recommending corrective action is the responsibility of the Aquatic Biologist, ER.
  - 2) Approval and implementation of corrective action is the responsibility of the Assistant Manager, Nuclear Production.
- G. Program Coordination - is the responsibility of the EPC.

### SAMPLING/MONITORING LOCATIONS

- A. General Service Water (GSW) intake structure
  - 1. Downstream side of the traveling screens
    - a. Fermi-2 GSW pumphouse pit floor - approximately one-third of the distance from the traveling screens to the GSW pumps, as close as reasonably possible to the east wall
    - b. Fermi-2 GSW pumphouse pit floor - approximately two-thirds of the distance from the traveling screens to the GSW pumps, as close as reasonably possible to the east wall
    - c. Fermi-2 GSW pumphouse pit floor - approximately one-third of the distance from the traveling screens to the GSW pumps, as close as reasonably possible to the west wall
    - d. Fermi-2 GSW pumphouse pit floor - approximately two-third of the distance from the traveling screens to the GSW pumps, as close as reasonably possible to the west wall
  - 2. Inlet and Outlet of heat exchangers and coolers
    - a. GSW inlet and outlet end bells of the east EBCCW heat exchanger
    - b. GSW inlet and outlet end bells of the west EBCCW heat exchanger

- c. GSW inlet and outlet end bells of the east TBCCW heat exchanger.
- d. GSW inlet and outlet end bells of the west TBCCW heat exchanger
- e. main generator hydrogen cooler #1 inlet\*
- f. main generator hydrogen cooler #2 inlet\*
- g. main generator hydrogen cooler #3 inlet\*
- h. main generator hydrogen cooler #4 inlet\*

\*NOTE: Given the two-pass vertical "U" tube configuration of these coolers, sample media will probably not be available. The inlet, however, should be examined for blocked tubes.

- i. upper main turbine lube oil cooler outlet
- j. lower main turbine lube oil cooler outlet

## B. Circulating Water (CW)

- 1. Hot and cold basins of cooling towers
  - a. hot water basin - north cooling tower
  - b. hot water basin - south cooling tower
  - c. cold water basin - north cooling tower
  - d. cold water basin - south cooling tower
- 2. Downstream of the fixed screens
  - a. downstream of the east CWPH fixed inlet screen (between the fixed screen and the CW pumps)
  - b. downstream of the center CWPH fixed inlet screen (between the fixed screen and the CW pumps)
  - c. downstream of the west CWPH fixed inlet screen (between the fixed screen and the CW pumps)
- 3. Inlet and outlet water boxes of the main condenser
  - a. northeast CW inlet water box of the main condenser
  - b. northwest CW inlet water box of the main condenser
  - c. southeast CW inlet water box of the main condenser
  - d. southwest CW inlet water box of the main condenser

- e. east CW outlet water box of the main condenser
  - f. west CW outlet water box of the main condenser
4. Thermal Plume of cooling water blowdown
- a. from Lake Erie on the right edge of the decant ramp 5-15 yards from the shoreline
  - b. from Lake Erie on the left edge of the decant ramp 5-15 yards from shoreline
- C. Residual Heat Removal Service Water (RHRSW)
1. Inlet and outlet of heat exchangers
- a. RHRSW inlet/outlet plenum of the (Division I) RHR heat exchanger
  - b. RHRSW inlet/outlet plenum of the (Division II) RHR heat exchanger
  - c. RHRSW inlet and outlet end bells, northwest EECW heat exchanger
  - d. RHRSW inlet and outlet end bells, southeast EECW heat exchanger
  - e. EDGSW inlet, #11 EDG air cooler
  - f. EDGSW inlet, #11 EDG oil cooler
  - g. EDGSW outlet, #11 EDG jacket cooler
  - h. EDGSW inlet, #12 EDG air cooler
  - i. EDGSW inlet, #12 EDG oil cooler
  - j. EDGSW outlet, #12 EDG jacket cooler
  - k. EDGSW inlet, #13 EDG air cooler
  - l. EDGSW inlet, #13 EDG oil cooler
  - m. EDGSW outlet, #13 EDG jacket cooler
  - n. EDGSW inlet, #14 EDG air cooler
  - o. EDGSW inlet, #14 EDG oil cooler
  - p. EDGSW outlet, #14 EDG jacket cooler

**2. Bottom of RHR reservoir**

- a. RHR reservoir (Division I) - center of east side
- b. RHR reservoir (Division I) - center of south side
- c. RHR reservoir (Division I) - northwest corner
- d. RHR reservoir (Division II) - center east side
- e. RHR reservoir (Division II) - center south side
- f. RHR reservoir (Division II) - northwest corner

**D. Fire Protection System**

1. fire ring header in accordance with POM Procedure 24.501.03
2. Turbine and Reactor Buildings utilizing the valves indicated:
  - a. Used oil storage Rm. sprinkler system inspectors test valve U80-P41E, in accordance with POM Procedure 27.501.20.
  - b. Cable Tray area sprinkler system - inspectors test valve U80-P042G, in accordance with POM Procedure 27.501.20.
  - c. 2nd Fl Cable Tray area sprinkler system - inspectors test valve T80-P051, in accordance with POM Procedure 24.501.17.
  - d. Railroad Bay sprinkler system - inspectors test valve T80-P049, in accordance with POM Procedure 24.501.17.

**IV. SAMPLING/MONITORING PROCEDURES (refer to the Matrix, Section X, to determine which technique to use at any particular sample location)**

**A. PONAR dredge**

1. Lower the opened dredge (do not drop) until it touches bottom.
2. Slack the line momentarily, then draw the sampler up in a smooth, continuous manner.
3. Remove sample from dredge into clean waterproof containers.
4. Repeat up to five times or until approximately one gallon of debris is collected.
5. Process sample (Section V) within eight hours of sample collection.

**B. Remotely positioned or diver positioned video camera**

1. Obtain a videotaped record of the sample area.
2. Forward to the Aquatic Biologist (ER) for analysis.

**C. Hand Collection**

1. Wearing protective waterproof gloves, remove no more than 10 gallons of debris to clean waterproof containers. Attempt to exclude nonshell materials. Include all shell fragments from tube ends.
2. Deliver samples to a location designated by the EPC within four hours of collection.

**D. Hand Collection**

1. Wearing protective waterproof gloves, place loose surface material (no more than 10 gallons) from an area two foot by two foot (2' x 2'), using any convenient scoop-type device, in clean waterproof containers. Discard nonshell materials.
2. Process sample (Section V) within eight hours of sample collection.

**E. Measurement**

1. Measure and record depth of sediment at sampling location.
2. Forward written documentation of this measurement to the Aquatic Biologist, ER; copy the EPC.

**F. Hand Collection**

1. Wearing protective waterproof gloves, collect all loose surface material from a one square meter area; discard nonshell materials.
2. Place collected materials in clean waterproof containers.
3. Process sample (Section V) within eight hours of sample collection.

**G. Straining**

1. Position a straining device (window screen mesh) such that the sample volume passes through the strainer.
2. Place any shell material which accumulates on screen during flush in clean waterproof containers. Deliver samples to a location designated by the EPC, within four hours of sample collection.

## **B. Hand Collection**

1. Wearing protective waterproof gloves, collect all shells and shell fragments.
2. Place these materials in clean waterproof containers.
3. Process sample (Section V) within eight hours of collection.

## **V. SAMPLE PROCESSING**

1. Water wash loose material through a window screening. Discard nonshell material.
2. Place washed material in clean waterproof containers.
3. Label containers with: 1) sample location designation and 2) time/date.
4. Place on ice or refrigerate within eight hours of sample collection.
5. Transport to the Aquatic Biologist, ER, within 72 hours of sample collection.

## **VI. FREQUENCIES** (refer to the Matrix, Section X, to determine the frequency requirement for any particular component)

- A. Inspect when opened for routine PM program purposes.
- B. Spring (April - June)
- C. Fall (September - November)
- D. Every 18 months (to coincide with scheduled surveillances)
- E. Inspect individual components if their performance decreases significantly.
- F. Inspect selected components\* if corbicula are found in source waters (RHR reservoirs, GSW pumphouses, or circulating water reservoir/pump house).

\* DECo's Aquatic Biologist will, after reviewing relevant data and consulting with Nuclear Production, recommend which components to inspect during the next scheduled outage.

## **VII. SAMPLE ANALYSIS**

A written report of the results of all sample/videotape analysis will be provided to the EPC by the Aquatic Biologist, ER.

**VIII. CORRECTIVE ACTION** - will be implemented by Nuclear Production. DECo's Aquatic Biologist, subsequent to his examination of sample media or videotapes, may recommend:

- A. Mechanical (manual) removal
- B. Dredging
- C. Flushing
- D. Chemical Treatment

The Aquatic Biologist, ER will monitor corrective actions to determine when adequate control measures have been taken.

## **IX. RECORDS**

1. The Aquatic Biologist-ER, will forward documentation of 1) the results of his sample/videotape analyses, 2) recommendations for corrective action, and 3) "adequacy of corrective actions" determinations to the EPC as they are developed.
2. Annually in January, the EPC will forward to Document Control, for permanent retention, a report and/or records which substantiate and provide detail regarding the accomplishment of this program for the previous year.




Sampling-Monitoring Location (SECT. III)	A.1.g through A.1.d (CSW intake structure)	A.2.g through A.2.j (CSW supply to Ht. exch. and coolers)	B.1.a and b (Cooling Tur. H.W. basin)	B.1.e & d. (Cooling Tur. C.W. basin)	B.2.g through B.2.c. (CSW)	B.3.g through B.3.f. (Main condenser)
FREQUENCY (SECT. VI)	B	A, E, and F	B, C	B, C	B, C	E, F, A
COLLECTION RESPONSIBILITY (SECT. III)	B.3.	B.1	B.3	B.3	B.3.	B.1.
SAMPLING-MONITORING PROGRAM(S) (SECT. IV)	A or B	C	H	F	A or B and E	C
CORRECTIVE ACTION (IF REQUESTED) (SECT. VIII)	B	A	A	A	B	A

Sampling-Monitoring Location (Sect. III)	B.4.a. 2 b. (thermal plume)	C.1.a. through C.1.p. (RRRSW to heat exch. & coolers)	C.2.a. through C.2.f. (RRR reservoir)	D.1 and D.2.a through D.2.d (fire protection)
FREQUENCY (SECT. VI)	B	E, F, A and 3	B	D
COLLECTION RESPONSIBILITY (SECT. II)	B3	B1	B3	B2
SAMPLING-MONITORING PROCEDURES (SECT. IV)	D	C	A or B	C
CORRECTIVE ACTION (IF REQUESTED) (SECT. VIII)	N/A	A	B	C

0801.01.16

Date: December 5, 1989  
NP-CH-89-0099

To: Distribution

From: F. N. Lehmann   
Environmental Engineer

Reference: Fermi 2 Program for Detection, Prevention, and Control of  
Corbicula (Asiatic clam)

Subject: Monitoring and Control of Zebra Mussels at Fermi

The Zebra mussel, Dreissena polymorpha, is a European mollusk that invaded the Great Lakes during the past few years. This new organism is very adaptable and is already imposing major fouling concerns by attaching to power plant water supply intakes, piping, and heat exchangers thus threatening plant operation. Fermi 2 has already discovered zebra mussels within the GSW system. The following will summarize our monitoring program, extent of current zebra mussel infestation and present/future control methodologies.

The Zebra mussel "invasion" has not caught us unawares at Fermi 2. The earlier potential for plant water supply fouling by the asiatic clam, Corbicula sp. prompted us to develop/implement an extensive Corbicula Monitoring Program (November 1986). The program requires periodic inspections of our General Service Water (GSW), Circulating Water (CW), Residual Heat Removal (RHR) and Fire Protection systems. Actual sampling locations, methodologies and frequencies can be found in Reference 1. The Corbicula Monitoring program along with proactive consultation from our water treatment vendor, Betz Laboratories, has given us early warning of the presence of zebra mussels at Fermi. This has prompted us to fold inspections of raw water systems for Zebra mussels, into the existing Corbicula Monitoring Program. We have been on the lookout for their presence since early this year.

Zebra mussels were first discovered at the GSW intake structure in August of this year. Divers observed populations of 5,000-10,000 individuals per square meter clinging to the cement wall (all were juveniles, 2-5 mm in length). In contrast Monroe Power Plant presently has populations of 700,000 individuals per square meter on their intake structure with approximately 80% blockage of their trash bars. Subsequent inspections of Fermi 2 raw water system components conducted throughout RFO1 revealed the presence of living clams in RBCCW heat exchangers, Turbine Lube Oil Coolers, GSW pump housings, GSW pump pit, and GSW relief valves. No living clams have been found to date in the CW, EHRSW or Fire Protection systems. A small number of Zebra mussel shells were observed in main condenser water boxes, and hot water basins of the cooling towers. A comprehensive inspection report will be forthcoming in January.

Severe zebra mussel infestations observed at Monroe Power Plant prompted Fermi Chemistry personnel to investigate possible control methods. A molluscicide developed by Betz Industrial for the control of Corbicula (Clam-Trol CT-1) was selected for use in Fermi's raw water systems. This chemical has been proven in laboratory test to be as effective on Zebra mussels as it is for Corbicula. (See attachments). Chemistry group first applied CT-1 in the CW system in late August primarily as a shock treatment for algae control.

Recently the GSW system and portions of the Fire Protection system were treated for zebra mussels. The treatment involved operating the GSW system in recirculating mode while maintaining a concentration of 15-20 ppm CT-1 in GSW. The chemical was fed into the system for 15 hours. Two test chambers were set up with live Zebra mussels in the GSW pump house. These test chambers received treated GSW throughout the entire treatment. Due to latent mortality effects (clams sometimes won't die for up to three weeks following treatment) no kill efficiencies are available at this time. Future treatment of Fermi raw water systems will consist of spring and fall applications of CT-1 to both CW and GSW systems at concentrations of 15-20 ppm. Frequency of treatment may be altered depending on future monitoring results. We recently applied to the Michigan Department of Natural Resources (MDNR) for generic permission to periodically apply CT-1 to our raw water systems. Formal MDNR approval was received on 11-15-89. Chemical treatment of the GSW intake structure is currently not possible due to environmental regulatory constraints. It may therefore become necessary to remove Zebra mussels from the intake structure by mechanical means (scraping and/or hydroblasting). Future inspections will indicate when and how often this will be necessary.

In Summary:

- o November 1986 - Corbicula Monitoring Program implemented at Fermi.
- o August 1989 - Zebra mussels discovered on GSW intake structure (5000-10,000 indivs./sq. meter).  
Treated CW system with Betz Clam-Trol CT-1.
- o September-October 1989 - Zebra mussels discovered in RBCCW HX, Turbine Lube Oil Coolers, GSW pump housings, GSW relief valves and GSW pump pit.
- o October 1989 - Monroe Power Plant incurs 80% blockage of intake water trash bars due to Zebra mussel infestation (700,000 indivs./sq. meter).
- o Nov. 15, 1989 - Received MDNR generic approval to periodically apply Betz Clam-Trol Ct-1 as molluscicide in Fermi raw water systems.
- o Nov. 22/23, 1989 - Treated GSW and portions of Fire Protection system with Clam-Trol CT-1.
- o Spring/Fall 1990 - Plan to treat GSW and CW systems with Clam-Trol CT-1.

If you have any questions regarding this subject please contact me at extension 6-5577.

WT/FML/cjn

Noted by: W. Terrasi  
W. Terrasi  
General Supervisor  
Chemistry

cc: S. G. Catola            W. S. Orser  
G. V. Cranston        A. C. Settles  
R. J. DeWulf           K. M. Shields  
R. R. Eberhardt       B. R. Sylvia  
D. R. Gipson           W. M. Tucker  
A. Kowalczyk  
P. R. Lovallo  
R. McKeon  
C. M. Naegeli

# CLAM-TROL™ CT-1

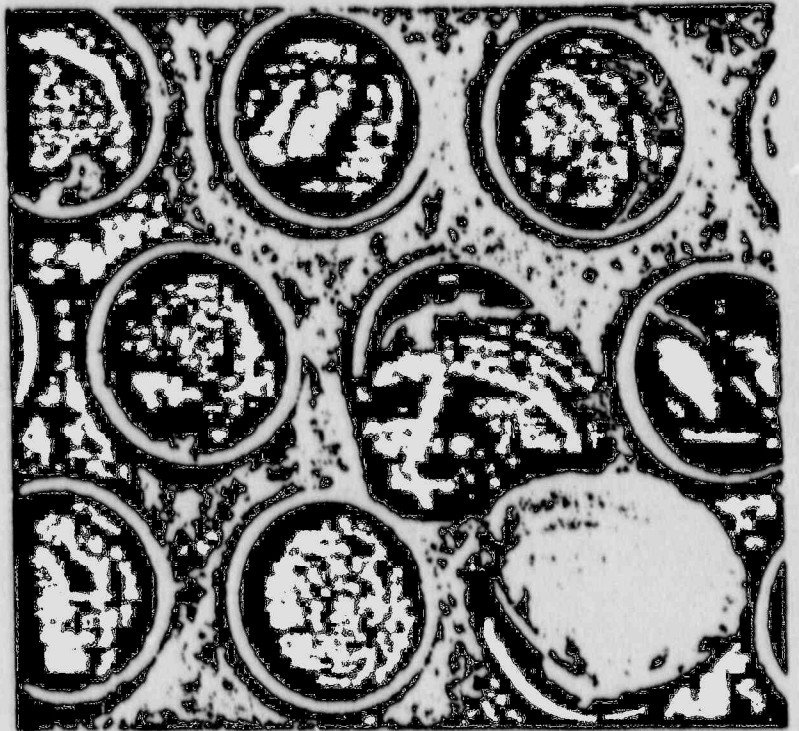
## THE ASIATIC CLAM... SO SMALL, YET SO DESTRUCTIVE

No matter what kind of cooling, auxiliary or waste water system you use, you could be engaged in an ongoing battle against the Asiatic clam (aka Corbicula). These tiny monsters only grow to about 1½ inches in size. But every year they cost American industry over \$1 billion in power outages, plant shutdowns, reduced operating efficiencies, increased maintenance expenditures, and extensive equipment replacement costs.

The Asiatic clam is a most prolific mollusk. Because it's hermaphroditic, just one clam can produce an army of over 20,000 offspring in your cooling system during a single year. When they grow to maturity in the comfortable environment of a low-flow area in your water system, their destructive powers are awesome.

First, they turn typical heat exchangers into clam condominiums until the tubes become plugged and the only solution is an entire plant shut down. Heat exchangers and condensers must then be opened up to rod the shells out. Then, any tubes and baffle plates which have been damaged must be replaced. Additionally, divers accompanied by expensive dredging equipment must be used to rid intake systems of all the Asiatic clams and shells.

Unfortunately, these drastic measures offer only a temporary solution to the problem, because if a single larva remains, the whole reproductive process can start all over again.



*Before Clam-Trol CT-1—system is infested and numerous tubes are plugged with adult clams.*

## WHY TYPICAL CONTROL METHODS DON'T WORK

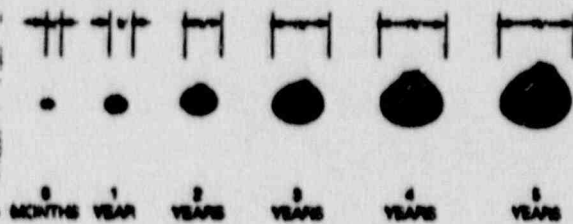
Standard control measures, like screens and strainers, have proven to be largely ineffective. This is because they can't prevent the microscopic larvae and juveniles from entering cooling systems and growing to adulthood.

Other treatments, like chlorine or bromine, don't work because mature Asiatic clams can sense them at low concentrations (0.1 mg/L). When they do, they simply pull in their siphons and "clam up" for as long as two months.

In fact, it is currently believed that oxidizing biocides, like chlorine, cause clam mortality through asphyxiation over a prolonged period of constant chemical feed

rather than any direct toxic effect. As a result, any interruption in this feed for maintenance or repair will give the clams a chance to breathe and totally negate the effectiveness of the treatment.

### Corbicula Clam Growth

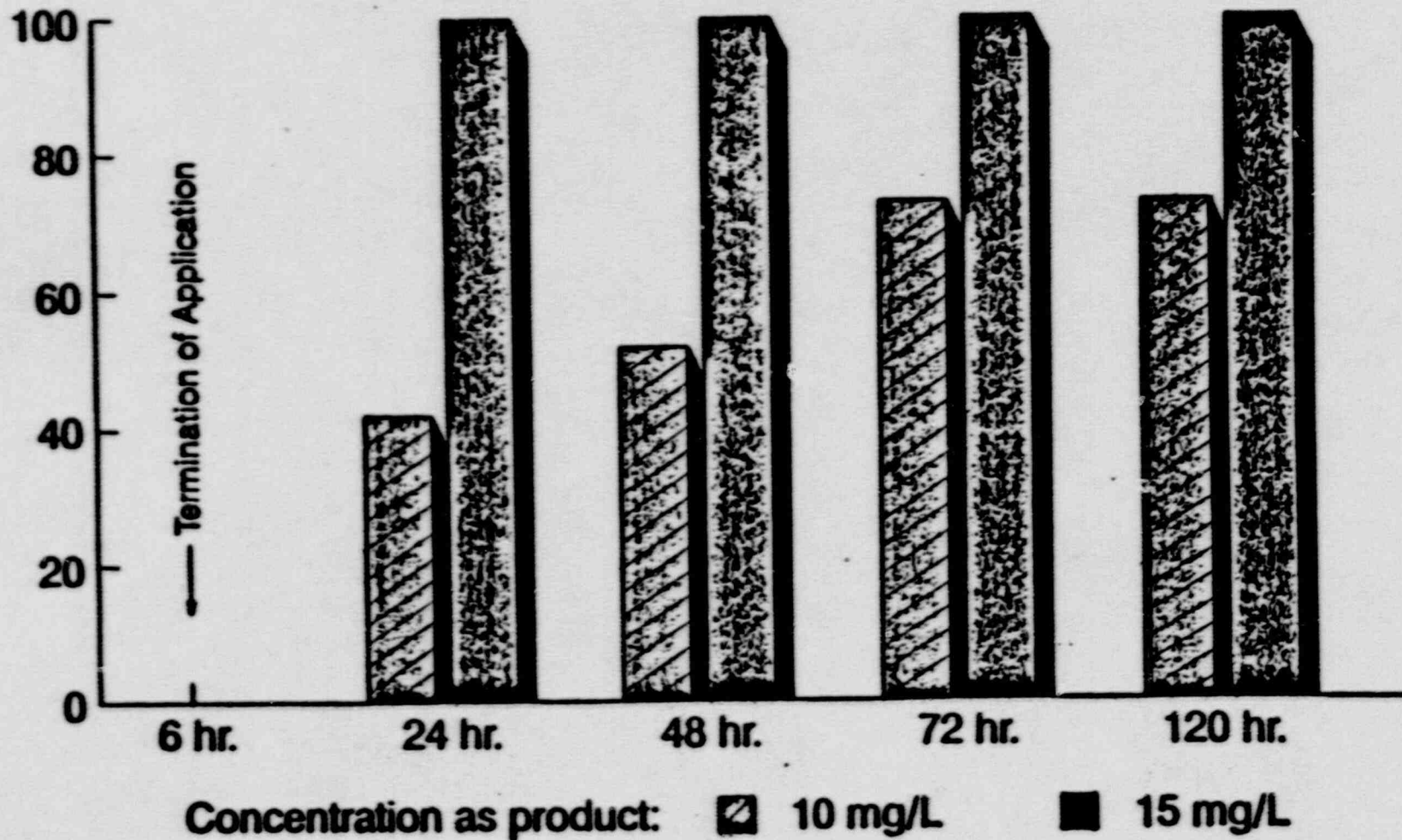


*This growth chart shows that clams can reach a fouling size in one year or less.*



# Betz Clam-Trol<sup>®</sup> CT-1 Efficacy To Zebra Mussels

% Mortality: 6 hour Exposure at 20°C







Appendix 4

Appendix 4 contains an application for reissuance of all of the National Pollutant Discharge Elimination System Permits presently issued for the Fermi complex as submitted to the Michigan Department of Natural Resources in 1989.



2000 Second Avenue  
Detroit, Michigan 48226  
(313) 257 8000

October 16, 1989

Mr. Paul Zugger  
Executive Secretary  
Michigan Water Resources Commission  
P. O. Box 30028  
Lansing, MI 48909

Re: NPDES Permits for Ferni Complex

Dear Mr. Zugger:

Enclosed is the Detroit Edison Company's application for reissuance of all of the NPDES Permits presently issued for the Ferni complex. These permits are the Ferni 1 Permit, NPDES No. M10001830; the Ferni 2 Operating Permit, NPDES No. M10037028; the Ferni 2 Construction Permit, NPDES No. M10038110; and the Ferni Dredge Spoil Basin, NPDES No. M10038365. Please note the following points regarding this application.

This application combines these four permits and all associated outfalls into a single application under NPDES Permit No. M10037028. This application also contains a new suggested outfall numbering sequence. The attachment to this letter describes these outfalls and both the old and new numbering schemes.

The Ferni complex consists of two units, the first unit is an oil-fired boiler which has not been utilized in recent years. Since its associated wastewater discharge is only indicative of maintenance activities and not normal operating activities, the Company only analyzed outfall 011 for the basic wastewater characteristics. The Company understands that GC/MS analyses will be required on outfall 011 if and when Unit 1 returns to operation.

The Company also wishes to point out that analyses has also not been performed on outfall 009 because this outfall presently has no flow. This outfall provides a secondary means of discharging demineraliser regenerants associated with Unit 2 operation. Normally this waste stream is routed through outfall 001. The permit application in Section II, Item 5 of the outfall 009 notes that this stream was analyzed in conjunction with the sampling of the combined wastewaters of outfall 001.

Mr. Paul Zegger  
October 16, 1989  
Page 2

Lastly, please note that Biological Oxygen Demand analyses was performed by Burmah Laboratories. All other analyses was performed by Detroit Edison's Laboratory.

Please call me at (313) 237-8714 if you have any questions regarding this application.

Sincerely,



Dennis Leonard  
Environmental Protection

DL/ms

Enclosure

cc: W. McCracken  
R. Schrameck

The following is a list of current outfall designations in relation to new proposed outfall designation after grouping Femi I M10001830, Femi II M10037028, Femi II construction M10039110 and Femi dredge disposal facility M10039365.

