

PART II

Section E. Activities Not Authorized by This Permit

(%_LoopByselect_mps-start_%)

1. Final Effluent Limitations, Monitoring Point (%_select_mps[monitor_pt_label]_%)

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittee is authorized to discharge a maximum of (%_mp_variables[flow]_%)
(%_mp_variables[flow_unit_cd]_%) of INSERTBOX TYPES OF WASTEWATER from (%_mp_variables[permit_mp_out_rw_info]_%) Such discharge shall be limited and monitored by the permittee as specified below.

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Frequency	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Flow	(report)	(report)	MGD	---	---	---	Daily	Report Total Daily Flow
Outfall Observation	(report)	---	yes/no	---	---	---	Daily	Visual
Total Mercury	(report)	---	lbs/day	(report)	---	ng/l	Monthly	Grab
[KEEP 12-MRA ONLY for facilities with a Final Effluent Mercury Limit, OTHERWISE DELETE]								
	12-Month Rolling Average			12-Month Rolling Average				
Total Mercury	INSERTBOX	---	lbs/day	INSERTBOX	---	ng/l	Monthly	Calculation
				Minimum Daily	Maximum Daily			
pH	---	---	---	6.5	9.0	S.U.	Daily	Grab

a. Narrative Standard

The receiving water shall contain no turbidity, color, oil films, floating solids, foams, settleable solids, INSERTBOX DELETE "SUSPENDED SOLIDS" IF TSS LIMITED ABOVE suspended solids, or deposits as a result of this discharge in unnatural quantities which are or may become injurious to any designated use.

b. Monitoring Location

Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken INSERTBOX LOCATION.

c. Outfall Observation

Any unusual characteristics of the discharge (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) shall be reported within 24 hours to the Department followed with a written report within five (5) days detailing the findings of the investigation and the steps taken to correct the condition.

d. Quarterly Monitoring KEEP ONLY IF QUARTERLY MONITORING REQUIRED ABOVE

Quarterly samples shall be taken during the months of January, April, July, and October. If the facility does not discharge during these months, the permittee shall sample the next discharge occurring during that quarter. If the facility does not discharge during a quarter, a sample is not required for that quarter. For any month in which a sample is not taken, the permittee shall enter "G" on the Discharge Monitoring Report.

PART II

Section E. Activities Not Authorized by This Permit

e. Water Treatment Additives

This permit does not authorize the discharge of water treatment additives without approval. Approval of water treatment additives is authorized under separate correspondence. Water treatment additives include any material that is added to water used at the facility or to a wastewater generated by the facility to condition or treat the water. In the event a permittee proposes to discharge water treatment additives, including an increased discharge concentration of a previously approved water treatment additive, the permittee shall submit a request for approval in accordance with Part I.A.INSERTBOX. of this permit.

(%_LoopByselect_mps-end_%)

f. Analytical Method(s) and Quantification Level(s) for INSERTBOX (EDIT AS APPROPRIATE)

The sampling procedures, preservation and handling, and analytical protocol for compliance monitoring for INSERTBOX shall be in accordance with EPA Method INSERTBOX. The quantification level for INSERTBOX shall be INSERTBOX unless a higher level is appropriate because of sample matrix interference. Justification for higher quantification levels shall be submitted to the Department within 30 days of such determination. Upon approval of the Department, the permittee may use alternate analytical methods (for parameters with methods specified in 40 CFR 136, the alternate methods are restricted to those listed in 40 CFR 136).

g. Monitoring Frequency Reduction for INSERTBOX LIST PARAMETERS

ONLY USE THIS CLAUSE WHEN APPROPRIATE TO REDUCE MONITORING FOR SPECIFIED PARAMETERS

After the submittal of INSERTBOX months of data, the permittee may request, in writing, Department approval of a reduction in monitoring frequency for INSERTBOX. INSERTBOX **IF DEFINABLE, PROVIDE REQUIREMENTS FOR A SUCCESSFUL DEMONSTRATION (I.E., STEADY STATE CONDITIONS OR VALUES \leq X) HERE.** This request shall contain an explanation as to why the reduced monitoring is appropriate. Upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency indicated in Part I.A.INSERTBOX of this permit. The monitoring frequency for INSERTBOX shall not be reduced to less than INSERTBOX. The Department may revoke the approval for reduced monitoring at any time upon notification to the permittee.

h. Drinking Fountain Water

This permit does not authorize any discharges of pollutants via drinking fountains other than excess potable drinking water. **(NOTE to permit writer: Changes to the plumbing code in 1978 required that drinking fountain water be discharged to sanitary sewer system or be properly treated prior to discharge to surface waters. We've generally required facilities to eliminate any drinking fountain water installed after 1978 unless they are properly treated, and review whether drinking fountains installed prior to 1978 can be removed).**

PART II

Section E. Activities Not Authorized by This Permit

i. Limits below the Quantification Level

The sampling procedures, preservation and handling, and analytical protocol for compliance monitoring for INSERTBOX shall be in accordance with EPA Method INSERTBOX. The quantification level shall be INSERTBOX unless a higher level is appropriate because of sample matrix interference. Justification for higher quantification levels shall be submitted to the Department within 30 days of such determination.

