PERMIT NO. MI0001457

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the federal Clean Water Act (federal Water Pollution Control Act, 33 U.S.C., Section 1251 *et seq.*, as amended); Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA); Part 41, Sewerage Systems, of the NREPA; and Michigan Executive Order 2019-06,

Holtec Palisades LLC (formerly Entergy Services Inc)

1 Holtec Boulevard Camden, NJ 08104

is authorized to discharge from the Holtec Palisades LLC, Palisades Power Plant located at

27780 Blue Star Memorial Highway Covert, MI 49043

designated as Palisades Power Plant

to the receiving water named Lake Michigan in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit.

This permit is based on a complete application submitted on June 11, 2018, as amended through April 3, 2023.

This permit takes effect on August 1, 2025. The provisions of this permit are severable. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term in accordance with applicable laws and rules. On its effective date, this permit shall supersede National Pollutant Discharge Elimination System (NPDES) Permit No. MI0001457 (expiring October 1, 2018).

This permit and the authorization to discharge shall expire at midnight on **October 1, 2029**. In order to receive authorization to discharge beyond the date of expiration, the permittee shall submit an application that contains such information, forms, and fees as are required by the Michigan Department of Environment, Great Lakes, and Energy (Department) by <u>April 4, 2029</u>.

Issued: June 27, 2025.

Original signed by Christine Alexander Christine Alexander, Manager Permits Section Water Resources Division

PERMIT FEE REQUIREMENTS

In accordance with Section 324.3120 of the NREPA, the permittee shall make payment of an annual permit fee to the Department for each October 1 the permit is in effect regardless of occurrence of discharge. The permittee shall submit the fee in response to the Department's annual notice. Payment may be made electronically via the Department's MiEnviro Portal system. The MiEnviro Portal website is located at https://mienviro.michigan.gov/ncore/. Payment shall be submitted or postmarked by January 15 for notices mailed by December 1. Payment shall be submitted or postmarked no later than 45 days after receiving the notice for notices mailed after December 1.

Annual Permit Fee Classification: Industrial-Commercial Major

In accordance with Section 324.3118 of the NREPA, the permittee shall make payment of an annual storm water fee to the Department for each January 1 the permit is in effect regardless of occurrence of discharge. The permittee shall submit the fee in response to the Department's annual notice. Payment may be made electronically via the Department's MiEnviro Portal system. The MiEnviro Portal website is located at https://mienviro.michigan.gov/ncore/. Payment shall be submitted or postmarked by March 15 for notices mailed by February 1. Payment shall be submitted or postmarked no later than 45 days after receiving the notice for notices mailed after February 1.

CONTACT INFORMATION

Unless specified otherwise, all contact with the Department required by this permit shall be made to the Kalamazoo District Office of the Water Resources Division. The Kalamazoo District Office is located at 7953 Adobe Road, Kalamazoo, MI 49009-5025, Telephone: 269-567-3500, Fax: 269-567-9440.

CONTESTED CASE INFORMATION

Any person who is aggrieved by this permit may file a sworn petition with the Michigan Administrative Hearing System within the Michigan Department of Licensing and Regulatory Affairs, c/o the Michigan Department of Environment, Great Lakes, and Energy, setting forth the conditions of the permit which are being challenged and specifying the grounds for the challenge. The Department of Licensing and Regulatory Affairs may reject any petition filed more than 60 days after issuance as being untimely.

Section A. Limitations and Monitoring Requirements

1. Final Effluent Limitations, Monitoring Point 001A

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 135.2 MGD of noncontact cooling water, cooling tower blowdown, and miscellaneous treated low volume wastewater consisting of steam generator blowdown, demineralizer backwash and regeneration waste, reverse osmosis filter backwash, turbine sump drainage, floor drainage, laboratory waste, and radwaste wastewater, and an unspecified amount of storm water from Monitoring Point 001A through Outfall 001. Outfall 001 discharges to Lake Michigan at Latitude 42.32337, Longitude -86.31557. Such discharge shall be limited and monitored by the permittee as specified below.

		Maximum Limits for Quantity or Loading			um Limits f r Concentra	Monitoring	Sample	
Parameter	Monthly	onthly Daily Units		Monthly	Daily	Units	Frequency	<u>Type</u>
Flow	(report)	(report)	MGD				Daily	Report Total Daily Flow
Outfall Observation	(report)						5X Weekly	Visual
Temperature					(report)	°F	Daily	Continuous
Duration greater than 80 °F		(report)	min/day				Daily	Report Total Discharge Duration
Thermal Discharge		2,100	MBTU/hr				Daily	Calculation
Spectrus CT-1300					<25	ug/l	Every 3 Hrs During Discharge	Grab
Hydrazine								
Continuous Discharge (during power operation)								
Through July 31, 2026	(report)	(report)	lbs/day	(report)	(report)	ug/l	Weekly	Grab
Beginning August 1, 2026	(report)	(report)	lbs/day	<3.0	(report)	ug/l	Weekly	Grab
Intermittent Discharge (during outages)		(report)	lbs/day		32	ug/l	Daily	Grab
Hydrazine Discharge Duration		(report)	min/day				Daily	Report Total Discharge Duration
Chloride					(report)	mg/l	Monthly	Grab
Sulfate					(report)	mg/l	Monthly	Grab
Total Mercury								
Corrected	(report)	(report)	lbs/day	(report)	(report)	ng/l	Annually	Calculation
Uncorrected					(report)	ng/l	Annually	Grab
Field Duplicate					(report)	ng/l	Annually	Grab
Field Blank					(report)	ng/l	Annually	Preparation
Laboratory Method Blank					(report)	ng/l	Annually	Preparation
				Minimum <u>Daily</u>				
рН				6.5	9.0	S.U.	Daily	Grab

Section A. Limitations and Monitoring Requirements

		num Lim ity or Lo			Maximum Limits for Quality or Concentration			Sample
<u>Parameter</u>	Monthly	<u>Daily</u>	<u>Units</u>	<u>Monthly</u>	<u>Daily</u>	<u>Units</u>	Monitoring <u>Frequency</u>	<u>Type</u>
Total Residual Oxidant (TRO)								
During Chlorination – No Brom	ine Use							
Continuous (greater than 120 min/day)					38	ug/l	5X Weekly	Grab
Total Residual Chlorine (TRC) Discharge Duration		(report)	min/day				Daily	Report Total Discharge Duration
				Instantaneous <u>Maximum</u>				
Intermittent (less than/equal to 120 min/day)				300	200	ug/l	Daily	Grab
Total Residual Chlorine (TRC) Discharge Duration		120	min/day				Daily	Report Total Discharge Duration
During Bromination – Alone or	With Conc	urrent C	<u>hlorine</u>					
				Instantaneous Maximum				
Intermittent (less than/equal to 120 min/day)				50		ug/l	Daily	Grab
TRO Discharge Duration		120	min/day				Daily	Report Total Discharge Duration

a. Narrative Standard

The receiving water shall contain no turbidity, color, oil films, floating solids, foams, settleable solids, 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 prior to discharge to Lake Michigan.

c. Outfall Observation

Outfall observation shall be reported as "yes" or "no." The permittee shall report yes if this requirement was completed and no if this requirement was not completed. 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.

Section A. Limitations and Monitoring Requirements

d. Remote Monitoring

Outfall observation shall be conducted through on-site visual inspection by qualified personnel at the frequency specified in Part I.A.1. of this permit or the Department's approval for reduced monitoring. If qualified personnel will not be on site at this frequency and the treatment system has continuous remote monitoring equipment, the permittee may request, in writing, Department approval to conduct less frequent on-site visual inspections. Upon receipt of written approval and consistent with such approval, the permittee may monitor the treatment system remotely and shall conduct on-site visual inspections at the frequency specified in the Department's approval letter. At a minimum, on-site visual inspections shall be conducted two (2) days per month, approximately once every 14 days. If the remote monitoring equipment becomes temporarily inoperable, outfall observation shall be conducted through on-site visual inspection by qualified personnel at the frequency specified in either Part I.A.1. of this permit or the Department's approval for reduced monitoring, until the remote monitoring equipment is once again operable. The qualified personnel conducting the monitoring shall identify and record the dates and times of remote monitoring vs. on-site monitoring, and these records shall be retained in accordance with Part II.B.5. of this permit.

e. Annual Monitoring

Annual samples shall be taken during the month of July. If the facility does not discharge during these months, the permittee shall sample the next discharge occurring during the period in question. If the facility does not discharge during the period in question, a sample is not required for that period. For any month in which a sample is not taken, the permittee shall enter "*G" on the Discharge Monitoring Report (DMR). (For purposes of reporting on the Daily tab of the DMR, the permittee shall enter "*G" on the first day of the month only).

f. Monitoring for Hydrazine

The effluent limitations and monitoring requirements for Hydrazine apply only when water treatment additives containing Hydrazine are used and discharged. The permittee shall enter "*G" on the Discharge Monitoring Report for Hydrazine when water treatment additives containing Hydrazine are not used and discharged.

Compliance with the maximum monthly average limitation for the continuous discharge of Hydrazine apply during normal power operation at the plant when a lower concentration of Hydrazine is maintained in the system. Compliance with the maximum daily limitation for the intermittent discharge of Hydrazine apply during refueling and other forced outages when a higher concentration of Hydrazine is maintained in the system. The limitations for the intermittent discharge of Hydrazine shall only apply when the discharge duration is less than four consecutive days. If the duration of the discharge is expected to last four consecutive days or longer, the continuous effluent limitations shall apply. The permittee shall notify the Department verbally and via the MiEnviro Portal prior to each intermittent discharge of Hydrazine and shall record the start and end times of the intermittent discharge on the DMR. The permittee shall enter "*G" on the DMR for the Hydrazine discharge mode not being used. (For purposes of reporting on the Daily tab of the DMR, the permittee shall enter "*G" on the first day of the month only.) The Department may modify these requirements upon notification to the permittee.

g. Limits Below the Quantification Level – Hydrazine

The sampling procedures, preservation and handling, and analytical protocol for compliance monitoring for Hydrazine shall be in accordance with ASTM Method D1385-07. Upon approval from the Department, the permittee may use alternate analytical methods (for parameters with methods specified in 40 CFR, Part 136, the alternate methods are restricted to those listed in 40 CFR, Part 136). The maximum acceptable quantification level shall be 3.0 ug/l unless a higher level is appropriate because of sample matrix interference. Justification for a higher quantification level shall be submitted to the Department within 30 days of such determination.

Section A. Limitations and Monitoring Requirements

The maximum monthly average water quality-based effluent limitation for Hydrazine is 1.0 ug/l (1.2 lbs/day). This is less than the quantification level. Control requirements are therefore established consistent with R 323.1213. **Any discharge of Hydrazine during normal operations (not outages) at or above the quantification level is a specific violation of this permit**. If concentrations in all samples representing a monitoring period are less than the quantification level, the permittee will be considered to be in compliance with the permit for the monitoring period that the samples represent, provided that the permittee is also in full compliance with the Pollutant Minimization Program for Hydrazine set forth in Part I.A.8. of this permit. For the purpose of reporting on the Daily tab of the DMR, individual sample results less than the quantification level shall be reported as "<3.0." Calculations shall be made using the quantification level in place of any sample result less than the quantification shall be reported as less than the calculated value X (i.e., "<X"). For additional guidance including examples, see the document entitled "Reporting Results Below Quantification," available at: https://www.michigan.gov/-

/media/Project/Websites/egle/Documents/Programs/WRD/MiEnviro/results-belowquantification.pdf?rev=7e8dda12c72643d9a974c1d65e6a2957.