CURRENT OUTFALL DESIGNATION

NEW PROPOSED OUTFALL DESIGNATION

NPDES Permit No. M10037028		
FERMI II 001	FERMI	001
Total discharge 001 to Lake Erie		
00A Treated Radwaste wastewater		001A
00B Demineralized and neutralization wastewater		001B
FERMI II 002	FERMI	002
Turbine building & storm water		
FERMI II 003	FERMI	003
Reactor building dewatering water		
FERMI II 004	FERMI	004
Dewatering water & storm water		
FERMI II 005	FERMI	005
Storm water runoff		
FERMI II 006	FERMI	006
Storm water runoff		
FERMI II 007	FERMI	007
Storm water runoff		
FERMI II 008	FERMI	008
Storm water runoff		
FERMI II 009	FERMI	009
Storm water & miscellaneous low volume waste		
<hr/>		
NPDES permit No. M10039110		
FERMI II 002	FERMI	010
Low volume waste to Swan Creek		
<hr/>		
NPDES permit No. M10001830		
FERMI I 001	FERMI	011
Non-contact cooling water		
00A Oily Wastewater to Swan Creek		011C
00B Demineralize Wastewater		011D
FERMI I Storm water		011E
FERMI I 002	FERMI	012
Stormwater Runoff Lake Erie		
<hr/>		
NPDES Permit No. M10039365		
Dredge Disposal Facility 001	FERMI	013

10/09/89

SECTION I

EPA I.D. NUMBER M 10 9 8 0 0 0 2 8 1 0  
 PERMIT NUMBER M 10 0 3 7 0 2 8  
 APPLICATION FOR DISCHARGE PERMIT IS:  
 MODIFICATION  EXISTING  NEW  INCREASED USE  REISSUANCE

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 1

PHYSICAL LOCATION ADDRESS AND INFORMATION

A. PARENT COMPANY/DEPT./DIVISION THE DETROIT EDISON COMPANY

B. DIV./BUREAU NUCLEAR OPERATION

C. PLANT OR FACILITY ENRICO FERM I UNIT B. STANDARD INDUSTRIAL CLASSIFICATION (REFER TO TABLE III) 48111

D. TYPE OF FACILITY ATOMIC POWER PL

F. STREET NUMBER 6400 G. STREET NAME DIXIE HIGHWAY

H. CITY NAME NEWPORT I. ZIP CODE MI 48116

J. TOWNSHIP FRENCH TOWN K. COUNTY (REFER TO TABLE I) MONROE CO. NUMBER 5 8

L. NAME OF AUTHORIZED CONTACT PERSON MORTON STERLING M. TITLE DIRECTOR EN V. PT.

N. TELEPHONE NUMBER 313 237 7141 O. ADDRESS (IF DIFFERENT FROM ABOVE) 2000 SECOND 485 W.C.B.

P. CITY NAME DETROIT Q. STATE MI R. ZIP CODE 48226

S. TYPE OF TREATMENT FACILITY (REFER TO TABLE II) 4A T. PROGRAM FOR EFFECTIVE RESIDUAL MANAGEMENT DATE SUBMITTED \_\_\_\_\_  
 YES  NO  N.A. DATE IMPLEMENTED \_\_\_\_\_

U. BACK-UP POWER SOURCE  YES  NO  N.A. V. POLLUTION INCIDENT PREVENTION PLAN DATE SUBMITTED 1/80 W. NUMBER OF EMPLOYEES 1000  
 YES  NO  N.A. DATE IMPLEMENTED 1/80

X. TYPE OF DISCHARGE  GROUNDWATER  SURFACE WATER Y. DO YOU HAVE A CERTIFIED OPERATOR?  YES  NO  
 OPERATOR'S NAME DARVIL GRIMES S.S.# 1316 72 11 29  
 FACILITY # 1518 0 21915 CERTIFICATION # 11217 1181

ITEM 2

MAILING ADDRESS OF APPLICANT

A. NAME MORTON STERLING

B. NAME ENRICO FERM I ATOMIC PLANT

C. STREET ADDRESS OR POST OFFICE BOX 2000 SECOND AVE 485 W.C.B.

D. CITY NAME DETROIT E. STATE MI F. ZIP CODE 48226

REQUIRED SIGNATURE

I, the applicant, certify under penalty of law that I have personally compiled and am familiar with the information obtained in this application and all attachments and that, based on my knowledge of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for providing false information, including the possibility of fines and imprisonment.

SIGNATURE OF APPLICANT

SIGNATURE: Morton Sterling DATE: 10/2/89  
 NAME: MORTON STERLING TITLE: DIR. DIRECTOR

SIGNATURE OF LOCAL GOVERNMENTAL REPRESENTATIVE (SEE NOTE ON REVERSE SIDE)

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
 NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_

SEE INSTRUCTIONS ON REVERSE SIDE

**ITEM 3**

SOURCE OF WATER SUPPLY

A. MUNICIPAL	NAME	W. O. N. E. I.
	QUANTITY (GAL.)	_____ GALLONS/DAY
B. SURFACE WATER INTAKE	NAME OF WATERWAY	L. A. K. E. E. R. I. E.
	QUANTITY (GAL.)	5,481.5 5,000 GALLONS/DAY
C. PRIVATE WELL	QUANTITY (GAL.)	6,032 0,000 GALLONS/DAY
D. OTHER	SPECIFY	P. R. E. C. I. P. I. T. A. T. I. O. N.
	QUANTITY (GAL.)	2,865 5,000 GALLONS/DAY

**ITEM 4**

FACILITY WATER USAGE

A. PROCESS WATER (INCLUDING CONTACT COOLING WATER)	QUANTITY (GAL.)	26 0,000 GALLONS/DAY
B. NONCONTACT COOLING WATER	QUANTITY (GAL.)	3,577.2 0,000 GALLONS/DAY
C. SANITARY WATER	QUANTITY (GAL.)	44 0,000 GALLONS/DAY
D. OTHER	SPECIFY	D. E. W. A. T. E. R. I. N. G.
	QUANTITY (GAL.)	4,320 0,000 GALLONS/DAY

**ITEM 5**

CRITICAL MATERIALS & PRIORITY POLLUTANTS USED & STORED & PRODUCED

REFER TO TABLES IV & V

UNIT'S CODE  
 1 POUNDS  
 2 GALLONS  
 3 CUBIC YARDS  
 4 TONS

MATERIAL 1	NAME OF SUBSTANCE	SODIUM ARSENITE
	PARAMETER NUMBER	C. L. A. S. S. I. 10.11
	QUANTITY	10 N. E. UNITS / YEAR
MATERIAL 2	NAME OF SUBSTANCE	COBALT NITRATE
	PARAMETER NUMBER	C. L. A. S. S. I. 0.11.6
	QUANTITY	1 T. W. O. UNITS / YEAR
MATERIAL 3	NAME OF SUBSTANCE	CUPRIC CHLORIDE
	PARAMETER NUMBER	C. L. A. S. S. I. 0.11.7
	QUANTITY	1 T. E. N. UNITS / YEAR
MATERIAL 4	NAME OF SUBSTANCE	CUPRIC SULFATE
	PARAMETER NUMBER	C. L. A. S. S. I. 0.11.7
	QUANTITY	1 T. E. N. UNITS / YEAR
MATERIAL 5	NAME OF SUBSTANCE	SODIUM HYPOCHLORITE
	PARAMETER NUMBER	C. L. A. S. S. I. 0.11.4
	QUANTITY	1 T. W. E. N. T. Y. UNITS / YEAR
MATERIAL 6	NAME OF SUBSTANCE	ASBESTOS
	PARAMETER NUMBER	_____
	QUANTITY	18,200 UNITS / YEAR
MATERIAL 7	NAME OF SUBSTANCE	CHLORINE GAS
	PARAMETER NUMBER	C. L. A. S. S. I. 0.11.4
	QUANTITY	6.0 UNITS / YEAR

<b>ITEM 3</b>  SOURCE OF WATER SUPPLY	A. MUNICIPAL	NAME	_____
		QUANTITY (MAX.)	_____ GALLONS/DAY
	B. SURFACE WATER INTAKE	NAME OF WATERWAY	_____
		QUANTITY (MAX.)	_____ GALLONS/DAY
	C. PRIVATE WELL	QUANTITY (MAX.)	_____ GALLONS/DAY
<b>ITEM 4</b>  FACILITY WATER USAGE	D. OTHER	SPECIFY	_____
		QUANTITY (MAX.)	_____ GALLONS/DAY
	A. PROCESS WATER (INCLUDING CONTACT COOLING WATER)	QUANTITY (MAX.)	_____ GALLONS/DAY
	B. NONCONTACT COOLING WATER	QUANTITY (MAX.)	_____ GALLONS/DAY
<b>ITEM 5</b>  CRITICAL MATERIALS & PRIORITY POLLUTANTS USED, STORED, PRODUCED  REFER TO TABLES IV & V  UNITS CODE POUNDS GALLONS CUBIC YARDS TONS	MATERIAL 10	NAME OF SUBSTANCE	CHLOROFORM
		PARAMETER NUMBER	101016171-1616-β
		QUANTITY	_____ UNITS 161/YEAR
	MATERIAL 11	NAME OF SUBSTANCE	CHROMIC ACID
		PARAMETER NUMBER	10111A1S1S101115
		QUANTITY	_____ UNITS 121/YEAR
	MATERIAL 12	NAME OF SUBSTANCE	CHROMIUM STANDARD
		PARAMETER NUMBER	10111A1S1S101115
		QUANTITY	_____ UNITS 121/YEAR
	MATERIAL 13	NAME OF SUBSTANCE	LEAD
		PARAMETER NUMBER	10111A1S1S10119
		QUANTITY	_____ UNITS 11/YEAR
MATERIAL 14	NAME OF SUBSTANCE	MERCURIC IODIDE	
	PARAMETER NUMBER	10111A1S1S101211	
	QUANTITY	_____ UNITS 11/YEAR	
MATERIAL 15	NAME OF SUBSTANCE	LEAD ACETATE	
	PARAMETER NUMBER	10111A1S1S101214	
	QUANTITY	_____ UNITS 11/YEAR	
MATERIAL 16	NAME OF SUBSTANCE	TOLUENE	
	PARAMETER NUMBER	10101110181-18181-3	
	QUANTITY	_____ UNITS 121/YEAR	



SEE INSTRUCTIONS  
ON REVERSE SIDE

NUMBER

RTSP-102

**ITEM 3**

SOURCE  
OF  
WATER  
SUPPLY

A. MUNICIPAL	NAME	
	QUANTITY (GAL.)	
B. SURFACE WATER INTAKE	NAME OF WATERWAY	
	QUANTITY (GAL.)	
C. PRIVATE WELL	QUANTITY (GAL.)	
D. OTHER	SPECIFY	
	QUANTITY (GAL.)	

**ITEM 4**

FACILITY  
WATER  
USAGE

A. PROCESS WATER (INCLUDING CONTACT COOLING WATER)	QUANTITY (GAL.)	
B. NONCONTACT COOLING WATER	QUANTITY (GAL.)	
C. SANITARY WATER	QUANTITY (GAL.)	
D. OTHER	SPECIFY	
	QUANTITY (GAL.)	

**ITEM 5**

CRITICAL  
MATERIALS  
&  
PRIORITY  
POLLUTANTS  
USED  
OR  
STORED  
OR  
PRODUCED

REFER  
TO  
TABLES  
IV & V

UNITS CODE

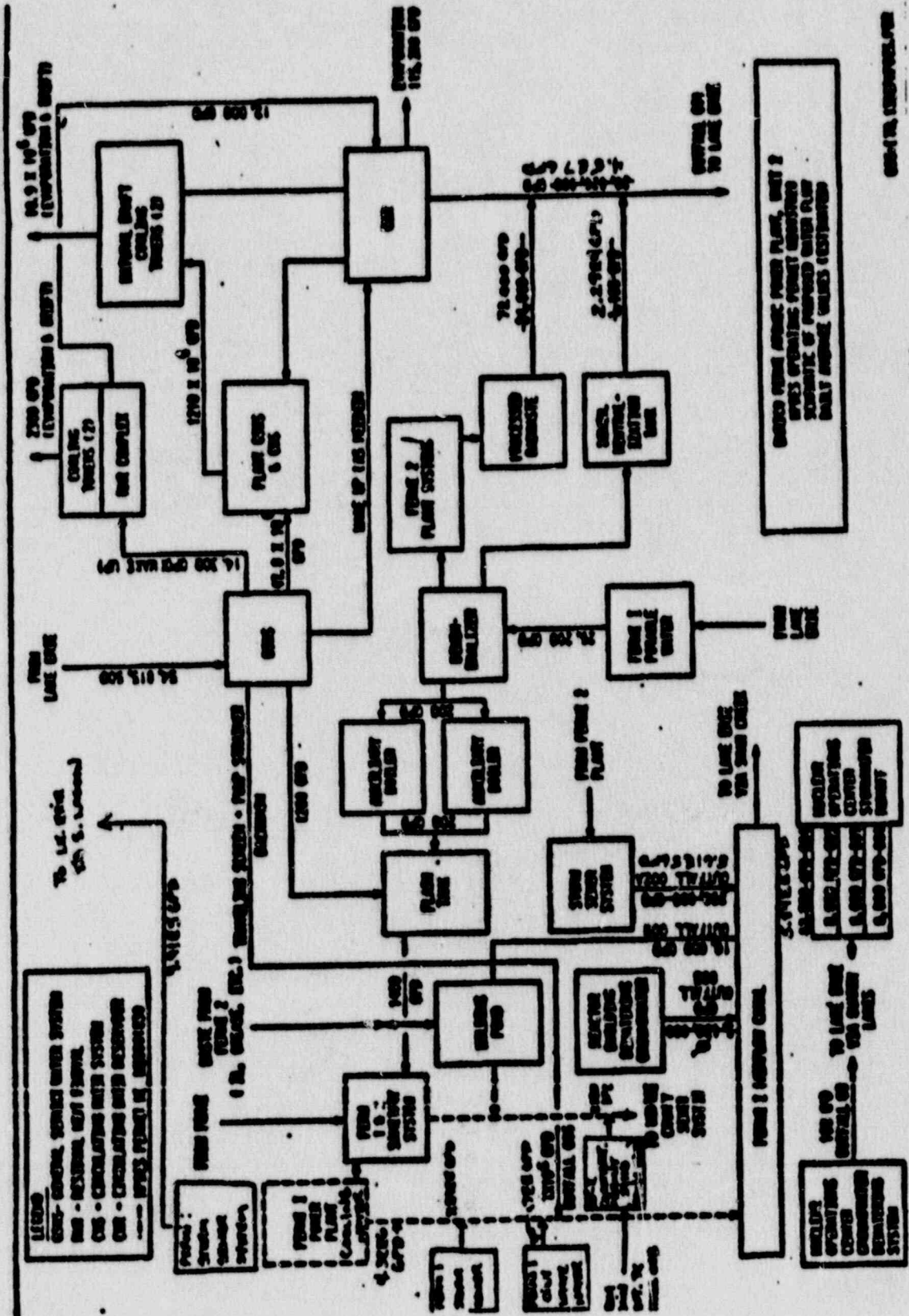
- 1 POUNDS
- 2 GALLONS
- 3 CUBIC YARDS
- 4 TONS

ENVIRONMENTAL	NAME OF SUBSTANCE	1, 1, 2-TRICHLOROETHANE
	PARAMETER NUMBER	101010, 7191-1010-F5
	QUANTITY	1220 UNITS/YEAR
ENVIRONMENTAL	NAME OF SUBSTANCE	ZINC OXIDE
	PARAMETER NUMBER	10121-1711111
	QUANTITY	UNITS/YEAR
ENVIRONMENTAL	NAME OF SUBSTANCE	
	PARAMETER NUMBER	
	QUANTITY	UNITS/YEAR
ENVIRONMENTAL	NAME OF SUBSTANCE	
	PARAMETER NUMBER	
	QUANTITY	UNITS/YEAR
ENVIRONMENTAL	NAME OF SUBSTANCE	
	PARAMETER NUMBER	
	QUANTITY	UNITS/YEAR
ENVIRONMENTAL	NAME OF SUBSTANCE	
	PARAMETER NUMBER	
	QUANTITY	UNITS/YEAR

**ITEM 6**

DESCRIPTION AND DIAGRAM

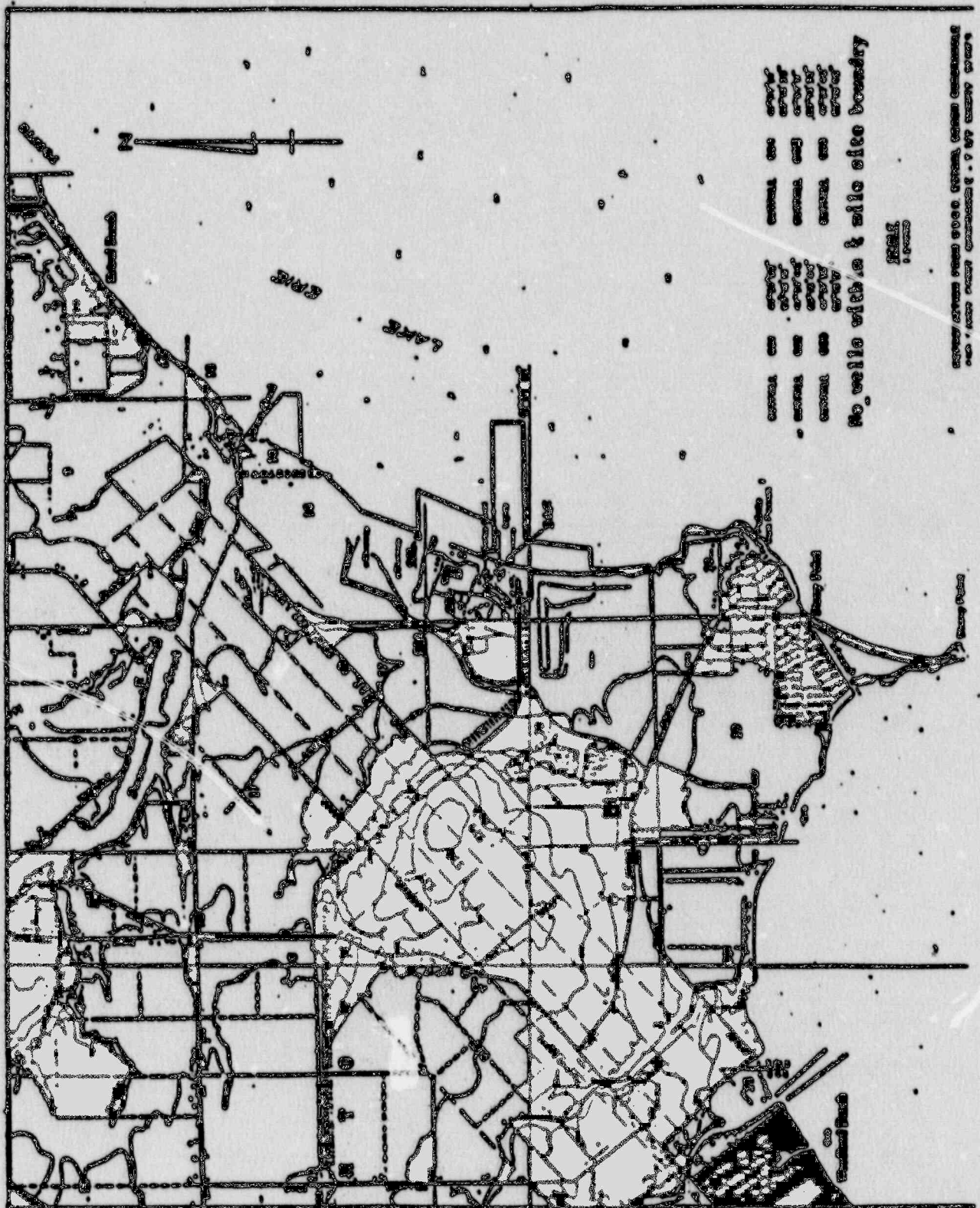
A. PROVIDE A BRIEF DESCRIPTION AND LINE DIAGRAM SHOWING THE WATER FLOW THROUGH YOUR FACILITY FROM INTAKE TO DISCHARGE. SHOW ALL OPERATIONS CONTRIBUTING WASTEWATER, INCLUDING PROCESS AND PRODUCTION AREAS, SANITARY FLOWS, COOLING WATER, AND STORMWATER RUNOFF. YOU MAY GROUP SIMILAR OPERATIONS INTO A SINGLE UNIT. THE WATER BALANCE SHOULD SHOW AVERAGE FLOWS. SHOW ALL SIGNIFICANT LOSSES OF WATER TO PRODUCTS, ATMOSPHERE, AND DISCHARGE. YOU SHOULD USE ACTUAL MEASUREMENTS WHENEVER AVAILABLE; OTHERWISE USE YOUR BEST ESTIMATE.



# ITEM 7

A. PROVIDE A MAP OF THE TREATMENT FACILITY LOCATION, SHOWING THE LOCATION OF THE DISCHARGE POINT(S) AND OTHER INFORMATION REQUESTED ON REVERSE SIDE OF PAGE.

LOCATION  
MAP



# ITEM 8

CONCENTRATED ANIMAL FEEDING OPERATION

A. DO YOU OPERATE A CONCENTRATED ANIMAL FEEDING FACILITY? (IF NO, CONTINUE TO ITEM 10)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
B. NUMBER OF ACRES USED FOR CONFINEMENT FEEDING?	_____ ACRES
C. IF THERE IS OPEN CONFINEMENT, HAS A RUNOFF DIVERSION AND CONTROL SYSTEM BEEN CONSTRUCTED? (IF NO, CONTINUE TO ITEM 9)	<input type="checkbox"/> YES <input type="checkbox"/> NO
D. WHAT IS THE DESIGN BASIS FOR THE CONTROL SYSTEM? CHECK ONE OF THE FOLLOWING AND ENTER NUMBER OF INCHES OF RAIN? TYPE _____	<input type="checkbox"/> 30 YEAR 24 HOUR STORM _____ INCHES <input type="checkbox"/> 25 YEAR 24 HOUR STORM _____ INCHES <input type="checkbox"/> OTHER (SPECIFY) _____ INCHES
E. WHAT IS THE NUMBER OF ACRES OF CONTRIBUTING DRAINAGE?	_____ ACRES
F. WHAT IS THE DESIGN SAFETY FACTOR FOR THIS CONTROL SYSTEM?	_____

# ITEM 9

TYPE & NUMBER OF ANIMALS IN OPEN AND HOUSED CONFINEMENT

TYPE	A. LIST TYPE OF ANIMAL.	B. GIVE THE NUMBER OF THIS TYPE OF ANIMAL IN OPEN CONFINEMENT.	C. GIVE THE NUMBER OF THIS TYPE OF ANIMAL IN HOUSED CONFINEMENT.
TYPE 1	_____	_____	_____
TYPE 2	_____	_____	_____
TYPE 3	_____	_____	_____
TYPE 4	_____	_____	_____
TYPE 5	_____	_____	_____
TYPE 6	_____	_____	_____
TYPE 7	_____	_____	_____
TYPE 8	_____	_____	_____

**ITEM 10**

AQUATIC ANIMAL PRODUCTION FACILITY

A. DO YOU OPERATE AN AQUATIC ANIMAL PRODUCTION FACILITY? (IF NO, CONTINUE TO ITEM 12)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
B. INDICATE THE TOTAL NUMBER OF PONDS, RACEWAYS AND SIMILAR STRUCTURES AT YOUR FACILITY.	_____ . PONDS _____ . RACEWAYS _____ . OTHER
C. INDICATE IN WHICH CALENDAR MONTH MAXIMUM FEEDING OCCURS.	_____
D. ENTER THE TOTAL NUMBER OF POUNDS OF FOOD FED DURING THIS MONTH?	_____ POUNDS

**ITEM 11**

SPECIES OF AQUATIC ANIMALS PRODUCED AT THIS FACILITY

SPECIES 1	A. IS THIS SPECIE A WARM OR COLD WATER SPECIE?	<input type="checkbox"/> WARM <input type="checkbox"/> COLD
	B. GIVE THE NAME OF THIS SPECIE.	_____
	C. ENTER THE TOTAL HARVESTABLE WEIGHT OF THIS SPECIE PRODUCED BY THIS FACILITY PER YEAR IN POUNDS.	_____ POUNDS
	D. ENTER THE MAXIMUM WEIGHT PRESENT FOR THIS SPECIE WHICH WOULD REPRESENT YOUR NORMAL OPERATION.	_____ POUNDS
SPECIES 2	A. IS THIS SPECIE A WARM OR COLD WATER SPECIE?	<input type="checkbox"/> WARM <input type="checkbox"/> COLD
	B. GIVE THE NAME OF THIS SPECIE.	_____
	C. ENTER THE TOTAL HARVESTABLE WEIGHT OF THIS SPECIE PRODUCED BY THIS FACILITY PER YEAR IN POUNDS.	_____ POUNDS
	D. ENTER THE MAXIMUM WEIGHT PRESENT FOR THIS SPECIE WHICH WOULD REPRESENT YOUR NORMAL OPERATION.	_____ POUNDS
SPECIES 3	A. IS THIS SPECIE A WARM OR COLD WATER SPECIE?	<input type="checkbox"/> WARM <input type="checkbox"/> COLD
	B. GIVE THE NAME OF THIS SPECIE.	_____
	C. ENTER THE TOTAL HARVESTABLE WEIGHT OF THIS SPECIE PRODUCED BY THIS FACILITY PER YEAR IN POUNDS.	_____ POUNDS
	D. ENTER THE MAXIMUM WEIGHT PRESENT FOR THIS SPECIE WHICH WOULD REPRESENT YOUR NORMAL OPERATION.	_____ POUNDS
SPECIES 4	A. IS THIS SPECIE A WARM OR COLD WATER SPECIE?	<input type="checkbox"/> WARM <input type="checkbox"/> COLD
	B. GIVE THE NAME OF THIS SPECIE.	_____
	C. ENTER THE TOTAL HARVESTABLE WEIGHT OF THIS SPECIE PRODUCED BY THIS FACILITY PER YEAR IN POUNDS.	_____ POUNDS
	D. ENTER THE MAXIMUM WEIGHT PRESENT FOR THIS SPECIE WHICH WOULD REPRESENT YOUR NORMAL OPERATION.	_____ POUNDS
SPECIES 5	A. IS THIS SPECIE A WARM OR COLD WATER SPECIE?	<input type="checkbox"/> WARM <input type="checkbox"/> COLD
	B. GIVE THE NAME OF THIS SPECIE.	_____
	C. ENTER THE TOTAL HARVESTABLE WEIGHT OF THIS SPECIE PRODUCED BY THIS FACILITY PER YEAR IN POUNDS.	_____ POUNDS
	D. ENTER THE MAXIMUM WEIGHT PRESENT FOR THIS SPECIE WHICH WOULD REPRESENT YOUR NORMAL OPERATION.	_____ POUNDS
SPECIES 6	A. IS THIS SPECIE A WARM OR COLD WATER SPECIE?	<input type="checkbox"/> WARM <input type="checkbox"/> COLD
	B. GIVE THE NAME OF THIS SPECIE.	_____
	C. ENTER THE TOTAL HARVESTABLE WEIGHT OF THIS SPECIE PRODUCED BY THIS FACILITY PER YEAR IN POUNDS.	_____ POUNDS
	D. ENTER THE MAXIMUM WEIGHT PRESENT FOR THIS SPECIE WHICH WOULD REPRESENT YOUR NORMAL OPERATION.	_____ POUNDS

SECTION I

PERMIT  
NUMBER

M1003702B

LIST NAME AND MAILING ADDRESS OF ALL PROPERTY OWNERS ADJACENT TO THE TREATMENT FACILITY AND OR DISCHARGE/DISPOSAL AREA.