The water quality-based effluent limitations for INSERTBOX are less than the quantification level; therefore, control requirements are established consistent with R 323.1213. Any discharge of INSERTBOX at or above the quantification level specified in this permit is a specific violation of this permit. If an effluent sample is less than the quantification level, the permittee will be considered to be in compliance with the INSERTBOX final effluent limitations set forth in Part I.A.INSERTBOX for the period that the sample represents, provided that the permittee is also in full compliance with INSERTBOX **(KEEP OR DELETE: OTHER REQUIREMENTS SUCH AS CARBON TREATMENT SYSTEM OPERATION, INCLUDE A PERMIT REFERENCE)** and the Pollutant Minimization Program for INSERTBOX set forth in Part I.A.INSERTBOX. INSERTBOX **KEEP FOR PCBs ONLY** For the purpose of determining if an effluent sample is less than the quantification level, Total PCBs shall be defined as the sum of the individual analytical results for each of the aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 with any aroclor result less than the quantification level being treated as a zero. For the purpose of reporting on the Discharge Monitoring Reports, the permittee shall calculate concentration and loading levels of Total PCBs in this same manner; however, the result of any individual aroclor measurement less than the quantification level but greater than the detection level shall be reported on the Daily Discharge Monitoring Reports (see Part II.C.2.). **KEEP FOR ALL** This paragraph does not authorize the discharge of INSERTBOX at levels which are injurious to the designated uses of the waters of the state or which constitute a threat to the public health or welfare.

j. Final Effluent Limitation for Total Mercury **KEEP ONLY FOR FACILITIES WITH AN EXISTING MERCURY LIMIT OR RECOMMENDATION FOR A LIMIT**

The final limit for total mercury is the Discharge Specific Level Currently Achievable (LCA) based on a multiple discharger variance from the water quality-based effluent limit of 1.3 ng/l, pursuant to Rule 323.1103(9) of the Water Quality Standards. Compliance with the LCA shall be determined as a 12-month rolling average. The 12-month rolling average shall be determined by adding the present monthly average result to the preceding 11 monthly average results then dividing the sum by 12. **KEEP NEXT SENTENCE FOR FACILITIES THAT - DO NOT HAVE ENOUGH DATA TO CALCULATE THE 12-MONTH ROLLING AVERAGE - OTHERWISE DELETE:** For facilities without sufficient data needed to calculate the 12-Month Rolling Average, enter **"E"** on your monthly Discharge Monitoring Report (DMR) form until 12 months, or the equivalent of 12 months, of monthly monitoring data have been obtained, then begin reporting the calculated 12-Month Rolling Average as required. For facilities with quarterly monitoring requirements for total mercury, quarterly monitoring shall be equivalent to 3 months of monitoring in calculating the 12-month rolling average. Facilities that monitor more frequently than monthly for total mercury must determine the monthly average result, which is the sum of the results of all data obtained in a given month divided by the total number of samples taken, in order to calculate the 12-month rolling average. If the 12-month rolling average for any **CHOOSE ONE [month/quarter]** is less than or equal to the LCA, the permittee will be considered to be in compliance for total mercury for that **CHOOSE ONE [month/quarter]**, provided the permittee is also in full compliance with the Pollutant Minimization Program for Total Mercury, set forth in Part I.A.INSERTBOX.

KEEP ONLY FOR FACILITIES WITH A FINAL MERCURY LIMIT AND MONITORING MORE FREQUENT THAN QUARTERLY, OTHERWISE DELETE: After a minimum of 12 monthly data points have been collected, the permittee may request a reduction in the monitoring frequency for total mercury. This request shall contain an explanation as to why the reduced monitoring is appropriate and shall be submitted to the Department. Upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency for total mercury indicated in Part I.A.INSERTBOX of this permit. The Department may revoke the approval for reduced monitoring at any time upon notification to the permittee.

PART II

Section E. Activities Not Authorized by This Permit

k. Total Mercury Testing Requirements

The analytical protocol for total mercury shall be in accordance with EPA Method 1631, Revision E, "Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry." The quantification level for total mercury shall be 0.5 ng/l, unless a higher level is appropriate because of sample matrix interference. Justification for higher quantification levels shall be submitted to the Department within 30 days of such determination.

The use of clean technique sampling procedures is required unless the permittee can demonstrate to the Department that an alternative sampling procedure is representative of the discharge. Guidance for clean technique sampling is contained in: EPA Method 1669, *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels (Sampling Guidance)*, EPA-821-R96-001, July 1996. Information and data documenting the permittee's sampling and analytical protocols and data acceptability shall be submitted to the Department upon request.

KEEP THE NEXT 4 ¶s FOR MONITORING ONLY; DELETE IF A LIMIT IS INCLUDED IN PERMIT OR THE PERMITTEE IS ACHIEVING COMPLIANCE WITH THE WQS OF 1.3 ng/l (see below)

On or before INSERTBOX ONE YEAR PLUS SIXTY DAYS FROM PERMIT EFFECTIVE DATE, the permittee shall submit to the Department a report summarizing the mercury monitoring data. The Department will review the report using the reasonable potential process described in R 323.1211 of the Michigan Administrative Code to determine if there is a reasonable potential for the Water Quality Standard of 1.3 ng/l of total mercury to be exceeded in the effluent.

- 1) If it is determined that the effluent has a reasonable potential to exceed 1.3 ng/l of total mercury, upon written notification by the Department, the permittee shall develop a Pollutant Minimization Program for Total Mercury in accordance with the provisions of Part I.A.INSERTBOX. of this permit.
- 2) If it is determined that the effluent does not have a reasonable potential to exceed 1.3 ng/l of total mercury and upon receipt of written approval and consistent with such approval, the permittee may reduce the monitoring frequency for total mercury indicated in Part I.A.INSERTBOX. of this permit. The Department may revoke the approval for reduced monitoring at any time upon notification to the permittee.
- 3) If, at any time during the life of the permit, the final effluent concentration exceeds 5 ng/l, the permittee shall notify the Department with its next regular monthly monitoring report and shall develop and implement the Pollutant Minimization Program for Total mercury contained in Part 1.A.INSERTBOX of this permit.

KEEP THE FOLLOWING ONLY FOR FACILITIES THAT PREVIOUSLY HAD AN LCA FOR MERCURY BUT ARE NOW MEETING THE WQS OF 1.3 ng/l AND NO LONGER HAVE AN LCA or PMP.

The Department will review the mercury monitoring data using the reasonable potential process described in R 323.1211 of the Michigan Administrative Code to determine if there is a reasonable potential for the Water Quality Standard of 1.3 ng/l of total mercury to be exceeded in the effluent. If it is determined that the effluent has a reasonable potential to exceed 1.3 ng/l of total mercury, upon written notification by the Department, the permittee shall resume the Pollutant Minimization Program for Total Mercury in accordance with the provisions of Part I.A.4. of this permit. If, at any time during the life of the permit, the final effluent concentration exceeds 5 ng/l, the permittee shall notify the Department at the time of its next regular monthly monitoring report and shall resume the Pollutant Minimization Program for Total Mercury contained in Part 1.A.4. of this permit.

l. TTO Submittal Requirements

See Part I.A.**Error! Reference source not found..** for definition of TTO.