This permit condition does not authorize the discharge of this parameter at levels that are injurious to the designated uses of the waters of the state or that constitute a threat to the public health or welfare.

h. Total Mercury Testing and Additional Reporting 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," EPA-821-R-02-019, August 2002. 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 alternate sampling procedure is representative of the discharge. Guidance for clean technique sampling is set forth 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.

In order to demonstrate compliance with EPA Method 1631E and EPA Method 1669, the permittee shall report, on the daily sheet, the analytical results of all field blanks and field duplicates collected in conjunction with each sampling event, as well as laboratory method blanks when used for blank correction. The permittee shall collect at least one (1) field blank and at least one (1) field duplicate per sampling event. If more than 10 samples are collected during a sampling event, the permittee shall collect at least one (1) additional field blank AND field duplicate for every 10 samples collected. A "sampling event" shall be defined herein as all sampling for total mercury conducted on the same day, provided the same sampling team collected all samples using the same sampling methods, procedures, and equipment on that day. Only field blanks or laboratory method blanks may be used to calculate a concentration lower than the actual sample analytical results (i.e., a blank correction). Only one (1) blank (field OR laboratory method) may be used for blank correction of a given sample result, and only if the blank meets the quality control acceptance criteria. If blank correction is not performed on a given sample analytical result, the permittee shall report under "Total Mercury – Uncorrected." The field duplicate is for quality control purposes only; its analytical result shall not be averaged with the sample result.

Section A. Limitations and Monitoring Requirements

i. Total Residual Oxidant (Chlorine and Bromine) Requirements 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 120 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 Bromination – Alone or With Concurrent Chlorine" 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, where no single sample may exceed 50 ug/l.

During the continuous discharge of chlorine, a minimum of one (1) TRC sample shall be taken during the chlorine discharge event.

The permittee shall enter "*G" on the DMR for the TRO discharge modes not being used. (For purposes of reporting on the Daily tab of the DMR, the permittee shall enter "*G" on the first day of the month only).

Upon written approval from the Department, the permittee may use a dehalogenating reagent as a water treatment additive, including but not limited to sodium thiosulfate, sodium bisulfite, and sodium sulfite, to achieve applicable TRO limitations. Requests for such approval shall be submitted in accordance with Part I.A.4. of this permit. The quantity of the reagent(s) used shall be limited to 0.6 times the stoichiometric amount of TRO for sodium thiosulfate, 1.5 times the stoichiometric amount of TRO for sodium bisulfite, and 1.8 times the stoichiometric amount of TRO for sodium sulfite. For guidance and example calculations, see the Department's "Calculator to Determine Stoichiometric Amount of Dechlor Agent," available at https://www.michigan.gov/egle/about/organization/water-resources/npdes/compliance-assistance. TRO samples taken to determine the amount of each reagent to add shall be taken upstream of dehalogenation.

j. Zebra Mussel Control Requirements

The discharge of Spectrus CT-1300 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 for Spectrus CT-1300 shall be in accordance with the Orange II/Methylene Chloride Method. The quantification level shall not exceed 25 ug/l for Spectrus CT-1300, 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 from 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 "<25" on the DMR.

Section A. Limitations and Monitoring Requirements

The water quality-based effluent limitation for Spectrus CT-1300 is 15 ug/l daily maximum. If the water quality-based effluent limitation is less than the quantification level using the specified analytical method, the permittee shall detoxify the treated effluent from Monitoring Point 001A 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 on the Monitoring Point 001A effluent to verify that adequate detoxification of Spectrus CT-1300 is occurring. Testing shall be conducted on the discharge during the first treatment of the product. Testing shall be conducted using procedures contained in EPA-821-R-02-012, "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (Fifth Edition). The results of the toxicity testing and discharge concentrations shall be submitted to the Department within 30 days following the first treatment of the product.

As an alternative 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 15 ug/l for Spectrus CT-1300 will be met. Upon approval from the Department, detoxification with bentonite clay and toxicity testing will not be required.

Any discharge of Spectrus CT-1300 at or above the indicated quantification level is a specific violation of this permit. If all samples in any monthly reporting period are less than the above quantification level, 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, provided that the permittee is also in full compliance with the Pollutant Minimization Program for Spectrus CT-1300 set forth in Part I.A.9. of this permit.

If the results of effluent toxicity testing for the 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.

k. Thermal Discharge Calculation

Thermal discharge shall be determined using the following calculation: (flow rate in MGD) **multiplied by** (the conversion factor of 8.34) **multiplied by** (discharge temperature in °F **minus** intake temperature in °F), **divided by** 24. The resulting value is the amount of thermal discharge in MBTU/hr. Intake temperature monitoring requirements are specified in Part I.A.3. of this permit.

I. Temperature Reporting

The permittee shall monitor final effluent temperature daily on a continuous basis. Temperature readings shall be collected and recorded at a minimum every 10 minutes over the 24-hour period. In accordance with the definitions in Part II.A., the highest recorded temperature reading for the 24-hr period shall be reported as the daily concentration. The permittee shall also report the total number of minutes per day that the final effluent temperature is greater than 80 °F. For any day on which the final effluent temperature does not exceed 80 °F, the permittee shall enter a value of zero (0) under "Duration greater than 80 °F" on the Daily tab of the DMR. For any time interval during which the final effluent temperature exceeds 80 °F, the entire duration of the time interval shall be recorded as exceeding 80 °F.

m. Storm Water Pollution Prevention

In addition to the requirements set forth in Part I.A.1. above, the storm water drainage area associated with Monitoring Point 001A shall be managed in accordance with Part I.B. – Storm Water Pollution Prevention, with the exception that the outfall observation requirement shall take the place of the visual assessment requirement.

Section A. Limitations and Monitoring Requirements

2. Final Effluent Limitations, Monitoring Points 001D and 001F

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 0.1 MGD of treated low volume wastewater consisting of treated radwaste wastewater and steam generator blowdown from Monitoring Point 001D through Monitoring Point 001A and Outfall 001, and a maximum of 0.1 MGD of treated low volume wastewater consisting of treated turbine sump drainage including steam generator blowdown, demineralizer backwash and regeneration waste, reverse osmosis filter backwash, turbine sump drainage, floor drainage, and laboratory waste from Monitoring Point 001F through Monitoring Point 001A and Outfall 001. Outfall 001 discharges to Lake Michigan at Latitude 42.32337, Longitude -86.31557. Such discharge shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading			Maximum I <u>Quality or Co</u>		Monitoring	Sample	
<u>Parameter</u>	Monthly	<u>Daily</u>	<u>Units</u>	Monthly	<u>Daily</u>	Units	Frequency	Type
Monitoring Point 001D (treated radwaste wastewater):								
Flow	(report)	(report)	MGD				Daily	Report Total Daily Flow
Oil and Grease				15	20	mg/l	Annually	Grab
Total Suspended Solids				30	100	mg/l	Per Batch	Grab
Monitoring Point 001F (treated turbine sump drainage):								
Flow	(report)	(report)	MGD				Daily	Report Total Daily Flow
Oil and Grease				15	20	mg/l	2X Monthly	Grab
Total Suspended Solids				30	100	mg/l	Monthly	Grab

a. Monitoring Location

Samples, measurements, and observations taken in compliance with the monitoring requirements above shall be taken prior to discharge to the mixing basin or co-mingling with other wastewaters.

b. Annual Monitoring

Annual samples shall be taken during the month of July. If the facility does not discharge during these months, the permittee shall sample the next discharge occurring during the period in question. If the facility does not discharge during the period in question, a sample is not required for that period. For any month in which a sample is not taken, the permittee shall enter "*G" on the Discharge Monitoring Report (DMR). (For purposes of reporting on the Daily tab of the DMR, the permittee shall enter "*G" on the first day of the month only).

Section A. Limitations and Monitoring Requirements

3. Intake Structure Monitoring

The intake structure at the Palisades Power Plant withdraws water from Lake Michigan at Latitude 42.325833, Longitude -86.326944. The intake structure shall be limited and monitored by the permittee as specified below.

	Maximum Limits for Quantity or Loading				num Limits or Concent	Monitoring	Sample	
Parameter	Monthly	Daily	<u>Units</u>	Monthly	Daily	<u>Units</u>	Frequency	<u>.</u> Type
Intake Flow	(report)	(report)	MGD				Daily	Report Total Daily Flow
Intake Observation								
Daily Observation	(report)						Daily	Visual
Annual Inspection	(report)						See Part I.A.7.d.	Visual
Intake Temperature					(report)	°F	Daily	Continuous

a. Intake Screen Backwash

The permittee is authorized to discharge intake screen backwash from Outfall 001 to Lake Michigan. The permittee shall collect and remove debris accumulated on or around the intake trash racks and traveling screens and dispose of such material on land in an appropriate manner.

b. Intake Observation

Intake observation shall be reported as "yes" or "no." The permittee shall report yes if this requirement was completed and no if this requirement was not completed. For any month in which an observation is not completed, the permittee shall enter "*G" on the Discharge Monitoring Report (DMR). (For purposes of reporting on the Daily tab of the DMR, the permittee shall enter "*G" on the first day of the month only). Intake observation requirements are specified in Part I.A.7.d.

Section A. Limitations and Monitoring Requirements

4. Request for Approval to Use Water Treatment Additives

This permit does not authorize the use of any water treatment additive without prior written approval from the Department. Such approval is authorized under separate correspondence. Water treatment additives include any materials that are added to water used at the facility, or to wastewater generated by the facility, to condition or treat the water. Permittees proposing to use water treatment additives, including a proposed increased concentration of a previously approved water treatment additive, shall submit a request for approval via the Department's MiEnviro Portal system. The MiEnviro Portal website is located at https://mienviro.michigan.gov/ncore/. Instructions for submitting such a request may be obtained at http://www.michigan.gov/eglenpdes (near the center of that page, click on one or both links). Additional monitoring and reporting may be required as a condition of approval to use the water treatment additive.

A request for approval to use water treatment additives shall include all of the following usage and discharge information for each water treatment additive proposed to be used:

- a. The Safety Data Sheet (SDS);
- b. Ingredient information, including the name of each ingredient, CAS number for each ingredient, and fractional content by weight for each ingredient;
- c. The proposed water treatment additive discharge concentration with supporting calculations;
- d. The discharge frequency (i.e., number of hours per day and number of days per year);
- e. The outfall(s) and monitoring point(s) from which the water treatment additive is to be discharged;
- f. The type of removal treatment, if any, that the water treatment additive receives prior to discharge;
- g. The water treatment additive's function (i.e., microbiocide, flocculant, etc.);
- h. The SDS shall include a 48-hour LC50 or EC50 for a North American freshwater planktonic crustacean (either *Ceriodaphnia sp., Daphnia sp.,* or *Simocephalus sp.*). The results shall be based on the whole water treatment additive, shall not be results based on a similar product, and shall not be estimated; and
- i. The SDS shall include the results of a toxicity test for one (1) other North American freshwater aquatic species (other than a planktonic crustacean) that meets a minimum requirement of R 323.1057(2) of the Water Quality Standards. The results shall be based on the whole water treatment additive, shall not be results based on a similar product, and shall not be estimated. Examples of tests that would meet this requirement include a 96-hour LC50 for rainbow trout, bluegill, or fathead minnow.