ITEM  
12

MAILING  
LIST  
OF  
ADJACENT  
PROPERTY  
OWNERS

Thomas Petty  
6200 Langton

Rand Masserant  
6001 Tell

Ralph Fix  
6577 Leroux

Justin Sis  
5900 Leroux

Steve Balough  
6170 Leroux

Carl Manis  
7860 Dixie

Carl Manis  
6834 Dixie

Micheel Walroba  
3979 Dixie

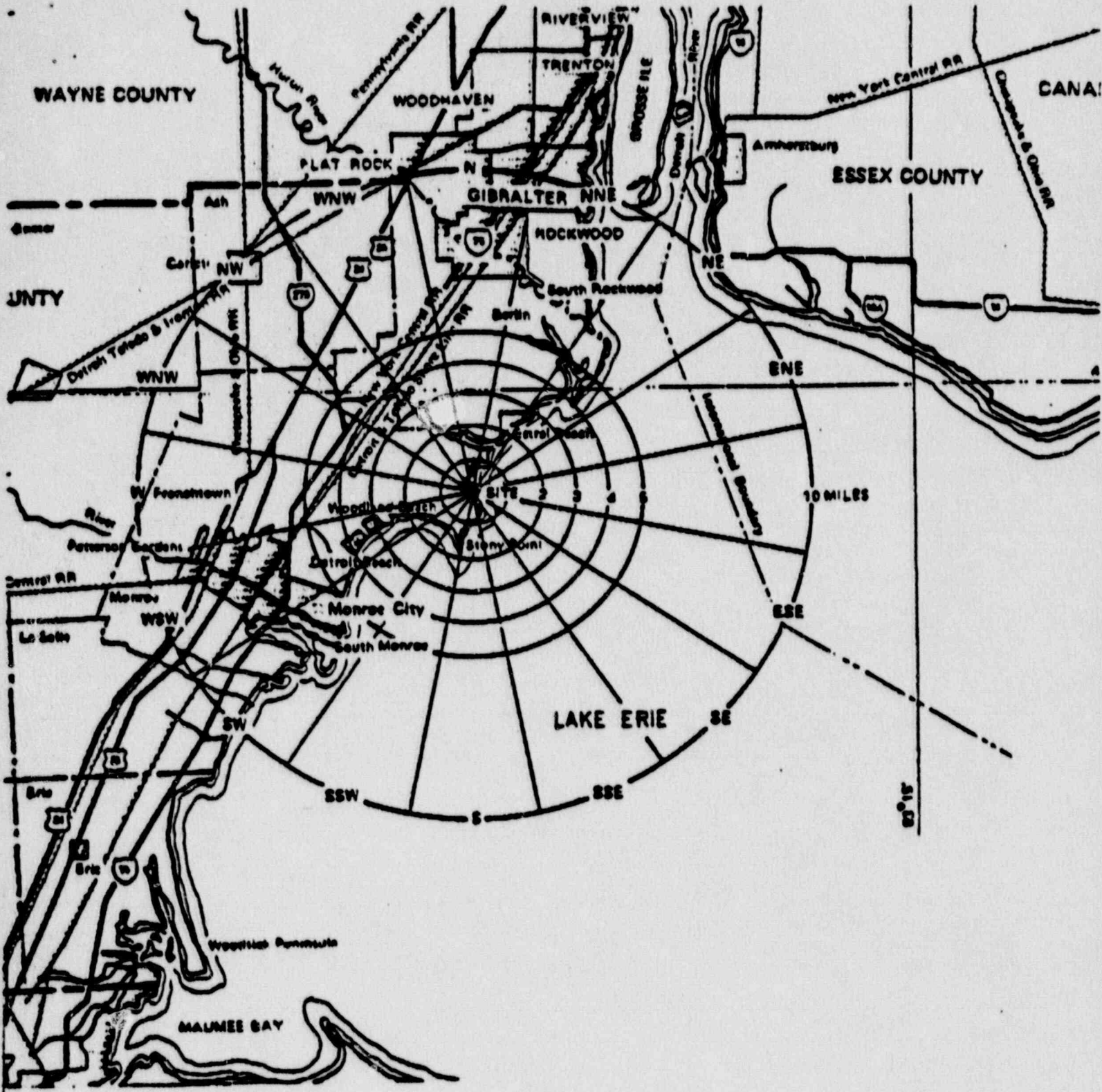
Carl Jondro  
5991 Point Aux Peaux

P. Solva  
5820 Point Aux Peaux

Charles Hirst  
5194 Point Aux Peaux

Charles Morris  
4981 Point Aux Peaux

Steve Dull  
4834 Long



SEE INSTRUCTIONS ON REVERSE SIDE

<b>ITEM 1</b>  DISCHARGE LOCATION SCHEDULE FLOW RATE  WASTEWATER TYPE CODE 1 CONTACT COOLING 2 NONCONTACT COOLING 3 PROCESS 4 SANITARY 5 STORMWATER  UNIT CODE 1 MGY 2 MGD 3 GPD	OUTFALL NUMBER 001																												
	A. LOCATION OF DISCHARGE S.E. & S.W. SECTION 16, TOWN 6.S., RANGE 10.E.																												
	B. NAME OF RECEIVING WATER (IE. GROUNDWATER OR NAME OF SURFACE WATER)																												
	C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E.) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO																												
	D. IF YES, LIST DISCHARGE PERIODS NO. / DAY THROUGH THROUGH THROUGH																												
	E. LAND APPLICATION RATE IN./HR. NR./DAY IN./WK. <input checked="" type="checkbox"/>																												
	F. TYPE OF WASTEWATER DISCHARGE 3 2 WASTEWATER TYPE CODE																												
	G. DISCHARGE SCHEDULE (YEARLY AVERAGE) HOURS/DAY 24 DAY/YEAR 365																												
	H. DISCHARGE FLOW RATE TOTAL YEARLY 16460.10 UNIT CODE 1 DAILY MINIMUM 10 2 DAILY MAXIMUM 45.094 2																												
	I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT. AUTHORIZED 45.094 UNIT CODE 2																												
J. MAXIMUM DESIGN DISCHARGE FLOW RATE. DESIGN 45.094 UNIT CODE 2																													
<b>ITEM 2</b>  WATER TREATMENT ADDITIVES  UNITS CODE 1 Mg/l 2 Ug/l	A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO																												
	B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES. <table border="1"> <thead> <tr> <th>NAME</th> <th>FUNCTION</th> </tr> </thead> <tbody> <tr> <td>Sulfur Acid H<sub>2</sub>SO<sub>4</sub></td> <td>pH adjustment</td> </tr> <tr> <td>Chlorine Gas Cl<sub>2</sub></td> <td>Biocide</td> </tr> <tr> <td>Sodium Hydroxide NaOH</td> <td>pH adjustment</td> </tr> <tr> <td>Foamtrol</td> <td>Defoaming agent</td> </tr> </tbody> </table>	NAME	FUNCTION	Sulfur Acid H <sub>2</sub> SO <sub>4</sub>	pH adjustment	Chlorine Gas Cl <sub>2</sub>	Biocide	Sodium Hydroxide NaOH	pH adjustment	Foamtrol	Defoaming agent																		
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	C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES. (see attachment)																												
	D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES. <table border="1"> <thead> <tr> <th>ADDITIVE NAME</th> <th>MINIMUM</th> <th>UNITS CODE</th> <th>AVERAGE</th> <th>UNITS CODE</th> <th>MAXIMUM</th> <th>UNITS CODE</th> </tr> </thead> <tbody> <tr> <td>Sulfuric acid sulfate</td> <td>3.0</td> <td>1</td> <td>15.8</td> <td>1</td> <td>26.7</td> <td>1</td> </tr> <tr> <td>Chlorine (chloride)</td> <td>2.0</td> <td>1</td> <td>4.0</td> <td>1</td> <td>4.0</td> <td>1</td> </tr> <tr> <td>Sodium Hydroxide (sodium)</td> <td>1.7</td> <td>1</td> <td>3.6</td> <td>1</td> <td>18.8</td> <td>1</td> </tr> </tbody> </table>	ADDITIVE NAME	MINIMUM	UNITS CODE	AVERAGE	UNITS CODE	MAXIMUM	UNITS CODE	Sulfuric acid sulfate	3.0	1	15.8	1	26.7	1	Chlorine (chloride)	2.0	1	4.0	1	4.0	1	Sodium Hydroxide (sodium)	1.7	1	3.6	1	18.8	1
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Sodium Hydroxide (sodium)	1.7	1	3.6	1	18.8	1																							
E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES? ** <input checked="" type="checkbox"/> YES 1 <input type="checkbox"/> NO																													
F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY? <table border="1"> <thead> <tr> <th>ADDITIVE NAME</th> <th>REMOVAL</th> <th>DISCHARGE FREQUENCY</th> </tr> <tr> <td></td> <th>HRS./DAY</th> <th>DAYS/WK.</th> </tr> </thead> <tbody> <tr> <td>Sodium Sulfite</td> <td>100</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	ADDITIVE NAME	REMOVAL	DISCHARGE FREQUENCY		HRS./DAY	DAYS/WK.	Sodium Sulfite	100																					
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G. AS AN ATTACHMENT TO THIS APPLICATION, PROVIDE SPECIFIC MAMMALIAN OR AQUATIC TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.																													

\*\* if necessary



SECTION II

PERMIT NUMBER

MI 0037028

SEE INSTRUCTIONS ON REVERSE SIDE

<b>ITEM 1</b>  DISCHARGE LOCATION SCHEDULE FLOW RATE WASTEWATER TYPE CODE 1 CONTACT COOLING 2 NONCONTACT COOLING 3 PROCESS 4 SANITARY 5 STORMWATER UNIT CODE 1 MG/L 2 MGD 3 GPD	OUTFALL NUMBER	0,0,1					
	A. LOCATION OF DISCHARGE	[S.E.] & [S.W.] & SECTION 1, 16, TOWN 6, S, RANGE 1, 0 E					
	B. NAME OF RECEIVING WATER (IE. GROUNDWATER OR NAME OF SURFACE WATER)						
	C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E)	<input type="checkbox"/> YES		<input type="checkbox"/> NO			
	D. IF YES, LIST DISCHARGE PERIODS	NO. / DAY	THROUGH		NO. / DAY	THROUGH	
	E. LAND APPLICATION RATE	IN./HR.	HR./DAY	IN./WK.	<input type="checkbox"/>		
	F. TYPE OF WASTEWATER DISCHARGE	WASTEWATER TYPE CODE					
	G. DISCHARGE SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAY/YEAR				
H. DISCHARGE FLOW RATE	TOTAL YEARLY	UNIT CODE					
	DAILY MINIMUM						
	DAILY MAXIMUM						
I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.	AUTHORIZED	UNIT CODE					
J. MAXIMUM DESIGN DISCHARGE FLOW RATE.	DESIGN	UNIT CODE					
<b>ITEM 2</b>  WATER TREATMENT ADDITIVES  UNITS CODE 1 Mg/l 2 U <sub>g</sub> /l	A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)	<input type="checkbox"/> YES		<input checked="" type="checkbox"/> NO			
	B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.	NAME	FUNCTION				
		Betz Slimicide C-78P	Biocide				
		Betz Clamtrol Ct-1	Biocide				
		Betz Coppertrol ct-1	Corrosion inhibitor				
		Betz Powerline 3690	Deposit control agent				
	C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.	See attached.					
	D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.	MINIMUM	UNITS CODE	AVERAGE	UNITS CODE	MAXIMUM	UNITS CODE
	ADDITIVE NAME						
	ADDITIVE NAME						
ADDITIVE NAME							
E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?	<input type="checkbox"/> YES		<input type="checkbox"/> NO				
F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?	REMOVAL		DISCHARGE FREQUENCY				
ADDITIVE NAME			HR./DAY	DAYS/WK.			
ADDITIVE NAME							
ADDITIVE NAME							
G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC MAMMALIAN OR AQUATIC TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.							

Sulfuric Acid

C-1-L Chemicals, Inc.  
800 Marion Ave.  
River Rouge, MI 48218

Gaseous Chlorine  
Sodium Hydroxide

Pennwalt Corp.  
P.O. Box 209 Biddle Ave.  
Wyandotte, MI. 48192

Sodium Hypochlorite

Jones Chemicals  
18000 Payne Ave.  
Riverview, MI. 48192

# BETZ LABORATORIES, INC.

BOVERTON ROAD • TREVORS, PENNSYLVANIA 15047 • U.S.A. / TELEPHONE: 219 • 395-2300 • TELEX: 173 146

SEPTEMBER 15, 1989

DETROIT EDISON  
FARM II  
NEWPORT, MI

RE: CLAM-TROL CT-1  
COPPER-TROL CU-1

POWERLINE 3690  
SLIMICIDE C-78P

GENTLEMEN:

IN RESPONSE TO A REQUEST FROM MR. RAY POST, WE ARE WRITING TO YOU REGARDING THE ABOVE-REFERENCED BETZ PRODUCTS. ALL MATERIALS LISTED CONTAIN NONE OF THE 126 PRIORITY POLLUTANTS AS SPECIFIED IN FR 47, NO. 224, P. 52309.

WE TRUST THAT WE HAVE PROVIDED YOU WITH THE DESIRED INFORMATION. PLEASE LET US KNOW IF WE MAY BE OF FURTHER SERVICE TO YOU IN THIS MATTER.

VERY TRULY YOURS,

BETZ LABORATORIES, INC.

*Harold M. Hersh / csk*  
HAROLD M. HERSH  
ENVIRONMENTAL INFORMATION  
COORDINATOR

KMH:CRK

BETZ MATERIAL SAFETY DATA SHEET (PAGE 3 OF 3)

EFFECTIVE DATE 07-26-89

PRODUCT: SLICIMIDE C-78P

SECTION 7 - SPECIAL PROTECTIVE EQUIPMENT - USE PROTECTIVE EQUIPMENT IN ACCORDANCE WITH 29CFR SECTION 1910.132-134, USE RESPIRATORS WITHIN USE LIMITATIONS OR ELSE USE SUPPLIED AIR RESPIRATORS.

VENTILATION PROTECTION - ADEQUATE VENTILATION TO MAINTAIN DUST CONCENTRATIONS BELOW THE EXPOSURE LIMIT OF 10MG/M3 (PEL/TLV) FOR NUISANCE DUSTS.

RECOMMENDED RESPIRATORY PROTECTION - IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE RESPIRATOR WITH ORGANIC VAPOR, ACID GASSES & DUST/MIST CARTRIDGES

RECOMMENDED SKIN PROTECTION - GAUNTLET-TYPE NEOPRENE GLOVES, CHEMICAL RESISTANT APRON WASH OFF AFTER EACH USE. REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION - AIRTIGHT CHEMICAL GOGGLES

SECTION 8 - STORAGE AND HANDLING PRECAUTIONS

STORAGE INSTRUCTIONS - KEEP DRUMS & PAILS CLOSED WHEN NOT IN USE. KEEP DRY. DO NOT STORE AT HIGH TEMPERATURE OR NEAR OXIDIZABLES OR COMBUSTIBLES

HANDLING INSTRUCTIONS - GENERAL - IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE. SPECIFIC - OXIDIZER. AVOID ALL CONTACT WITH REDUCING AGENTS, OILS, GREASES, ORGANICS AND ACIDS.

THIS MSDS COMPLIES WITH THE OSHA HAZARD COMMUNICATION STANDARD HAROLD M. NERSH (ENVIRONMENTAL INFORMATION COORDINATOR)

APPENDIX: REGULATORY INFORMATION THE CONTENT OF THIS APPENDIX REPRESENTS INFORMATION KNOWN TO BETZ ON THE EFFECTIVE DATE OF THIS MSDS. THIS INFORMATION IS BELIEVED TO BE ACCURATE. ANY CHANGES IN REGULATIONS WILL RESULT IN UPDATED VERSIONS OF THIS DOCUMENT.

TSCA: ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY

FIFRA (40CFR): EPA REG. NO. 5785-65-3876

REPORTABLE QUANTITY (RQ) FOR UNDILUTED PRODUCT: NOT APPLICABLE

RCRA: IF THIS PRODUCT IS DISCARDED AS A WASTE, THE RCRA HAZARDOUS WASTE IDENTIFICATION NUMBER IS: NOT APPLICABLE

DOT HAZARD CLASSIFICATION: OXIDIZER DOT SHIPPING DESIGNATION IS: UN1479 OXIDIZER, N.O.S.

THIS PRODUCT CONTAINS THESE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR REPRODUCTIVE TOXICITY: NONE PRESENT IN SIGNIFICANT AMOUNTS

SARA SECTION 302 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

SARA SECTION 313 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

SARA SECTION 312 HAZARD CLASS: IMMEDIATE (ACUTE) AND FIRE

MICHIGAN CRITICAL MATERIALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

NFPA/HMIS: HEALTH - 2; FIRE - 1; REACTIVITY - 1; SPECIAL - OXY; PE - C

PRODUCT: GLYPHICIDE C-78P

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS \*\*\* PRIMARY ROUTE OF EXPOSURE  
 MODERATELY IRRITATING. MAY BE CORROSIVE IN CONTACT WITH MOIST SKIN.

ACUTE EYE EFFECTS \*\*\*  
 SEVERE IRRITANT TO THE EYES

ACUTE RESPIRATORY EFFECTS \*\*\*  
 DUSTS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT

CHRONIC EFFECTS OF OVEREXPOSURE \*\*\*  
 NO EVIDENCE OF POTENTIAL CHRONIC EFFECTS.

MEDICAL CONDITIONS AGGRAVATED \*\*\*  
 NOT KNOWN

SYMPTOMS OF EXPOSURE \*\*\*  
 MAY CAUSE REDNESS OR ITCHING OF SKIN.

PRECAUTIONARY STATEMENT BASED ON TESTING RESULTS \*\*\*

MAY BE TOXIC IF ORALLY INGESTED.

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT \*\*\*  
 REMOVE CLOTHING. WASH AREA WITH LARGE AMOUNTS OF SOAP SOLUTION OR WATER FOR 15 MIN. IMMEDIATELY CONTACT PHYSICIAN

EYE CONTACT \*\*\*  
 IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE \*\*\*  
 REMOVE VICTIM FROM CONTAMINATED AREA. APPLY NECESSARY FIRST AID TREATMENT. IMMEDIATELY CONTACT A PHYSICIAN.

INGESTION \*\*\*  
 DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM  
 DO NOT INDUCE VOMITING. IMMEDIATE CONTACT PHYSICIAN. DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS \*\*\*  
 VENTILATE AREA. USE SPECIFIED PROTECTIVE EQUIPMENT. SPILLED MATERIAL WHICH CAN NOT BE RECOVERED FOR RE-USE, SHOULD BE PLACED IN A WASTE DISPOSAL CONTAINER AND DISPOSED OF IN AN APPROVED PESTICIDE LANDFILL. SEE PRODUCT LABEL STORAGE AND DISPOSAL INSTRUCTIONS.  
 PRODUCT RELEASES CHLORINE WHEN WET. SPILL RESIDUE MAY BE NEUTRALIZED WITH 3% HYDROGEN PEROXIDE SOLUTION.

DISPOSAL INSTRUCTIONS \*\*\*  
 WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER TREATMENT FACILITY, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT

PRODUCT (AS IS) -  
 DISPOSE OF IN APPROVED PESTICIDE FACILITY OR ACCORDING TO LABEL INSTRUCTIONS

FIRE EXTINGUISHING INSTRUCTIONS \*\*\*  
 FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE)  
 FLOOD WITH WATER. USE OF CO2 OR FOAM MAY NOT BE EFFECTIVE.

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(PAGE 1 OF 3)  
EFFECTIVE DATE 07-26-89  
PRINTED: 3-SEP-1989  
REV: SEC. 3

PRODUCT : SLIMICIDE C-78P

PRODUCT APPLICATION : SOLID MICROBIAL CONTROL AGENT.

-----SECTION 1-----HAZARDOUS INGREDIENTS-----  
INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC  
PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD IS  
LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE  
AND CHRONIC HAZARDS OF THIS FORMULATION.

1-BROMO-3-CHLORO-5,5-DIMETHYLHYDANTOIN\*\*\*CAS#16079-88-2; OXIDIZER; EYE AND  
SKIN IRRITANT; PEL: NONE; TLV: NONE.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: 5% DISP. (APPROX.) 4.7	ODOR: HALOGEN
FL. PT. (DEG. F): >200 SETA (CC)	SP. GR. (70F) OR DENSITY: 65 LBS. CU. FT.
VAPOR PRESSURE (MMHG): NA	VAPOR DENSITY (AIR=1): NA
VISC CPS70F: NA	% SOLUBILITY (WATER): 1
EVAP. RATE: NA WATER=1	APPEARANCE: WHITE
PHYSICAL STATE: GRANULES	FREEZE POINT (DEG. F): NA

-----SECTION 3-----REACTIVITY DATA-----

STABLE. OXIDIZER. SLOWLY RELEASES HALOGEN GASES WHEN CONTAMINATED WITH  
MOISTURE. MAY REACT WITH ALKALIES, ACIDS, ORGANICS OR REDUCING AGENTS. DO  
NOT CONTAMINATE. BETZ TANK CLEAN-OUT CATEGORY 'B'.

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

BETZ MATERIAL SAFETY DATA SHEET (PAGE 3 OF 3)

EFFECTIVE DATE 06-09-89

PRODUCT: POWERLINE 3690

-----SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----  
USE PROTECTIVE EQUIPMENT IN ACCORDANCE WITH 29CFR SECTION 1910.132-134. USE  
RESPIRATORS WITHIN USE LIMITATIONS OR ELSE USE SUPPLIED AIR RESPIRATORS.

VENTILATION PROTECTION\*\*\*

ADEQUATE VENTILATION

RECOMMENDED RESPIRATORY PROTECTION\*\*\*

IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY,  
USE A RESPIRATOR WITH DUST/MIST FILTERS.

RECOMMENDED SKIN PROTECTION\*\*\*

RUBBER GLOVES

WASH OFF AFTER EACH USE. REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION\*\*\*

SPLASH PROOF CHEMICAL GOGGLES

-----SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS\*\*\*

KEEP DRUMS & PAILS CLOSED WHEN NOT IN USE.

REASONABLE AND SAFE CHEMICAL STORAGE

HANDLING INSTRUCTIONS\*\*\*

GENERAL- IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE

SPECIFIC- ALKALINE. DO NOT MIX WITH ACIDIC MATERIAL.

\*\*\*\*\*  
THIS MSDS COMPLIES WITH THE OSHA HAZARD COMMUNICATION STANDARD  
HAROLD M. HERSH (ENVIRONMENTAL INFORMATION COORDINATOR)  
\*\*\*\*\*

APPENDIX: REGULATORY INFORMATION

THE CONTENT OF THIS APPENDIX REPRESENTS INFORMATION KNOWN TO BETZ ON THE  
EFFECTIVE DATE OF THIS MSDS. THIS INFORMATION IS BELIEVED TO BE ACCURATE.  
ANY CHANGES IN REGULATIONS WILL RESULT IN UPDATED VERSIONS OF THIS DOCUMENT.

...TSCA: ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY

...REPORTABLE QUANTITY(RQ) FOR UNDILUTED PRODUCT:

NOT APPLICABLE

...RCRA: IF THIS PRODUCT IS DISCARDED AS A WASTE, THE RCRA HAZARDOUS WASTE

IDENTIFICATION NUMBER IS: D002=CORROSIVE

...DOT HAZARD CLASSIFICATION: NOT APPLICABLE

...DOT SHIPPING DESIGNATION IS: NOT APPLICABLE

...THIS PRODUCT CONTAINS THESE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO

CAUSE CANCER OR REPRODUCTIVE TOXICITY: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 302 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 313 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 312 HAZARD CLASS: PRODUCT IS NONHAZARDOUS UNDER SECTION 311/312

...MICHIGAN CRITICAL MATERIALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

NFPA/HMIS : HEALTH - 1 ; FIRE - 1 ; REACTIVITY - 0 ; SPECIAL - ALK ; PE - B

PRODUCT: POWERLINE 3690

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS \*\*\* PRIMARY ROUTE OF EXPOSURE  
SLIGHTLY IRRITATING TO THE SKIN  
ACUTE EYE EFFECTS \*\*\*  
MODERATELY IRRITATING TO THE EYES  
ACUTE RESPIRATORY EFFECTS \*\*\*  
MISTS/AEROSOLS MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT  
CHRONIC EFFECTS OF OVEREXPOSURE\*\*\*  
NO EVIDENCE OF POTENTIAL CHRONIC EFFECTS.  
MEDICAL CONDITIONS AGGRAVATED \*\*\*  
NOT KNOWN

SYMPTOMS OF EXPOSURE \*\*\*  
MAY CAUSE REDNESS OR ITCHING OF SKIN.

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT\*\*\*  
REMOVE CONTAMINATED CLOTHING. WASH EXPOSED AREA WITH A LARGE QUANTITY OF SOAP SOLUTION OR WATER FOR 15 MINUTES  
EYE CONTACT\*\*\*  
IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT  
INHALATION EXPOSURE\*\*\*  
REMOVE VICTIM FROM CONTAMINATED AREA TO FRESH AIR. APPLY APPROPRIATE FIRST AID TREATMENT AS NECESSARY  
INGESTION\*\*\*  
DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM  
DILUTE CONTENTS OF STOMACH. INDUCE VOMITING BY ONE OF THE STANDARD METHODS. IMMEDIATELY CONTACT A PHYSICIAN

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS\*\*\*  
VENTILATE AREA. USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS.  
FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. SPREAD SAND/GRIT.

DISPOSAL INSTRUCTIONS\*\*\*  
WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER TREATMENT FACILITY, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT  
PRODUCT (AS IS) -

INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS\*\*\*  
FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).  
DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER



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PRODUCT : POWERLINE 3690

(PAGE 1 OF 2)  
EFFECTIVE DATE 06-09-89  
PRINTED: 9-SEP-1989  
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PRODUCT APPLICATION : WATER-BASED DEPOSIT CONTROL AGENT.

-----SECTION 1-----HAZARDOUS INGREDIENTS-----  
INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC  
PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD IS  
LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE  
AND CHRONIC HAZARDS OF THIS FORMULATION.

THIS PRODUCT IS NOT HAZARDOUS AS DEFINED BY OSHA REGULATIONS.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS	(APPROX.) 12.5	ODOR: SLIGHT
FL. PT. (DEG. F) >200	SETA (CC)	SP. GR. (70F) OR DENSITY: 1.02
VAPOR PRESSURE (MMHG): 18		VAPOR DENSITY (AIR=1): <1
VISC @ 70F: 30		SOLUBILITY (WATER): 100
EVAP. RATE: <1	ETHER=1	APPEARANCE: COLORLESS
PHYSICAL STATE: LIQUID		FREEZE POINT (DEG. F): 31

-----SECTION 3-----REACTIVITY DATA-----

STABLE. MAY REACT WITH STRONG OXIDIZERS. DO NOT CONTAMINATE. BETZ TANK  
CLEAN-OUT CATEGORY 'A'

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

BETZ MATERIAL SAFETY DATA SHEET (PAGE 3 OF 3)

EFFECTIVE DATE 05-18-89

PRODUCT: COPPER-TROL CU-1

SECTION 7 - SPECIAL PROTECTIVE EQUIPMENT -  
USE PROTECTIVE EQUIPMENT IN ACCORDANCE WITH 29CFR SECTION 1910.132-134. USE RESPIRATORS WITHIN USE LIMITATIONS OR ELSE USE SUPPLIED AIR RESPIRATORS.

VENTILATION PROTECTION\*\*\*  
ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION\*\*\*  
IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH DUST/MIST FILTERS.

RECOMMENDED SKIN PROTECTION\*\*\*  
GAUNTLET-TYPE RUBBER GLOVES, CHEMICAL RESISTANT APRON  
WASH OFF AFTER EACH USE. REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION\*\*\*  
SPASH PROOF CHEMICAL GOGGLES. FACE SHIELD

SECTION 8 - STORAGE AND HANDLING PRECAUTIONS -

STORAGE INSTRUCTIONS\*\*\*  
KEEP DRUMS & PAILS CLOSED WHEN NOT IN USE.  
DO NOT FREEZE. IF FROZEN, THAW AND MIX COMPLETELY PRIOR TO USE

HANDLING INSTRUCTIONS\*\*\*  
GENERAL- IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE  
SPECIFIC- ALKALINE. CORROSIVE (SKIN/EYES). DO NOT MIX WITH ACIDIC MATERIAL.

\*\*\*\*\*  
THIS MSDS COMPLIES WITH THE OSHA HAZARD COMMUNICATION STANDARD  
HAROLD M. MERSH (ENVIRONMENTAL INFORMATION COORDINATOR)  
\*\*\*\*\*

APPENDIX: REGULATORY INFORMATION  
THE CONTENT OF THIS APPENDIX REPRESENTS INFORMATION KNOWN TO BETZ ON THE EFFECTIVE DATE OF THIS MSDS. THIS INFORMATION IS BELIEVED TO BE ACCURATE. ANY CHANGES IN REGULATIONS WILL RESULT IN UPDATED VERSIONS OF THIS DOCUMENT.

- ...TSCA: ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY
- ...REPORTABLE QUANTITY (RQ) FOR UNDILUTED PRODUCT: 740 GALS. (SODIUM HYDROXIDE)
- ...RCRA: IF THIS PRODUCT IS DISCARDED AS A WASTE, THE RCRA HAZARDOUS WASTE IDENTIFICATION NUMBER IS: 0002-CORROSIVE
- ...DOT HAZARD CLASSIFICATION: CORROSIVE TO SKIN
- ...DOT SHIPPING DESIGNATION IS: UN1824 SODIUM HYDROXIDE SOLUTION

...THIS PRODUCT CONTAINS THESE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR REPRODUCTIVE TOXICITY: NONE PRESENT IN SIGNIFICANT AMOUNTS

- ...SARA SECTION 302 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS
- ...SARA SECTION 313 CHEMICALS: SODIUM HYDROXIDE (1310-73-2) , 11.0-15.0% ;
- ...SARA SECTION 312 HAZARD CLASS: IMMEDIATE (ACUTE) AND DELAYED (CHRONIC)
- ...MICHIGAN CRITICAL MATERIALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

NFPA/WHIS : HEALTH - 3 ; FIRE - 1 ; REACTIVITY - 0 ; SPECIAL - CORR ; PE - D

PRODUCT: COPPER-TROL CU-1

SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS \*\*\* PRIMARY ROUTE OF EXPOSURE  
 CORROSIVE TO SKIN. POTENTIAL SKIN SENSITIZER  
 ACUTE EYE EFFECTS \*\*\*  
 CORROSIVE TO THE EYES  
 ACUTE RESPIRATORY EFFECTS \*\*\*  
 MISTS/AEROSOLS CAUSE IRRITATION TO UPPER RESPIRATORY TRACT  
 CHRONIC EFFECTS OF OVEREXPOSURE \*\*\*  
 PROLONGED OR REPEATED CONTACT MAY CAUSE TISSUE NECROSIS AND/OR DERMATITIS.  
 MEDICAL CONDITIONS AGGRAVATED \*\*\*  
 NOT KNOWN

SYMPTOMS OF EXPOSURE \*\*\*  
 CAUSES SEVERE IRRITATION, BURNS OR TISSUE ULCERATION WITH SUBSEQUENT SCARRING.