This is a guideline-based limitation and is not an authorization to discharge toxic organic compounds at levels which cause or may cause water quality violations. The discharge of toxic organic compounds at levels which cause or may cause water quality violations is prohibited.

PART II

Section E. Activities Not Authorized by This Permit

The permittee shall monitor TTO expected to be present in the discharge. The pollutants to be analyzed and a monitoring plan which includes duration of monitoring, sample location, and analytical test procedures, shall be submitted to the Department for approval on or before INSERTBOX, and implemented upon approval. The permittee may submit a request to the Department to use the following alternative option.

Alternative to TTO Monitoring: The permittee shall submit a Toxic Organic Pollutant Management Plan to the Department for approval. The plan shall be implemented upon approval. The plan shall specify the toxic organic chemicals used and sludges or process residuals generated; the method of disposal used, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organic pollutants do not spill or routinely leak into process wastewater, noncontact cooling water, groundwater, storm water, or other surface waters.

The permittee shall submit the following certification on the Discharge Monitoring Reports:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for Total Toxic Organics, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since the period covered by the last monthly monitoring report. I further certify that this facility has implemented the approved Toxic Organic Pollutant Management Plan since the period covered by the last Discharge Monitoring Report."

Any change in the Toxic Organic Pollutant Management Plan shall be submitted to the Department at least 14 days prior to its implementation by the permittee.

m.TTO Monitoring Requirements

See Part I.A.**Error! Reference source not found..** for definition of TTO.

This is a guideline-based limitation and is not an authorization to discharge toxic organic compounds at levels which cause or may cause water quality violations. The discharge of toxic organic compounds at levels which cause or may cause water quality violations is prohibited.

The permittee shall monitor TTO expected to be present in the discharge. The pollutants to be analyzed and a monitoring plan which includes duration of monitoring, sample location, and analytical test procedures, have been previously INSERTBOX submitted to **OR** approved by the Department. **(CHECK PREVIOUS PERMIT LANGUAGE, PREVIOUS PERMIT MAY NOT HAVE REQUIRED APPROVAL)**

n.TTO Management Requirements

See Part I.A.**Error! Reference source not found..** for definition of TTO.

This is a guideline-based limitation and is not an authorization to discharge toxic organic compounds at levels which cause or may cause water quality violations. The discharge of toxic organic compounds at levels which cause or may cause water quality violations is prohibited.

As an alternative to monitoring TTO, the permittee shall carry out the requirements of the Toxic Organic Pollutant Management Plan and certification statement as specified below.

Alternative to TTO Monitoring: A Toxic Organic Pollutant Management Plan has been previously INSERTBOX submitted to **OR** approved by the Department. **(CHECK PREVIOUS PERMIT LANGUAGE, PREVIOUS PERMIT MAY NOT HAVE REQUIRED APPROVAL)** The plan specifies the toxic organic chemicals used and sludges or process residuals generated; the method of disposal used, such as reclamation, contract hauling, or incineration; and procedures for ensuring that toxic organic pollutants do not spill or routinely leak into process wastewater, noncontact cooling water, groundwater, storm water, or other surface waters.

PART II

Section E. Activities Not Authorized by This Permit

The permittee shall submit the following certification on the Discharge Monitoring Reports:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the permit limitation for Total Toxic Organics, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since the period covered by the last monthly monitoring report. I further certify that this facility has implemented the approved Toxic Organic Pollutant Management Plan since the period covered by the last Discharge Monitoring Report."

Any change in the Toxic Organic Pollutant Management Plan shall be submitted to the Department at least 14 days prior to its implementation by the permittee.

o.TRO (Chlorine and Bromine) Requirements

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Frequency	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Total Residual Oxidant (TRO)								
During Chlorination - No Bromine Use								
Discharge Mode								
Continuous (greater than 160 min/day)	---	---	---	---	38	ug/l	Daily	Grab
Intermittent (less than/equal to 160 min/day)			---	---	200	ug/l	Daily	Grab
During Bromine Use - the discharge of bromine shall not exceed 120 min/day								
Intermittent (less than/equal to 120 min/day)			---	---	50	ug/l	Daily	Grab
TRO Discharge Time	---	---	---	---	(report)	min/day	Daily	Report Total Discharge Time

Total Residual Oxidant (TRO) shall be analyzed in accordance with Part II.B.2. of this permit.

TRO monitoring is only required during periods of chlorine or bromine use and subsequent discharge. Limitations for the intermittent discharge of chlorine apply only when the discharge of chlorine is less than or equal to 160 minutes per day, otherwise the limitations for continuous discharge of chlorine apply. Authorization to discharge bromine with or without chlorine is limited to 120 minutes per day at the limitations specified above with the additional requirement that any discharge of chlorine is restricted to a concurrent discharge with bromine (no additional discharge of chlorine is authorized for that day).

During the intermittent discharge of chlorine without bromine ("During Chlorination - No Bromine Use" limitations given above), the daily concentration value reported for TRO shall be the average of a minimum of three (3) equally spaced grab samples taken during a chlorine discharge event, with the additional limitation that no single sample may exceed 300 ug/l.

During the intermittent discharge of bromine with or without chlorine ("During Bromine Use" limitations given above), the daily concentration value reported for TRO shall be the maximum of at least three (3) equally spaced grab samples taken during a bromine discharge event (no single sample may exceed 50 ug/l).

The permittee shall enter "*G" on the Discharge Monitoring Report for the TRO discharge modes not being used.