Section A. Limitations and Monitoring Requirements

5. Quantification Levels and Analytical Methods for Selected Parameters

Maximum acceptable quantification levels (QLs) are specified for selected parameters in the table below. These QLs apply to all monitoring conducted in compliance with this permit if and when the parameters specified herein are monitored. This includes monitoring conducted to meet the requirements of the application for permit reissuance. These QLs shall be considered the maximum acceptable unless a higher QL is appropriate because of sample matrix interference. Justification for higher QLs shall be submitted to the Department within 30 days of such determination.

Where necessary to help ensure that the QLs specified herein can be achieved, analytical methods may also be specified in the table below. The sampling procedures, preservation and handling, and analytical protocol for all monitoring conducted in compliance with this permit, including monitoring conducted to meet the requirements of the application for permit reissuance, shall be in accordance with the methods specified herein, or in accordance with Part II.B.2. of this permit if no method is specified herein, unless an alternate method is approved by the Department. The Department will consider only alternate methods that meet the requirements of Part II.B.2. and whose QLs are at least as sensitive (i.e., low) as those specified herein. Not all QLs are expressed in the same units in the table below. The table is continued on the following page:

Parameter	QL	Units	Analytical Method
1,2-Diphenylhydrazine (as Azobenzene)	3.0	ug/l	
2,4,6-Trichlorophenol	5.0	ug/l	
2,4-Dinitrophenol	19	ug/l	
3,3'-Dichlorobenzidine	1.5	ug/l	
4-Chloro-3-Methylphenol	7.0	ug/l	
4,4'-DDD	0.01	ug/l	
4,4'-DDE	0.01	ug/l	
4,4'-DDT	0.01	ug/l	
Acrylonitrile	1.0	ug/l	
Aldrin	0.01	ug/l	
Alpha-Endosulfan	0.01	ug/l	
Alpha-Hexachlorocyclohexane	0.01	ug/l	
Antimony, Total	1	ug/l	
Arsenic, Total	1	ug/l	
Barium, Total	5	ug/l	
Benzidine	0.1	ug/l	
Beryllium, Total	1	ug/l	
Beta-Endosulfan	0.01	ug/l	
Beta-Hexachlorocyclohexane	0.01	ug/l	
Bis (2-Chloroethyl) Ether	1.0	ug/l	
Bis (2-Ethylhexyl) Phthalate	5.0	ug/l	
Boron, Total	20	ug/l	
Cadmium, Total	0.2	ug/l	
Chlordane	0.01	ug/l	
Chloride	1.0	mg/l	
Chromium, Hexavalent	5	ug/l	
Chromium, Total	10	ug/l	
Copper, Total	1	ug/l	
Cyanide, Available	2	ug/l	EPA Method OIA 1677
Cyanide, Total	5	ug/l	
Delta-Hexachlorocyclohexane	0.01	ug/l	

Section A. Limitations and Monitoring Requirements

Parameter	QL	Units	Analytical Method
Dieldrin	0.01	ug/l	
Di-N-Butyl Phthalate	9.0	ug/l	
Endosulfan Sulfate	0.01	ug/l	
Endrin	0.01	ug/l	
Endrin Aldehyde	0.01	ug/l	
Fluoranthene	1.0	ug/l	
Heptachlor	0.01	ug/l	
Heptachlor Epoxide	0.01	ug/l	
Hexachlorobenzene	0.01	ug/l	
Hexachlorobutadiene	0.01	ug/l	
Hexachlorocyclopentadiene	0.01	ug/l	
Hexachloroethane	5.0	ug/l	
Hydrazine	3.0	ug/l	ASTM Method D1385-07
Lead, Total	1	ug/l	
Lindane	0.01	ug/l	
Lithium, Total	10	ug/l	
Mercury, Total	0.5	ng/l	EPA Method 1631E
Nickel, Total	5	ug/l	
PCB-1016	0.1	ug/l	
PCB-1221	0.1	ug/l	
PCB-1232	0.1	ug/l	
PCB-1242	0.1	ug/l	
PCB-1248	0.1	ug/l	
PCB-1254	0.1	ug/l	
PCB-1260	0.1	ug/l	
Pentachlorophenol	1.8	ug/l	
Perfluorooctane sulfonate (PFOS)			While EPA Method 1633 remains draft, analyses may be performed using that method, or ASTM
Perfluorooctanoic acid (PFOA)	2.0	ng/l	D7979, or an isotope dilution method (sometimes referred to as Method 537
Perfluorobutanesulfonate (PFBS)			modified). Once EPA Method 1633 is promulgated, only that method may be used.
Phenanthrene	1.0	ug/l	
Phosphorus (as P), Total	10	ug/l	
Selenium, Total	1.0	ug/l	
Silver, Total	0.5	ug/l	
Strontium, Total	1000	ug/l	
Sulfate	2.0	mg/l	
Sulfide, Total	20	ug/l	
Thallium, Total	1	ug/l	
Toxaphene	0.1	ug/l	
Vinyl Chloride	1.0	ug/l	
Zinc, Total	10	ug/l	

Section A. Limitations and Monitoring Requirements

6. Cold Shock Prevention

Cessation of thermal inputs to the receiving water by this facility shall occur gradually so as to avoid fish mortality due to cold shock during the winter months (November through March). The basis for this requirement is to allow fish associated with the discharge-heated mixing zone for Outfall 001 to acclimate to the decreasing temperature.

7. Cooling Water Intake Structure

The federal rules promulgated by the United States Environmental Protection Agency in 40 CFR Parts 122 and 125 establish the requirements of section 316(b) of the Clean Water Act for Existing Facilities. The Existing Facilities Rule applies to facilities with point source discharges having one or more cooling water intake structure (CWIS) with a cumulative design intake flow of greater than 2 million gallons per day (MGD) and 25% or more of the water the facility withdraws on an actual intake flow (AIF) basis is used exclusively for cooling purposes. The cooling water intake structure operated by the permittee has been reviewed and determined to comply with the Best Technology Available (BTA) standards for impingement mortality and entrainment to minimize adverse environmental impact in accordance with 40 CFR Subpart J under Section 316(b) of the Clean Water Act.

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for previous or future fish losses. Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act in accordance with 40 CFR § 125.98(b)(1).

a. Best Technology Available Standards for Impingement Mortality

The chosen method of compliance for impingement is 40 CFR § 125.94(c)(1) – closed-cycle recirculating system. The permittee must operate a closed-cycle recirculating system defined in 40 CFR § 125.92(c) as a system designed and properly operated using minimized make-up and blowdown flows withdrawn from a water of the United States to support non-contact cooling uses within a facility, or a system designed to include certain impoundments.

b. Monitoring Requirements

The permittee shall monitor the actual intake flows at a minimum frequency of daily as specified in Part I.A.3. The monitoring must be representative of normal operating conditions, and must include measuring cooling water withdrawals, make-up water, and blow down volume. In lieu of daily intake flow monitoring, upon request, the Department may approve the permittee to monitor the cycles of concentration at a minimum frequency of daily.

c. Proper Operation and Maintenance

The permittee shall ensure that the CWIS associated equipment at this facility is properly operated and maintained at all times to minimize adverse environmental impact. This includes removal of floating debris and accumulated trash collected on the intake screens in a manner to prevent any pollutant from the material entering the waters of the State.

d. Equipment Inspection

The permittee shall conduct either visual inspections or employ remote monitoring devices during the period the cooling water intake structure is in operation to ensure the intakes are maintained and operated to function as designed. The Department may establish alternative procedures if this requirement is not feasible (e.g., an offshore intake, velocity cap, or during periods of inclement weather). The permittee shall also conduct visual inspections of the velocity cap and submerged portion of the intake structure utilizing commercial divers as described in the application at least once every three years, when the plant is not operating. After plant operations restart, the permittee shall conduct annual visual inspections of the velocity cap and submerged portion of the intake structure utilizing commercial divers as described portion of the intake structure utilizing conduct cap and submerged portions restart, the permittee shall conduct annual visual inspections of the velocity cap and submerged portion of the intake structure utilizing commercial divers and submerged portion of the intake structure utilizing conduct cap and submerged portion of the intake structure utilizing conduct annual visual inspections of the velocity cap and submerged portion of the intake structure utilizing commercial divers as described in the application.

Section A. Limitations and Monitoring Requirements

The permittee shall keep records of the daily visual inspections, including any observations made during the visual inspection, and make available upon request by the Department. If weather or other unsafe or hazardous conditions exist, if raising the screen to conduct the inspection may cause damage to the screen or other equipment, the permittee shall document the conditions that preclude any inspection from taking place. Any unusual characteristics of the intake that result in a violation of the BTA Standards for Impingement Mortality shall be verbally 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.

e. Changes to the Equipment

The permittee shall ensure that advance notice is given to the Department of any planned changes in the location, design, operation, or capacity of the CWIS associated equipment specific to the operations at this facility. If the Department determines that additional technologies or control measures are necessary to reduce the impact of impingement or entrainment, the Department may revise the requirements of this condition or permit.

- f. Annual Certification Statement and Report On or before <u>February 1 of each year</u>, the permittee shall submit an annual certification and report for the previous calendar year to the Department, signed by the responsible corporate officer as defined in 40 CFR 122.22 in accordance with 40 CFR 125.97(c) that includes:
 - 1) a certification that water intake structure technologies are being maintained and operated as set forth in this permit;
 - 2) a summary of the required visual inspections;
 - 3) a summary of any modified operation of any unit at the facility that impacts cooling water withdrawals or operation of cooling water intake structures; and

If the information contained in the previous year's annual certification and report is still pertinent, the permittee may state as such in a letter to the Department and the letter, along with any applicable data submission requirements associated with the annual certification statement and report, shall constitute the annual certification.

Records of all submissions that are part of the permit reporting requirement under 40 CFR § 125.97 shall be retained by the permittee at a minimum until the subsequent permit is issued. In addition, records supporting the Department's BTA determination for entrainment shall be retained until such time the Department revises the BTA determination for entrainment in the permit. The Department may require supplemental reporting and/or data collection under 40 CFR Parts 122 and 125.

During each permit reissuance, the Department will reevaluate the facility's CWIS to determine if it represents BTA for minimizing adverse environmental impacts. On or before <u>April 4, 2029</u>, with the application for reissuance, the permittee shall submit all information required in 40 CFR § 122.21(r). The permittee must certify that the permit application is true, accurate and complete pursuant to 40 CFR § 122.22(d). The permittee may request in writing Department approval of a reduction of information required for subsequent permit applications if conditions at the facility and in the waterbody remain substantially unchanged since the previous application information prior to <u>April 1, 2026</u>. The request must identify each element in 40 CFR § 122.21(r) that the permittee determines has not substantially changed since the previous permit application and the basis for the determination. The Department has the discretion to accept or reject any part of the request. Records of all submissions that are part of the previous permit application shall be retained by the permittee at a minimum until the subsequent permit is issued in accordance with 40 CFR § 125.95.

Section A. Limitations and Monitoring Requirements

8. Pollutant Minimization Program for Hydrazine

This requirement establishes the program necessary to comply with the final effluent limitations for Hydrazine. The goal of the Pollutant Minimization Program is to maintain the effluent concentration of Hydrazine at or below the water quality-based effluent limitation set forth in Part I.A.1. The permittee shall develop and implement a Pollutant Minimization Program in accordance with the following schedule:

On or before <u>October 30, 2025</u>, the permittee shall submit to the Department an approvable Pollutant Minimization Program for Hydrazine designed to proceed toward the goal. The Pollutant Minimization Program shall be implemented upon approval by the Department. The Pollutant Minimization Program shall include the following:

- a. an annual review and semi-annual monitoring of potential sources of Hydrazine entering the wastewater collection system;
- b. a program for quarterly monitoring of influent for Hydrazine; and
- c. implementation of reasonable cost-effective control measures when sources of Hydrazine are discovered. Factors to be considered include significance of sources, economic considerations, and technical and treatability considerations.