PRECAUTIONARY STATEMENT BASED ON TESTING RESULTS \*\*\*

MAY BE TOXIC IF ORALLY INGESTED.

SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT \*\*\*  
 REMOVE CLOTHING. WASH AREA WITH LARGE AMOUNTS OF SOAP SOLUTION OR WATER FOR 15 MIN. IMMEDIATELY CONTACT PHYSICIAN  
 EYE CONTACT \*\*\*  
 IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT  
 INHALATION EXPOSURE \*\*\*  
 REMOVE VICTIM FROM CONTAMINATED AREA. APPLY NECESSARY FIRST AID TREATMENT. IMMEDIATELY CONTACT A PHYSICIAN.

INGESTION \*\*\*  
 DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM  
 DO NOT INDUCE VOMITING. IMMED. CONTACT PHYSICIAN. DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS \*\*\*  
 VENTILATE AREA. USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE WASTE CHARACTERISTICS OF THE ABSORBED MATERIAL, OR ANY CONTAMINATED SOIL, SHOULD BE DETERMINED IN ACCORDANCE WITH RCRA REGULATIONS.  
 FLUSH AREA WITH WATER. WET AREA MAY BE SLIPPERY. SPREAD SAND/GRIT.

DISPOSAL INSTRUCTIONS \*\*\*  
 WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER TREATMENT FACILITY, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT PRODUCT (AS IS) -  
 INCINERATE OR BURY IN APPROVED LANDFILL

FIRE EXTINGUISHING INSTRUCTIONS \*\*\*  
 FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).  
 DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

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PRODUCT : COPPER-TROL CU-1

(PAGE 1 OF 3)  
EFFECTIVE DATE 05-18-89  
PRINTED: 9-SEP-1989  
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PRODUCT APPLICATION : WATER-BASED CORROSION INHIBITOR.

-----SECTION 1-----HAZARDOUS INGREDIENTS-----  
INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD IS LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE AND CHRONIC HAZARDS OF THIS FORMULATION.

SODIUM HYDROXIDE\*\*\* (CAUSTIC SODA); CAS#1310-73-2; CORROSIVE; TOXIC IF ORALLY INGESTED; PEL: 2.0MG/M3; TLV: 2.0MG/M3 (CEILING).

TRADE SECRET INGREDIENT; POTENTIAL SKIN SENSITIZER; CORROSIVE TO SKIN AND EYES; PEL: NONE; TLV: NONE. THIS CHEMICAL IS NOT ON ANY STATE RIGHT-TO-KNOW LIST.

-----SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 13.5	ODOR: MILD
FL. PT. (DEG. F): >200 P-M(CC)	SP. GR. (70F) OR DENSITY: 1.184
VAPOR PRESSURE (MMHG): 18	VAPOR DENSITY (AIR=1): <1
VISC CPS70F: 37	% SOLUBILITY (WATER): 100
EVAP. RATE: <1 ETHER=1	APPEARANCE: BROWN-BLACK
PHYSICAL STATE: LIQUID	FREEZE POINT (DEG. F): -4

-----SECTION 3-----REACTIVITY DATA-----

STABLE. MAY REACT WITH ACIDS. DO NOT CONTAMINATE. BETZ TANK CLEAN-OUT CATEGORY C

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

BETZ MATERIAL SAFETY DATA SHEET (PAGE 3 OF 3)

EFFECTIVE DATE 05-18-89

PRODUCT: CLAM-TROL CT-1

SECTION 7-----SPECIAL PROTECTIVE EQUIPMENT-----  
USE PROTECTIVE EQUIPMENT IN ACCORDANCE WITH 29CFR SECTION 1910.132-134. USE RESPIRATORS WITHIN USE LIMITATIONS OR ELSE USE SUPPLIED AIR RESPIRATORS.

VENTILATION PROTECTION\*\*  
ADEQUATE VENTILATION TO MAINTAIN AIR CONTAMINANTS BELOW EXPOSURE LIMITS

RECOMMENDED RESPIRATORY PROTECTION\*\*\*  
IF VENTILATION IS INADEQUATE OR SIGNIFICANT PRODUCT EXPOSURE IS LIKELY, USE A RESPIRATOR WITH ORGANIC VAPOR CARTRIDGE & DUST/MIST PREFILTER

RECOMMENDED SKIN PROTECTION\*\*\*  
GAUNTLET-TYPE RUBBER GLOVES, CHEMICAL RESISTANT APRON  
WASH OFF AFTER EACH USE. REPLACE AS NECESSARY

RECOMMENDED EYE PROTECTION\*\*\*  
SPLASH PROOF CHEMICAL GOGGLES. FACE SHIELD

SECTION 8-----STORAGE AND HANDLING PRECAUTIONS-----

STORAGE INSTRUCTIONS\*\*\*  
KEEP DRUMS & PAILS CLOSED WHEN NOT IN USE.  
STORE IN COOL VENTILATED LOCATION. STORE AWAY FROM OXIDIZERS

HANDLING INSTRUCTIONS\*\*\*  
GENERAL-IMMEDIATELY REMOVE CONTAMINATED CLOTHING, WASH BEFORE REUSE  
SPECIFIC- COMBUSTIBLE. DO NOT USE AROUND SPARKS OR FLAMES. BOND CONTAINERS DURING FILLING OR DISCHARGE WHEN PERFORMED AT TEMPERATURES AT OR ABOVE THE PRODUCT FLASH POINT.

\*\*\*\*\*  
THIS MSDS COMPLIES WITH THE OSHA HAZARD COMMUNICATION STANDARD  
HAROLD M. HERSH (ENVIRONMENTAL INFORMATION COORDINATOR)  
\*\*\*\*\*

APPENDIX: REGULATORY INFORMATION  
THE CONTENT OF THIS APPENDIX REPRESENTS INFORMATION KNOWN TO BETZ ON THE EFFECTIVE DATE OF THIS MSDS. THIS INFORMATION IS BELIEVED TO BE ACCURATE. ANY CHANGES IN REGULATIONS WILL RESULT IN UPDATED VERSIONS OF THIS DOCUMENT.

...TSCA: ALL COMPONENTS OF THIS PRODUCT ARE LISTED IN THE TSCA INVENTORY

...FIFRA(40CFR):EPA REG.NO. 3076-145

...REPORTABLE QUANTITY(RQ) FOR UNDILUTED PRODUCT:

NOT APPLICABLE

...RCRA: IF THIS PRODUCT IS DISCARDED AS A WASTE, THE RCRA HAZARDOUS WASTE

IDENTIFICATION NUMBER IS: D001=IGNITABLE;D002=CORROSIVE

...DOT HAZARD CLASSIFICATION: CORROSIVE TO SKIN, COMBUSTIBLE

...DOT SHIPPING DESIGNATION IS: UN1760 CORROSIVE LIQUID, N.O.S.

...THIS PRODUCT CONTAINS THESE CHEMICALS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER OR REPRODUCTIVE TOXICITY: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 302 CHEMICALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

...SARA SECTION 313 CHEMICALS: ETHYLENE GLYCOL(107-21-1) 21.0-30.0%

...SARA SECTION 312 HAZARD CLASS: IMMEDIATE(ACUTE), DELAYED(CHRONIC) AND FIRE

...MICHIGAN CRITICAL MATERIALS: NONE PRESENT IN SIGNIFICANT AMOUNTS

WFOA/HMIS : HEALTH - 3 ; FIRE - 2 ; REACTIVITY - 0 ; SPECIAL - CORR ; PE - D

BETZ MATERIAL SAFETY DATA SHEET (PAGE 2 OF 3)

EFFECTIVE DATE 05-18-89

PRODUCT: CLAM-TROL CT-1

-----SECTION 4-----HEALTH HAZARD EFFECTS-----

ACUTE SKIN EFFECTS \*\*\* PRIMARY ROUTE OF EXPOSURE

CORROSIVE TO SKIN. POTENTIAL SKIN SENSITIZER

ACUTE EYE EFFECTS \*\*\*

CORROSIVE TO THE EYES

ACUTE RESPIRATORY EFFECTS \*\*\* PRIMARY ROUTE OF EXPOSURE

VAPORS, GASES, MISTS AND/OR AEROSOLS CAUSE IRRITATION TO UPPER

RESPIRATORY TRACT

CHRONIC EFFECTS OF OVEREXPOSURE\*\*\*

PROLONGED OR REPEATED OVEREXPOSURES MAY CAUSE: TISSUE NECROSIS; BLOOD CELL DAMAGE OR IMPAIR BLOOD CELL FUNCTION; REPRODUCTIVE SYSTEM TOXICITY; SKIN SENSITIZATION.

MEDICAL CONDITIONS AGGRAVATED \*\*\*

NOT KNOWN

SYMPTOMS OF EXPOSURE \*\*\*

INHALATION OF VAPORS/MISTS/AEROSOLS MAY CAUSE EYE, NOSE, THROAT AND LUNG IRRITATION; SKIN CONTACT MAY CAUSE SEVERE IRRITATION OR BURNS.

PRECAUTIONARY STATEMENT BASED ON TESTING RESULTS \*\*\*

MAY BE TOXIC IF ORALLY INGESTED.

-----SECTION 5-----FIRST AID INSTRUCTIONS-----

SKIN CONTACT\*\*\*

REMOVE CLOTHING. WASH AREA WITH LARGE AMOUNTS OF SOAP SOLUTION OR WATER FOR 15 MIN. IMMEDIATELY CONTACT PHYSICIAN

EYE CONTACT\*\*\*

IMMEDIATELY FLUSH EYES WITH WATER FOR 15 MINUTES. IMMEDIATELY CONTACT A PHYSICIAN FOR ADDITIONAL TREATMENT

INHALATION EXPOSURE\*\*\*

REMOVE VICTIM FROM CONTAMINATED AREA. APPLY NECESSARY FIRST AID TREATMENT. IMMEDIATELY CONTACT A PHYSICIAN.

INGESTION\*\*\*

DO NOT FEED ANYTHING BY MOUTH TO AN UNCONSCIOUS OR CONVULSIVE VICTIM DO NOT INDUCE VOMITING. IMMEDIATELY CONTACT PHYSICIAN. DILUTE CONTENTS OF STOMACH USING 3-4 GLASSES MILK OR WATER

-----SECTION 6-----SPILL, DISPOSAL AND FIRE INSTRUCTIONS-----

SPILL INSTRUCTIONS\*\*\*

VENTILATE AREA. USE SPECIFIED PROTECTIVE EQUIPMENT. CONTAIN AND ABSORB ON ABSORBENT MATERIAL. PLACE IN WASTE DISPOSAL CONTAINER. THE CONTAMINATED ABSORBENT SHOULD BE CONSIDERED A PESTICIDE AND DISPOSED OF IN AN APPROVED PESTICIDE LANDFILL. SEE PRODUCT LABEL STORAGE AND DISPOSAL INSTRUCTIONS.

REMOVE IGNITION SOURCES. FLUSH AREA WITH WATER. SPREAD SAND/GRIT.

DISPOSAL INSTRUCTIONS\*\*\*

WATER CONTAMINATED WITH THIS PRODUCT MAY BE SENT TO A SANITARY SEWER TREATMENT FACILITY, IN ACCORDANCE WITH ANY LOCAL AGREEMENT, A PERMITTED WASTE TREATMENT FACILITY OR DISCHARGED UNDER A NPDES PERMIT PRODUCT (AS IS) -

DISPOSE OF IN APPROVED PESTICIDE FACILITY OR ACCORDING TO LABEL

INSTRUCTIONS

FIRE EXTINGUISHING INSTRUCTIONS\*\*\*

FIREFIGHTERS SHOULD WEAR POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (FULL FACE-PIECE TYPE).

DRY CHEMICAL, CARBON DIOXIDE, FOAM OR WATER

BETZ LABORATORIES, INC.  
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BETZ MATERIAL SAFETY DATA SHEET  
24 HOUR EMERGENCY TELEPHONE (HEALTH OR ACCIDENT) 215/355-3300

(PAGE 1 OF 3)  
EFFECTIVE DATE 05-18-89  
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PRODUCT : CLAM-TROL CT-1

PRODUCT APPLICATION : WATER-BASED MICROBIAL CONTROL AGENT.

SECTION 1-----HAZARDOUS INGREDIENTS-----  
INFORMATION ON PHYSICAL HAZARDS, HEALTH HAZARDS, PEL'S AND TLV'S FOR SPECIFIC  
PRODUCT INGREDIENTS AS REQUIRED BY THE OSHA HAZARD COMMUNICATIONS STANDARD IS  
LISTED. REFER TO SECTION 4 (PAGE 2) FOR OUR ASSESSMENT OF THE POTENTIAL ACUTE  
AND CHRONIC HAZARDS OF THIS FORMULATION.

ETHYLENE GLYCOL\*\*\*CAS#107-21-1; LIVER, KIDNEY AND BLOOD TOXIN; CNS  
DEPRESSANT; ANIMAL TERATOGEN (HIGH ORAL DOSES); PEL/TLV: 50PPM-C.

ALKYL DIMETHYL BENZYL AMMONIUM CHLORIDE\*\*\*CAS#68424-85-1; CORROSIVE (EYES);  
PEL: NONE; TLV: NONE.

ISOPROPYL ALCOHOL\*\*\* (IPA); CAS#67-63-0; FLAMMABLE LIQUID; CHRONIC  
OVEREXPOSURE MAY CAUSE LIVER AND KIDNEY TOXICITY;

PEL/TLV: 400PPM (500PPM-STEL)  
DODECYLGUANIDINE HYDROCHLORIDE\*\*\* (DGH); CAS#13590-97-1; CORROSIVE; PEL: NONE;  
TLV: NONE.

ETHYL ALCOHOL\*\*\* (ETHANOL); CAS#64-17-5; FLAMMABLE; MAY CAUSE DEFATTING  
DERMATITIS, DIZZINESS AND HEADACHE; PEL: 1000PPM; TLV: 1000PPM.

SECTION 2-----TYPICAL PHYSICAL DATA-----

PH: AS IS (APPROX.) 5.3 ODOR: MILD  
MELT PT. (DEG. F): 116 SETA (CC) SP. GR. (70F) OR DENSITY: 1.022  
VAPOR PRESSURE (MMHG): 23 VAPOR DENSITY (AIR=1): >1  
ISC CPS 70F: 23 % SOLUBILITY (WATER): 100  
VAP. RATE: <1 ETHER=1 APPEARANCE: COLORLESS  
PHYSICAL STATE: LIQUID FREEZE POINT (DEG. F): <-30

SECTION 3-----REACTIVITY DATA-----

STABLE. MAY REACT WITH STRONG OXIDIZERS. DO NOT CONTAMINATE. BETZ TANK  
CLEAN-OUT CATEGORY 'B'

THERMAL DECOMPOSITION (DESTRUCTIVE FIRES) YIELDS ELEMENTAL OXIDES.

BETZ LABORATORIES, INC.  
4636 SOMERTON ROAD, TREVOSE, PA. 19047

9/15/89 PRODUCT: SLIMICIDE C-78P  
AQUATIC TOXICOLOGY

DAPHNIA MAGNA

0% MORTALITY:            MG/L  
48 HR. LC50:            0.5 MG/L

RAINBOW TROUT

0% MORTALITY:            MG/L  
96 HR. LC50:            0.9 MG/L

FATHEAD MINNOW

0% MORTALITY:            MG/L  
96 HR. LC50:            2.3 MG/L

9/15/89 MAMMALIAN TOXICOLOGY

ORAL LD50 -NO DATA

DERMAL LD50 -NO DATA

SKIN IRRITATION SCORE-NO DATA

EYE IRRITATION SCORE-NO DATA

INHALATION-NO DATA



BETZ LABORATORIES, INC.  
4636 SOMERTON ROAD, TREVOSE, PA. 19047

9/15/89 PRODUCT: POWERLINE 3690  
AQUATIC TOXICOLOGY

DAPHNIA MAGNA

0% MORTALITY: 500 MG/L  
48 HR. SCR.  
RAINBOW TROUT

0% MORTALITY: 1000 MG/L  
48 HR. SCR.

9/15/89 MAMMALIAN TOXICOLOGY

ORAL LD50 -NO DATA  
DERMAL LD50 -NO DATA  
SKIN IRRITATION SCORE-NO DATA  
EYE IRRITATION SCORE-NO DATA  
INHALATION-NO DATA

BETZ LABORATORIES, INC.  
4696 SOMERTON ROAD, TREVOSE, PA. 19047

9/15/89 PRODUCT: COPPER-TROL CU-2  
AQUATIC TOXICOLOGY

DAPHNIA MAGNA

0% MORTALITY: 65 MG/L  
48 HR. LC50: 112.5 MG/L

RAINBOW TROUT

0% MORTALITY: 21 MG/L  
96 HR. LC50: 28.1 MG/L

FATHEAD MINNOW

0% MORTALITY: 49 MG/L  
96 HR. LC50: 60.6 MG/L

9/15/89 MAMMALIAN TOXICOLOGY

ORAL LD50 -NO DATA

DERMAL LD50 -NO DATA

SKIN IRRITATION SCORE-NO DATA

EYE IRRITATION SCORE-NO DATA

INHALATION-NO DATA

BETZ LABORATORIES, INC.  
4636 SOMERTON ROAD, TREVOSE, PA. 19047

9/15/89 PRODUCT: CLAM-TROL CT-1  
AQUATIC TOXICOLOGY

RAINBOW TROUT

0% MORTALITY: 10 MG/L  
96 HR. LC50: 14.7 MG/L

DAPHNIA MAGNA

0% MORTALITY: 0.16 MG/L  
48 HR. LC50: 0.4 MG/L

FATHEAD MINNOW

0% MORTALITY: 1.55 MG/L  
96 HR. LC50: 3.0 MG/L

9/15/89 MAMMALIAN TOXICOLOGY

ORAL LD50 -NO DATA

DERMAL LD50 -NO DATA

SKIN IRRITATION SCORE-NO DATA

EYE IRRITATION SCORE-NO DATA

INHALATION-NO DATA

# ITEM 3

PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

**UNITS CODE**

- 1 POUNDS
- 2 GALLONS
- 3 CUBIC YARDS
- 4 TONS
- 5 MGW
- 6 MGD
- 7 SPD

**TIME**

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

OUTFALL NUMBER		101011		
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	001A1 RAD WASTE 4911		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY 24	DAYS/YEAR 365	
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	2,612.8	UNIT CODE 5
		DAILY MINIMUM	0	7
DAILY MAXIMUM		7,200.0	7	
D. PROCESS PRODUCTION RATE	1100 MWH		UNITS/TIME 1/1	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	001B1 DIE M IN WIST 4911		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY 24	DAYS/YEAR 365	
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	1,132	UNIT CODE 5
		DAILY MINIMUM	0	7
DAILY MAXIMUM		2,280.0	7	
D. PROCESS PRODUCTION RATE	1100 MWH		UNITS/TIME 1/1	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE			
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR	
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY		UNIT CODE
		DAILY MINIMUM		
DAILY MAXIMUM				
D. PROCESS PRODUCTION RATE			UNITS/TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE			
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR	
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY		UNIT CODE
		DAILY MINIMUM		
DAILY MAXIMUM				
D. PROCESS PRODUCTION RATE			UNITS/TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE			
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR	
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY		UNIT CODE
		DAILY MINIMUM		
DAILY MAXIMUM				
D. PROCESS PRODUCTION RATE			UNITS/TIME	

**ITEM 4**

**GROUNDWATER DISCHARGE INFORMATION**

OUTFALL NUMBER		0,0,1	
A.	IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
B.	HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 14, 1980 R. 323.220 (PAGE 45) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
C.	ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 323.220 (10) (PAGE 45) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 323.220 (5) (PAGE 47) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
D.	ARE YOU REQUESTING A VARIANCE FROM RULE 323.2205 (PAGE 46) (NONDEGRADATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 323.2210 (PAGE 47) OF THE PART 22 RULES.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
E.	LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME INJURIOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.	<input type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT	
THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.		<input type="checkbox"/> PRESENT, DATA PROVIDED IN ITEM 7	

**ITEM 5**

**EXPECTED WASTEWATER CHARACTERISTICS**

**UNITS CODE**

- 1 MG/L
- 2 UG/L
- 3 COUNTS / 100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

**SAMPLE TYPE**

- 1 GRAB
- 2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE	# ANALYSES	SAMPLE TYPE
	AVE	MAX			
*BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	N.D.	N.D.	1	3	2
*COD (CHEMICAL OXYGEN DEMAND)	26	26	1	3	2
*TOC (TOTAL ORGANIC CARBON)	4.9	4.9	1	3	2
*AMMONIA NITROGEN (AS N)	0	0	1	3	2
*TOTAL SUSPENDED SOLIDS		75	1		
TOTAL PHOSPHORUS (AS P)		0.11	1		
TOTAL RESIDUAL CHLORINE			1		
DISSOLVED OXYGEN		9.0	1	3	1
*pH	8.12	8.5	1	1.8	2
FECAL COLIFORM BACTERIA			3		
*TEMPERATURE (SUMMER)			5		
*TEMPERATURE (WINTER)			5		
B. OTHER WASTEWATER CHARACTERISTICS					
OILS & GREASE	N.D.	N.D.		3	1
ORGANIC N	1.4	1.4	1	3	1

"N.D. represents a nondetectable level"

\*REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

**ITEM 6**  
**PRIORITY POLLUTANTS AND ADDITIONAL INFORMATION FOR SURFACE WATER DISCHARGE ONLY**

<p><b>CUTFALL NUMBER</b></p>	<p>01011</p>
<p>THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. <b>NOTE!</b> NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.</p>	
<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE IA PAGE 81) (IF NO, GO TO E) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE IA PAGE 81. (CONTINUE WITH C.)</p>	<p>L S T I E I A M I I E I I E I C I P P I</p>
<p>C. DOES THIS CUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO E) (IF YES, GO TO D)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE IA PAGE 81) <b>NOTE!</b> FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE IIA PAGE 42). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE IIAA PAGE 43). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET. (CONTINUE WITH E-K BELOW)</p>	<p><input checked="" type="checkbox"/> VOLATILE <input type="checkbox"/> BASE/NEUTRAL <input checked="" type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE</p>
<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, <b>ICMS</b> OR HAS REASON TO BELIEVE ANY POLLUTANT LISTED IN TABLE IIA AND IVA PAGES 42-43 IS DISCHARGED FROM ANY CUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED. RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, <b>ICMS</b> OR HAS REASON TO BELIEVE ANY POLLUTANT LISTED IN TABLE IVA PAGE 43 ARE DISCHARGED FROM ANY CUTFALL, THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA. RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) <b>ICMS</b>: 2, 4, 5-TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, TP); 2-(2, 4, 5-TRICHLOROPHENYL) ETHYL 2, 2-DICHLOROPROPIONATE (ERBON); O, O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (RONNEL); 2, 4, 5-TRICHLOROPHENYL (TCP), OR HEXACHLOROPHENE (HEP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR <b>ICMS</b> OR HAS REASON TO BELIEVE THAT TCP, 2, 4, 5 OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA, GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>J. IF THE SURFACE WATER DISCHARGE APPLICANT <b>ICMS</b> OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>K. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input type="checkbox"/> NOT APPLICABLE <input checked="" type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>L. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLE IV PAGE 8 AND IIA THROUGH IVA PAGES 42-43. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>

ITEM  
7

CRITICAL  
MATERIALS  
•  
TOXIC  
POLLUTANTS  
•  
HAZARDOUS  
SUBSTANCES  
OR  
DISCHARGE

R/F/FAL NUMBER

0.0.1.1

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION 11, ITEM 4-C. REGULATED DISCHARGE INFORMATION (PAGE 55)
- 2. SECTION 11, ITEM 5. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)
- 3. 0. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 59)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 5) NOT ADDRESSED IN SECTION 11 ITEM 8 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

UNITS CODE  
0 MG/L  
1 MG/L  
2 LBS/DAY  
3 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 IN NR. CONDUIT

CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.

- YES
- NO

# ITEM 1

DISCHARGE LOCATION  
SCHEDULE  
FLOW RATE

WASTEWATER TYPE CODE

- 1 CONTACT COOLING
- 2 NONCONTACT COOLING
- 3 PROCESS
- 4 SANITARY
- 5 STORMWATER

UNIT CODE

- 1 MGD
- 2 MGD
- 3 GPD

OUTFALL NUMBER	009		
A. LOCATION OF DISCHARGE	N.W. & N.W. & SECTION (21), TOWNSHIP (6S), RANGE (10E)		
B. NAME OF RECEIVING WATER (IE. GROUNDWATER OR NAME OF SURFACE WATER)	SWAN CREEK		
C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
D. IF YES, LIST DISCHARGE PERIODS	MO. / DAY	THROUGH	MO. / DAY
	___ / ___	THROUGH	___ / ___
	___ / ___	THROUGH	___ / ___
	___ / ___	THROUGH	___ / ___
E. LAND APPLICATION RATE	IN./HR.	HR./DAY	IN./WK. <input checked="" type="checkbox"/>
F. TYPE OF WASTEWATER DISCHARGE	3		
G. DISCHARGE SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAY/YEAR	
H. DISCHARGE FLOW RATE	TOTAL YEARLY		UNIT CODE
	___	01	1
	DAILY MINIMUM	___	3
	DAILY MAXIMUM	___	3
I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.	AUTHORIZED	___	UNIT CODE
		7 2 0 0 0 0 0	3
J. MAXIMUM DESIGN DISCHARGE FLOW RATE.	DESIGN	___	UNIT CODE
		7 2 0 0 0 0 0	3

# ITEM 2

WATER TREATMENT ADDITIVES

UNITS CODE

- 1 Mg/l
- 2 U<sub>g</sub>/l

A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.	NAME	FUNCTION	
	_____	_____	
	_____	_____	
	_____	_____	
C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.	_____		
D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.	MINIMUM	UNITS CODE	AVERAGE
	_____	___	_____
	_____	___	_____
	_____	___	_____
E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?	REMOVAL		DISCHARGE FREQUENCY
	_____	_____	MS./DAY DAYS/WK.
	_____	_____	___
	_____	_____	___
G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC MAMMALIAN OR BENTHIC TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.			



**ITEM 3**

PROCESS STREAMS CONTRIBUTING TO CUTFALL DISCHARGE

**UNITS CODE**

- 1 POUNDS
- 2 GALLONS
- 3 CUBIC YARDS
- 4 TONS
- 5 MGT
- 6 MGP
- 7 GPD

**TIME**

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

CUTFALL NUMBER		1009	
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS CUTFALL AND SIC CODE	LOW VOLUME WST APRIL	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS/TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS CUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS/TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS CUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS/TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS CUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS/TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS CUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS/TIME	

SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 4

GROUNDWATER DISCHARGE INFORMATION

OUTFALL NUMBER: L.O.D.19

A. IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUP OF GROUNDWATERS? (IF NO, CONTINUE TO ITEM 7)  YES  NO

B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 24, 1980 R. 22.220 (PAGE 5) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.  YES  NO

C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 22.220 (10) (PAGE 5) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 22.220 (5) (PAGE 5) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.  YES  NO

D. ARE YOU REQUESTING A VARIANCE FROM RULE 22.225 (PAGE 5) (NONDEGRADATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 22.220 (PAGE 5) OF THE PART 22 RULES.  YES  NO

E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE ON FICHMANN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME HAZARDOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.  NOT APPLICABLE/DELIVER INCIDENT  PRESENT, DATA PROVIDED IN ITEM 7

THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.