PART II

Section E. Activities Not Authorized by This Permit

The permittee may use dehalogenation techniques to achieve the applicable TRO limitations, using sodium thiosulfate, sodium sulfite, sodium bisulfite, or other dehalogenating reagents approved by the Department. The quantity of reagent(s) used shall be limited to 1.5 times the stoichiometric amount of applied chlorine/bromine oxidant.

p.TRO (Bromine) Requirements

<u>Parameter</u>	<u>Maximum Limits for Quantity or Loading</u>			<u>Maximum Limits for Quality or Concentration</u>			<u>Monitoring Frequency</u>	<u>Sample Type</u>
	<u>Monthly</u>	<u>Daily</u>	<u>Units</u>	<u>Monthly</u>	<u>Daily</u>	<u>Units</u>		
Total Residual Oxidant (TRO) - the discharge of bromine shall not exceed 120 min/day	---	---	---	---	50	ug/l	Daily	Grab
TRO Discharge Time	---	---	---	---	(report)	min/day	Daily	Report Total Discharge Time

Total Residual Oxidant (TRO) shall be analyzed in accordance with Part II.B.2. of this permit.

TRO monitoring is only required during periods of bromine use and subsequent discharge.

The daily concentration value reported for TRO shall be the maximum of at least three (3) equally spaced grab samples taken during a bromine discharge event (no single sample may exceed 50 ug/l).

The permittee may use dehalogenation techniques to achieve the applicable TRO limitations, using sodium thiosulfate, sodium sulfite, sodium bisulfite, or other dehalogenating reagents approved by the Department. The quantity of reagent(s) used shall be limited to 1.5 times the stoichiometric amount of applied bromine oxidant.

q.Total Residual Chlorine Requirements **USE FOR INTERMITTENT/CONTINUOUS DISCHARGE**

<u>Parameter</u>	<u>Maximum Limits for Quantity or Loading</u>			<u>Maximum Limits for Quality or Concentration</u>			<u>Monitoring Frequency</u>	<u>Sample Type</u>
	<u>Monthly</u>	<u>Daily</u>	<u>Units</u>	<u>Monthly</u>	<u>Daily</u>	<u>Units</u>		
Total Residual Chlorine (TRC)								
<u>Discharge Mode</u>								
Continuous (greater than 160 min/day)	---	---	---	---	38	ug/l	Daily	Grab
Intermittent (less than/equal to 160 min/day)	---	---	---	---	200	ug/l	Daily	Grab
TRC Discharge Time	---	---	---	---	(report)	min/day	Daily	Report Total Discharge Time

Total Residual Chlorine (TRC) shall be analyzed in accordance with Part II.B.2. of this permit.

If chlorine discharge is intermittent, TRC monitoring is only required during periods of chlorine use and subsequent discharge. Limitations for the intermittent discharge of chlorine apply only when the discharge of chlorine is less than or equal to 160 minutes per day, otherwise the limitations for continuous discharge of chlorine apply.

During the intermittent discharge of chlorine, the daily concentration value reported for TRC shall be the average of a minimum of three (3) equally spaced grab samples taken during a chlorine discharge event, with the additional limitation that no single sample may exceed 300 ug/l.

The permittee shall enter "*G" on the Discharge Monitoring Report for the TRC discharge modes not being used.

PART II

Section E. Activities Not Authorized by This Permit

The permittee may use dechlorination techniques to achieve the applicable TRC limitations, using sodium thiosulfate, sodium sulfite, sodium bisulfite, or other dechlorinating reagents approved by the Department. The quantity of reagent(s) used shall be limited to 1.5 times the stoichiometric amount of applied chlorine.

r.Total Residual Chlorine Requirements **USE FOR CONTINUOUS DISCHARGE**

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Frequency	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Total Residual Chlorine	---	---	---	---	38	ug/l	Daily	Grab

Total Residual Chlorine (TRC) shall be analyzed in accordance with Part II.B.2. of this permit.

INSERTBOX DELETE IF USING CHLORINE EVERYDAY, OTHERWISE KEEP TRC monitoring is only required during periods of chlorine use and subsequent discharge.

The permittee may use dechlorination techniques to achieve the applicable TRC limitations, using sodium thiosulfate, sodium sulfite, sodium bisulfite, or other dechlorinating reagents approved by the Department. The quantity of reagent(s) used shall be limited to 1.5 times the stoichiometric amount of applied chlorine.

s.Zebra Mussel Control Requirements

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Frequency	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
GBBetzDearborn Spectrus CT-1300	---	---	---	---	---	??	ug/l During Discharge	Every 3 Hrs Grab
Nalco 9210	---	---	---	---	??	ug/l	Every 3 Hrs Grab During Discharge	
Nalco 9380	---	---	---	---	??	ug/l	Every 3 Hrs Grab During Discharge	
Nalco H-130M	---	---	---	---	??	ug/l	Every 3 Hrs Grab During Discharge	
EVAC	---	---	---	---	??	ug/l	Every 3 Hrs Grab During Discharge	
MEXEL	---	---	---	---	??	ug/l	Every 3 Hrs Grab During Discharge	

PART II

Section E. Activities Not Authorized by This Permit

The discharge of any combination of INSERTBOX **(LIST PRODUCTS)** is restricted to no more than six (6) times per year, for no more than 12 hours per discharge event. The permittee shall notify the Department at least one (1) week prior to each discharge.

The sampling procedures, preservation and handling, and analytical protocol for compliance monitoring of Spectrus CT-1300, Nalco 9210, Nalco 9380, Nalco H-130M, and MEXEL shall be in accordance with the Orange II/Methylene Chloride Method. The quantification levels shall not exceed INSERTBOX **(EDIT AS NECESSARY)** 50 µg/l for Spectrus CT-1300, 25 µg/l for Nalco 9210 and Nalco 9380, 20 µg/l for Nalco H-130M, and 290 µg/l for MEXEL, unless higher levels are appropriate because of sample matrix interference. The sampling procedure and handling, and analytical protocol for compliance monitoring of EVAC shall be in accordance with the Colorimetric Determination of Akyldimethylamine Method. The quantification level shall not exceed 10 ug/l for EVAC unless higher levels are appropriate because of sample matrix interference. Justification for higher quantification levels shall be submitted to the Department within 30 days of such determination. Other methods may be used upon approval of the Department. The highest value measured during the discharge event shall be reported. If the concentration in all samples is less than the quantification level, report zero on the discharge monitoring reports.