On or before <u>March 1 of each year</u> following Department approval of the Pollutant Minimization Program, the permittee shall submit a status report to the Department that includes 1) the monitoring results for the previous year, 2) an updated list of potential sources, and 3) a summary of all actions taken to reduce or eliminate identified sources of Hydrazine.

Any information generated as a result of the Pollutant Minimization Program set forth in this permit may be used to support a request to modify the approved program or may demonstrate that the Pollutant Minimization Program requirement has been completed satisfactorily.

A request for modification of the approved program and supporting documentation shall be submitted in writing to the Department for review and approval. The Department may approve modifications to the approved program (approval of a program modification does not require a permit modification).

The permittee may choose to demonstrate that the program is complete and request removal of the program from the permit. Such request and supporting documentation demonstrating that the water quality-based effluent limits are being achieved shall be submitted in writing to the Department. If the Department determines that the request is approvable, this permit may be modified in accordance with applicable laws and rules to remove this requirement.

This permit may be modified in accordance with applicable laws and rules to include additional conditions and/or limitations as necessary.

Section A. Limitations and Monitoring Requirements

9. Pollutant Minimization Program for Spectrus CT-1300

This requirement establishes the program necessary to comply with the final effluent limitations for Spectrus CT-1300. The goal of the Pollutant Minimization Program is to maintain the effluent concentration of Spectrus CT-1300 at or below the water quality-based effluent limitation set forth in Part I.A.1. The permittee shall develop and implement a Pollutant Minimization Program in accordance with the following schedule:

On or before <u>October 30, 2025</u>, the permittee shall submit to the Department an approvable Pollutant Minimization Program for Spectrus CT-1300 designed to proceed toward the goal. The Pollutant Minimization Program shall be implemented upon approval by the Department. The Pollutant Minimization Program shall include the following:

- a. an annual review and semi-annual monitoring of potential sources of Spectrus CT-1300 entering the wastewater collection system;
- b. a program for quarterly monitoring of influent for Spectrus CT-1300; and
- c. implementation of reasonable cost-effective control measures when sources of Spectrus CT-1300 are discovered. Factors to be considered include significance of sources, economic considerations, and technical and treatability considerations.

On or before <u>March 1 of each year</u> following Department approval of the Pollutant Minimization Program, the permittee shall submit a status report to the Department that includes 1) the monitoring results for the previous year, 2) an updated list of potential sources, and 3) a summary of all actions taken to reduce or eliminate identified sources of Spectrus CT-1300.

Any information generated as a result of the Pollutant Minimization Program set forth in this permit may be used to support a request to modify the approved program or may demonstrate that the Pollutant Minimization Program requirement has been completed satisfactorily.

A request for modification of the approved program and supporting documentation shall be submitted in writing to the Department for review and approval. The Department may approve modifications to the approved program (approval of a program modification does not require a permit modification).

The permittee may choose to demonstrate that the program is complete and request removal of the program from the permit. If the permittee is able to use a test method that utilizes a quantification level sufficient to determine compliance with the effluent limitation, the permittee may request the suspension of the requirements of this condition while the test method is utilized. Such request and supporting documentation demonstrating that the water quality-based effluent limits are being achieved shall be submitted in writing to the Department. If the Department determines that the request is approvable, this requirement may be waived and/or the permit may be modified in accordance with applicable laws and rules to remove this requirement.

This permit may be modified in accordance with applicable laws and rules to include additional conditions and/or limitations as necessary.

Section A. Limitations and Monitoring Requirements

10. Facility Contact

The "Facility Contact" was specified in the application. The permittee may replace the facility contact at any time, and shall notify the Department in writing <u>within 10 days</u> after replacement (including the name, address and telephone number of the new facility contact).

- a. The facility contact shall be (or a duly authorized representative of this person):
 - for a corporation, a principal executive officer of at least the level of vice president; or a designated representative if the representative is responsible for the overall operation of the facility from which the discharge originates, as described in the permit application or other NPDES form,
 - for a partnership, a general partner,
 - for a sole proprietorship, the proprietor, or
 - for a municipal, state, or other public facility, either a principal executive officer, the mayor, village president, city or village manager or other duly authorized employee.
- b. A person is a duly authorized representative only if:
 - the authorization is made in writing to the Department by a person described in paragraph a. of this section; and
 - the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the facility (a duly authorized representative may thus be either a named individual or any individual occupying a named position).

Nothing in this section releases the permittee from properly submitting reports and forms as required by law.

11. Discharge Monitoring Report – Quality Assurance Study Program

The permittee shall participate in the Discharge Monitoring Report – Quality Assurance (DMR-QA) Study Program. The purpose of the DMR-QA Study Program is to annually evaluate the proficiency of all in-house and/or contract laboratory(ies) that perform, on behalf of the facility authorized to discharge under this permit, the analytical testing required under this permit. In accordance with Section 308 of the Clean Water Act (33 U.S.C. § 1318); and R 323.2138 and R 323.2154 of Part 21, Wastewater Discharge Permits, promulgated under Part 31 of the NREPA, participation in the DMR-QA Study Program is required for all major facilities, and for minor facilities selected for participation by the Department.

<u>Annually and in accordance with DMR-QA Study Program requirements and submittal due dates</u>, the permittee shall submit to the Michigan DMR-QA Study Program state coordinator all documentation required by the DMR-QA Study. DMR-QA Study Program participation is required only for the analytes required under this permit and only when those analytes are also identified in the DMR-QA Study.

If the permitted facility's status as a major facility should change, participation in the DMR-QA Study Program may be reevaluated. Questions concerning participation in the DMR-QA Study Program should be directed to the Michigan DMR-QA Study Program state coordinator.

All forms and instructions required for participation in the DMR-QA Study Program, including submittal due dates and state coordinator contact information, can be found at <u>https://www.epa.gov/compliance/discharge-monitoring-report-quality-assurance-study-program</u>.

Section A. Limitations and Monitoring Requirements

12. Priority Pollutants

The permittee shall not discharge to surface waters of the state any priority pollutant listed in Appendix A of 40 CFR Part 423 in discharges of cooling tower blowdown resulting from plant operations. In the event the permittee proposes to use chemicals for cooling tower maintenance, which may contain such pollutants, the permittee shall submit a request for approval in accordance with Part I.A.4 of this permit. Upon review of such a request, this permit may be modified in accordance with applicable laws and rules to include additional control requirements as necessary.

On or before <u>April 4, 2029</u>, with the application for reissuance, the permittee shall submit written confirmation that no chemicals containing the priority pollutants listed in Appendix A of 40 CFR Part 423 are being used for cooling tower maintenance purposes.

13. Continuous Monitoring

If continuous monitoring equipment is used and becomes temporarily inoperable, the permittee shall manually obtain a minimum of three (3) equally spaced grab samples/readings within each 24-hour period for the affected parameter(s). On such days, in the comment field on the Daily tab of the DMR, the permittee shall indicate "continuous monitoring system inoperable," the date on which the system is expected to become operable again, and the number of samples/readings obtained during each 24-hour period.

14. Power Plants – PCB Prohibition

The permittee shall not discharge any polychlorinated biphenyls (PCBs) to surface waters of the state as a result of plant operations.

On or before <u>April 4, 2029</u>, with the application for reissuance, the permittee shall submit written confirmation that no PCB compounds have been or will be discharged to surface waters of the state as a result of plant operations.

15. Monitoring Frequency Reduction

The permittee may decommission this facility during this permit cycle. To facilitate this process, the permittee may request, in writing, Department approval of a reduction in monitoring frequency for the parameters indicated in Parts I.A.1., I.A.2., and I.A.3. of this permit. 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 Parts I.A.1., I.A.2., and I.A.3. of this permit. 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 Parts I.A.1., I.A.2., and I.A.3. of this permit. The monitoring frequency for any pollutant shall not be reduced to less than annually. The Department may also eliminate monitoring requirements for any parameter if the parameter being monitored is no longer expected to be present in the discharge at levels of concern due to a discontinuation of a wastewater type being discharged. If a process contributing wastewater has ended but legacy wastewater or residuals still have the potential to be discharged, effluent limitations and/or monitoring for the relevant parameters shall not be eliminated. The Department may revoke the approval for reduced or eliminated monitoring at any time upon notification to the permittee.

16. Change in Operations Notification

The permittee shall notify the Department <u>at least 30 days</u> prior to a change in operations at the facility, including either the restart of normal power generation operations or the installation of the new heat exchanger. Beginning on the month of the restart of normal power generation operations, the annual visual inspections of the velocity cap and submerged portion of the intake structure as specified in Part I.A.7.d. shall become effective.

Section A. Limitations and Monitoring Requirements

17. Thermal Plume Study

Once normal power generation operations restart at the plant and the new heat exchanger has been installed, the permittee shall conduct a thermal plume study for the discharge from Monitoring Point 001A to Lake Michigan. The goal of this study is to determine whether the thermal plume study submitted in October 2003 is still representative of the thermal discharge conditions of the plant once normal power generation operations resume and the new heat exchanger is installed. The study shall be performed during normal power generation operations at the plant which means the plant is consistently running at or near its potential maximum power generation thermal discharge level of 2,100 MBTU/hr. The study shall be conducted seasonally, during spring, summer, fall, and winter. Each seasonal study shall include a determination of the velocity and volume of near shore currents which serve to dilute the discharge in Lake Michigan, a determination of the stratification of the effluent, if any in Lake Michigan, predominant wind direction and velocity at the time of the study, and detailed mapping of the plume for each study.

The permittee shall notify the Department <u>at least 30 days</u> prior to the restart of normal power generation operations or the installation of the new heat exchanger, as specified in Part I.A.16., Change in Operations Notification.

<u>Within 3 months</u> of the time when both normal power generation operations have restarted at the plant and the new heat exchanger has been installed, a plan for conducting the thermal plume study developed in accordance with the above requirements shall be submitted to the Department for approval. The new heat exchanger is expected to be installed during the first refueling outage, which is expected to occur between 18 and 24 months following the restart of normal power generation operations. If the new heat exchanger will not be installed within 24 months of the restart of operations, the study plan shall be submitted to the Department <u>within 24 months</u> of the restart of normal power generation operations.

<u>Within 2 years</u> of approval of the study plan, the permittee shall implement the approved plan and submit the final report to the Department.

The Department may revise this schedule upon notification to the permittee.

Section B. Storm Water Pollution Prevention

1. Final Effluent Limitations and Monitoring Requirements

The permittee is authorized to discharge storm water associated with industrial activity, as defined under 40 CFR 122.26(b)(14)(i-ix), to Lake Michigan. Such discharge shall be limited and monitored by the permittee as specified below.

a. Narrative Standard

In accordance with R 323.1050 of the Part 4 Rules promulgated pursuant to Part 31 of the NREPA, the receiving waters shall not have any of the following physical properties as a result of this discharge in unnatural quantities that are, or may become, injurious to any designated use: turbidity, color, oil films, floating solids, foams, settleable solids, suspended solids, or deposits.