ITEM 5

EXPECTED WASTEWATER CHARACTERISTICS

UNITS CODE

- 1 MG/L
- 2 MG/L
- 3 COUNTS / 100 ml
- 4 B.U.
- 5 °F
- 6 LOG/100 ml

SAMPLE TYPE  
 1 GRAB  
 2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE 8 ANALYSES SAMPLE 1		
	Avg	Peak	1	2	3
DOBS (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	N.D.	N.D.	1	3	2
COB (CHEMICAL OXYGEN DEMAND)	32	32	1		
TOC (TOTAL ORGANIC CARBON)	9.7	9.7	1		
AMMONIA NITROGEN (AS N)	10.25	10.25	1		
TOTAL SUSPENDED SOLIDS	1.8	1.8	1		
TOTAL PHOSPHORUS (AS P)	0.30	0.30	1		
TOTAL RESIDUAL CHLORINE			1		
DISSOLVED OXYGEN			1		
pH	8.2	8.5	1	1.8	2
FECAL COLIFORM BACTERIA			3		
TEMPERATURE (SUMMER)			5		
TEMPERATURE (WINTER)			5		
B. OTHER WASTEWATER CHARACTERISTICS					
TOILIBORIBREABBE	N.D.	N.D.	1	3	1
ORGANIC	1.2	1.2	1	3	2
			1		
			1		
			1		
			1		

\*REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

OUTFALL NUMBER

0103

ITEM  
6PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
ONLY

THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. NOTE! NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.

A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE IA PAGE 41)  
(IF NO, GO TO E) (IF YES, GO TO B)

 YES  NO

B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE IA PAGE 41.  
(CONTINUE WITH C.)

L S I T I E I A M I E I L E I C I P I P I

C. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER?  
(IF NO, GO TO E) (IF YES, GO TO D)

 YES  NO

D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR.  
(REFER TO TABLE IA PAGE 41)

NOTE! FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE IIA PAGE 42). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE IIA PAGE 43.

RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.

(CONTINUE WITH E-K BELOW)

 VOLATILE  
 BASE/NEUTRAL  
 ACID  
 PESTICIDE

E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE IIA AND IVA PAGES 42-43 IS DISCHARGED FROM ANY OUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED.

RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.

 NOT APPLICABLE/BELIEVED ABSENT  
 PRESENT/DATA IS ATTACHED

F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE IVA PAGE 43 ARE DISCHARGED FROM ANY OUTFALL THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.

RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.

 NOT APPLICABLE/BELIEVED ABSENT  
 PRESENT/DATA IS ATTACHED

G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) WHO:

USES OR MANUFACTURES 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T);  
 2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, TP);  
 5-(2, 4, 5-TRICHLOROPHENYL) ETHYL 2, 2-DICHLOROPROPIONATE (EONON);  
 O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (RONNEL);  
 2, 4, 5-TRICHLOROPHENYL (TCP); OR HEXACHLOROPHENE (HEP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR

KNOWS OR HAS REASON TO BELIEVE THAT TCDD IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.

 NOT APPLICABLE/BELIEVED ABSENT  
 PRESENT/DATA IS ATTACHED

H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.

 NOT APPLICABLE  
 APPLICABLE/SEE ATTACHED

I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.

 NOT APPLICABLE  
 APPLICABLE/SEE ATTACHED

J. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES IV PAGE 5 AND IIA THROUGH IVA PAGES 42-43. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.

 NOT APPLICABLE  
 APPLICABLE/SEE ATTACHED

SEE INSTRUCTIONS ON REVERSE SIDE

SECTION II

PERMIT NUMBER

N10037028

ITEM 7

CRITICAL MATERIALS  
• TOXIC POLLUTANTS  
• HAZARDOUS SUBSTANCES IN DISCHARGE

OUTFALL NUMBER

1009

4. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION II, ITEM 4-E. PROPOSED DISCHARGE INFORMATION (PAGE 55)
- 2. SECTION II, ITEM 6. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)
- 3. 8. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 59)

5. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 6) NOT ADDRESSED IN SECTION II ITEM 6 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

WRITE CODE  
1 Mg/l  
2 UG/l  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
1 CRAB  
2 24 HR. COMB

TABLE I	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
TABLE II	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
TABLE III	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
TABLE IV	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
TABLE V	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
TABLE VI	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
TABLE VII	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.  YES  NO

SEE INSTRUCTIONS ON REVERSE SIDE

SECTION II

PERMIT NUMBER

M10037028

<b>ITEM 1</b>  DISCHARGE LOCATION  SCHEDULE  FLOW RATE  WASTEWATER TYPE CODE  1 CONTACT COOLING 2 NONCONTACT COOLING 3 PROCESS 4 SANITARY 5 STORMWATER  UNIT CODE 1 MGY 2 MGD 3 GPD	OUTFALL NUMBER	0110					
	A. LOCATION OF DISCHARGE	S.E. & S.W. SECTION 11.6, T.16.5, R.11.0.E.					
	B. NAME OF RECEIVING WATER (IE. GROUNDWATER OR NAME OF SURFACE WATER)	S.W.A.N. C.R.I.E.I.K.					
	C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E)	<input type="checkbox"/> YES			<input checked="" type="checkbox"/> NO		
	D. IF YES, LIST DISCHARGE PERIODS	NO. / DAY		THROUGH		NO. / DAY	
		____		____		____	
		____		____		____	
		____		____		____	
	E. LAND APPLICATION RATE	IN./WK.		MR./DAY		IN./WK.	
		____		____		____	
F. TYPE OF WASTEWATER DISCHARGE	WASTEWATER TYPE CODE						
	____						
G. DISCHARGE SCHEDULE (YEARLY AVERAGE)	HOURS/DAY		DAY/YEAR				
	24						
H. DISCHARGE FLOW RATE	TOTAL YEARLY		DAILY MINIMUM		DAILY MAXIMUM		
	8.32		0		2,280.0		
					UNIT CODE 3		
I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.	AUTHORIZED		DESIGN		UNIT CODE		
	1300.0		2280.0		3		
J. MAXIMUM DESIGN DISCHARGE FLOW RATE.	DESIGN				UNIT CODE		
	2280.0				3		
<b>ITEM 2</b>  WATER TREATMENT ADDITIVES   UNITS CODE 1 Mg/l 2 Ug/l	A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)	<input type="checkbox"/> YES			<input checked="" type="checkbox"/> NO		
	B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.	NAME			FUNCTION		
		_____			_____		
		_____			_____		
		_____			_____		
		_____			_____		
	C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.						
	D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.	MINIMUM	UNITS CODE	AVERAGE	UNITS CODE	MAXIMUM	UNITS CODE
	ADDITIVE NAME	____	____	____	____	____	____
	ADDITIVE NAME	____	____	____	____	____	____
ADDITIVE NAME	____	____	____	____	____	____	
E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?	<input type="checkbox"/> YES			<input type="checkbox"/> NO			
F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?	REMOVAL			DISCHARGE FREQUENCY			
ADDITIVE NAME	____			____			
ADDITIVE NAME	____			____			
ADDITIVE NAME	____			____			
G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC MAMMALIAN OR ABLATIC TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.							

SECTION II

PERMIT NUMBER

MI 0037028

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 3

PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

UNITS CODE  
 1 POUNDS  
 2 GALLONS  
 3 CUBIC YARDS  
 4 TONS  
 5 G/GY  
 6 M/GD  
 7 GPD

TIME  
 1 HOUR  
 2 DAY  
 3 WEEK  
 4 MONTH  
 5 YEAR

OUTFALL NUMBER		10110	
Process 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	LAUNDRY DRY CLEAN 4814	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY 24	DAYS/YEAR 365
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS / TIME	
Process 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS / TIME	
Process 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS / TIME	
Process 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS / TIME	
Process 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
	D. PROCESS PRODUCTION RATE	UNITS / TIME	

SECTION II

PERMIT NUMBER

MI 0037028

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 4

GROUNDWATER DISCHARGE INFORMATION

OUTFALL NUMBER		01110	
A.	IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)	<input type="checkbox"/> YES	<input type="checkbox"/> NO
B.	HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 14, 1980 R. 223.2207 (PAGE 6) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
C.	ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 223.2207 (10) (PAGE 6) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 223.2208 (5) (PAGE 67) OF THE PART 22 RULES. IF YES ATTACH EXEMPTIONS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE COULD QUALIFY FOR AN EXEMPTION.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
D.	ARE YOU REQUESTING A VARIANCE FROM RULE 223.2208 (PAGE 6) (REGISTRATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH EXEMPTIONS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 223.2210 (PAGE 6) OF THE PART 22 RULES.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
E.	LIST ALL CHEMICAL SUBSTANCES WHICH ARE ON MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 8) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME DANGEROUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS TABLET.  THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL GROUNDWATER ANALYSES.	<input type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT	<input type="checkbox"/> PRESENT, DATA PROVIDED IN ITEM 7

ITEM 5

EXPECTED WASTEWATER CHARACTERISTICS

UNITS CODE

- 1 MG/L
- 2 LBS/L
- 3 COUNTS / 100 ML
- 4 S.U.
- 5 °F
- 6 LBS/DEG

SAMPLE TYPE

- 7 OASB
- 8 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE	# ANALYSES	SAMPLE TYPE
	Avg	MAX			
*BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	_____	_____	1	___	___
*COD (CHEMICAL OXYGEN DEMAND)	_____	_____	1	___	___
*TOD (TOTAL ORGANIC DEMAND)	_____	_____	1	___	___
*AMMONIA NITROGEN (AS N)	_____	_____	1	___	___
*TOTAL SUSPENDED SOLIDS	_____	_____	1	___	___
TOTAL PHOSPHORUS (AS P)	_____	_____	1	___	___
TOTAL RESIDUAL CHLORINE	_____	_____	1	___	___
DISSOLVED OXYGEN	_____	_____	1	___	___
PH	_____	_____	1	___	___
FECAL COLIFORM BACTERIA	_____	_____	3	___	___
*TEMPERATURE (SURFACE)	_____	_____	5	___	___
*TEMPERATURE (WATER)	_____	_____	5	___	___
B. OTHER WASTEWATER CHARACTERISTICS					
_____	_____	_____	1	___	___
_____	_____	_____	1	___	___
_____	_____	_____	1	___	___
_____	_____	_____	1	___	___
_____	_____	_____	1	___	___
_____	_____	_____	1	___	___

\* Data supplied for outfall 001

REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

**ITEM  
6**

PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
ONLY

OUTFALL NUMBER	0110
<p>THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. <b>NOTE!</b> NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.</p>	
<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE IA PAGE 41) (IF NO, GO TO E) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE IA PAGE 41. (CONTINUE WITH C.)</p>	<p>ISITELAMLELLICPPJ</p>
<p>C. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO E) (IF YES, GO TO D)</p>	<p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
<p>D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE IA PAGE 41)</p> <p><b>NOTE!</b> FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE 11A PAGE 42). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE 11A PAGE 43.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET. (CONTINUE WITH E-K BELOW)</p>	<p><input checked="" type="checkbox"/> VOLATILE provided for outfall 001  <input type="checkbox"/> BASE/NEUTRAL  <input checked="" type="checkbox"/> ACID  <input type="checkbox"/> PESTICIDE</p>
<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF THE TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE 11A AND IV, PAGES 42-43 IS DISCHARGED FROM ANY OUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT  <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE VA PAGE 45 ARE DISCHARGED FROM ANY OUTFALL THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT  <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) WHO:</p> <p>USES OR MANUFACTURES 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T);          2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, TP);          2, 4, 5-TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPROPIONATE (EDSON); O,          O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (RONNEL);          2, 4, 5-TRICHLOROPHENOL (TCP); OR HEXACHLOROPHENE (HEP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR</p> <p>KNOWS OR HAS REASON TO BELIEVE THAT TCDD IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA, GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT  <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>J. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE  <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>K. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE  <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>L. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLE IV PAGE 6 AND 11A THROUGH VA PAGES 45-46. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE  <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>



SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

CUTFALL NUMBER

0110

ITEM 7

CRITICAL MATERIALS  
• TOXIC POLLUTANTS  
• HAZARDOUS SUBSTANCES IN DISCHARGE

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION II, ITEM 4-E. GROUNDWATER DISCHARGE INFORMATION (PAGE 55)
- 2. SECTION II, ITEM 6. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)
- 3. D. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 59)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 6) NOT ADDRESSED IN SECTION II ITEM 6 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE FOLLOWING)

UNITS CODE  
1 MG/L  
2 UG/L  
3 LBS/DA  
4 KG/DA

SAMPLE TYPE  
1 GAS  
2 24 HR COMP

CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.

- YES
- NO

SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

<b>ITEM 1</b>  DISCHARGE LOCATION  SCHEDULE  FLOW RATE  WASTEWATER TYPE CODE  1 CONTACT COOLING 2 NONCONTACT COOLING 3 PROCESS 4 SANITARY 5 WASTEWATER  UNIT CODE 1 MG/L 2 MGD 3 GPD	OUTFALL NUMBER  0111
	A. LOCATION OF DISCHARGE L.H.W. & L.H.W. & SECTION 1211, FOR 1618, RANGE 111011
	B. NAME OF RECEIVING WATER (I.E. CROWDATER OR NAME OF SURFACE WATER) S.W.A.N. CREEK
	C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO 5) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	D. IF YES, LIST DISCHARGE PERIODS PD. / DAY _____ WEDNESDAY _____ _____ WEDNESDAY _____ _____ WEDNESDAY _____
	E. LOAD APPLICATION RATE IN./HR. _____ PD./DAY _____ IN./HR. _____ <input checked="" type="checkbox"/>
	F. TYPE OF WASTEWATER DISCHARGE (2) (3) WASTEWATER TYPE CODE
	G. DISCHARGE SCHEDULE (YEARLY DURATION) DURATION/DAY (214) DAY/YEAR (21615)
	H. DISCHARGE FLOW RATE TOTAL YEARLY _____ UNITS CODE (1) DAILY MINIMUM _____ (0) (2) DAILY MAXIMUM _____ (432) (2)
	I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT. AUTHORIZED _____ UNITS CODE (12)
J. MAXIMUM DESIGN DISCHARGE FLOW RATE. DESIGN _____ UNITS CODE (12)	
<b>ITEM 2</b>  WATER TREATMENT ADDITIVES  NAME CODE 1 MG/L 2 MGD	A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 5) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES. _____ _____ _____ _____
	C. NAME AND ADDRESS OF MANUFACTURER OF THESE ADDITIVES. _____ _____
	D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES. MINIMUM UNITS CODE AVERAGE UNITS CODE MAXIMUM UNITS CODE ADDITIVE NAME _____ ADDITIVE NAME _____ ADDITIVE NAME _____
	E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES? <input type="checkbox"/> YES <input type="checkbox"/> NO
	F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE RESIDENCY? ADDITIVE NAME _____ REMOVAL EFFICIENCY (MG./DAY) (DAYS/HR.) ADDITIVE NAME _____ ADDITIVE NAME _____
	G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC ANALYSIS OR ANALYTIC TECHNIQUES, DATA OR REFERENCES WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.

SEE INSTRUCTIONS ON REVERSE SIDE

SECTION II

PERMIT NUMBER

MI 0037028

ITEM 3

PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

OUTFALL NUMBER

101111

PROCESS 1

A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE

LOTTEN WASTEFIELD LLC 49111

B. PROCESS SCHEDULE (YEARLY AVERAGE)

HOURS/DAY 24 DAYS/YEAR 365

C. PROCESS WASTEWATER FLOW RATE

TOTAL YEARLY 0.78 UNIT CODE 2

DAILY MINIMUM 0

DAILY MAXIMUM 1,500,000 7

D. PROCESS PRODUCTION RATE

100 MWH UNITS/TIME

PROCESS 2

A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE

DIEMIN WASTEFIELD LLC 49111

B. PROCESS SCHEDULE (YEARLY AVERAGE)

HOURS/DAY 24 DAYS/YEAR 365

C. PROCESS WASTEWATER FLOW RATE

TOTAL YEARLY 1.32 UNIT CODE 5

DAILY MINIMUM 0

DAILY MAXIMUM 2,160,000 7

D. PROCESS PRODUCTION RATE

100 MW UNITS/TIME

PROCESS 3

A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE

LOTIORM WASTEFIELD LLC 49111

B. PROCESS SCHEDULE (YEARLY AVERAGE)

HOURS/DAY 24 DAYS/YEAR 365

C. PROCESS WASTEWATER FLOW RATE

Based on 30" rain/yr.  
3" Daily max. rainfall

TOTAL YEARLY 7.29 UNIT CODE 5

DAILY MINIMUM 0

DAILY MAXIMUM 7,290,000 7

D. PROCESS PRODUCTION RATE

UNITS/TIME

PROCESS 4

A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE

B. PROCESS SCHEDULE (YEARLY AVERAGE)

HOURS/DAY DAYS/YEAR

C. PROCESS WASTEWATER FLOW RATE

TOTAL YEARLY UNIT CODE

DAILY MINIMUM

DAILY MAXIMUM

D. PROCESS PRODUCTION RATE

UNITS/TIME

PROCESS 5

A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE

B. PROCESS SCHEDULE (YEARLY AVERAGE)

HOURS/DAY DAYS/YEAR

C. PROCESS WASTEWATER FLOW RATE

TOTAL YEARLY UNIT CODE

DAILY MINIMUM

DAILY MAXIMUM

D. PROCESS PRODUCTION RATE

UNITS/TIME

UNITS CODE

- 1 POUNDS
- 2 GALLONS
- 3 CUBIC YARDS
- 4 TONS
- 5 MGY
- 6 MGD
- 7 BPD

TIME

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 4

GROUNDWATER DISCHARGE INFORMATION

OUTFALL NUMBER 10-1-111

A. IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)  YES  NO

B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 14, 1980 R. 323.2207 (PAGE 85) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.  YES  NO

C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 323.2207 (10) (PAGE 85) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 323.2208 (5) (PAGE 87) OF THE PART 22 RULES. IF "YES" ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.  YES  NO

D. ARE YOU REQUESTING A VARIANCE FROM RULE 323.2205 (PAGE 85) (REDEGRADATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 323.2210 (PAGE 87) OF THE PART 22 RULES.  YES  NO

E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME HAZARDOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II OF THIS BOOKLET.  NOT APPLICABLE/BELIEVED ABSENT  
 PRESENT, DATA PROVIDED IN ITEM 7

THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.

ITEM 5

EXPECTED WASTEWATER CHARACTERISTICS

UNITS CODE

- 1 MG/L
- 2 UG/L
- 3 COUNTS/100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

SAMPLE TYPE  
1 GRAB  
2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE	# ANALYSES	SAMPLE TYPE CODE
	AVE	MAX			
BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	<u>N.D.</u>	<u>N.D.</u>	<u>1</u>	<u>3</u>	<u>2</u>
COD (CHEMICAL OXYGEN DEMAND)	<u>21</u>	<u>23</u>	<u>1</u>	<u>3</u>	<u>2</u>
TOC (TOTAL ORGANIC CARBON)	<u>3.6</u>	<u>5.9</u>	<u>1</u>	<u>3</u>	<u>2</u>
AMMONIA NITROGEN (AS N)	<u>0.03</u>	<u>0.09</u>	<u>1</u>	<u>3</u>	<u>2</u>
TOTAL SUSPENDED SOLIDS	<u>61</u>	<u>5</u>	<u>1</u>	<u>3</u>	<u>1</u>
TOTAL PHOSPHORUS (AS P)	<u>    </u>	<u>    </u>	<u>1</u>	<u>    </u>	<u>    </u>
TOTAL RESIDUAL CHLORINE	<u>    </u>	<u>    </u>	<u>1</u>	<u>    </u>	<u>    </u>
DISSOLVED OXYGEN	<u>    </u>	<u>    </u>	<u>1</u>	<u>    </u>	<u>    </u>
PH	<u>7.9</u>	<u>8.2</u>	<u>4</u>	<u>4</u>	<u>1</u>
FECAL COLIFORM BACTERIA	<u>    </u>	<u>    </u>	<u>3</u>	<u>    </u>	<u>    </u>
TEMPERATURE (SUMMER)	<u>    </u>	<u>    </u>	<u>5</u>	<u>    </u>	<u>    </u>
TEMPERATURE (WINTER)	<u>    </u>	<u>    </u>	<u>5</u>	<u>    </u>	<u>    </u>
B. OTHER WASTEWATER CHARACTERISTICS					
OILS & GREASE	<u>N.D.</u>	<u>N.D.</u>	<u>1</u>	<u>    </u>	<u>    </u>
ORGANIC NITROGEN	<u>0.8</u>	<u>0.8</u>	<u>1</u>	<u>3</u>	<u>1</u>
<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>
<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>	<u>    </u>

\* N.D. represents a non-detectable level

REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

**ITEM**  
**8**

**PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
ONLY**

OUTFALL NUMBER

0111

THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. BELIEVE! FOR USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.

<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE IA PAGE 61) (IF NO, GO TO B) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE IA PAGE 61. (CONTINUE WITH C.)</p>	<p>IS T E I A M I L L I C P P I</p>
<p>C. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO D) (IF YES, GO TO D)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE IA PAGE 61)</p> <p><b>NOTE!</b> FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE IIA PAGE 62). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE IIA PAGE 63.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET. (CONTINUE WITH D-B BELOW)</p>	<p><input checked="" type="checkbox"/> VOLATILE <span style="float: right;">See Cover Letter</span> <input type="checkbox"/> BASE/NEUTRAL <input checked="" type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE</p>
<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE IIA AND IVA PAGES 62-63 IS DISCHARGED FROM ANY OUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE VA PAGE 63 ARE DISCHARGED FROM ANY OUTFALL, THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) DO:</p> <p>USES OR MANUFACTURES 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, TP); 2, 4, 5-TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPROPIONATE (DDECH); 0, p-DIMETHYL 0-2, 4, 5-TRICHLOROPHENYL PHOSPHOROTHIOATE (DOPOL); 2, 4, 5-TRICHLOROPHENYL (TD); OR HEPTACHLOROPHENE (HEP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR</p> <p>KNOWS OR HAS REASON TO BELIEVE THAT TOXIN IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA, GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUESTED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input type="checkbox"/> NOT APPLICABLE <input checked="" type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>L. DO YOU DISCHARGE ANY OTHER TOXIC OR HAZARDOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLE IV PAGE 6 AND IIA THROUGH IIA PAGES 62-63. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>

SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 7

CRITICAL MATERIALS  
OR  
TOXIC POLLUTANTS  
OR  
HAZARDOUS SUBSTANCES  
OR  
ACIDIC/ALKALINE

CUTAL USED

0.1.1.1

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION II, ITEM 4-5. HAZARDOUS WASTE REPORTING (PAGE 55)
- 2. SECTION II, ITEM 6. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)
- 3. D. BELOW CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 58)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 5) NOT MENTIONED IN SECTION II ITEM 6 PRIORITY POLLUTANTS WHICH YOU BELIEVE OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

WRITE CODE  
1 MG/L  
2 UG/L  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 24 HR COMP

CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND DATE	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND DATE	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND DATE	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND DATE	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND DATE	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND DATE	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND DATE	UNIT CODE	UNIT CODE
CRITICAL MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND DATE	UNIT CODE	UNIT CODE

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.

- YES
- NO

<b>ITEM 1</b> DISCHARGE LOCATION SCHEDULE FLOW RATE WASTEWATER TYPE CODE 1 CONTACT COOLING 2 NONCONTACT COOLING 3 PROCESS 4 SANITARY 5 STORMWATER UNIT CODE 1 MG/L 2 MGD 3 GPD	OUTFALL NUMBER	0, 1, 2					
	A. LOCATION OF DISCHARGE	N.E. & S.W. SECTION 2, 1, TOWNSHIP 6, S, RANGE 1, 0, E					
	B. NAME OF RECEIVING WATER (IE. GROUNDWATER OR NAME OF SURFACE WATER)	SOUTH LAGOON					
	C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E.)	<input type="checkbox"/> YES		<input checked="" type="checkbox"/> NO			
	D. IF YES, LIST DISCHARGE PERIODS	NO. / DAY	THROUGH	NO. / DAY	THROUGH		
		_____	_____	_____	_____		
		_____	_____	_____	_____		
		_____	_____	_____	_____		
	E. LAND APPLICATION RATE	IN./HR.	NR./DAY	IN./HR.	<input checked="" type="checkbox"/>		
	F. TYPE OF WASTEWATER DISCHARGE	5 _____					
G. DISCHARGE SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	6	DAY/YEAR	60			
H. DISCHARGE FLOW RATE	TOTAL YEARLY *	9.9			UNIT CODE		
	DAILY MINIMUM	10					
	DAILY MAXIMUM **	9.9, 10.0, 0			3		
I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.	AUTHORIZED	110, 10, 10, 0, 0, 10			UNIT CODE		
J. MAXIMUM DESIGN DISCHARGE FLOW RATE.	DESIGN	19, 19, 11, 0, 0, 0			UNIT CODE		
<b>ITEM 2</b> WATER TREATMENT ADDITIVES UNITS CODE 1 MG/L 2 MG/L	A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)	<input type="checkbox"/> YES		<input checked="" type="checkbox"/> NO			
	B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.	NAME	FUNCTION				
		_____	_____				
		_____	_____				
		_____	_____				
		_____	_____				
	C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.						
	D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.	MINIMUM	UNITS CODE	AVERAGE	UNITS CODE	MAXIMUM	UNITS CODE
	ADDITIVE NAME	_____	_____	_____	_____	_____	_____
	ADDITIVE NAME	_____	_____	_____	_____	_____	_____
ADDITIVE NAME	_____	_____	_____	_____	_____	_____	
E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?	<input type="checkbox"/> YES		<input type="checkbox"/> NO				
F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?	REMOVAL		DISCHARGE FREQUENCY				
ADDITIVE NAME	_____	_____	_____	_____	_____	_____	
ADDITIVE NAME	_____	_____	_____	_____	_____	_____	
ADDITIVE NAME	_____	_____	_____	_____	_____	_____	
G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC MAMMALIAN OR AQUATIC TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.							

SECTION II

PERMIT NUMBER

M10037C28

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 3

PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

- UNITS CODE
- 1 POUNDS
  - 2 GALLONS
  - 3 CUBIC YARDS
  - 4 TONS
  - 5 MGY
  - 6 MGD
  - 7 GPD

TIME

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

OUTFALL NUMBER

(0, 1, 2)

PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	N O N E	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	



SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 4

GROUNDWATER DISCHARGE INFORMATION

OUTFALL NUMBER

012

A. IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)

B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF CHAPTER 34, 1980 C.S. 2200 (PAGE 65) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.

C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE 22.2207 (10) (PAGE 65) OR FROM COMPLIANCE WITH THE REQUIREMENTS UNDER RULE 22.2208 (5) (PAGE 67) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE MEETS QUALITY FOR AN EXEMPTION.

D. ARE YOU REQUESTING A VARIANCE FROM RULE 22.2205 (PAGE 65) (RECOMMENDATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 22.2210 (PAGE 67) OF THE PART 22 RULES.

E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN FICHMAN'S CRITICAL MATERIALS REGISTERED TABLE IV (PAGE 8) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME HAZARDOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.

THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL GWT ANALYSES.

YES  NO

YES  NO

YES  NO

YES  NO

NOT APPLICABLE/RELIEVED ASBEST

PRESENT, DATA PROVIDED IN ITEM 7

ITEM 5

EXPECTED WASTEWATER CHARACTERISTICS

WRITE CODE

- 1 mg/l
- 2 ug/l
- 3 COUNTS / 100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

- SAMPLE TYPE
- 1 GRAB
- 2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE # ANALYSES SAMPLE TYPE		
	AVE	MAX			
*BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	N.P.T. - APPLICABLE		1	1	1
*COD (CHEMICAL OXYGEN DEMAND)	1	1	1	1	1
*TOC (TOTAL ORGANIC CARBON)	1	1	1	1	1
*AMMONIA NITROGEN (AS N)	1	1	1	1	1
*TOTAL SUSPENDED SOLIDS	1	1	1	1	1
TOTAL PHOSPHORUS (AS P)	1	1	1	1	1
TOTAL RESIDUAL CHLORINE	1	1	1	1	1
DISSOLVED OXYGEN	1	1	1	1	1
pH	1	1	1	1	1
TOTAL COLIFORM BACTERIA	1	1	1	1	1
TEMPERATURE (SUMMER)	1	1	1	1	1
TEMPERATURE (WINTER)	1	1	1	1	1
B. OTHER WASTEWATER CHARACTERISTICS					
OILS OR GREASE	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1
	1	1	1	1	1

REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

SEE INSTRUCTIONS  
ON REVERSE SIDE

OUTFALL NUMBER

0112

ITEM  
6PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
ONLYTHE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS.  
NOTE! NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND  
QUALITATIVE INFORMATION REQUESTED BELOW.A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE 1A PAGE 81)  
(IF NO, GO TO E) (IF YES, GO TO B)  YES  NOB. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE 1A PAGE 81.  
(CONTINUE WITH C.) STEAM, ELECTRICC. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER?  
(IF NO, GO TO E) (IF YES, GO TO D)  YES  NOD. INDICATE WHICH SC/MS FRACTIONS MUST BE TESTED FOR.  
(REFER TO TABLE 1A PAGE 81)NOTE! FOR EACH SC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN  
EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE 11A PAGE 42). IN ADDITION, ALL PRIMARY  
INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE  
DATA FOR EACH TOXIC POLLUTANT IN TABLE 11A PAGE 42.

RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.

(CONTINUE WITH D-R BELOW)

- 
- VOLATILE
- 
- 
- BASE/NEUTRAL
- 
- 
- ACID
- 
- 
- PESTICIDE

E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS  
OF THE TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN  
TABLE 11A AND 11A PAGES 42-43 IS DISCHARGED FROM ANY OUTFALL, THE QUANTITATIVE DATA  
MUST BE PROVIDED.

RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.

- 
- NOT APPLICABLE/BELIEVED ABSENT
- 
- 
- PRESENT/DATA IS ATTACHED

F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS  
OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN  
TABLE 11A PAGE 43 ARE DISCHARGED FROM ANY OUTFALL, THE APPLICANT MUST DESCRIBE  
REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.

RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.

- 
- NOT APPLICABLE/BELIEVED ABSENT
- 
- 
- PRESENT/DATA IS ATTACHED

G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES)  
WHO:USES OR MANUFACTURES 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T);  
2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, TP);  
2, 4, 5-TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPROPIONATE (ORION); O,  
O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (ROHNE);  
2, 4, 5-TRICHLOROPHENYL (TCP); OR HEXACHLOROPHENE (HCP); ALL DATA FOR THE  
ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) ORKNOWS OR HAS REASON TO BELIEVE THAT TOXIN IS OR MAY BE PRESENT IN THEIR DISCHARGE.  
MUST REPORT QUALITATIVE DATA, GENERATED WHICH USED A SCREENING PROCEDURE NOT  
CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN  
(TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.

- 
- NOT APPLICABLE/BELIEVED ABSENT
- 
- 
- PRESENT/DATA IS ATTACHED

H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT  
BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE  
APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE  
THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.

- 
- NOT APPLICABLE
- 
- 
- APPLICABLE/SEE ATTACHED

I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED  
BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND  
THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.

- 
- NOT APPLICABLE
- 
- 
- APPLICABLE/SEE ATTACHED

L. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN  
TABLES IV PAGE 6 AND 11A THROUGH 11A PAGES 42-43. IF YES, THEN IDENTIFY THE  
CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS  
INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.

- 
- NOT APPLICABLE
- 
- 
- APPLICABLE/SEE ATTACHED

SECTION II

PERMIT NUMBER

N10037028

SEE INSTRUCTIONS ON REVERSE SIDE

OUTFALL NUMBER

10112

ITEM 7

CRITICAL MATERIALS  
•  
TOXIC POLLUTANTS  
•  
HAZARDOUS SUBSTANCES IN DISCHARGE

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION II, ITEM 4-C. REGULATED DISCHARGE INFORMATION (PAGE 35)
- 2. SECTION II, ITEM 5. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 37)
- 3. D. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 38)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 38) NOT ADDRESSED IN SECTION II ITEM 4 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

UNITS CODE  
1 MG/L  
2 LB/DAY  
3 LB/DAY  
4 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 24 HR. COMPOUND

SURFACE WATER	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE: # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND RANGE	UNIT CODE: _____	UNIT CODE: _____
SURFACE WATER	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE: # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND RANGE	UNIT CODE: _____	UNIT CODE: _____
SURFACE WATER	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE: # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND RANGE	UNIT CODE: _____	UNIT CODE: _____
SURFACE WATER	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE: # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND RANGE	UNIT CODE: _____	UNIT CODE: _____
SURFACE WATER	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE: # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND RANGE	UNIT CODE: _____	UNIT CODE: _____
SURFACE WATER	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE: # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND RANGE	UNIT CODE: _____	UNIT CODE: _____
SURFACE WATER	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE: # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	_____
	C. MAXIMUM CONCENTRATION AND RANGE	UNIT CODE: _____	UNIT CODE: _____

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.

- YES
- NO

SEE INSTRUCTIONS ON REVERSE SIDE

SECTION II

PERMIT NUMBER

M1003702B

ITEM 1

OUTFALL NUMBER 013

A. LOCATION OF DISCHARGE S.W. & N.W. SECTION 21, TOWN 16S, RANGE 112E

B. NAME OF RECEIVING WATER (IS GROUNDEWATER OR NAME OF SURFACE WATER) SOUTH LAKE OGIN

C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E)  YES  NO

D. IF YES, LIST DISCHARGE PERIODS

MO. / DAY	MO. / DAY
_____	_____
_____	_____
_____	_____

E. LAND APPLICATION RATE

IN./HR.	HR./DAY	IN./WK.
_____	_____	_____

F. TYPE OF WASTEWATER DISCHARGE

G. DISCHARGE SCHEDULE (YEARLY AVERAGE)

CYCLE/DAY	DAY/YEAR
<u>24</u>	<u>365</u>

H. DISCHARGE FLOW RATE

TOTAL YEARLY	DAILY MAXIMUM	DAILY MINIMUM	UNIT CODE
<u>105.0</u>	<u>0</u>	<u>7.5</u>	<u>2</u>

I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.

AUTHORIZED	DESIGN	UNIT CODE
<u>7.5</u>	<u>7.5</u>	<u>2</u>

ITEM 2

A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)  YES  NO

B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.

C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.

D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.

ADDITIVE NAME	FUNCTION	UNITS CODE	AVERAGE	UNITS CODE	MAXIMUM	UNITS CODE
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?  YES  NO

F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE RESIDUES?

ADDITIVE NAME	REMOVAL EFFICIENCY	RES./DAY	RES./WEEK
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC INFORMATION ON ACUTE TOXICOLOGICAL DATA OR EXPERIENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.

SEE INSTRUCTIONS  
ON REVERSE SIDE

SECTION 11

PERMIT  
NUMBER

M10037028

ITEM  
3

PROCESS  
STREAMS  
CONTRIBUTING  
TO  
OUTFALL  
DISCHARGE

UNITS CODE

- 1 POUNDS
- 2 GALLONS
- 3 CUBIC  
YARDS
- 4 TONS
- 5 MOY
- 6 MOG
- 7 GPD

TIME

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

OUTFALL NUMBER		10113	
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	NONE	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	

SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 4

GROUNDEWATER DISCHARGE INFORMATION

CUTFALL NUMBER	019
A. IS THE DISCHARGE FROM THIS CUTFALL DIRECTED TO THE GROUND OR GROUNDEWATER? (IF NO, CONTINUE TO ITEM 5)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDEWATER RULES OF AUGUST 14, 1980 R. 23.220 (PAGE 55) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.	<input type="checkbox"/> YES <input type="checkbox"/> NO
C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 23.220 (10) (PAGE 55) OR FROM GROUNDEWATER PERMITTING REQUIREMENTS UNDER RULE R. 23.220 (5) (PAGE 52) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.	<input type="checkbox"/> YES <input type="checkbox"/> NO
D. ARE YOU REQUESTING A VARIANCE FROM RULE 23.225 (PAGE 5) (EXPLANATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDEWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 23.220 (PAGE 5) OF THE PART 22 RULES.	<input type="checkbox"/> YES <input type="checkbox"/> NO
E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN PUGHEN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME HAZARDOUS TO THE DESIGNATED USES OF THE GROUNDEWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDEWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.  THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.	<input type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT  <input type="checkbox"/> PRESENT, DATA PROVIDED IN ITEM 7

ITEM 5

EXPECTED WASTEWATER CHARACTERISTICS

WASTE CODE

- 1 MG/L
- 2 LB/L
- 3 COUNTS/100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS		ANALYSES	SAMPLE TYPE
	Avg	Max	Code	Code		
BOD <sub>5</sub> (FIVE DAY BIOLOGICAL OXYGEN DEMAND)	N.D.	N.D.	1	3	2	
COD (CHEMICAL OXYGEN DEMAND)	51	61	1	3	2	
TOC (TOTAL ORGANIC CARBON)	5.6	5.6	1	3	2	
AMMONIA NITROGEN (AS N)	0.08	0.08	1	3	2	
TOTAL SUSPENDED SOLIDS	7.3	7.3	1			
TOTAL PHOSPHORUS (AS P)			1			
TOTAL RESIDUAL CHLORINE			1			
DISSOLVED OXYGEN MIN			1			
PH	8.1	8.2	1	3	2	
TOTAL COLIFORM BACTERIA			3			
TEMPERATURE (SUMMER)			5			
TEMPERATURE (WINTER)			5			
B. OTHER WASTEWATER CHARACTERISTICS						
OILS & GREASES	N.D.	N.D.	1	3	1	
TOXIC ORGANICS		5.2	1	3	1	
			1			
			1			
			1			
			1			

SAMPLE TYPE  
1 GRAB  
2 24 HOUR COMPOSITE

\*REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

SEE INSTRUCTIONS  
ON REVERSE SIDE

SECTION II

PERMIT  
NUMBER

M10037028

**ITEM  
6**

PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
ONLY

OUTFALL NUMBER	0113
THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. <b>NOTE!</b> FOR USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.	
A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE IA PAGE 6.) (IF NO, GO TO E) (IF YES, GO TO B)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE IA PAGE 6. (CONTINUE WITH C.)	ISOLAMILIPER
C. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO E) (IF YES, GO TO B)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE IA PAGE 6.)  <b>NOTE!</b> FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE 11A PAGE 12). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE 11IA PAGE 12.  RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.  (CONTINUE WITH E-F BELOW)	<input type="checkbox"/> VOLATILE <input type="checkbox"/> BASIC/NEUTRAL <input type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE
E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE 11A AND 11A PAGES 12-13 IS DISCHARGED FROM ANY OUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED.  RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.	<input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED
F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE VA PAGE 14 ARE DISCHARGED FROM ANY OUTFALL, THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.  RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.	<input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED
G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) <b>AND:</b>  METHYL 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5 - TRICHLOROPHENYL PROPANOIC ACID (BILVAL, 2, 4, 5, TP); 2, 4, 5 - TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPROPIONATE (BENZ); O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (BENZ); 2, 4, 5-TRICHLOROPHENYL (TP); OR HEPTACHLOROPHOS (HCP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR  KNOWS OR HAS REASON TO BELIEVE THAT YIELD IS OR MAY BE PRESENT IN THEIR DISCHARGE, MUST REPORT QUALITATIVE DATA, GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TEBD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.	<input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED
H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.	<input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED
I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.	<input type="checkbox"/> NOT APPLICABLE <input checked="" type="checkbox"/> APPLICABLE/SEE ATTACHED
L. DO YOU DISCHARGE ANY OTHER TOXIC OR IRRITIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES IV PAGE 8 AND 11A THROUGH VA PAGES 14-15. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.	<input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED

ITEM 7

CRITICAL MATERIALS  
•  
TOXIC POLLUTANTS  
•  
HAZARDOUS SUBSTANCES IN DISCHARGE

OUTFALL # 1013

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

1. SECTION 11, ITEM 4-B. GROUNDWATER DISCHARGE INFORMATION (PAGE 35)

2. SECTION 11, ITEM 5. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 37)

3. B. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 38)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 6) NOT ADDRESSED IN SECTION 11 ITEM 5 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

NOT APPLICABLE

APPLICABLE (SEE BELOW)

UNIT CODE  
1 Mg/l  
2 UG/l  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
GRAB  
OR  
24 HOURS

MATERIAL 1	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	UNIT CODE	SAMPLE TYPE	# OF ANALYSES
	B. AVERAGE CONCENTRATION, SAMPLE TYPE: # OF ANALYSES			
	C. MAXIMUM CONCENTRATION AND PASS			
MATERIAL 2	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	UNIT CODE	SAMPLE TYPE	# OF ANALYSES
	B. AVERAGE CONCENTRATION, SAMPLE TYPE: # OF ANALYSES			
	C. MAXIMUM CONCENTRATION AND PASS			
MATERIAL 3	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	UNIT CODE	SAMPLE TYPE	# OF ANALYSES
	B. AVERAGE CONCENTRATION, SAMPLE TYPE: # OF ANALYSES			
	C. MAXIMUM CONCENTRATION AND PASS			
MATERIAL 4	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	UNIT CODE	SAMPLE TYPE	# OF ANALYSES
	B. AVERAGE CONCENTRATION, SAMPLE TYPE: # OF ANALYSES			
	C. MAXIMUM CONCENTRATION AND PASS			
MATERIAL 5	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	UNIT CODE	SAMPLE TYPE	# OF ANALYSES
	B. AVERAGE CONCENTRATION, SAMPLE TYPE: # OF ANALYSES			
	C. MAXIMUM CONCENTRATION AND PASS			
MATERIAL 6	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	UNIT CODE	SAMPLE TYPE	# OF ANALYSES
	B. AVERAGE CONCENTRATION, SAMPLE TYPE: # OF ANALYSES			
	C. MAXIMUM CONCENTRATION AND PASS			
MATERIAL 7	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	UNIT CODE	SAMPLE TYPE	# OF ANALYSES
	B. AVERAGE CONCENTRATION, SAMPLE TYPE: # OF ANALYSES			
	C. MAXIMUM CONCENTRATION AND PASS			

ADDITIONAL PAGES OF THIS FORM 7 OF 7 ARE AVAILABLE ON THE REVERSE SIDE OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REPORT TO BE SUBMITTED.

YES

NO



# ITEM 1

DISCHARGE LOCATION  
 SCHEDULE  
 FLOW RATE  
 WASTEWATER TYPE CODE  
 1 CONTACT COOLING  
 2 NONCONTACT COOLING  
 3 PROCESS  
 4 SANITARY  
 5 WASTEWATER  
 UNIT CODE  
 1 MG/L  
 2 GPD  
 3 GPM

WTFALL ROPER 0,0,2

A. LOCATION OF DISCHARGE L.N.W. & L.N.W. SECTION (211), TOWN L.161S., RANGE 110.E.

B. NAME OF RECEIVING WATER (RE. GROUNDWATER OR NAME OF SURFACE WATER) SWAN CREEK

C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E.)  YES  NO

D. IF YES, LIST DISCHARGE PERIODS

PERIOD	MO.	DAY	THROUGH	MO.	DAY

E. LAND APPLICATION RATE

IN./HR.	HR./DAY	IN./WK.
<u>0</u>	<u>0</u>	<u>0</u>

F. TYPE OF WASTEWATER DISCHARGE 15

G. DISCHARGE SCHEDULE (YEARLY AVERAGE)

HOURS/DAY	DAY/YEAR
<u>15</u>	<u>60</u>

H. DISCHARGE FLOW RATE

TOTAL YEARLY	DAILY MINIMUM	DAILY MAXIMUM	UNIT CODE
<u>5,610,000</u>	<u>0</u>	<u>5,610,000</u>	<u>3</u>

Based on 30" rain/yr  
 Based on 3" daily max. rainfall

I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT. AUTHORIZED 5,610,000 UNIT CODE 3

J. MAXIMUM DESIGN DISCHARGE FLOW RATE. DESIGN 5,610,000 UNIT CODE 3

# ITEM 2

WATER TREATMENT ADDITIVES  
 UNIT CODE  
 1 Mg/l  
 2 Mg/l

A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)  YES  NO

B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.

NAME	FUNCTION

C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.

ADDITIVE NAME	MAXIMUM	UNITS CODE	AVERAGE	UNITS CODE	MAXIMUM	UNITS CODE

E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?  YES  NO

F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?

ADDITIVE NAME	% REMOVAL	DISCHARGE FREQUENCY

G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC TOXICOLOGICAL OR AQUATIC TOXICOLOGICAL DATA OR REFERENCES WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.

SEE INSTRUCTIONS ON REVERSE SIDE

SECTION II

PERMIT NUMBER

M1003702

ITEM 3

PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

- UNITS CODE
- 1 POUNDS
  - 2 GALLONS
  - 3 CUBIC YARDS
  - 4 TONS
  - 5 MGY
  - 6 MGD
  - 7 GPD

- TIME
- 1 HOUR
  - 2 DAY
  - 3 WEEK
  - 4 MONTH
  - 5 YEAR

OUTFALL NUMBER		101012	
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	N O N E	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	

# ITEM 4

## GROUNDWATER DISCHARGE INFORMATION

OUTFALL NUMBER	01012
A. IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 31, 1987 R. 323.2207 (PAGE 5) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.	<input type="checkbox"/> YES <input type="checkbox"/> NO
C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 323.2207 (10) (PAGE 5) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 323.2208 (5) (PAGE 5) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.	<input type="checkbox"/> YES <input type="checkbox"/> NO
D. ARE YOU REQUESTING A VARIANCE FROM RULE 323.2205 (PAGE 5) (AGGRAVATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 323.2210 (PAGE 6) OF THE PART 22 RULES.	<input type="checkbox"/> YES <input type="checkbox"/> NO
E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 5) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME INJURIOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.  THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.	<input type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT  <input type="checkbox"/> PRESENT, DATA PROVIDED IN ITEM 7

# ITEM 5

## EXPECTED WASTEWATER CHARACTERISTICS

### UNITS CODE

- 1 MG/L
- 2 UG/L
- 3 COUNTS / 100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

### SAMPLE TYPE

- 1 GRAB
- 2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE	N	ANALYSES	SAMPLE TYPE CODE
	AVE	MAX				
*BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	0.10	0.10	1	1	1	1
*COD (CHEMICAL OXYGEN DEMAND)	1.00	1.00	1	1	1	1
*TOC (TOTAL ORGANIC CARBON)	1.00	1.00	1	1	1	1
*AMMONIA NITROGEN (AS N)	1.00	1.00	1	1	1	1
*TOTAL SUSPENDED SOLIDS	1.00	1.00	1	1	1	1
TOTAL PHOSPHORUS (AS P)	1.00	1.00	1	1	1	1
TOTAL RESIDUAL CHLORINE	1.00	1.00	1	1	1	1
DISSOLVED OXYGEN MIN	1.00	1.00	1	1	1	1
*PH	7.00	7.00	4	1	1	1
FECAL COLIFORM BACTERIA	1.00	1.00	3	1	1	1
*TEMPERATURE (SUMMER)	1.00	1.00	5	1	1	1
*TEMPERATURE (WINTER)	1.00	1.00	5	1	1	1
B. OTHER WASTEWATER CHARACTERISTICS						
OILS & GREASE	1.00	1.00	1	1	1	1
_____	1.00	1.00	1	1	1	1
_____	1.00	1.00	1	1	1	1
_____	1.00	1.00	1	1	1	1
_____	1.00	1.00	1	1	1	1
_____	1.00	1.00	1	1	1	1

\*REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

**ITEM  
6**

**PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
ONLY**

<p><b>CUTFALL NUMBER</b></p>	
<p>THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. <b>NOTE!</b> NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.</p>	
<p><b>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE IA PAGE 4)</b> (IF NO, GO TO E) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p><b>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE IA PAGE 4</b> (CONTINUE WITH C.)</p>	<p>S T E A M E L E C T R I C</p>
<p><b>C. DOES THIS CUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER?</b> (IF NO, GO TO E) (IF YES, GO TO D)</p>	<p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
<p><b>D. INDICATE WHICH GC/MS PRACTICES MUST BE TESTED FOR.</b> (REFER TO TABLE IA PAGE 4)</p> <p><b>NOTE!</b> FOR EACH GC/MS PRACTICE CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH PRACTICE MUST BE ANALYZED FOR (SEE TABLE IIA PAGE 12). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE IIA PAGE 13.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p> <p>(CONTINUE WITH 7-8 BELOW)</p>	<p><input type="checkbox"/> VOLATILE <input type="checkbox"/> BASE/NEUTRAL <input type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE</p>
<p><b>G. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, EDCS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE IIA AND IVA PAGES 12-13 IS DISCHARGED FROM ANY CUTFALL THE QUANTITATIVE DATA MUST BE PROVIDED.</b></p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p><b>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, EDCS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE VA PAGE 15 ARE DISCHARGED FROM ANY CUTFALL THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.</b></p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p><b>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) DO:</b></p> <p>NOTE: OR MANUFACTURES 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVER, 2, 4, 5, TP); 2, 4, 5-TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPHOSPHATE (EDS); 0, 0-DIMETHYL 0, 2, 4, 5-TRICHLOROPHENYL PHOSPHOROTHIOATE (EDM); 2, 4, 5-TRICHLOROPHENYL (TP); OR HEPTACHLOROPHOS (HCP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR</p> <p>EDCS OR HAS REASON TO BELIEVE THAT TEED IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA, GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TEED). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p><b>J. IF THE SURFACE WATER DISCHARGE APPLICANT EDCS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</b></p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p><b>K. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</b></p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p><b>L. DO YOU DISCHARGE ANY OTHER TOXIC OR HAZARDOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES IV PAGE 6 AND IIA THROUGH IVA PAGES 12-13. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</b></p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>

002

**ITEM 7**

CRITICAL MATERIALS  
OR  
TOXIC POLLUTANTS  
OR  
HAZARDOUS SUBSTANCES  
OR  
DISCHARGE

OUTFALL NUMBER \_\_\_\_\_

1. CHECK THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

1. SECTION II, ITEM 4-6. GROUNDWATER DISCHARGE INFORMATION (PAGE 55)

2. SECTION II, ITEM 6. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)

3. 8. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 55)

2. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 6) NOT ADDRESSED IN SECTION II ITEM 6 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

NOT APPLICABLE

APPLICABLE (SEE BELOW)

UNITS CODE  
1 MG/L  
2 UG/L  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 24 HOUR

CRITICAL MATERIAL 1	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE # OF ANALYSES	UNIT CODE _____	SAMPLE TYPE # OF ANALYSES _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE _____	UNIT CODE _____
CRITICAL MATERIAL 2	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE # OF ANALYSES	UNIT CODE _____	SAMPLE TYPE # OF ANALYSES _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE _____	UNIT CODE _____
CRITICAL MATERIAL 3	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE # OF ANALYSES	UNIT CODE _____	SAMPLE TYPE # OF ANALYSES _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE _____	UNIT CODE _____
CRITICAL MATERIAL 4	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE # OF ANALYSES	UNIT CODE _____	SAMPLE TYPE # OF ANALYSES _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE _____	UNIT CODE _____
CRITICAL MATERIAL 5	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE # OF ANALYSES	UNIT CODE _____	SAMPLE TYPE # OF ANALYSES _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE _____	UNIT CODE _____
CRITICAL MATERIAL 6	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE # OF ANALYSES	UNIT CODE _____	SAMPLE TYPE # OF ANALYSES _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE _____	UNIT CODE _____
CRITICAL MATERIAL 7	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE # OF ANALYSES	UNIT CODE _____	SAMPLE TYPE # OF ANALYSES _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE _____	UNIT CODE _____
CRITICAL MATERIAL 8	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE # OF ANALYSES	UNIT CODE _____	SAMPLE TYPE # OF ANALYSES _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE _____	UNIT CODE _____

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.

YES

NO

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 1

DISCHARGE LOCATION

SCHEDULE OF FLOW RATE

WASTEWATER TYPE CODE  
CONDUIT COOLING  
NONCONDUCT COOLING  
PROCESS  
SANITARY  
STORMWATER

UNIT CODE

- 1 MGD
- 2 MGD
- 3 QPD

CUTALL NUMBER

10,013

A. LOCATION OF DISCHARGE	NEW & UNRESIDENTIAL SECTION (2.1.1) FOR (1.6.1.8), NAME (1.1.0.1.2)			
B. NAME OF RECEIVING WATER (I.E. CONDUIT OR NAME OF SURFACE WATER)	LAKERSIDE VIA SUMMIT DR. (1.6.1.1.1)			
C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO D)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO		
D. IF YES, LIST DISCHARGE PERIODS	MO. / DAY	THROUGH	MO. / DAY	THROUGH
	11 11	11 11	11 11	11 11
	11 11	11 11	11 11	11 11
	11 11	11 11	11 11	11 11
E. LAD APPLICATION RATE	IN./DAY	OR / DAY	IN./DAY	<input checked="" type="checkbox"/>
	11 11	11 11	11 11	11 11
F. TYPE OF WASTEWATER DISCHARGE	WASTEWATER TYPE CODE			
	3	1	1	1
G. DISCHARGE SCHEDULE (YEARLY AVERAGE)	MO./DAY	(2.1.1)	DAY/YEAR	(1.6.1.5)
H. DISCHARGE FLOW RATE	TOTAL YEARLY	11 11 3 11 11 0	UNIT CODE	1
	DAILY MAXIMUM	11 11 11 11 11 11 0	UNIT CODE	3
	DAILY MINIMUM	11 3 6 0 0 0 0 0 0	UNIT CODE	1
I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.	AUTHORIZED	11 3 6 1 0 0 0 0 0 0	UNIT CODE	3
J. MAXIMUM DESIGN DISCHARGE FLOW RATE.	DESIGN	11 3 6 1 0 0 0 0 0 0	UNIT CODE	3

ITEM 2

WATER TREATMENT ADDITIVES

UNIT CODE

- 1 Mg/l
- 2 Gp/l

A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO			
B. NAME, FUNCTION, AND CHEMICAL CONSTITUTION OF THESE ADDITIVES.	NAME	FUNCTION			
	_____	_____			
	_____	_____			
	_____	_____			
C. NAME AND ADDRESS OF MANUFACTURER OF THESE ADDITIVES.					
D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.	PERMITS	UNITS CODE	AVERAGE	UNITS CODE	PERMITS UNITS CODE
ADDITIVE NAME	11 11	11	11 11 11 11	11	11 11 11 11
ADDITIVE NAME	11 11	11	11 11 11 11	11	11 11 11 11
ADDITIVE NAME	11 11	11	11 11 11 11	11	11 11 11 11
E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?	<input type="checkbox"/> YES	<input type="checkbox"/> NO			
F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?			REMOVAL EFFICIENCY		
ADDITIVE NAME			% REMOVAL	MO./DAY	DAY/YEAR
			11	11	11
ADDITIVE NAME			11	11	11
			11	11	11
ADDITIVE NAME			11	11	11
			11	11	11
G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC PARALLEL OR AQUATIC TOXICOLOGICAL DATA ON REFERENCED WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.					

# ITEM 3

PROCESS  
STREAMS  
CONTRIBUTING  
TO  
OUTFALL  
DISCHARGE

**UNITS CODE**

- 1 POUNDS
- 2 GALLONS
- 3 CUBIC YARDS
- 4 TONS
- 5 MGD
- 6 MGD
- 7 GPD

**TIME**

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

OUTFALL NUMBER		003	
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	IN OLINE	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	

SEE INSTRUCTIONS ON REVERSE SIDE

**ITEM 4**

**GROUNDWATER DISCHARGE INFORMATION**

OUTFALL NUMBER		0,0,3	
A. IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUP OF GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 24, 1980 R. 223.220 (PAGE 45) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 223.220 (10) (PAGE 45) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 223.220 (5) (PAGE 47) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
D. ARE YOU REQUESTING A VARIANCE FROM RULE 223.2205 (PAGE 45) (REGISTRATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 223.2210 (PAGE 47) OF THE PART 22 RULES.	<input type="checkbox"/> YES	<input type="checkbox"/> NO	
E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME HAZARDOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS MODULE.  THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.	<input type="checkbox"/> NOT APPLICABLE BELIEVED ABSENT  <input type="checkbox"/> PRESENT, DATA PROVIDED IN ITEM 7		

**ITEM 5**

**EXPECTED WASTEWATER CHARACTERISTICS**

**UNITS CODE**

- 1 MG/L
- 2 UG/L
- 3 COUNTS / 100 ml
- 4 G.M.
- 5 °F
- 6 LBS/DAY

**SAMPLE TYPE**

- 1 GRAB
- 2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTIC	CONCENTRATION		UNITS CODE	# ANALYSES	SAMPLE TYPE
	Avg	MAX			
°BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	_____	_____	1	1	1
°COD (CHEMICAL OXYGEN DEMAND)	_____	_____	1	1	1
°TOC (TOTAL ORGANIC CARBON)	_____	_____	1	1	1
°AMMONIA NITROGEN (AS N)	_____	_____	1	1	1
°TOTAL SUSPENDED SOLIDS	_____	_____	1	1	1
TOTAL PHOSPHORUS (AS P)	_____	_____	1	1	1
TOTAL RESIDUAL CHLORINE	_____	_____	1	1	1
DISSOLVED OXYGEN MIN	_____	_____	1	1	1
°PH _____		_____	1	1	1
FECAL COLIFORM BACTERIA	_____	_____	3	1	1
°TEMPERATURE (SUMMER)	_____	_____	5	1	1
°TEMPERATURE (WINTER)	_____	_____	5	1	1
B. OTHER WASTEWATER CHARACTERISTICS					
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1

REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.