If the water quality-based effluent limits are less than the quantification levels using the specified analytical method, the permittee shall detoxify the treated effluent from monitoring point INSERTBOX using bentonite clay (which shall be added as a prewetted slurry to ensure proper mixing and to maximize detoxification potential) when appropriate. Additionally, the permittee shall conduct 48-hour acute toxicity testing using a *Daphnia* species of the monitoring point INSERTBOX effluent to verify that adequate detoxification of INSERTBOX **(LIST PRODUCTS)**. Testing shall be conducted on the discharge during the first treatment of each product. Testing shall be conducted using procedures contained in EPA/600/4-90/027F "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms." The results of the toxicity testing and discharge concentrations shall be submitted to the Department within 30 days following the first treatment of each product.

As an alternate to the requirements listed in the previous paragraph, the permittee may choose to demonstrate to the Department, through mass-balance calculations, that the final effluent limit of INSERTBOX **(EDIT AS NECESSARY)** 15 µg/l for Spectrus CT-1300, 50 µg/l for Nalco 9210, 6.3 µg/l for Nalco 9380, 3.1 µg/l (as DDAC) for Nalco H-130M, 92 µg/l for MEXEL, and 78 µg/l (as amine) for EVAC, will be met. Upon approval of the Department, detoxification with bentonite clay and toxicity testing will not be required.

Any discharge of INSERTBOX **(LIST PRODUCTS)** at or above the indicated quantification levels is a specific violation of this permit. If all the samples in any monthly reporting period are less than the above quantification levels and, if toxicity testing is required because of the lack of a successful demonstration, the results of the effluent toxicity testing do not exceed 1.0 acute toxic units (TU_A), the Department will consider the permittee to be in compliance with the final effluent limitations for this pollutant for that reporting period.

If the results of effluent toxicity testing for any product exceeds 1.0 TU_A, the permittee shall discontinue use of that product and notify the Department. The permittee will not be authorized to discharge that product until a demonstration is made to the Department that 1.0 TU_A will be consistently achieved, and the Department approves its use and discharge.

PART II

Section E. Activities Not Authorized by This Permit

t. Acute Toxicity Requirements **USE THIS CLAUSE FOR LONG-TERM ACUTE TESTING WITH NO LIMIT**

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Sample
	Monthly	Daily	Units	Monthly	Daily	Units	Frequency Type
Acute Toxicity	---	---	---	(report)	TU _A	INSERTBOX	24-Hr Composite

Test species shall include fathead minnow **and** either *Daphnia magna*, *Daphnia pulex* or *Ceriodaphnia dubia*. Testing and reporting procedures shall follow procedures contained in EPA/600/4-90/027F, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Edition)." **KEEP OR DELETE NEXT SENTENCE** When the effluent ammonia nitrogen (as N) concentration is greater than 5 mg/l, the pH of the toxicity test shall be maintained at the pH of the effluent at the time of sample collection. The acute toxic unit value (TU_A) for **each species tested** shall be reported on the Discharge Monitoring Report (DMR). For **each species not tested**, the permittee shall enter "***W**" on the DMR. Completed toxicity test reports for each test conducted shall be retained by the permittee in accordance with the requirements of Part II.B.5. of this permit and shall be available for review by the department upon request. **KEEP OR DELETE NEXT SENTENCE** After INSERTBOX **SPECIFY TIME INTERVAL** of toxicity testing and upon approval of the Department, the monitoring frequency may be reduced if the test data indicate that the toxicity requirements of Rule 323.1219 of the Michigan Administrative Code are consistently being met. After one (1) year of toxicity testing and upon approval of the Department, the acute toxicity tests may be performed using the more sensitive species identified in the acute toxicity database. If a more sensitive species cannot be identified, the acute toxicity tests shall be performed with both species. Toxicity test data acceptability is contingent upon the validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request.

The Department will review the toxicity data submitted by the permittee to determine if the acute toxicity requirements of Rule 323.1219 are being satisfied.

1) If the data indicate persistent exceedance of the acute toxicity requirements of Rule 323.1219, upon written notification by the Department, the following conditions apply. Within 90 days of the above notification, the permittee shall implement a Toxicity Reduction Evaluation (TRE). The objective of the TRE shall be to reduce the toxicity of the final effluent from monitoring point INSERTBOX to ≤ 1.0 acute toxic unit (TU_A) within three (3) years of notification. The following documents are available as guidance to reduce toxicity to acceptable levels: Phase I, EPA/600/6-91/003; Phase II, EPA/600/R-92/080; Phase III, EPA/600/R-92/081; and Publicly Owned Treatment Works (POTWs), EPA/833B-99/002. The TRE shall include INSERTBOX **SPECIFY FREQUENCY** acute toxicity tests of the discharge from monitoring point INSERTBOX for the duration of the TRE. The tests shall be conducted and reported as specified above. Upon approval of the Department, the acute toxicity tests may be performed using the more sensitive species identified in the acute toxicity database. If a more sensitive species cannot be identified, the acute toxicity tests shall be performed with both species. Annual progress reports shall be submitted to the Department within 30 days of the completion of the last test of each annual cycle.

2) This permit may be modified in accordance with applicable laws and rules to include additional whole effluent toxicity control requirements as necessary.