- b. Unusual Discharge Characteristics Storm water discharges shall be monitored as required by this permit to ensure there are no unusual characteristics (i.e., unnatural turbidity, color, oil film, floating solids, foams, settleable solids, suspended solids, or deposits) that would cause a violation of the narrative standard or other water quality standards.
- c. Industrial Storm Water Certified Operator Storm water treatment and/or control measures associated with this discharge shall be under the direct supervision of an industrial storm water operator certified by the Department, as required by Section 3110 of the NREPA.
- d. Implementation of Storm Water Pollution Prevention Plan The permittee shall implement an acceptable Storm Water Pollution Prevention Plan (SWPPP) that meets the requirements of this permit.

Section B. Storm Water Pollution Prevention

2. Storm Water Pollution Prevention Plan (SWPPP)

The SWPPP is a written plan that identifies sources of significant materials associated with industrial activity and includes procedures intended to reduce the exposure of significant materials to storm water. The SWPPP template and other guidance materials are available on the Industrial Storm Water Program webpage at www.michigan.gov/industrialstormwater.

An acceptable SWPPP shall identify the facility name, address, and permit number, and meet the requirements specified in Part I.B.3. through Part I.B.9. below:

3. Source Identification

To identify potential sources of significant materials that have reasonable potential to pollute storm water and subsequently be discharged to surface waters of the state, the SWPPP shall, at a minimum, include the following:

a. Site Map

The site map shall identify and label the following:

- 1) buildings and other permanent structures;
- 2) all areas of industrial activity, industrial equipment, and/or industrial material storage;
- 3) storage, disposal, and/or recycling areas for significant materials;

4) the location of all storm water discharge points and monitoring points (numbered or otherwise uniquely labeled for reference);

5) the location of all storm water inlets (e.g., catch basins, roof drains, etc.) contributing to each storm water discharge point (numbered or otherwise labeled for reference);

6) the location of non-storm water NPDES-permitted discharges;

7) the location of all storm water conveyances (e.g., pipe, ditch, channel, etc.) and outlines of the drainage areas contributing to each storm water discharge point;

8) all structural controls (e.g., secondary containment, inlet filters, etc.) and/or or storm water treatment equipment/devices;

9) area(s) of vegetation (with appropriate labelling such as lawn, old field, marsh, wooded, etc.);

10) area(s) that have the potential for soil erosion and sediment discharges (e.g., gravel lots, access roads, material stockpiles, outfalls, etc.);

11) impervious surfaces (e.g., roofs, asphalt, concrete, etc.);

12) name and location of receiving water(s); and

13) contaminated areas of the site regulated under Part 201 (Environmental Remediation) of the NREPA.

Section B. Storm Water Pollution Prevention

- b. List of Significant Materials Associated with Industrial Activity This list shall identify all significant materials that have a reasonable potential to pollute storm water, and identify the activity or area in which the significant materials are handled or stored. For each activity or area identified, the inlet(s) and discharge point(s) impacted in the event of a spill or leak shall be included on the list. The following industrial activities and/or areas shall be evaluated for the potential to expose significant materials to storm water, as applicable:
 - 1) loading, unloading, and other industrial material handling activities;
 - 2) outdoor industrial material storage areas, including secondary containment structures;
 - 3) outdoor manufacturing or processing activities;
 - 4) dust or particulate generating processes/activities;
 - 5) discharges associated with vents, stacks, and air emission controls;
 - 6) industrial waste or recyclable material storage or disposal areas;
 - 7) activities associated with the maintenance and cleaning of vehicles, machines, and equipment;

8) area(s) that have the potential for soil erosion and sediment discharges (e.g., gravel lots, access roads, material stockpiles, outfalls, etc.);

- 9) areas of contamination regulated under Part 201 (Environmental Remediation) of the NREPA;
- 10) areas of significant material residues;
- 11) areas where animals (wild or domestic) congregate and deposit wastes; and
- 12) other areas where storm water may come into contact with significant materials.
- c. List of Significant Spills and Leaks

This list shall identify the date, volume, and location of each significant spill/leak as defined under Part II.A. of this permit, and the cleanup actions undertaken. Significant spills/leaks shall be controlled in accordance with the SWPPP and are cause for the SWPPP to be updated as specified in Part I.B.7. of this permit. The permittee shall notify the Department of significant spills/leaks as specified in Part II.C.6. and/or Part II.C.7. of this permit. Written reports regarding significant spills/leaks shall be retained with the SWPPP records in accordance with Part I.B.10. of this permit.

- d. Summary of Storm Water Discharge Sampling Data If data have been collected, the SWPPP shall include a list of the pollutants detected, sources identified, and the control measures implemented to reduce the discharge of the detected pollutants. Storm water discharge sampling data shall be retained in accordance with Part I.B.10. of this permit.
- e. Illicit Connection Investigation and Elimination Program The permittee shall implement an illicit connection investigation and elimination program. The SWPPP shall include a written description of the actions taken to identify, investigate, and eliminate illicit connections to Municipal Separate Storm Sewer System (MS4) or surface waters of the state. Any discharge from an illicit connection to an MS4 or surface water of the state is a violation of this permit.

Section B. Storm Water Pollution Prevention

- f. Description of Dust Suppression Material Used Onsite
 - The SWPPP shall include a description of the dust suppression material used onsite, the areas where the material is used, and the actions implemented to prevent an unauthorized discharge of the material. If the permittee does not use dust suppression material onsite, the SWPPP shall indicate this.

4. Total Maximum Daily Loads (TMDLs)

The permittee shall implement nonstructural and/or structural controls to reduce the discharge of the pollutant(s) associated with any TMDL(s) identified below. The SWPPP shall include a list of all TMDL(s) identified below, as well as references to control measures already listed in the SWPPP intended to reduce the discharge of the TMDL pollutant(s). The implementation of an acceptable SWPPP shall meet the control measure expectations of all TMDL(s) identified below; however, the Department may require additional control measures if it is determined that the storm water discharge is negatively impacting the applicable TMDL(s). If no TMDLs are identified below, this condition does not apply.

Name of TMDL	Pollutant of Concern
NA	NA

5. Nonstructural Controls

To manage and address sources of significant materials that have reasonable potential to pollute storm water and subsequently be discharged to surface waters of the state, the SWPPP shall, at a minimum, include the following nonstructural controls:

a. Preventative Maintenance

Preventive maintenance procedures shall list the storm water management and control devices, treatment systems, industrial equipment, etc. that will be routinely serviced and maintained to prevent significant material exposure to storm water. The written procedures shall include a maintenance schedule for each item listed.

b. Good Housekeeping Inspections

Good housekeeping procedures shall list the areas that will be routinely inspected and cleaned to prevent significant material exposure to storm water. The areas associated with the items listed in the preventative maintenance procedures shall also be included. The written procedures shall include an inspection and cleaning schedule for each area listed. A written report documenting the implementation of the inspection and cleaning schedule shall be retained in accordance with Part I.B.10. of this permit.

c. Comprehensive Site Inspections

Comprehensive site inspection procedures shall include all items identified in 3) below that will be inspected by an Industrial Storm Water Certified Operator to ensure compliance with this permit. At a minimum, one inspection shall be performed during normal facility operating hours within each of the following quarters unless the Department has approved an alternate schedule in accordance with Part I.B.12. of this permit: January – March, April – June, July – September, and October – December. A written report documenting the comprehensive site inspection shall be retained in accordance with Part I.B.10. of this permit, and shall include the following information:

- 1) the date of the inspection;
- 2) the Industrial Storm Water Certified Operator's name(s) and certification number(s);

Section B. Storm Water Pollution Prevention

3) all observations regarding significant material exposure and any necessary corrective actions related to the inspection of the following:

- a) areas identified in Part I.B.3.a. and Part I.B.3.b. of this permit,
- b) areas identified in Part I.B.3.c. of this permit where significant spills or leaks have occurred in the past three years,
- c) all storm water inlets, conveyances (not including subsurface piping), and discharge points, and
- d) all structural controls and/or storm water treatment equipment/devices;

4) a review of the good housekeeping reports, and any other paperwork associated with the SWPPP; and

5) a written statement, based on the results of the comprehensive site inspection, certifying compliance with the terms of this permit and with the permittee's SWPPP.

d. Visual Assessments

At a minimum, one (1) storm water sample shall be collected for visual assessment during normal facility operating hours at each discharge point within each of the following quarters unless the Department has approved an alternate schedule in accordance with Part I.B.12. of this permit: January – March, April – June, July – September, and October – December. Visual assessment guidance is available on the Industrial Storm Water Program webpage at www.michigan.gov/industrialstormwater.

The following are the requirements of the visual assessments and shall be included in the written procedures:

1) The storm water sample(s) shall be collected during normal hours of operation by an Industrial Storm Water Certified Operator, Qualified Personnel as defined in Part II.A. of this permit, or automatic sampling device.

- 2) The storm water sample(s) shall be collected:
 - a) with clean equipment and containers, and
 - b) within the first 30 minutes of the start of a discharge resulting from a qualifying storm event as defined in Part II.A. of this permit. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample shall be collected as soon thereafter as practicable. In the case of snowmelt, samples shall be collected during a period with measurable discharge from the site.

3) The visual assessment of the storm water sample(s) shall be performed and documented by an Industrial Storm Water Certified Operator. Documentation shall be retained in accordance with Part I.B.10. of this permit, and shall include the following information:

- a) Sample location(s).
- b) Storm water sample collection date(s), time(s), and if applicable, an explanation as to why sample(s) were not collected within the first 30 minutes of discharge.

Section B. Storm Water Pollution Prevention

- c) Visual assessment date and time.
- d) Name and certification number of the Industrial Storm Water Certified Operator.
- e) Storm event information, including the length of event expressed in hours, approximate size of event expressed in inches of precipitation, duration of time since previous event that caused a discharge, date and time the discharge began, and nature of event (i.e., rainfall or snowmelt).
- f) Name(s) of personnel who obtained the storm water sample(s) or document that an automatic sampling device was used.
- g) Any notable observations of the discharge while the storm water samples were collected. This requirement is waived if an automatic sampling device was used to collect the storm water samples.
- h) Sample(s) shall be observed in a colorless glass or plastic container for the following characteristics: color, oil sheen, turbidity, floating solids, suspended solids, settleable solids, foam, and any other unusual characteristics.
- i) Unaltered, full-color photograph of the storm water sample(s) against a white background.
- j) A description of corrective actions taken if any unusual characteristics are identified during the visual assessment.

4) When a visual assessment cannot be completed for any reason (e.g., adverse weather conditions, no discharge, qualifying event occurred outside the normal facility operating hours, etc.) during any quarter, written documentation explaining the reason for not completing the visual assessment shall be included with the SWPPP records. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, electrical storms, or situations that otherwise make sampling impractical such as drought or extended frozen conditions.

5) If the facility has two (2) or more storm water discharge points that are believed to discharge substantially identical storm water effluents, the facility may conduct visual assessments of the discharge at one (1) of the storm water discharge points and report that the results also apply to the other substantially identical storm water discharge point(s). The determination of substantially identical storm water discharge point(s). The determination conducted as set forth under Part I.B.3.b. of this permit and shall be clearly documented in the SWPPP. Visual assessments shall be conducted on a rotating basis of each substantially identical storm water discharge point throughout the period of coverage under this permit.

e. Material Handling and Spill Prevention / Response Procedures

Significant material handling and storage procedures shall be developed to minimize the potential for leaks and spills that may be exposed to storm water. For each potential spill or leak area, the procedures shall identify the significant material handling and storage requirements, spill/leak response actions, and locations of spill/leak kits. The SWPPP shall include language describing what a reportable spill or leak is, and the appropriate reporting requirements in accordance with Part II.C.6. and Part II.C.7. of this permit.