**ITEM 6**  
**PRIORITY POLLUTANTS AND ADDITIONAL INFORMATION FOR SURFACE WATER DISCHARGE ONLY**

OUTFALL NUMBER	01013
<p>THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. NOTE! NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.</p>	
<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE IA PAGE 91) (IF NO, GO TO E) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE IA PAGE 91. (CONTINUE WITH C.)</p>	<p>L S I T I E I A I M I E I I C P P I J</p>
<p>C. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO E) (IF YES, GO TO D)</p>	<p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
<p>D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE IA PAGE 91)  NOTE! FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE IIA PAGE 92). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE IIA PAGE 93.  RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET. (CONTINUE WITH E-K BELOW)</p>	<p><input type="checkbox"/> VOLATILE <input type="checkbox"/> BASE/NEUTRAL <input type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE</p>
<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE IIA AND IVA PAGES 92-93 IS DISCHARGED FROM ANY OUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED.  RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE VA PAGE 95 ARE DISCHARGED FROM ANY OUTFALL THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.  RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) WHO:  USES OR MANUFACTURES 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, 7P); 2, 4, 5-TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPROPIONATE (ORON); O, O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (RONNEL); 2, 4, 5-TRICHLOROPHENYL (TCP); OR HEXACHLOROPHENE (HCP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR  KNOWS OR HAS REASON TO BELIEVE THAT TCDD IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA, GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>J. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES IV PAGE 9 AND IIA THROUGH IVA PAGES 92-95. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>

ITEM  
7

CRITICAL MATERIALS  
•  
TOXIC POLLUTANTS  
•  
HAZARDOUS SUBSTANCES  
OR  
DISCHARGE

RITIAL NUMBER

0, 0, 3

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION 11, ITEM 4-e. EXTRACTED DISCHARGE INFORMATION (PAGE 55)
- 2. SECTION 11, ITEM 6. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)
- 3. D. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 58)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 6) NOT ADDRESSED IN SECTION 11 ITEM 6 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

UNITS CODE  
1 MG/L  
2 UG/L  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 24 HRS. COMPOUND

CRITICAL MATERIAL 1	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____ UNIT CODE: _____	
CRITICAL MATERIAL 2	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____ UNIT CODE: _____	
CRITICAL MATERIAL 3	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____ UNIT CODE: _____	
CRITICAL MATERIAL 4	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____ UNIT CODE: _____	
CRITICAL MATERIAL 5	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____ UNIT CODE: _____	
CRITICAL MATERIAL 6	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____ UNIT CODE: _____	
CRITICAL MATERIAL 7	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____ UNIT CODE: _____	
CRITICAL MATERIAL 8	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____ SAMPLE TYPE: # OF ANALYSES: _____	
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____ UNIT CODE: _____	

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.

- YES
- NO

SEE INSTRUCTIONS ON REVERSE SIDE

10104

**ITEM 1**

DISCHARGE LOCATION  
 SCHEDULE  
 FLOW RATE  
 WASTEWATER TYPE CODE  
 1 CONTACT COOLING  
 2 NONCONTACT COOLING  
 3 PROCESS  
 4 SANITARY  
 5 STORMWATER  
 UNIT CODE  
 1 GPD  
 2 MGD  
 3 CPD

**A. LOCATION OF DISCHARGE** I 9 E 6 S E 1 6 SECTION 12 0 TOW 1 6 S RANGE 1 0 E

**B. NAME OF RECEIVING WATER (IE. BODY/WATER) OR NAME OF DRAINAGE BASIN** L ERIE VIA QUARRY LK

**C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E)**  YES  NO

**D. IF YES, LIST DISCHARGE PERIODS**

NO. / DAY	NO. / DAY

**E. LAND APPLICATION RATE**

IN./HR.	HR./DAY	IN./WK.

**F. TYPE OF WASTEWATER DISCHARGE** 1 5

**G. DISCHARGE SCHEDULE (YEARLY AVERAGE)**

UNITS/DAY	DAY/YEAR
1214	163

**H. DISCHARGE FLOW RATE**

TOTAL YEARLY	DAILY MINIMUM	DAILY MAXIMUM	UNIT CODE
58440	0	584400	3

**I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.**

AUTHORIZED	UNIT CODE
584400	3

**J. MAXIMUM DESIGN DISCHARGE FLOW RATE.**

DESIGN	UNIT CODE
584400	3

**ITEM 2**

WATER TREATMENT ADDITIVES  
 UNIT CODE  
 1 mg/l  
 2 ug/l

**A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)**  YES  NO

**B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.**

NAME	FUNCTION

**C. NAME AND ADDRESS OF MANUFACTURER OF THESE ADDITIVES.**

**D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.**

ADDITIVE NAME	MINIMUM	UNITS CODE	AVERAGE	UNITS CODE	MAXIMUM	UNITS CODE

**E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?**  YES  NO

**F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE PROBLEMS?**

ADDITIVE NAME	% REMOVAL	SURVEILLANCE FREQUENCY
		NO. / YEAR    DAYS / YEAR

**G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC APPROPRIATE OR ACUTE TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.**

**ITEM 3**

PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

UNITS CODE

- 1 POUNDS
- 2 GALLONS
- 3 GUSK
- 4 YDMS
- 5 MGV
- 6 MGD
- 7 GPD

TIME

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

OUTFALL NUMBER		L01014	
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	UNIDINIS	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
D. PROCESS PRODUCTION RATE		UNITS / TIME	

SEE INSTRUCTIONS ON REVERSE SIDE

**ITEM 4**

GROUNDWATER DISCHARGE INFORMATION

OUTFALL NUMBER	0, 0, 4	
A. IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 14, 1980 R. 223.220 (PAGE 65) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 223.221 (10) (PAGE 66) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 223.228 (5) (PAGE 67) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
D. ARE YOU REQUESTING A VARIANCE FROM RULE 223.225 (PAGE 65) (NONDEGRADATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 223.220 (PAGE 62) OF THE PART 22 RULES.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE ON MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME INJURIOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS FACILITY.	<input type="checkbox"/> NOT APPLICABLE/DELTIVED ABSENT	
THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.	<input type="checkbox"/> PRESENT, DATA PROVIDED IN ITEM 7	

**ITEM 5**

EXPECTED WASTEWATER CHARACTERISTICS

UNITS CODE  
 1 MG/L  
 2 UG/L  
 3 COUNTS/100 ML  
 4 S.U.  
 5 %  
 6 LBS/DAY

SAMPLE TYPE  
 1 GRAB  
 2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE	# ANALYSES	SAMPLE TYPE
	AVE	MAX			
DO (5 MIN BIOLOGICAL OXYGEN DEMAND)	NOT APPLICABLE		1	1	1
5-D (CHEMICAL OXYGEN DEMAND)	1	1	1	1	1
TOC (TOTAL ORGANIC CARBON)	1	1	1	1	1
AMMONIA NITROGEN (AS N)	1	1	1	1	1
TOTAL SUSPENDED SOLIDS	1	1	1	1	1
TOTAL PHOSPHORUS (AS P)	1	1	1	1	1
TOTAL RESIDUAL CHLORINE	1	1	1	1	1
DISSOLVED OXYGEN	1	1	1	1	1
PH	1	1	1	1	1
FECAL COLIFORM BACTERIA	1	1	3	1	1
TEMPERATURE (SUMMER)	1	1	5	1	1
TEMPERATURE (WINTER)	1	1	5	1	1
B. OTHER WASTEWATER CHARACTERISTICS					
COILS OILS OILS OILS OILS	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1
1	1	1	1	1	1

REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

**ITEM  
6**

PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
CASE

OUTFALL NUMBER	01014
<p>THE FOLLOWING REQUESTED INFORMATION SHALL BE PROVIDED BY ALL SURFACE WATER DISCHARGERS. NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.</p>	
<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE 1A PAGE 41) (IF NO, GO TO B) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE 1A PAGE 41. (CONTINUE WITH C.)</p>	<p>S. I. T. E. I. A. M. I. E. L. L. E. C. P. I. P. I.</p>
<p>C. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO D) (IF YES, GO TO D)</p>	<p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
<p>D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE 1A PAGE 41)</p> <p>NOTE! FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE 11A PAGE 42). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE 11A PAGE 43.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p> <p>(CONTINUE WITH D-R BELOW)</p>	<p><input type="checkbox"/> VOLATILE <input type="checkbox"/> BASIC/NEUTRAL <input type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE</p>
<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE 11A AND 11B PAGES 42-43 IS DISCHARGED FROM ANY OUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE 11A PAGE 42 ARE DISCHARGED FROM ANY OUTFALL, THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) DO:</p> <p>TEST OR MANUFACTURE 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5-TRICHLOROPHENYL PROPIONIC ACID (SILVER, 2, 4, 5, TP); 2, 4, 5-TRICHLOROPHENYL ETHYL 2-DICHLOROPROPIONATE (SILVER); D-DIMETHYL D-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOICATE (SILVER); 2, 4, 5-TRICHLOROPHENYL (TCP); OR KETAACHLOROPHENE (KCP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR</p> <p>KNOWS OR HAS REASON TO BELIEVE THAT TEST IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA, GENERATED WHEN USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>J. DO YOU DISCHARGE ANY OTHER TOXIC OR INHABITOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES IV PAGE 6 AND 11A THROUGH 11B PAGES 42-43? IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>

CUTFALL NUMBER

0,04

**ITEM 7**

CRITICAL MATERIALS  
•  
TOXIC POLLUTANTS  
•  
HAZARDOUS SUBSTANCES IN DISCHARGE

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION 11, ITEM 4-E. GROUNDWATER DISCHARGE INFORMATION (PAGE 55)
- 2. SECTION 11, ITEM 6. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)
- 3. B. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 39)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 6) NOT ADDRESSED IN SECTION 11 ITEM 6 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

UNIT CODE  
1 Mg/l  
2 UG/l  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 24 HR. COMP

MATERIAL 1	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	_____		UNIT CODE	_____					
MATERIAL 2	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	_____		UNIT CODE	_____					
MATERIAL 3	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	_____		UNIT CODE	_____					
MATERIAL 4	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	_____		UNIT CODE	_____					
MATERIAL 5	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	_____		UNIT CODE	_____					
MATERIAL 6	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	_____		UNIT CODE	_____					
MATERIAL 7	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	_____		UNIT CODE	_____					
MATERIAL 8	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	_____		UNIT CODE	_____					

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.  YES  NO

SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

<p><b>ITEM 1</b></p> <p>DISCHARGE LOCATION</p> <p>SCHEDULE</p> <p>FLOW RATE</p> <p>WASTEWATER TYPE CODE</p> <p>1 CONTACT COOLING</p> <p>2 NONCONTACT COOLING</p> <p>3 PROCESS</p> <p>4 SANITARY</p> <p>5 STORMWATER</p> <p>UNITS CODE</p> <p>1 MG/D</p> <p>2 MGD</p> <p>3 GPD</p>	<p>CUTAL NUMBER</p> <p>005</p>							
	<p>A. LOCATION OF DISCHARGE</p> <p>1 S.E. &amp; 1 S.E. &amp; SECTION 20, TOW 16 S, RANG 10 E</p>							
	<p>B. NAME OF RECEIVING WATER (I.E. GROUNDWATER OR NAME OF SURFACE WATER)</p> <p>QUARRY LAKE</p>							
	<p>C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E)</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>							
	<p>D. IF YES, LIST DISCHARGE PERIODS</p> <p>MO. / DAY</p> <p>TOUGH</p> <p>WORLD</p> <p>TOUGH</p>							
	<p>E. LAND APPLICATION RATE</p> <p>IN./HR. PER DAY</p> <p>IN./HR.</p>							
	<p>F. TYPE OF WASTEWATER DISCHARGE</p> <p>WASTEWATER TYPE CODE</p>							
	<p>G. DISCHARGE SCHEDULE (YEARLY AVERAGE)</p> <p>MO./DAY DAY/YEAR</p> <p>16 60</p>							
	<p>H. DISCHARGE FLOW RATE</p> <p>TOTAL YEARLY</p> <p>DAILY MINIMUM</p> <p>DAILY MAXIMUM</p>							
	<p>I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.</p> <p>AUTHORIZED</p>							
<p>J. MAXIMUM DESIGN DISCHARGE FLOW RATE.</p> <p>DESIGN</p>								
<p><b>ITEM 2</b></p> <p>WATER TREATMENT ADDITIVES</p> <p>UNITS CODE</p> <p>1 mg/l</p> <p>2 ug/l</p>	<p>A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>							
	<p>B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.</p>							
	<p>C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.</p>							
	<p>D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.</p> <p>ADDITIVE NAME</p> <p>ADDITIVE NAME</p> <p>ADDITIVE NAME</p>	<p>PERMITAL</p> <p>UNITS CODE</p> <p>AVERAGE</p> <p>UNITS CODE</p> <p>MAXIMUM</p> <p>UNITS CODE</p>						
	<p>E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?</p> <p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>							
	<p>F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?</p> <p>ADDITIVE NAME</p> <p>ADDITIVE NAME</p> <p>ADDITIVE NAME</p>	<p>REMOVAL EFFICIENCY</p> <p>PERCENT</p> <p>PER DAY</p> <p>PER YEAR</p>						
	<p>G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC PAPPIALIAN OR AQUATIC TOXICOLOGICAL DATA OR REFERENCES WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.</p>							



SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM	OUTFALL NUMBER		
	3	(005)	
PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE	Process 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	NONE
		B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY _____ DAYS/YEAR _____
		C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY _____ UNIT CODE _____ DAILY MINIMUM _____ DAILY MAXIMUM _____
		D. PROCESS PRODUCTION RATE	_____ UNITS/TIME _____
	Process 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	_____
		B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY _____ DAYS/YEAR _____
		C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY _____ UNIT CODE _____ DAILY MINIMUM _____ DAILY MAXIMUM _____
		D. PROCESS PRODUCTION RATE	_____ UNITS/TIME _____
	Process 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	_____
		B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY _____ DAYS/YEAR _____
		C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY _____ UNIT CODE _____ DAILY MINIMUM _____ DAILY MAXIMUM _____
		D. PROCESS PRODUCTION RATE	_____ UNITS/TIME _____
	Process 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	_____
		B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY _____ DAYS/YEAR _____
		C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY _____ UNIT CODE _____ DAILY MINIMUM _____ DAILY MAXIMUM _____
		D. PROCESS PRODUCTION RATE	_____ UNITS/TIME _____

- UNITS CODE
- 1 POUNDS
  - 2 GALLONS
  - 3 CUBIC YARDS
  - 4 TONS
  - 5 MOY
  - 6 MGD
  - 7 GPD

- TIME
- 1 HOUR
  - 2 DAY
  - 3 WEEK
  - 4 MONTH
  - 5 YEAR

SEE INSTRUCTIONS ON REVERSE SIDE

**ITEM 4**

**GROUNDWATER DISCHARGE INFORMATION**

OUTFALL NUMBER		005	
A.	IS THE DISCHARGE FROM THIS OUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
B.	HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 14, 1980 R. 323.2207 (PAGE 45) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
C.	ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 323.2207 (10) (PAGE 45) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 323.2208 (5) (PAGE 47) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
D.	ARE YOU REQUESTING A VARIANCE FROM RULE 323.2205 (PAGE 45) (NONDEGRADATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 323.2210 (PAGE 47) OF THE PART 22 RULES.	<input type="checkbox"/> YES	<input type="checkbox"/> NO
E.	LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME INJURIOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.  THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.	<input type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT	<input type="checkbox"/> PRESENT, DATA PROVIDED IN ITEM 7

**ITEM 5**

**EXPECTED WASTEWATER CHARACTERISTICS**

**UNITS CODE**

- 1 Mg/l
- 2 Ug/l
- 3 COUNTS / 100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE	# ANALYSES	SAMPLE CODE
	Avg	MAX			
°BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	_____	_____	1	1	1
°COD (CHEMICAL OXYGEN DEMAND)	_____	_____	1	1	1
°TOC (TOTAL ORGANIC CARBON)	_____	_____	1	1	1
°AMMONIA NITROGEN (AS N)	_____	_____	1	1	1
°TOTAL SUSPENDED SOLIDS	_____	_____	1	1	1
TOTAL PHOSPHORUS (AS P)	_____	_____	1	1	1
TOTAL RESIDUAL CHLORINE	_____	_____	1	1	1
DISSOLVED OXYGEN	_____	_____	1	1	1
°PH	_____	_____	6	1	1
PECAL COLIFORM BACTERIA	_____	_____	3	1	1
°TEMPERATURE (SUMMER)	_____	_____	5	1	1
°TEMPERATURE (WINTER)	_____	_____	5	1	1
<b>B. OTHER WASTEWATER CHARACTERISTICS</b>					
OILS GREASE	_____	_____	1	1	1
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1
_____	_____	_____	1	1	1

- SAMPLE TYPE**
- 1 GRAB
  - 2 24 HOUR COMPOSITE

\*REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

OUTFALL NUMBER

01015

THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. **NOTE!** NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.

<p><b>ITEM 6</b></p> <p>PRIORITY POLLUTANTS AND ADDITIONAL INFORMATION FOR SURFACE WATER DISCHARGE ONLY</p>	<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE 1A PAGE 41) (IF NO, GO TO E) (IF YES, GO TO E)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
	<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE 1A PAGE 41. (CONTINUE WITH C.)</p>	<p>S T E A M I E L E C P P</p>
	<p>C. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO E) (IF YES, GO TO D)</p>	<p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
	<p>D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE 1A PAGE 41)</p> <p><b>NOTE!</b> FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE 11A PAGE 42). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE 111A PAGE 43.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET. (CONTINUE WITH E-K BELOW)</p>	<p><input type="checkbox"/> VOLATILE</p> <p><input type="checkbox"/> BASE/NEUTRAL</p> <p><input type="checkbox"/> ACID</p> <p><input type="checkbox"/> PESTICIDE</p>
	<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE 11A AND 11A PAGES 42-43 IS DISCHARGED FROM ANY OUTFALL THE QUANTITATIVE DATA MUST BE PROVIDED.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT</p> <p><input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
	<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE 11A PAGE 43 ARE DISCHARGED FROM ANY OUTFALL THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT</p> <p><input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
	<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) <b>AND:</b></p> <p>USES OR MANUFACTURES 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVER, 2, 4, 5, TP); 2-(2, 4, 5-TRICHLOROPHENYL) ETHYL 2, 2-DICHLOROPROPIONATE (DIBON); O, O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (RONNEL); 2, 4, 5-TRICHLOROPHENYL (TCP); OR HEXACHLOROPHENE (HCP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR</p> <p>KNOWS OR HAS REASON TO BELIEVE THAT TCDD IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT</p> <p><input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
	<p>H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE</p> <p><input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
	<p>I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE</p> <p><input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
	<p>J. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES IV PAGE 6 AND 11A THROUGH 11A PAGES 42-43. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE</p> <p><input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>

SEE INSTRUCTIONS ON REVERSE SIDE

OUTFALL NUMBER

005

ITEM 7

CRITICAL MATERIALS  
• TOXIC POLLUTANTS  
• HAZARDOUS SUBSTANCES IN DISCHARGE

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION 11, ITEM 4-E. GROUNDWATER DISCHARGE INFORMATION (PAGE 35)
- 2. SECTION 11, ITEM 5. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 37)
- 3. B. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 38)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 6) NOT ADDRESSED IN SECTION 11 ITEM 5 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	UNIT CODE	SAMPLE TYPE # OF ANALYSES
MATERIAL 1	B. AVERAGE CONCENTRATION, SAMPLE TYPE, # OF ANALYSES		
	C. MAXIMUM CONCENTRATION AND MASS		
	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
MATERIAL 2	B. AVERAGE CONCENTRATION, SAMPLE TYPE, # OF ANALYSES		
	C. MAXIMUM CONCENTRATION AND MASS		
	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
MATERIAL 3	B. AVERAGE CONCENTRATION, SAMPLE TYPE, # OF ANALYSES		
	C. MAXIMUM CONCENTRATION AND MASS		
	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
MATERIAL 4	B. AVERAGE CONCENTRATION, SAMPLE TYPE, # OF ANALYSES		
	C. MAXIMUM CONCENTRATION AND MASS		
	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
MATERIAL 5	B. AVERAGE CONCENTRATION, SAMPLE TYPE, # OF ANALYSES		
	C. MAXIMUM CONCENTRATION AND MASS		
	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
MATERIAL 6	B. AVERAGE CONCENTRATION, SAMPLE TYPE, # OF ANALYSES		
	C. MAXIMUM CONCENTRATION AND MASS		
	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
MATERIAL 7	B. AVERAGE CONCENTRATION, SAMPLE TYPE, # OF ANALYSES		
	C. MAXIMUM CONCENTRATION AND MASS		
	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		
MATERIAL 8	B. AVERAGE CONCENTRATION, SAMPLE TYPE, # OF ANALYSES		
	C. MAXIMUM CONCENTRATION AND MASS		
	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT		

UNITS CODE  
1 MG/L  
2 UG/L  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 24 HR. COMPOUND

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.

- YES
- NO

# ITEM 1

DISCHARGE LOCATION

SCHEDULE

FLOW RATE

WASTEWATER TYPE CODE

- 1 CONTACT COOLING
- 2 NONCONTACT COOLING
- 3 PROCESS
- 4 SANITARY
- 5 STORMWATER

UNIT CODE

- 1 MG/D
- 2 MG/D
- 3 GPD

CUTFALL NUMBER	0106			
A. LOCATION OF DISCHARGE	N.W. & N.W. & SECTION (21), TOWN (16S), RANGE (10E)			
B. NAME OF RECEIVING WATER (IE. GROUNDWATER OR NAME OF SURFACE WATER)	LAKE ERIE			
C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E)	<input type="checkbox"/> YES		<input checked="" type="checkbox"/> NO	
D. IF YES, LIST DISCHARGE PERIODS	MO. / DAY		MO. / DAY	
	___	___	THROUGH	___
	___	___	THROUGH	___
	___	___	THROUGH	___
E. LAND APPLICATION RATE	IN./HR.	HR./DAY	IN./WK.	<input checked="" type="checkbox"/>
F. TYPE OF WASTEWATER DISCHARGE	WASTEWATER TYPE CODE BACKWASH			
G. DISCHARGE SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	___	DAY/YEAR	(365)
H. DISCHARGE FLOW RATE	TOTAL YEARLY		___	UNIT CODE 1
	DAILY MINIMUM		___	___
	DAILY MAXIMUM		___	UNIT CODE 2
I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.	AUTHORIZED		___	UNIT CODE 2
J. MAXIMUM DESIGN DISCHARGE FLOW RATE.	DESIGN		___	UNIT CODE 2

# ITEM 2

WATER TREATMENT ADDITIVES

- UNITS CODE
- 1 Mg/l
  - 2 U<sub>g</sub>/l

A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO															
B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.	<table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">NAME</th> <th style="width: 50%;">FUNCTION</th> </tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>				NAME	FUNCTION										
NAME	FUNCTION															
C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.																
D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.	MINIMUM	UNITS CODE	AVERAGE	UNITS CODE												
ADDITIVE NAME	___	___	___	___												
ADDITIVE NAME	___	___	___	___												
ADDITIVE NAME	___	___	___	___												
E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?	<input type="checkbox"/> YES		<input type="checkbox"/> NO													
F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?	% REMOVAL		DISCHARGE FREQUENCY													
ADDITIVE NAME	___	MR./DAY	___	DAYS/WK.												
ADDITIVE NAME	___	___	___	___												
ADDITIVE NAME	___	___	___	___												
G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC MAMMALIAN OR AQUATIC TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.																

**ITEM 3**

PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

**UNITS CODE**

- 1 POUNDS
- 2 GALLONS
- 3 CUBIC YARDS
- 4 TONS
- 5 MGV
- 6 MGD
- 7 SPD

**TIME**

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

OUTFALL NUMBER		0106	
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	N O N E	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	

**ITEM 4**

**GROUNDWATER  
DISCHARGE  
INFORMATION**

CUTFALL NUMBER	
A. IS THE DISCHARGE FROM THIS CUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 14, 1980 R. 323.220 (PAGE 45) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.	<input type="checkbox"/> YES <input type="checkbox"/> NO
C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 323.220 (10) (PAGE 45) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 323.220B (5) (PAGE 47) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.	<input type="checkbox"/> YES <input type="checkbox"/> NO
D. ARE YOU REQUESTING A VARIANCE FROM RULE 323.2205 (PAGE 45) (NONDEGRADATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 323.2210 (PAGE 47) OF THE PART 22 RULES.	<input type="checkbox"/> YES <input type="checkbox"/> NO
E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME INJURIOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.  THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.	<input type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT  <input type="checkbox"/> PRESENT, DATA PROVIDED IN ITEM 7

**ITEM 5**

**EXPECTED  
WASTEWATER  
CHARAC-  
TERISTICS**

**UNITS CODE**

- 1 MG/L
- 2 UG/L
- 3 COUNTS / 100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

**SAMPLE  
TYPE**

- 1 GRAB
- 2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE	# ANALYSES	SAMPLE TYPE
	Ave	MAX			
•BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	NOT APPLICABLE		1		
•COD (CHEMICAL OXYGEN DEMAND)	_____	_____	1		
•TOC (TOTAL ORGANIC CARBON)	_____	_____	1		
•AMMONIA NITROGEN (AS N)	_____	_____	1		
•TOTAL SUSPENDED SOLIDS	_____	_____	1		
TOTAL PHOSPHORUS (AS P)	_____	_____	1		
TOTAL RESIDUAL CHLORINE	_____	_____	1		
DISSOLVED OXYGEN MIN	_____	_____	1		
•PH _____	_____	_____	1		
•FECAL COLIFORM BACTERIA	_____	_____	3		
•TEMPERATURE (SUMMER)	_____	_____	5		
•TEMPERATURE (WINTER)	_____	_____	5		
B. OTHER WASTEWATER CHARACTERISTICS					
•OILS & GREASE	_____	_____	1		
_____	_____	_____	1		
_____	_____	_____	1		
_____	_____	_____	1		
_____	_____	_____	1		
_____	_____	_____	1		

\*REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

**ITEM 6**  
**PRIORITY POLLUTANTS AND ADDITIONAL INFORMATION FOR SURFACE WATER DISCHARGE ONLY**

<p>CUTFALL NUMBER</p>	<p>0,016</p>
<p>THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. NOTE! NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.</p>	
<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE 1A PAGE 41) (IF NO, GO TO E) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE 1A PAGE 41. (CONTINUE WITH C.)</p>	<p>STEAM ELECTRIC</p>
<p>C. DOES THIS CUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO E) (IF YES, GO TO D)</p>	<p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
<p>D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE 1A PAGE 41)</p> <p>NOTE! FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE 11A PAGE 42). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE 11A PAGE 43.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET. (CONTINUE WITH E-K BELOW)</p>	<p><input type="checkbox"/> VOLATILE <input type="checkbox"/> BASE/NEUTRAL <input type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE</p>
<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF THE TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE 11A AND 11A PAGES 42-43 IS DISCHARGED FROM ANY CUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE 11A PAGE 43 ARE DISCHARGED FROM ANY CUTFALL, THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) AND:</p> <p>2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5 - TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, TP); 2, 4, 5 - TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPROPIONATE (ERBON); O, O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (RONNEL); 2, 4, 5-TRICHLOROPHENYL (TCP); OR HEXACHLOROPHENE (HCP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR</p> <p>KNOWS OR HAS REASON TO BELIEVE THAT TCDD IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA, GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>L. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES IV PAGE 5 AND 11A THROUGH 11A PAGES 42-43. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>



**ITEM 7**

**CRITICAL MATERIALS  
•  
TOXIC POLLUTANTS  
•  
HAZARDOUS SUBSTANCES  
IN DISCHARGE**

OUTFALL NUMBER

906

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION 11, ITEM 4-E. GROUNDWATER DISCHARGE INFORMATION (PAGE 55)
- 2. SECTION 11, ITEM 6. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)
- 3. B. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 59)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 6) NOT ADDRESSED IN SECTION 11 ITEM 6 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

MATERIAL	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE	_____							
MATERIAL 2	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE	_____							
MATERIAL 3	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE	_____							
MATERIAL 4	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE	_____							
MATERIAL 5	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE	_____							
MATERIAL 6	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE	_____							
MATERIAL 7	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE	_____							
MATERIAL 8	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____									
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE	SAMPLE TYPE	# OF ANALYSES	_____						
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE	UNIT CODE	_____							

**UNITS CODE**

- 1 Mg/l
- 2 UG/l
- 3 LBS/DAY
- 4 KG/DAY

**SAMPLE TYPE**

- 1 GRAB
- 2 24 HR.COMP

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.