PART II

Section E. Activities Not Authorized by This Permit

u.Acute Toxicity Requirements **USE THIS CLAUSE FOR A DELAYED LIMIT WITH OPTION FOR TRE**

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Frequency	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Acute Toxicity								
Through INSERT DATE		---	---	---	---	---	(report)	TU _A Quarterly 24-Hr
Composite								
Beginning INSERT DATE	---	---	---	---	---	1.0	TU _A Monthly	24-Hr Composite

Test species shall include fathead minnow **and** either *Daphnia magna*, *Daphnia pulex* or *Ceriodaphnia dubia*. Testing and reporting procedures shall follow procedures contained in EPA/600/4-90/027F, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Edition)." **INSERTBOX KEEP OR DELETE NEXT SENTENCE** When the effluent ammonia nitrogen (as N) concentration is greater than 5 mg/l, the pH of the toxicity test shall be maintained at the pH of the effluent at the time of sample collection. The acute toxic unit (TU_A) value for **each species tested** shall be reported on the Discharge Monitoring Report (DMR). For **each species not tested**, the permittee shall enter "**W**" on the DMR. Completed toxicity test reports for each test conducted shall be retained by the permittee in accordance with the requirements of Part II.B.5. of this permit and shall be available for review by the department upon request. **KEEP OR DELETE NEXT SENTENCE** After **INSERTBOX SPECIFY TIME INTERVAL** of toxicity testing and upon approval of the Department, the monitoring frequency may be reduced if the test data indicate that the toxicity requirements of Rule 323.1219 of the Michigan Administrative Code are consistently being met. After one (1) year of toxicity testing and upon approval of the Department, the acute toxicity tests may be performed using the more sensitive species identified in the acute toxicity database. If a more sensitive species cannot be identified, the acute toxicity tests shall be performed with both species. Toxicity test data acceptability is contingent upon the validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request.

KEEP OR DELETE FOLLOWING PARAGRAPH

The permittee shall conduct a Toxicity Reduction Evaluation (TRE). The objective of the TRE shall be to reduce the toxicity of the final effluent from monitoring point **INSERTBOX** to ≤ 1.0 TU_A by **INSERTBOX DATE**. The following documents are available as guidance to reduce toxicity to acceptable levels: Phase I, EPA/600/6-91/003; Phase II, EPA/600/R-92/080; Phase III, EPA/600/R-92/081; and Publicly Owned Treatment Works (POTWs), EPA/833B-99/002. Annual progress reports shall be submitted to the Department within 30 days of the completion of the last test of each annual cycle.

1) When monitoring shows persistent exceedance of the 1.0 TU_A limit for effluent toxicity, the Department will determine whether the permittee must implement the toxicity control program requirements specified in 2) below.

2) Upon written notification by the Department, the following conditions apply. Within 90 days of the notification, the permittee shall implement a Toxicity Reduction Evaluation (TRE). The objective of the TRE shall be to reduce the toxicity of the final effluent from monitoring point **INSERTBOX** to ≤ 1.0 TU_A. The following documents are available as guidance to reduce toxicity to acceptable levels. Phase I, EPA/600/6-91/003; Phase II, EPA/600/R-92/080; Phase III, EPA/600/R-92/081; and POTWs, EPA/833B-99/002. Annual progress reports shall be submitted to the Department within 30 days of the completion of the last test of each annual cycle.

PART II

Section E. Activities Not Authorized by This Permit

v. Acute Toxicity Final Requirements **USE THIS CLAUSE FOR AN IMMEDIATE LIMIT**

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Sample Frequency Type	
	Monthly	Daily	Units	Monthly	Daily	Units		
Acute Toxicity	---	---	---	---		1.0	TU _A	INSERTBOX 24-Hr Composite

Test species shall include fathead minnow **and** either *Daphnia magna*, *Daphnia pulex* or *Ceriodaphnia dubia*. Testing and reporting procedures shall follow procedures contained in EPA/600/4-90/027F, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Edition)." INSERTBOX **KEEP OR DELETE NEXT SENTENCE** When the effluent ammonia nitrogen (as N) concentration is greater than 5 mg/l, the pH of the toxicity test shall be maintained at the pH of the effluent at the time of sample collection. The acute toxic unit (TU_A) value for **each species tested** shall be reported on the Discharge Monitoring Report (DMR). For **each species not tested**, the permittee shall enter "***W**" on the DMR. Completed toxicity test reports for each test conducted shall be retained by the permittee in accordance with the requirements of Part II.B.5. of this permit and shall be available for review by the department upon request. **KEEP OR DELETE NEXT SENTENCE** After INSERTBOX **SPECIFY TIME INTERVAL** of toxicity testing and upon approval of the Department, the monitoring frequency may be reduced if the test data indicate that the toxicity requirements of Rule 323.1219 of the Michigan Administrative Code are consistently being met. After one (1) year of toxicity testing and upon approval of the Department, the acute toxicity tests may be performed using the more sensitive species selected from the acute toxicity database. If a more sensitive species cannot be identified, the acute toxicity tests shall be performed with both species.

Toxicity test data acceptability is contingent upon the validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request.

1) When monitoring shows persistent exceedance of the 1.0 acute toxic unit (TU_A) limit for effluent toxicity, the Department will determine whether the permittee must implement the toxicity control program requirements specified in 2) below.

2) Upon written notification by the Department, the following conditions apply. Within 90 days of the notification, the permittee shall implement a Toxicity Reduction Evaluation (TRE). The objective of the TRE shall be to reduce the toxicity of the final effluent from monitoring point INSERTBOX to ≤ 1.0 TU_A. The following documents are available as guidance to reduce toxicity to acceptable levels. Phase I, EPA/600/6-91/003; Phase II, EPA/600/R-92/080; Phase III, EPA/600/R-92/081; and Publicly Owned Treatment Works (POTWs), EPA/833B-99/002. Annual progress reports shall be submitted to the Department within 30 days of the completion of the last test of each annual cycle.

PART II

Section E. Activities Not Authorized by This Permit

w. Whole Effluent Toxicity Requirements **USE THIS CLAUSE FOR LONG-TERM CHRONIC TESTING WITH NO LIMIT**

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Frequency	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Acute Toxicity	---	---	---	---	---	(report)	TU _A	INSERTBOX 24-Hr Composite
Chronic Toxicity	---	---	---	(report)	---	---	TU _C	INSERTBOX 24-Hr Composite