Section B. Storm Water Pollution Prevention

For Polluting Materials as defined under Part II.A. of this permit, the SWPPP may reference any of the following plans:

- Pollution Incident Prevention Plan (PIPP) prepared in accordance with the Part 5 Rules (R 324.2001 through R 324.2009 of the Michigan Administrative Code)
- Hazardous Waste Contingency Plan prepared in accordance with 40 CFR 264 and 265 Subpart D, as required by Part 111 of the NREPA
- Spill Prevention Control and Countermeasure (SPCC) plan prepared in accordance with 40 CFR 112
- f. Annual Employee Training Program

The SWPPP shall include a written description of the employee training program that will be implemented on an annual basis to inform appropriate personnel of the components of the SWPPP and requirements of this permit. Records of the annual employee training program shall be retained in accordance with Part I.B.10. of this permit.

6. Structural Controls

Structural controls shall be used to reduce significant material exposure and/or the concentration of significant materials in the discharge to ensure compliance with Part I.B.1.a. and Part I.B.1.b. of this permit. The SWPPP shall provide a list of all structural controls utilized onsite and the significant material(s) intended to be managed by the structural controls. The location of the structural controls shall be identified on the site map. Where applicable, structural controls shall, at a minimum, be utilized to achieve the following:

- a. prevent unauthorized discharges from industrial waste and recyclable material containers,
- b. prevent the discharge of sediment and other particulates that can be mobilized by storm water, and
- c. minimize channel/streambank erosion and scour in the immediate vicinity of outfalls.

7. Keeping SWPPPs Current

- a. The permittee and/or an Industrial Storm Water Certified Operator shall review the SWPPP annually after it is developed and maintain a written report of the review. Based on the review, the permittee or an Industrial Storm Water Certified Operator shall amend the SWPPP as needed to ensure continued compliance with the terms and conditions of this permit. A SWPPP Annual Review Report form is available on the Industrial Storm Water Program webpage at <u>www.michigan.gov/industrialstormwater</u>. The written report of the SWPPP Annual Review shall be retained in accordance with Part I.B.10. of this permit.
- b. The SWPPP developed under the conditions of a previous permit shall be amended as necessary to ensure compliance with this permit.

Section B. Storm Water Pollution Prevention

- c. The SWPPP shall be updated or amended whenever changes at the facility have the potential to increase the exposure of significant materials to storm water, significant spills/leaks occur at the facility, or when the SWPPP is determined by the permittee or the Department to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. SWPPP updates necessitated by increased activity or significant spills at the facility shall include a description of how the permittee intends to control any new sources of significant materials or respond to and prevent spills in accordance with the requirements of this permit.
- d. The Department may notify the permittee at any time that the SWPPP does not meet minimum requirements of this permit. Such notification shall identify why the SWPPP does not meet minimum requirements of this permit. The permittee shall make the required changes to the SWPPP within <u>30 days</u> after such notification from the Department and shall submit to the Department a written certification that the requested changes have been made.
- e. Amendments to the SWPPP shall be signed and retained on-site with the SWPPP pursuant to Part I.B.9. of this permit.

8. Contact Information and Industrial Storm Water Certified Operator Update

- a. The SWPPP shall include contact information (i.e., name, mailing address, phone number, and email address) for the Facility Contact, Industrial Storm Water Certified Operator(s), environmental consultant, and/or any other appropriate individuals who manage the storm water program at the facility. The SWPPP shall be updated, as necessary, to ensure the contact information is current.
- b. If the primary Industrial Storm Water Certified Operator is replaced, the permittee shall provide the name and certification number of the new Industrial Storm Water Certified Operator to the Department by updating the facility's MiEnviro Portal site. If a facility has multiple Industrial Storm Water Certified Operators, the names and certification numbers of all shall be included in the SWPPP.

9. Signature and SWPPP Certification

- a. The SWPPP shall be reviewed and signed by an Industrial Storm Water Certified Operator and by either the permittee or an authorized representative in accordance with 40 CFR 122.22. The SWPPP and associated records shall be retained on-site at the facility that generates the storm water discharge.
- b. The permittee shall make the SWPPP and items required by Part I.B.10. of this permit available upon request to the Department. The Department makes the non-confidential business portions of the SWPPP available to the public.

10. Record Keeping

The permittee shall maintain records of all SWPPP-related activities. All such records shall be retained for three (3) years. The following records are required by this permit:

- a. good housekeeping inspection reports
- b. comprehensive site inspection reports

Section B. Storm Water Pollution Prevention

- c. visual assessment reports
- d. employee training records
- e. SWPPP annual review reports
- f. significant spill/leak reports, and
- g. storm water discharge sampling data.

11. Non-Storm Water Discharges

Storm water is defined in Part II.A. of this permit to encompass non-storm water discharges included under the conditions of this permit. Any discharge of wastewater other than storm water as defined under the conditions of this permit shall be in compliance with an NPDES permit issued for the discharge. The non-storm water discharges included under the conditions of this permit are authorized under this permit, provided pollution prevention controls for the non-storm water component are identified in the permittee's SWPPP. The non-storm water discharges included under the conditions of this permit are as follows:

- a. discharges from fire hydrant flushing
- b. potable water sources, including water line flushing
- c. water from fire system testing and fire-fighting training without burned materials or chemical fire suppressants
- d. irrigation drainage
- e. lawn watering
- f. routine building wash-down that does not use detergents or other compounds
- g. pavement wash waters where contamination by toxic or hazardous materials has not occurred (unless all contamination by toxic or hazardous materials has been removed) and where detergents are not used
- h. uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids
- i. springs
- j. uncontaminated groundwater
- k. foundation or footing drains where flows are not contaminated with process materials such as solvents, and
- I. discharges from fire-fighting activities. Discharges from fire-fighting activities are exempted from the requirement to be identified in the SWPPP.

Section B. Storm Water Pollution Prevention

12. Alternate Schedule Request for Comprehensive Site Inspections and/or Visual Assessment

The permittee may request Department approval of an alternate schedule for comprehensive site inspections and/or visual assessments. Such a request may be made if the permittee meets the following criteria: the permittee is in full compliance with this permit, the permittee has an acceptable SWPPP, the permittee has installed and/or implemented adequate structural controls at the facility, the permittee has all required inspection reports available at the facility, and the permittee has an Industrial Storm Water Certified Operator at the facility. The Department may revoke the approval of an alternate schedule at any time upon notification to the permittee if these criteria are not being met.

13. Tracer Dye Discharges

This permit does not authorize the discharge of tracer dyes without approval from the Department. Requests to discharge tracer dyes shall be submitted to the Department in accordance with Rule 1097 (R 323.1097 of the Michigan Administrative Code).

Part II may include terms and /or conditions not applicable to discharges covered under this permit.

Section A. Definitions

Acute toxic unit (TU_A) means 100/LC₅₀ where the LC₅₀ is determined from a whole effluent toxicity (WET) test which produces a result that is statistically or graphically estimated to be lethal to 50% of the test organisms.

Annual monitoring frequency refers to a calendar year beginning on January 1 and ending on December 31. When required by this permit, an analytical result, reading, value or observation shall be reported for that period if a discharge occurs during that period.

Authorized public agency means a state, local, or county agency that is designated pursuant to the provisions of Section 9110 of Part 91, Soil and Sedimentation Control, of the NREPA, to implement soil erosion and sedimentation control requirements with regard to construction activities undertaken by that agency.

Best management practices (BMPs) means structural devices or nonstructural practices that are designed to prevent pollutants from entering into storm water, to direct the flow of storm water, or to treat polluted storm water.

Bioaccumulative chemical of concern (BCC) means a chemical which, upon entering the surface waters, by itself or as its toxic transformation product, accumulates in aquatic organisms by a human health bioaccumulation factor of more than 1000 after considering metabolism and other physiochemical properties that might enhance or inhibit bioaccumulation. The human health bioaccumulation factor shall be derived according to R 323.1057(5). Chemicals with half-lives of less than 8 weeks in the water column, sediment, and biota are not BCCs. The minimum bioaccumulation concentration factor (BAF) information needed to define an organic chemical as a BCC is either a field-measured BAF or a BAF derived using the biota-sediment accumulation factor (BSAF) methodology. The minimum BAF information needed to define an inorganic chemical as a BCC, including an organometal, is either a field-measured BAF or a laboratory-measured bioconcentration factor (BCF). The BCCs to which these rules apply are identified in Table 5 of R 323.1057 of the Water Quality Standards.

Biosolids are the solid, semisolid, or liquid residues generated during the treatment of sanitary sewage or domestic sewage in a treatment works. This includes, but is not limited to, scum or solids removed in primary, secondary, or advanced wastewater treatment processes and a derivative of the removed scum or solids.

Bulk biosolids means biosolids that are not sold or given away in a bag or other container for application to a lawn or home garden.

CAFO means concentrated animal feeding operation.

Certificate of Coverage (COC) is a document, issued by the Department, which authorizes a discharge under a general permit.

Chronic toxic unit (TUC) means 100/MATC or 100/IC25, where the maximum acceptable toxicant concentration (MATC) and IC25 are expressed as a percent effluent in the test medium.

Class B biosolids refers to material that has met the Class B pathogen reduction requirements or equivalent treatment by a Process to Significantly Reduce Pathogens (PSRP) in accordance with the Part 24 Rules, Land Application of Biosolids, promulgated under Part 31 of the NREPA. Processes include aerobic digestion, composting, anaerobic digestion, lime stabilization and air drying.

Combined sewer system is a sewer system in which storm water runoff is combined with sanitary wastes.

Section A. Definitions

Composite sample is a sample collected over time, either by continuous sampling or by mixing discrete samples. A composite sample represents the average wastewater characteristics present during the compositing period. Various methods for compositing are available and are based on either time or flow-proportioning, the choice of which will depend on the permit requirements.

Continuous monitoring refers to sampling/readings that occur at regular and consistent intervals throughout a 24-hour period and at a frequency sufficient to capture data that are representative of the discharge. The maximum acceptable interval between samples/readings shall be one (1) hour.

Daily concentration

FOR PARAMETERS OTHER THAN pH, DISSOLVED OXYGEN, TEMPERATURE, AND CONDUCTIVITY – Daily concentration is the sum of the concentrations of the individual samples of a parameter taken within a calendar day divided by the number of samples taken within that calendar day. The daily concentration will be used to determine compliance with any maximum and minimum daily concentration limitations. For guidance and examples showing how to report and perform calculations using results below quantification levels, see the document entitled "Reporting Results Below Quantification," available at https://www.michigan.gov/-/media/Project/Websites/egle/Documents/Programs/WRD/MiEnviro/results-below-guantification.pdf.

FOR pH, DISSOLVED OXYGEN, TEMPERATURE, AND CONDUCTIVITY – The daily concentration used to determine compliance with maximum daily pH, temperature, and conductivity limitations is the highest pH, temperature, and conductivity readings obtained within a calendar day. The daily concentration used to determine compliance with minimum daily pH and dissolved oxygen limitations is the lowest pH and dissolved oxygen readings obtained within a calendar day.

Daily loading is the total discharge by weight of a parameter discharged during any calendar day. This value is calculated by multiplying the daily concentration by the total daily flow and by the appropriate conversion factor. The daily loading will be used to determine compliance with any maximum daily loading limitations. When required by the permit, report the maximum calculated daily loading for the month in the "MAXIMUM" column under "QUANTITY OR LOADING" on the DMRs.