- YES
- NO

SEE INSTRUCTIONS ON REVERSE SIDE

<b>ITEM 1</b> DISCHARGE LOCATION SCHEDULE FLOW RATE WASTEWATER TYPE CODE 1 CONTACT COOLING 2 NONCONTACT COOLING 3 PROCESS 4 SANITARY 5 STORMWATER UNIT CODE 1 MG/L 2 MGD 3 GPD	OUTFALL NUMBER	007					
	A. LOCATION OF DISCHARGE	S.E. & S.E. SECTION 120, TOWN 16S, RANGE 110E					
	B. NAME OF RECEIVING WATER (I.E. GROUNDWATER OR NAME OF SURFACE WATER)	QUARRY LAKES					
	C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO E)	<input type="checkbox"/> YES			<input checked="" type="checkbox"/> NO		
	D. IF YES, LIST DISCHARGE PERIODS	NO. / DAY		THROUGH		NO. / DAY	
		____		____		____	
		____		____		____	
		____		____		____	
	E. LAND APPLICATION RATE	IN./HR.		NR./DAY		IN./WK.	
		____		____		____	
F. TYPE OF WASTEWATER DISCHARGE	5		WASTEWATER TYPE CODE				
G. DISCHARGE SCHEDULE (YEARLY AVERAGE)	HOURS/DAY		DAY/YEAR				
	16		160				
H. DISCHARGE FLOW RATE	TOTAL YEARLY		UNIT/ CODE				
	____		48		____		
	DAILY MINIMUM		____		____		
	____		0		____		
	DAILY MAXIMUM		____		____		
	____		8,000		3		
I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT.	AUTHORIZED		____		UNIT CODE		
	____		8,000		3		
J. MAXIMUM DESIGN DISCHARGE FLOW RATE.	DESIGN		____		UNIT CODE		
	____		8,000		3		
<b>ITEM 2</b> WATER TREATMENT ADDITIVES UNITS CODE 1 Mg/l 2 ug/l	A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3)	<input type="checkbox"/> YES			<input checked="" type="checkbox"/> NO		
	B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.	NAME		FUNCTION			
		_____		_____			
		_____		_____			
		_____		_____			
		_____		_____			
	C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.	_____					
		_____					
		_____					
	D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES.	MINIMUM	UNITS CODE	AVERAGE	UNITS CODE	MAXIMUM	UNITS CODE
ADDITIVE NAME	____	____	____	____	____	____	
ADDITIVE NAME	____	____	____	____	____	____	
ADDITIVE NAME	____	____	____	____	____	____	
E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES?	<input type="checkbox"/> YES			<input type="checkbox"/> NO			
F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY?	REMOVAL			DISCHARGE FREQUENCY			
	____			HRS./DAY			
ADDITIVE NAME	____			____			
ADDITIVE NAME	____			____			
ADDITIVE NAME	____			____			
G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC MAMMALIAN OR AQUATIC TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.	_____						

SECTION II

PERMIT NUMBER

M10037028

SEE INSTRUCTIONS ON REVERSE SIDE

ITEM 3

PROCESS STREAMS CONTRIBUTING TO OUTFALL DISCHARGE

- UNITS CODE
- 1 POUNDS
  - 2 GALLONS
  - 3 CUBIC YARDS
  - 4 TONS
  - 5 MGY
  - 6 MGD
  - 7 GPD

- TIME
- 1 HOUR
  - 2 DAY
  - 3 WEEK
  - 4 MONTH
  - 5 YEAR

OUTFALL NUMBER		100171	
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	NONE	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	

SEE INSTRUCTIONS ON REVERSE SIDE

**ITEM 4**

**GROUNDWATER DISCHARGE INFORMATION**

CUTFALL NUMBER

01017

A. IS THE DISCHARGE FROM THIS CUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)  YES  NO

B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 14, 1980 R. 323.2207 (PAGE 85) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.  YES  NO

C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 323.2207 (10) (PAGE 85) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 323.2208 (5) (PAGE 87) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.  YES  NO

D. ARE YOU REQUESTING A VARIANCE FROM RULE 323.2205 (PAGE 85) (NONDEGRADATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 323.2210 (PAGE 87) OF THE PART 22 RULES.  YES  NO

E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME INJURIOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.

NOT APPLICABLE/BELIEVED ABSENT

PRESENT, DATA PROVIDED IN ITEM 7

THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.

**ITEM 5**

**EXPECTED WASTEWATER CHARACTERISTICS**

**UNITS CODE**

- 1 MG/L
- 2 UG/L
- 3 COUNTS/100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

- SAMPLE TYPE**
- 1 GRAB
  - 2 24 HOUR COMPOSITE

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS	CODE	# ANALYSES	SAMPLE TYPE
	AVE	MAX				
•BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	N O T A P P L I C A B L E		1			
•COD (CHEMICAL OXYGEN DEMAND)			1			
•TOC (TOTAL ORGANIC CARBON)			1			
•AMMONIA NITROGEN (AS N)			1			
•TOTAL SUSPENDED SOLIDS			1			
TOTAL PHOSPHORUS (AS P)			1			
TOTAL RESIDUAL CHLORINE			1			
DISSOLVED OXYGEN			1			
•PH			1			
•FECAL COLIFORM BACTERIA			3			
•TEMPERATURE (SUMMER)			5			
•TEMPERATURE (WINTER)			5			
<b>B. OTHER WASTEWATER CHARACTERISTICS</b>						
•OILS & GREASE			1			
			1			
			1			
			1			
			1			
			1			

\*REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

**ITEM  
6**

PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
ONLY

<p>CUTFALL NUMBER</p>	<p>01017</p>
<p>THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. <b>NOTE!</b> NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.</p>	
<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE 1A PAGE 41) (IF NO, GO TO E) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE 1A PAGE 41. (CONTINUE WITH C.)</p>	<p>L S I T E I A   M I E I L E I C I P I P J</p>
<p>C. DOES THIS CUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO E) (IF YES, GO TO D)</p>	<p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
<p>D. INDICATE WHICH GC/MS FRACTIONS MUST BE TESTED FOR. (REFER TO TABLE 1A PAGE 41)</p> <p><b>NOTE!</b> FOR EACH GC/MS FRACTION CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH FRACTION MUST BE ANALYZED FOR (SEE TABLE 11A PAGE 42). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE 111A PAGE 43).</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p> <p>(CONTINUE WITH D-K BELOW)</p>	<p><input type="checkbox"/> VOLATILE <input type="checkbox"/> BASE/NEUTRAL <input type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE</p>
<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF THE TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE 11A AND 11A PAGES 42-43 IS DISCHARGED FROM ANY CUTFALL, THE QUANTITATIVE DATA MUST BE PROVIDED.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE 1A PAGE 43 ARE DISCHARGED FROM ANY CUTFALL THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) WHO:</p> <p>USES OR MANUFACTURES 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, TP); 2, 4, 5-TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPROPIONATE (ERBON); D, D-DIMETHYL D-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (RONNEL); 2, 4, 5-TRICHLOROPHENYL (TCP); OR HEXACHLOROPHENE (HCP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR</p> <p>KNOWS OR HAS REASON TO BELIEVE THAT TOCD IS OR MAY BE PRESENT IN THEIR DISCHARGE, MUST REPORT QUALITATIVE DATA GENERATED WHEN USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>J. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>K. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION, PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>L. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES 1A PAGE 4 AND 11A THROUGH 11A PAGES 42-43. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>

10,012

ITEM 7

CRITICAL MATERIALS  
•  
TOXIC POLLUTANTS  
•  
HAZARDOUS SUBSTANCES IN DISCHARGE

CUTFALL NUMBER

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION 11, ITEM 4-E. SEDIMENTED DISCHARGE INFORMATION (PAGE 35)
- 2. SECTION 11, ITEM 5. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 37)
- 3. B. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 38)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 5) NOT ADDRESSED IN SECTION 11 ITEM 5 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

UNITS CODE  
1 MG/L  
2 UG/L  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 IN FLOW

CRITICAL 1	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	_____	UNIT CODE SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND RAS	_____	UNIT CODE UNIT CODE
CRITICAL 2	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	_____	UNIT CODE SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND RAS	_____	UNIT CODE UNIT CODE
CRITICAL 3	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	_____	UNIT CODE SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND RAS	_____	UNIT CODE UNIT CODE
CRITICAL 4	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	_____	UNIT CODE SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND RAS	_____	UNIT CODE UNIT CODE
CRITICAL 5	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	_____	UNIT CODE SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND RAS	_____	UNIT CODE UNIT CODE
CRITICAL 6	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	_____	UNIT CODE SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND RAS	_____	UNIT CODE UNIT CODE
CRITICAL 7	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	_____	UNIT CODE SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND RAS	_____	UNIT CODE UNIT CODE
CRITICAL 8	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	_____	UNIT CODE SAMPLE TYPE # OF ANALYSES
	C. MAXIMUM CONCENTRATION AND RAS	_____	UNIT CODE UNIT CODE

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.  YES  NO

SEE INSTRUCTIONS ON REVERSE SIDE

<b>ITEM 1</b>  DISCHARGE LOCATION  SCHEDULE  FLOW RATE  WASTEWATER TYPE CODE 1 CONTACT COOLING 2 NONCONTACT COOLING 3 PROCESS 4 SANITARY 5 STORMWATER  UNIT CODE 1 MG/L 2 MGD 3 OPD	CUTPAL NUMBER  1008	A. LOCATION OF DISCHARGE 15.1W & 15.1E & SECTION 12.0, TON 11.1S, RANGE 11.0 E					
	B. NAME OF RECEIVING WATER (IE. GROUNDWATER OR NAME OF SURFACE WATER) 0.0.1.R.R.Y. L.A.K.E.S.						
	C. DO YOU DISCHARGE SEASONALLY? (IF NO, CONTINUE TO D) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO						
	D. IF YES, LIST DISCHARGE PERIODS NO. / DAY _____ _____ _____ _____ _____ _____						
	E. LAID APPLICATION RATE IN./HR. _____ HR./DAY _____ IN./WK. _____ <input checked="" type="checkbox"/>						
	F. TYPE OF WASTEWATER DISCHARGE 5 _____	WASTEWATER TYPE CODE					
	G. DISCHARGE SCHEDULE (YEARLY AVERAGE) _____ _____ _____	PERIOD/DAY _____ DAY/YEAR _____					
	H. DISCHARGE FLOW RATE TOTAL YEARLY _____ UNIT CODE _____ DAILY MINIMUM _____ 0 _____ 3 DAILY MAXIMUM _____ 8.0.0.0.0 _____ 3						
	I. THE MAXIMUM DISCHARGE FLOW RATE TO BE AUTHORIZED IN PERMIT. AUTHORIZED _____ UNIT CODE _____						
	J. MAXIMUM DESIGN DISCHARGE FLOW RATE. DESIGN _____ UNIT CODE _____						
<b>ITEM 2</b>  WATER TREATMENT ADDITIVES  UNIT CODE 1 Mg/l 2 Mg/l	A. DO YOU USE WATER TREATMENT ADDITIVES TO TREAT YOUR DISCHARGE? (IF NO, CONTINUE TO ITEM 3) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO						
	B. NAME, FUNCTION, AND CHEMICAL COMPOSITION OF THESE ADDITIVES.  _____ _____ _____ _____	NAME _____ FUNCTION _____					
	C. NAME AND ADDRESS OF MANUFACTURERS OF THESE ADDITIVES.  _____ _____						
	D. EXPECTED DISCHARGE CONCENTRATION OF ADDITIVES. ADDITIVE NAME _____ ADDITIVE NAME _____ ADDITIVE NAME _____	MINIMUM _____ _____ _____	UNITS CODE _____ _____ _____	AVERAGE _____ _____ _____	UNITS CODE _____ _____ _____	MAXIMUM _____ _____ _____	UNITS CODE _____ _____ _____
	E. DO YOU TREAT THE DISCHARGE TO REMOVE ADDITIVES? <input type="checkbox"/> YES <input type="checkbox"/> NO						
	F. WHAT IS THE REMOVAL EFFICIENCY AND DISCHARGE FREQUENCY? ADDITIVE NAME _____ ADDITIVE NAME _____ ADDITIVE NAME _____	\$ EFFICIENCY _____ _____ _____		DISCHARGE FREQUENCY NO. / DAY _____ DATE/YR. _____ _____ _____			
	G. AS AN ATTACHMENT TO THIS APPLICATION PROVIDE SPECIFIC APPALIAN OR AQUATIC TOXICOLOGICAL DATA OR REFERENCE WHICH ARE AVAILABLE AND INFORMATION ON THE RATE OF DEGRADATION OF THE PRODUCTS FOR EACH ADDITIVE.						

**ITEM  
3**

PROCESS  
STREAMS  
CONTRIBUTING  
TO  
OUTFALL  
DISCHARGE

- UNITS CODE**
- 1 POUNDS
  - 2 GALLONS
  - 3 CUBIC YARDS
  - 4 TONS
  - 5 MGY
  - 6 MGD
  - 7 GPD

**TIME**

- 1 HOUR
- 2 DAY
- 3 WEEK
- 4 MONTH
- 5 YEAR

OUTFALL NUMBER		100181	
PROCESS 1	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE	NONE	
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 2	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 3	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 4	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	
PROCESS 5	A. NAME OF PROCESS CONTRIBUTING TO THE DISCHARGE THROUGH THIS OUTFALL AND SIC CODE		
	B. PROCESS SCHEDULE (YEARLY AVERAGE)	HOURS/DAY	DAYS/YEAR
	C. PROCESS WASTEWATER FLOW RATE	TOTAL YEARLY	UNIT CODE
		DAILY MINIMUM	
DAILY MAXIMUM			
D. PROCESS PRODUCTION RATE		UNITS / TIME	



SEE INSTRUCTIONS ON REVERSE SIDE

**ITEM 4**

**GROUNDWATER DISCHARGE INFORMATION**

CUTFALL NUMBER

0,08

- A. IS THE DISCHARGE FROM THIS CUTFALL DIRECTED TO THE GROUND OR GROUNDWATERS? (IF NO, CONTINUE TO ITEM 5)  YES  NO
  - B. HAS A HYDROGEOLOGICAL STUDY OR ITS EQUIVALENT BEEN PERFORMED OR IS THERE SUFFICIENT CURRENT HYDROGEOLOGICAL INFORMATION AVAILABLE AS REQUIRED BY THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES OF AUGUST 14, 1980 R. 323.2207 (PAGE 45) FOR THIS EXISTING OR PROPOSED DISCHARGE? IF YES ATTACH A COPY OF THE REPORT.  YES  NO
  - C. ARE YOU REQUESTING AN EXEMPTION FROM SUBMITTING A HYDROGEOLOGICAL REPORT UNDER RULE R. 323.2202 (10) (PAGE 45) OR FROM GROUNDWATER MONITORING REQUIREMENTS UNDER RULE R. 323.2208 (5) (PAGE 47) OF THE PART 22 RULES. IF YES ATTACH DOCUMENTS AND EXPLANATION TO DEMONSTRATE THAT YOUR DISCHARGE WOULD QUALIFY FOR AN EXEMPTION.  YES  NO
  - D. ARE YOU REQUESTING A VARIANCE FROM RULE 323.2205 (PAGE 45) (NONDEGRADATION) OF THE WATER RESOURCES COMMISSION PART 22 GROUNDWATER RULES? IF YES, ATTACH SUCH DOCUMENTS AS NECESSARY TO DEMONSTRATE THE NEED FOR A VARIANCE IN TERMS OF THE CRITERIA SPECIFIED IN RULE 323.2210 (PAGE 47) OF THE PART 22 RULES.  YES  NO
  - E. LIST ALL CHEMICAL SUBSTANCES WHICH ARE IN MICHIGAN'S CRITICAL MATERIALS REGISTER TABLE IV (PAGE 6) AND/OR U.S. EPA'S PRIORITY POLLUTANT LIST TABLE V (PAGE 7) OR ANY OTHER SUBSTANCES WHICH ARE OR MAY BECOME INJURIOUS TO THE DESIGNATED USES OF THE GROUNDWATER OR TO THE PUBLIC HEALTH THAT ARE DISCHARGED OR EXPECTED TO BE DISCHARGED TO THE GROUNDWATER BY THIS FACILITY. ESTIMATE THE FINAL EFFLUENT CONCENTRATION AND RECORD ALL DATA IN ITEM 7 OF SECTION II IN THIS BOOKLET.  NOT APPLICABLE/BELIEVED ABSENT  
 PRESENT, DATA PROVIDED IN ITEM 7
- THE APPLICANT MAY BE REQUIRED TO DO ADDITIONAL WASTE ANALYSES.

**ITEM 5**

**EXPECTED WASTEWATER CHARACTERISTICS**

**UNITS CODE**

- 1 MG/L
- 2 LB/L
- 3 COUNTS / 100 ml
- 4 S.U.
- 5 °F
- 6 LBS/DAY

A. DISCHARGE CHARACTERISTICS	CONCENTRATION		UNITS CODE		ANALYSES	SAMPLE CODE
	Avg	MAX				
°BOD <sub>5</sub> (FIVE DAY BIOCHEMICAL OXYGEN DEMAND)	NOT	APPLICABLE				
°COD (CHEMICAL OXYGEN DEMAND)						
°TOC (TOTAL ORGANIC CARBON)						
°AMMONIA NITROGEN (AS N)						
°TOTAL SUSPENDED SOLIDS						
TOTAL PHOSPHORUS (AS P)						
TOTAL RESIDUAL CHLORINE						
DISSOLVED OXYGEN MIN						
°PH						
FECAL COLIFORM BACTERIA						
°TEMPERATURE (SUMMER)						
°TEMPERATURE (WINTER)						
<b>B. OTHER WASTEWATER CHARACTERISTICS</b>						
OILS GREASE						

**SAMPLE TYPE**

- 1 GRAB
- 2 24 HOUR COMPOSITE

\*REQUIRED INFORMATION FOR SURFACE WATER DISCHARGES.

**ITEM 6**

PRIORITY  
POLLUTANTS  
AND  
ADDITIONAL  
INFORMATION  
FOR  
SURFACE  
WATER  
DISCHARGE  
ONLY

OUTFALL NUMBER	L.O.D.B.
<p>THE FOLLOWING REQUESTED INFORMATION SHALL BE ADDRESSED BY ALL SURFACE WATER DISCHARGERS. NOTE! NEW USE DISCHARGERS SHALL PROVIDE EXPECTED VALUES FOR THE QUANTITATIVE AND QUALITATIVE INFORMATION REQUESTED BELOW.</p>	
<p>A. IS THIS FACILITY A PRIMARY INDUSTRY? (REFER TO TABLE IA PAGE 61) (IF NO, GO TO E) (IF YES, GO TO B)</p>	<p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p>
<p>B. INDICATE TYPE OF PRIMARY INDUSTRY AS LISTED IN TABLE IA PAGE 61. (CORRELATE WITH C.)</p>	<p>(S) (T) (E) (A) (M) (E) (L) (E) (C) (P) (I) (P)</p>
<p>C. DOES THIS OUTFALL DISCHARGE CONTAIN ANY PROCESS WASTEWATER? (IF NO, GO TO E) (IF YES, GO TO D)</p>	<p><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>
<p>D. INDICATE WHICH GC/MS PRACTICES MUST BE TESTED FOR. (REFER TO TABLE IA PAGE 61)</p> <p>NOTE! FOR EACH GC/MS PRACTICE CHECKED, EACH SPECIFIC ORGANIC TOXIC POLLUTANT WITHIN EACH PRACTICE MUST BE ANALYZED FOR (SEE TABLE IIA PAGE 62). IN ADDITION, ALL PRIMARY INDUSTRY APPLICANTS WITH A PROCESS WASTEWATER DISCHARGE MUST PROVIDE QUANTITATIVE DATA FOR EACH TOXIC POLLUTANT IN TABLE IIAA PAGE 63.</p> <p>RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET. (CORRELATE WITH C-E BELOW)</p>	<p><input type="checkbox"/> VOLATILE <input type="checkbox"/> BASIC/NEUTRAL <input type="checkbox"/> ACID <input type="checkbox"/> PESTICIDE</p>
<p>E. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE THAT ANY POLLUTANT LISTED IN TABLE IIA AND IVA PAGES 62-63 IS DISCHARGED FROM ANY OUTFALL THE QUANTITATIVE DATA MUST BE PROVIDED.  RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>F. IF ANY SURFACE WATER DISCHARGE APPLICANT (PRIMARY OR SECONDARY INDUSTRY), REGARDLESS OF TYPE OF DISCHARGE, KNOWS OR HAS REASON TO BELIEVE ANY POLLUTANTS LISTED IN TABLE VA PAGE 63 ARE DISCHARGED FROM ANY OUTFALL THE APPLICANT MUST DESCRIBE REASONS FOR THE POLLUTANT BEING PRESENT AND PROVIDE ANY AVAILABLE QUANTITATIVE DATA.  RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>G. ALL SURFACE WATER DISCHARGE APPLICANTS (PRIMARY AND SECONDARY INDUSTRIES) WHO:  USE OR MANUFACTURE 2, 4, 5 - TRICHLOROPHENYL ACETIC ACID (2, 4, 5-T); 2, 4, 5-TRICHLOROPHENYL PROPANOIC ACID (SILVEX, 2, 4, 5, 9P); 2, 4, 5-TRICHLOROPHENYL ETHYL 2, 2-DICHLOROPROPIONATE (DICON); O, O-DIMETHYL O-(2, 4, 5-TRICHLOROPHENYL) PHOSPHOROTHIOATE (ROPHOS); 2, 4, 5-TRICHLOROPHENYL (TCP); OR HEPTACHLOROPHENE (HCP); (ALL DATA FOR THE ABOVE MUST BE GENERATED USING STANDARD ANALYTICAL CALIBRATION PROCEDURES) OR  KNOWS OR HAS REASON TO BELIEVE THAT TOXIN IS OR MAY BE PRESENT IN THEIR DISCHARGE. MUST REPORT QUALITATIVE DATA GENERATED WHICH USED A SCREENING PROCEDURE NOT CALIBRATED WITH ANALYTICAL STANDARDS, FOR 2, 3, 7, 8 - TETRACHLORODIBENZO-P-DIOXIN (TCDD). RECORD ALL DATA ON FORMS PROVIDED (ITEM 7) IN THIS BOOKLET.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE/BELIEVED ABSENT <input type="checkbox"/> PRESENT/DATA IS ATTACHED</p>
<p>H. IF THE SURFACE WATER DISCHARGE APPLICANT KNOWS OR HAS REASON TO BELIEVE THAT BIOLOGICAL TOXICITY TESTS WERE MADE IN THE LAST THREE (3) YEARS ON ANY OF THE APPLICANT'S DISCHARGES OR ON A RECEIVING WATER IN RELATION TO A DISCHARGE, PROVIDE THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>I. IF A CONTRACT LABORATORY OR CONSULTING FIRM PERFORMED ANY OF THE ANALYSES REQUIRED BY THIS APPLICATION PROVIDE THE NAME AND ADDRESS OF EACH LABORATORY OR FIRM AND THE ANALYSES PERFORMED AS AN ATTACHMENT OF THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>
<p>J. DO YOU DISCHARGE ANY OTHER TOXIC OR INJURIOUS CHEMICAL SUBSTANCES NOT LISTED IN TABLES IV PAGE 6 AND IIA THROUGH IIA PAGES 62-63. IF YES, THEN IDENTIFY THE CHEMICAL SUBSTANCES AND ESTIMATE THE FINAL EFFLUENT CONCENTRATIONS. SUBMIT THIS INFORMATION AS AN ATTACHMENT TO THIS APPLICATION.</p>	<p><input checked="" type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> APPLICABLE/SEE ATTACHED</p>

SECTION II

PERMIT NUMBER

N10037028

SEE INSTRUCTIONS ON REVERSE SIDE

DUTY NUMBER

L O O L B J

ITEM 7

CRITICAL MATERIALS  
•  
TOXIC POLLUTANTS  
•  
HAZARDOUS SUBSTANCES IN DISCHARGE

A. USE THIS DATA SHEET TO RECORD INFORMATION AS REQUIRED IN: (CHECK APPROPRIATE BOX FOR WHICH INFORMATION THIS DATA SHEET REPRESENTS.)

- 1. SECTION II, ITEM 4-C. SEPARATED DISCHARGE INFORMATION (PAGE 55)
- 2. SECTION II, ITEM 6. PRIORITY POLLUTANTS IN SURFACE WATER DISCHARGE (PAGE 57)
- 3. B. BELOW: CRITICAL MATERIALS (TABLE IV) IN SURFACE WATER DISCHARGE (PAGE 59)

B. LIST ANY CRITICAL MATERIAL (TABLE IV PAGE 5) NOT ADDRESSED IN SECTION II ITEM 6 PRIORITY POLLUTANTS WHICH YOU KNOW OR HAVE REASON TO BELIEVE TO BE PRESENT IN THE DISCHARGE. SEE REVERSE SIDE OF THIS PAGE FOR FURTHER DIRECTIONS.

- NOT APPLICABLE
- APPLICABLE (SEE BELOW)

UNITS CODE  
1 MG/L  
2 UG/L  
3 LBS/DAY  
4 KG/DAY

SAMPLE TYPE  
1 GRAB  
2 24 HR. COMP

CRITICAL MATERIAL 1	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____	SAMPLE TYPE: # OF ANALYSES: _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
CRITICAL MATERIAL 2	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____	SAMPLE TYPE: # OF ANALYSES: _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
CRITICAL MATERIAL 3	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____	SAMPLE TYPE: # OF ANALYSES: _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
CRITICAL MATERIAL 4	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____	SAMPLE TYPE: # OF ANALYSES: _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
CRITICAL MATERIAL 5	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____	SAMPLE TYPE: # OF ANALYSES: _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
CRITICAL MATERIAL 6	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____	SAMPLE TYPE: # OF ANALYSES: _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
CRITICAL MATERIAL 7	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____	SAMPLE TYPE: # OF ANALYSES: _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____
CRITICAL MATERIAL 8	A. NAME OF CRITICAL MATERIAL OR PRIORITY POLLUTANT	_____	
	B. AVERAGE CONCENTRATION; SAMPLE TYPE; # OF ANALYSES	UNIT CODE: _____	SAMPLE TYPE: # OF ANALYSES: _____
	C. MAXIMUM CONCENTRATION AND MASS	UNIT CODE: _____	UNIT CODE: _____

ADDITIONAL PAGES OF THIS ITEM 7 ARE ATTACHED FOR THE REST OF THE CRITICAL MATERIALS AND/OR PRIORITY POLLUTANTS REQUIRED TO BE REPORTED.  YES  NO