Test species shall include fathead minnow **and** *Ceriodaphnia dubia*. Testing and reporting procedures shall follow procedures contained in EPA/600/4-91/002, "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Fourth Edition)." **INSERTBOX KEEP OR DELETE NEXT SENTENCE** When the effluent ammonia nitrogen (as N) concentration is greater than 3 mg/l, the pH of the toxicity test shall be maintained at a pH of 8 Standard Units. The acute toxic unit (TU_A) value and chronic toxic unit (TU_C) value for **each species tested** shall be reported on the Discharge Monitoring Report (DMR). If multiple chronic toxicity tests for the same species are performed during the month, the maximum TU_A value and monthly average TU_C value for the species shall be reported. For **each species not tested**, the permittee shall enter "**W**" on the DMR. Completed toxicity test reports for each test conducted shall be retained by the permittee in accordance with the requirements of Part II.B.5. of this permit and shall be available for review by the department upon request. **KEEP OR DELETE NEXT SENTENCE** After **INSERTBOX SPECIFY TIME INTERVAL** of toxicity testing and upon approval of the Department, the monitoring frequency may be reduced if the test data indicate that the toxicity requirements of Rule 323.1219 of the Michigan Administrative Code are consistently being met. After one (1) year of toxicity testing and upon approval of the Department, the chronic toxicity tests may be performed using the more sensitive species identified in the chronic toxicity database. If a more sensitive species cannot be identified, the chronic toxicity tests shall be performed with both species. Toxicity test data acceptability is contingent upon the validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request.

The Department will review the toxicity data submitted by the permittee to determine if the acute and chronic toxicity requirements of Rule 323.1219 are being satisfied.

1) If the data indicate persistent exceedance of the acute or chronic toxicity requirements of Rule 323.1219, upon written notification by the Department, the following conditions apply. Within 90 days of the above notification, the permittee shall implement a Toxicity Reduction Evaluation (TRE). The objective of the TRE shall be to reduce the toxicity of the final effluent from monitoring point **INSERTBOX** to acceptable levels (≤ 1.0 TU_A and \leq **INSERTBOX** TU_C) within three (3) years of notification. The following documents are available as guidance to reduce toxicity to acceptable levels: Phase I, EPA/600/6-91/003 (acute) and EPA/600/6-91/005F (chronic); Phase II, EPA/600/R-92/080 (acute and chronic); Phase III, EPA/600/R-92/081 (acute and chronic); and Publicly Owned Treatment Works (POTWs), EPA/833B-99/002. The TRE shall include **INSERTBOX SPECIFY FREQUENCY** chronic toxicity tests of the discharge from monitoring point **INSERTBOX** for the duration of the TRE. The tests shall be conducted and reported as specified above. Upon approval of the Department, the chronic toxicity tests may be performed using the more sensitive species identified in the chronic toxicity database. If a more sensitive species cannot be identified, the chronic toxicity tests shall be performed with both species. Annual progress reports shall be submitted to the Department within 30 days of the completion of the last test of each annual cycle.

2) This permit may be modified in accordance with applicable laws and rules to include additional whole effluent toxicity control requirements as necessary.

x. Whole Effluent Toxicity Requirements **USE THIS CLAUSE FOR A DELAYED LIMIT WITH OPTION FOR TRE**

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Frequency	Sample Type
	Monthly	Daily	Units	Monthly	Daily	Units		
Acute Toxicity Through INSERT DATE	---	---	---	---	(report)	TU _A	Quarterly	24-Hr Composite

PART II

Section E. Activities Not Authorized by This Permit

Beginning INSERTBOX DATE	---	---	---	---	---	1.0	TU _A	Monthly	24-Hr Composite
Chronic Toxicity									
Through INSERTBOX DATE	---	---	---	(report)	---	---	TU _C	Quarterly	24-Hr Composite
Beginning INSERTBOX DATE	---	---	---	INSERTBOX	---	---	TU _C	Monthly	24-Hr Composite

Test species shall include fathead minnow **and** *Ceriodaphnia dubia*. Testing and reporting procedures shall follow procedures contained in EPA/600/4-91/002, "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Fourth Edition)." INSERTBOX **KEEP OR DELETE NEXT SENTENCE** When the effluent ammonia nitrogen (as N) concentration is greater than 3 mg/l, the pH of the toxicity test shall be maintained at a pH of 8 Standard Units. The acute toxic unit (TU_A) value and chronic toxic unit (TU_C) value for **each species tested** shall be reported on the Discharge Monitoring Report (DMR). If multiple chronic toxicity tests for the same species are performed during the month, the maximum TU_A value and monthly average TU_C value for the species shall be reported. For **each species not tested**, the permittee shall enter "***W**" on the DMR.

Completed toxicity test reports for each test conducted shall be retained by the permittee in accordance with the requirements of Part II.B.5. of this permit and shall be available for review by the department upon request. **KEEP OR DELETE NEXT SENTENCE** After INSERTBOX **SPECIFY TIME INTERVAL** of toxicity testing and upon approval of the Department, the monitoring frequency may be reduced if the test data indicate that the toxicity requirements of Rule 323.1219 of the Michigan Administrative Code are consistently being met. After one (1) year of toxicity testing and upon approval of the Department, the chronic toxicity tests may be performed using the more sensitive species identified in the chronic toxicity database. If a more sensitive species cannot be identified, the chronic toxicity tests shall be performed with both species. Toxicity test data acceptability is contingent upon the validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request.

KEEP OR DELETE FOLLOWING PARAGRAPH

The permittee shall conduct a Toxicity Reduction Evaluation (TRE). The objective of the TRE shall be to reduce the toxicity of the final effluent from monitoring point INSERTBOX to \leq INSERTBOX TU_C and \leq 1.0 TU_A by INSERTBOX **DATE**. The following documents are available as guidance to reduce toxicity to acceptable levels: Phase I, EPA/600/6-91/005F (chronic), EPA/600/6-91/003 (acute); Phase II, EPA/600/R-92/080 (acute and chronic); Phase III, EPA/600/R-92/081 (acute and chronic); and Publicly Owned Treatment Works (POTWs), EPA/833B-99/002. Annual progress reports shall be submitted to the Department within 30 days of the completion of the last test of each annual cycle.

1) When monitoring shows persistent exceedance of the INSERTBOX TU_C limit or the 1.0 TU_A limit for effluent toxicity, the Department will determine whether the permittee must implement the toxicity control program requirements specified in 2) below.