Daily monitoring frequency refers to a 24-hour day. When required by this permit, an analytical result, reading, value or observation shall be reported for that period if a discharge occurs during that period.

Department means the Michigan Department of Environment, Great Lakes, and Energy.

Detection level means the lowest concentration or amount of the target analyte that can be determined to be different from zero by a single measurement at a stated level of probability.

Discharge means the addition of any waste, waste effluent, wastewater, pollutant, or any combination thereof to any surface water of the state.

EC₅₀ means a statistically or graphically estimated concentration that is expected to cause 1 or more specified effects in 50% of a group of organisms under specified conditions.

Section A. Definitions

Fecal coliform bacteria monthly

FOR WWSLs THAT COLLECT AND STORE WASTEWATER AND ARE AUTHORIZED TO DISCHARGE ONLY IN THE SPRING AND/OR FALL ON AN INTERMITTENT BASIS – Fecal coliform bacteria monthly is the geometric mean of all daily concentrations determined during a discharge event. Days on which no daily concentration is determined shall not be used to determine the calculated monthly value. The calculated monthly value will be used to determine compliance with the maximum monthly fecal coliform bacteria limitations. When required by the permit, report the calculated monthly value in the "AVERAGE" column under "QUALITY OR CONCENTRATION" on the DMR. If the period in which the discharge event occurred was partially in each of two months, the calculated monthly value shall be reported on the DMR of the month in which the last day of discharge occurred.

FOR ALL OTHER DISCHARGES – Fecal coliform bacteria monthly is the geometric mean of all daily concentrations determined during a reporting month. Days on which no daily concentration is determined shall not be used to determine the calculated monthly value. The calculated monthly value will be used to determine compliance with the maximum monthly fecal coliform bacteria limitations. When required by the permit, report the calculated monthly value in the "AVERAGE" column under "QUALITY OR CONCENTRATION" on the DMR.

Fecal coliform bacteria 7-day

FOR WWSLs THAT COLLECT AND STORE WASTEWATER AND ARE AUTHORIZED TO DISCHARGE ONLY IN THE SPRING AND/OR FALL ON AN INTERMITTENT BASIS – Fecal coliform bacteria 7-day is the geometric mean of the daily concentrations determined during any 7 consecutive days of discharge during a discharge event. If the number of daily concentrations determined during the discharge event is less than 7 days, the number of actual daily concentrations determined shall be used for the calculation. Days on which no daily concentration is determined shall not be used to determine the value. The calculated 7-day value will be used to determine compliance with the maximum 7-day fecal coliform bacteria limitations. When required by the permit, report the maximum calculated 7-day geometric mean value for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs. If the 7-day period was partially in each of two months, the value shall be reported on the DMR of the month in which the last day of discharge occurred.

FOR ALL OTHER DISCHARGES – Fecal coliform bacteria 7-day is the geometric mean of the daily concentrations determined during any 7 consecutive days in a reporting month. If the number of daily concentrations determined is less than 7, the actual number of daily concentrations determined shall be used for the calculation. Days on which no daily concentration is determined shall not be used to determine the value. The calculated 7-day value will be used to determine compliance with the maximum 7-day fecal coliform bacteria limitations. When required by the permit, report the maximum calculated 7-day geometric mean for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs. The first calculation shall be made on day 7 of the reporting month, and the last calculation shall be made on the last day of the reporting month.

Flow-proportioned composite sample is a composite sample in which either a) the volume of each portion of the composite is proportional to the effluent flow rate at the time that portion is obtained; or b) a constant sample volume is obtained at varying time intervals proportional to the effluent flow rate.

General permit means an NPDES permit authorizing a category of similar discharges.

Geometric mean is the average of the logarithmic values of a base 10 data set, converted back to a base 10 number.

Grab sample is a single sample taken at neither a set time nor flow.

IC₂₅ means the toxicant concentration that would cause a 25% reduction in a nonquantal biological measurement for the test population.

Section A. Definitions

Illicit connection means a physical connection to a municipal separate storm sewer system that primarily conveys non-storm water discharges other than uncontaminated groundwater into the storm sewer; or a physical connection not authorized or permitted by the local authority, where a local authority requires authorization or a permit for physical connections.

Illicit discharge means any discharge to, or seepage into, a municipal separate storm sewer system that is not composed entirely of storm water or uncontaminated groundwater. Illicit discharges include non-storm water discharges through pipes or other physical connections; dumping of motor vehicle fluids, household hazardous wastes, domestic animal wastes, or litter; collection and intentional dumping of grass clippings or leaf litter; or unauthorized discharges of sewage, industrial waste, restaurant wastes, or any other non-storm water waste directly into a separate storm sewer.

Individual permit means a site-specific NPDES permit.

Inlet means a catch basin, roof drain, conduit, drain tile, retention pond riser pipe, sump pump, or other point where storm water or wastewater enters into a closed conveyance system prior to discharge off site or into waters of the state.

Interference is a discharge which, alone or in conjunction with a discharge or discharges from other sources, both: 1) inhibits or disrupts a POTW, its treatment processes or operations, or its sludge processes, use or disposal; and 2) therefore, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or, of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act. [This definition does not apply to sample matrix interference].

Land application means spraying or spreading biosolids or a biosolids derivative onto the land surface, injecting below the land surface, or incorporating into the soil so that the biosolids or biosolids derivative can either condition the soil or fertilize crops or vegetation grown in the soil.

LC₅₀ means a statistically or graphically estimated concentration that is expected to be lethal to 50% of a group of organisms under specified conditions.

Maximum acceptable toxicant concentration (MATC) means the concentration obtained by calculating the geometric mean of the lower and upper chronic limits from a chronic test. A lower chronic limit is the highest tested concentration that did not cause the occurrence of a specific adverse effect. An upper chronic limit is the lowest tested concentration which did cause the occurrence of a specific adverse effect and above which all tested concentrations caused such an occurrence.

Maximum extent practicable means implementation of best management practices by a public body to comply with an approved storm water management program as required by a national permit for a municipal separate storm sewer system, in a manner that is environmentally beneficial, technically feasible, and within the public body's legal authority.

MBTU/hr means million British Thermal Units per hour.

MGD means million gallons per day.

Section A. Definitions

Monthly concentration is the sum of the daily concentrations determined during a reporting period divided by the number of daily concentrations determined. The calculated monthly concentration will be used to determine compliance with any maximum monthly concentration limitations. Days with no discharge shall not be used to determine the value. When required by the permit, report the calculated monthly concentration in the "AVERAGE" column under "QUALITY OR CONCENTRATION" on the DMR.

For minimum percent removal requirements, the monthly influent concentration and the monthly effluent concentration shall be determined. The calculated monthly percent removal, which is equal to 100 times the quantity [1 minus the quantity (monthly effluent concentration divided by the monthly influent concentration)], shall be reported in the "MINIMUM" column under "QUALITY OR CONCENTRATION" on the DMRs.

Monthly loading is the sum of the daily loadings of a parameter divided by the number of daily loadings determined during a reporting period. The calculated monthly loading will be used to determine compliance with any maximum monthly loading limitations. Days with no discharge shall not be used to determine the value. When required by the permit, report the calculated monthly loading in the "AVERAGE" column under "QUANTITY OR LOADING" on the DMR.

Monthly monitoring frequency refers to a calendar month. When required by this permit, an analytical result, reading, value or observation shall be reported for that period if a discharge occurs during that period.

Municipal separate storm sewer means a conveyance or system of conveyances designed or used for collecting or conveying storm water which is not a combined sewer and which is not part of a POTW as defined in the Code of Federal Regulations at 40 CFR 122.2.

Municipal separate storm sewer system (MS4) means all separate storm sewers that are owned or operated by the United States, a state, city, village, township, county, district, association, or other public body created by or pursuant to state law, having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law, such as a sewer district, flood control district, or drainage district, or similar entity, or a designated or approved management agency under Section 208 of the Clean Water Act that discharges to the waters of the state. This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

National Pretreatment Standards are the regulations promulgated by or to be promulgated by the Federal Environmental Protection Agency pursuant to Section 307(b) and (c) of the Clean Water Act. The standards establish nationwide limits for specific industrial categories for discharge to a POTW.

No observed adverse effect level (NOAEL) means the highest tested dose or concentration of a substance which results in no observed adverse effect in exposed test organisms where higher doses or concentrations result in an adverse effect.

Noncontact cooling water is water used for cooling which does not come into direct contact with any raw material, intermediate product, by-product, waste product or finished product.

Nondomestic user is any discharger to a POTW that discharges wastes other than or in addition to watercarried wastes from toilet, kitchen, laundry, bathing or other facilities used for household purposes.

Nonstructural controls are practices or procedures implemented by employees at a facility to manage storm water or to prevent contamination of storm water.

NPDES means National Pollutant Discharge Elimination System.

Outfall is the location at which a point source discharge first enters a surface water of the state.

Section A. Definitions

Part 91 agency means an agency that is designated by a county board of commissioners pursuant to the provisions of Section 9105 of Part 91 of the NREPA; an agency that is designated by a city, village, or township in accordance with the provisions of Section 9106 of Part 91 of the NREPA; or the Department for soil erosion and sedimentation control activities under Part 615, Supervisor of Wells; Part 631, Reclamation of Mining Lands; or Part 632, Nonferrous Metallic Mineral Mining, of the NREPA, pursuant to the provisions of Section 9115 of Part 91 of the NREPA.

Part 91 permit means a soil erosion and sedimentation control permit issued by a Part 91 agency pursuant to the provisions of Part 91 of the NREPA.

Partially treated sewage is any sewage, sewage and storm water, or sewage and wastewater, from domestic or industrial sources that is treated to a level less than that required by the permittee's NPDES permit, or that is not treated to national secondary treatment standards for wastewater, including discharges to surface waters from retention treatment facilities.

PFAS means perfluoroalkyl and polyfluoroalkyl substances.

Point of discharge is the location of a point source discharge where storm water is discharged directly into a separate storm sewer system.

Point source discharge means a discharge from any discernible, confined, discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, or rolling stock. Changing the surface of land or establishing grading patterns on land will result in a point source discharge where the runoff from the site is ultimately discharged to waters of the state.

Polluting material means any material, in solid or liquid form, identified as a polluting material under the Part 5 Rules, Spillage of Oil and Polluting Materials, promulgated under Part 31 of the NREPA (R 324.2001 through R 324.2009 of the Michigan Administrative Code).

POTW is a publicly owned treatment work.

Predevelopment is the last land use prior to the planned new development or redevelopment.

Pretreatment is reducing the amount of pollutants, eliminating pollutants, or altering the nature of pollutant properties to a less harmful state prior to discharge into a public sewer. The reduction or alteration can be by physical, chemical, or biological processes, process changes, or by other means. Dilution is not considered pretreatment unless expressly authorized by an applicable National Pretreatment Standard for a particular industrial category.

Public (as used in the MS4 individual permit) means all persons who potentially could affect the authorized storm water discharges, including, but not limited to, residents, visitors to the area, public employees, businesses, industries, and construction contractors and developers.

Public body means the United States; the state of Michigan; a city, village, township, county, school district, public college or university, or single-purpose governmental agency; or any other body which is created by federal or state statute or law.

Qualified Personnel means an individual who meets qualifications acceptable to the Department and who is authorized by an Industrial Storm Water Certified Operator to collect the storm water sample.

Qualifying storm event means a storm event causing greater than 0.1 inch of rainfall and occurring at least 72 hours after the previous measurable storm event that also caused greater than 0.1 inch of rainfall. Upon request, the Department may approve an alternate definition meeting the condition of a qualifying storm event.