2) Upon written notification by the Department, the following conditions apply. Within 90 days of the notification, the permittee shall implement a Toxicity Reduction Evaluation (TRE). The objective of the TRE shall be to reduce the toxicity of the final effluent from monitoring point INSERTBOX to \leq INSERTBOX TU_C and \leq 1.0 TU_A. The following documents are available as guidance to reduce toxicity to acceptable levels. Phase I, EPA/600/6-91/005F (chronic), EPA/600/6-91/003 (acute); Phase II, EPA/600/R-92/080 (acute and chronic); Phase III, EPA/600/R-92/081 (acute and chronic); and POTWs, EPA/833B-99/002. Annual progress reports shall be submitted to the Department within 30 days of the completion of the last test of each annual cycle.

y. Whole Effluent Toxicity Final Requirements **USE THIS CLAUSE FOR IMMEDIATE LIMITS**

Parameter	Maximum Limits for Quantity or Loading			Maximum Limits for Quality or Concentration			Monitoring Sample	
	Monthly	Daily	Units	Monthly	Daily	Units	Frequency	Type
Acute Toxicity	---	---	---	---	---	1.0	TU _A	INSERTBOX 24-Hr Composite
Chronic Toxicity	---	---	---	INSERTBOX	---	---	TU _C	INSERTBOX 24-Hr Composite

PART II

Section E. Activities Not Authorized by This Permit

Test species shall include fathead minnow **and** *Ceriodaphnia dubia*. Testing and reporting procedures shall follow procedures contained in EPA/600/4-91/002, "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms (Fourth Edition)." INSERTBOX **KEEP OR DELETE NEXT SENTENCE** When the effluent ammonia nitrogen (as N) concentration is greater than 3 mg/l, the pH of the toxicity test shall be maintained at a pH of 8 Standard Units. The acute toxic unit (TU_A) value and chronic toxic unit (TU_C) value for **each species tested** shall be reported on the Discharge Monitoring Report (DMR). If multiple chronic toxicity tests for the same species are performed during the month, the maximum TU_A value and monthly average TU_C value for the species shall be reported. For **each species not tested**, the permittee shall enter "***W**" on the DMR. Completed toxicity test reports for each test conducted shall be retained by the permittee in accordance with the requirements of Part II.B.5. of this permit and shall be available for review by the department upon request. **KEEP OR DELETE NEXT SENTENCE** After INSERTBOX **SPECIFY TIME INTERVAL** of toxicity testing and upon approval of the Department, the monitoring frequency may be reduced if the test data indicate that the toxicity requirements of Rule 323.1219 of the Michigan Administrative Code are consistently being met. After one (1) year of toxicity testing and upon approval of the Department, the chronic toxicity tests may be performed using the more sensitive species identified in the chronic toxicity database. If a more sensitive species cannot be identified, the chronic toxicity tests shall be performed with both species. Toxicity test data acceptability is contingent upon validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request.

1) When monitoring shows persistent exceedance of the INSERTBOX TU_C limit or the 1.0 TU_A limit for effluent toxicity, the Department will determine whether the permittee must implement the toxicity control program requirements specified in 2) below.

2) Upon written notification by the Department, the following conditions apply. Within 90 days of the notification, the permittee shall implement a Toxicity Reduction Evaluation (TRE). The objective of the TRE shall be to reduce the toxicity of the final effluent from monitoring point INSERTBOX to ≤ INSERTBOX TU_C and ≤ 1.0 TU_A. The following documents are available as guidance to reduce toxicity to acceptable levels: Phase I, EPA/600/6-91/005F (chronic), EPA/600/6-91/003 (acute); Phase II, EPA/600/R-92/080 (acute and chronic); Phase III, EPA/600/R-92/081 (acute and chronic); and Publicly Owned Treatment Works (POTWs), EPA/833B-99/002. Annual reports shall be submitted to the Department within 30 days of the completion of the last test of each annual cycle.

z. Notification Level

If the concentration of INSERTBOX is greater than INSERTBOX **TRIGGER LEVEL**, the permittee shall commence an investigation to determine the source and the reason for the elevated concentration of INSERTBOX in the discharge. The investigation shall include weekly sampling for six (6) weeks. The permittee shall submit a report to the Department within three (3) months of the date the INSERTBOX was detected at a level greater than INSERTBOX. The report shall contain the six (6) weeks of monitoring data, the permittee's explanation as to the cause of the elevated level of INSERTBOX in the discharge, the likelihood of reoccurrence of the elevated level of INSERTBOX in the discharge, and the steps taken to remedy the situation including any modification to existing treatment and control.

aa. Lagoon Discharge - Allowed Discharge Period

The discharge is limited to the high flow periods in the spring and fall of each year during the periods from INSERTBOX **MONTH AND DAY** through INSERTBOX **MONTH AND DAY** and from INSERTBOX **MONTH AND DAY** through INSERTBOX **MONTH AND DAY**, with no discharge during periods of significant ice cover on the receiving stream unless authorized by the Department.

bb. Lagoon Discharge - Prior Notification Requirement

At least ten (10) days prior to the discharge to the surface waters of the state, the Department shall be notified of the intended discharge and the quality of the effluent. **INSERTBOX IF THE LAGOON IS A WWSL FOR TREATMENT OF SANITARY WASTEWATER, CONSIDER USING REQUIREMENTS FOR WWSL IN THE MUNICIPAL PERMIT LANGUAGE.**

PART II

Section E. Activities Not Authorized by This Permit

cc.Lagoon Discharge - Total Phosphorus Removal Requirement

Phosphorus removal will be required at such time as practical methods are developed for effective removal of phosphorus compounds in the lagoon treatment facility by modification of design features or by process control methods.

dd.Heat Addition Calculation

Heat addition shall be determined using the following calculation: (flow rate in MGD) **times** (the conversion factor of 8.34) **times** (discharge temperature in °F **minus** intake temperature in °F), **divided by** 24. The resulting value is the amount of heat addition in MBTU/hr.

ee.Power Plants - PCB Prohibition

The permittee shall not discharge any polychlorinated biphenyls to the receiving waters of the state of Michigan as a result of plant operations.