Section A. Definitions

Quantification level means the measurement of the concentration of a contaminant obtained by using a specified laboratory procedure calculated at a specified concentration above the detection level. It is considered the lowest concentration at which a particular contaminant can be quantitatively measured using a specified laboratory procedure for monitoring of the contaminant.

Quarterly monitoring frequency refers to a three-month period, defined as January through March, April through June, July through September, and October through December (or otherwise defined in the permit). When required by this permit, an analytical result, reading, value or observation shall be reported for that period if a discharge occurs during that period.

Regional Administrator is the Region 5 Administrator, U.S. EPA, located at R-19J, 77 W. Jackson Blvd., Chicago, Illinois 60604.

Regulated area means the permittee's urbanized area, where urbanized area is defined as a place and its adjacent densely populated territory that together have a minimum population of 50,000 people as defined by the United States Bureau of the Census and as determined by the latest available decennial census.

Secondary containment structure means a unit, other than the primary container, in which significant materials are packaged or held, which is required by state or federal law to prevent the escape of significant materials by gravity into sewers, drains, or otherwise directly or indirectly into any sewer system or to the surface waters or groundwaters of the state.

Separate storm sewer system means a system of drainage, including, but not limited to, roads, catch basins, curbs, gutters, parking lots, ditches, conduits, pumping devices, or man-made channels, which is not a combined sewer where storm water mixes with sanitary wastes, and is not part of a POTW.

Significant industrial user is a nondomestic user that: 1) is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or 2) discharges an average of 25,000 gallons per day or more of process wastewater to a POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process waste stream which makes up five (5) percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the permittee as defined in 40 CFR 403.12(a) on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's treatment plant operation or violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Significant materials means any material which could degrade or impair water quality, including but not limited to: raw materials; fuels; solvents, detergents, and plastic pellets; finished materials such as metallic products; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (see 40 CFR 372.65); any chemical the facility is required to report pursuant to Section 313 of Emergency Planning and Community Right-to-Know Act (EPCRA); polluting materials as identified under the Part 5 Rules (R 324.2001 through R 324.2009 of the Michigan Administrative Code); Hazardous Wastes as defined in Part 111, Hazardous Waste Management, of the NREPA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be released with storm water discharges.

Significant spills and significant leaks means any release of a polluting material reportable under the Part 5 Rules (R 324.2001 through R 324.2009 of the Michigan Administrative Code).

Special-use area means storm water discharges for which the Department has determined that additional monitoring is needed from: secondary containment structures required by state or federal law; lands on Michigan's List of Sites of Environmental Contamination pursuant to Part 201, Environmental Remediation, of the NREPA; and/or areas with other activities that may contribute pollutants to the storm water.

Section A. Definitions

Stoichiometric means the quantity of a reagent calculated to be necessary and sufficient for a given chemical reaction.

Storm water means storm water runoff, snow melt runoff, surface runoff and drainage, and non-storm water included under the conditions of this permit.

Storm water discharge point is the location where the point source discharge of storm water is directed to surface waters of the state or to a separate storm sewer. It includes the location of all point source discharges where storm water exits the facility, including outfalls which discharge directly to surface waters of the state, and points of discharge which discharge directly into separate storm sewer systems.

Structural controls are physical features or structures used at a facility to manage or treat storm water.

SWPPP means the Storm Water Pollution Prevention Plan prepared in accordance with this permit.

Tier I value means a value for aquatic life, human health or wildlife calculated under R 323.1057 of the Water Quality Standards using a tier I toxicity database.

Tier II value means a value for aquatic life, human health or wildlife calculated under R 323.1057 of the Water Quality Standards using a tier II toxicity database.

Total maximum daily loads (TMDLs) are required by the Clean Water Act for waterbodies that do not meet water quality standards. TMDLs represent the maximum daily load of a pollutant that a waterbody can assimilate and meet water quality standards, and an allocation of that load among point sources, nonpoint sources, and a margin of safety.

Toxicity reduction evaluation (TRE) means a site-specific study conducted in a stepwise process designed to identify the causative agents of effluent toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity.

Water Quality Standards means the Part 4 Water Quality Standards promulgated pursuant to Part 31 of the NREPA, being R 323.1041 through R 323.1117 of the Michigan Administrative Code.

Weekly monitoring frequency refers to a calendar week which begins on Sunday and ends on Saturday. When required by this permit, an analytical result, reading, value, or observation shall be reported for that period if a discharge occurs during that period. If the calendar week begins in one month and ends in the following month, the analytical result, reading, value, or observation shall be reported in the month in which monitoring was conducted.

WWSL is a wastewater stabilization lagoon.

WWSL discharge event is a discrete occurrence during which effluent is discharged to the surface water up to 10 days of a consecutive 14-day period.

3-portion composite sample is a sample consisting of three equal-volume grab samples collected at equal intervals over an 8-hour period.

Section A. Definitions

7-day concentration

FOR WWSLs THAT COLLECT AND STORE WASTEWATER AND ARE AUTHORIZED TO DISCHARGE ONLY IN THE SPRING AND/OR FALL ON AN INTERMITTENT BASIS – The 7-day concentration is the sum of the daily concentrations determined during any 7 consecutive days of discharge during a WWSL discharge event divided by the number of daily concentrations determined. If the number of daily concentrations determined during the WWSL discharge event is less than 7 days, the number of actual daily concentrations determined shall be used for the calculation. The calculated 7-day concentration will be used to determine compliance with any maximum 7-day concentration limitations. When required by the permit, report the maximum calculated 7-day concentration for the WWSL discharge event in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMR. If the WWSL discharge event was partially in each of two months, the value shall be reported on the DMR of the month in which the last day of discharge occurred.

FOR ALL OTHER DISCHARGES – The 7-day concentration is the sum of the daily concentrations determined during any 7 consecutive days in a reporting month divided by the number of daily concentrations determined. If the number of daily concentrations determined is less than 7, the actual number of daily concentrations determined shall be used for the calculation. The calculated 7-day concentration will be used to determine compliance with any maximum 7-day concentration limitations in the reporting month. When required by the permit, report the maximum calculated 7-day concentration for the month in the "MAXIMUM" column under "QUALITY OR CONCENTRATION" on the DMR. The first 7-day calculation shall be made on day 7 of the reporting month, and the last calculation shall be made on the last day of the reporting month.

7-day loading

FOR WWSLs THAT COLLECT AND STORE WASTEWATER AND ARE AUTHORIZED TO DISCHARGE ONLY IN THE SPRING AND/OR FALL ON AN INTERMITTENT BASIS – The 7-day loading is the sum of the daily loadings determined during any 7 consecutive days of discharge during a WWSL discharge event divided by the number of daily loadings determined. If the number of daily loadings determined during the WWSL discharge event is less than 7 days, the number of actual daily loadings determined shall be used for the calculation. The calculated 7-day loading will be used to determine compliance with any maximum 7-day loading limitations. When required by the permit, report the maximum calculated 7-day loading for the WWSL discharge event in the "MAXIMUM" column under "QUANTITY OR LOADING" on the DMR. If the WWSL discharge event was partially in each of two months, the value shall be reported on the DMR of the month in which the last day of discharge occurred.

FOR ALL OTHER DISCHARGES – The 7-day loading is the sum of the daily loadings determined during any 7 consecutive days in a reporting month divided by the number of daily loadings determined. If the number of daily loadings determined is less than 7, the actual number of daily loadings determined shall be used for the calculation. The calculated 7-day loading will be used to determine compliance with any maximum 7-day loading limitations in the reporting month. When required by the permit, report the maximum calculated 7-day loading for the month in the "MAXIMUM" column under "QUANTITY OR LOADING" on the DMR. The first 7-day calculation shall be made on day 7 of the reporting month, and the last calculation shall be made on the last day of the reporting month.

24-hour composite sample is a flow-proportioned composite sample consisting of hourly or more frequent portions that are taken over a 24-hour period and in which the volume of each portion is proportional to the discharge flow rate at the time that portion is taken. A time-proportioned composite sample may be used upon approval from the Department if the permittee demonstrates it is representative of the discharge.

Section B. Monitoring Procedures

1. Representative Samples

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Test Procedures

Test procedures for the analysis of pollutants shall conform to regulations promulgated pursuant to Section 304(h) of the Clean Water Act (40 CFR Part 136 – Guidelines Establishing Test Procedures for the Analysis of Pollutants), unless specified otherwise in this permit. **Test procedures used shall be sufficiently sensitive to determine compliance with applicable effluent limitations**. For lists of approved test methods, go to https://www.epa.gov/cwa-methods. Requests to use test procedures not promulgated under 40 CFR Part 136 for pollutant monitoring required by this permit shall be made in accordance with the Alternate Test Procedures regulations specified in 40 CFR 136.4. These requests shall be submitted to the Manager of the Permits Section, Water Resources Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30458, Lansing, Michigan, 48909-7958. The permittee may use such procedures upon approval.

The permittee shall periodically calibrate and perform maintenance procedures on all analytical instrumentation at intervals to ensure accuracy of measurements. The calibration and maintenance shall be performed as part of the permittee's laboratory Quality Assurance/Quality Control program.

3. Instrumentation

The permittee shall periodically calibrate and perform maintenance procedures on all monitoring instrumentation at intervals to ensure accuracy of measurements.

4. Recording Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information: 1) the exact place, date, and time of measurement or sampling; 2) the person(s) who performed the measurement or sample collection; 3) the dates the analyses were performed; 4) the person(s) who performed the analyses; 5) the analytical techniques or methods used; 6) the date of and person responsible for equipment calibration; and 7) the results of all required analyses.

5. Records Retention

All records and information resulting from the monitoring activities required by this permit, including all records of analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation, shall be retained for a minimum of three (3) years, or longer if requested by the Regional Administrator or the Department.

Section C. Reporting Requirements

1. Start-Up Notification

The permittee shall notify the Department of start-up if one of the following conditions applies and in accordance with the applicable condition:

a. Non-CAFOs

1) **If this is an individual permit** and the permittee will not discharge during the first 60 days following the effective date of this permit, the permittee shall notify the Department via MiEnviro Portal within 14 days following the effective date of this permit, and then again <u>60 days prior</u> to commencement of the discharge.

2) **If this is a general permit** and the permittee will not discharge during the first 60 days following the effective date of the Certificate of Coverage (COC) issued under this general permit, the permittee shall notify the Department via MiEnviro Portal <u>within 14 days</u> following the effective date of the COC, and then again <u>60 days prior</u> to commencement of the discharge.

b. CAFOs

1) **If this is an individual permit** and the permittee will not populate with animals during the first 60 days following the effective date of this permit, the permittee shall notify the Department via MiEnviro Portal <u>within 14 days</u> following the effective date of this permit, and then again <u>60 days prior</u> to populating with animals.

2) **If this is a general permit** and the permittee will not populate with animals during 60 days following the effective date of the Certificate of Coverage (COC) issued under this general permit, the permittee shall notify the Department via MiEnviro Portal <u>within 14 days</u> following the effective date of the COC, and then again <u>60 days prior</u> to populating with animals.

2. Submittal Requirements for Self-Monitoring Data

Part 31 of the NREPA (specifically Section 324.3110(7)); and R 323.2155(2) of Part 21, Wastewater Discharge Permits, promulgated under Part 31 of the NREPA, allow the Department to specify the forms to be utilized for reporting the required self-monitoring data. Unless instructed on the effluent limitations page to conduct "Retained Self-Monitoring," the permittee shall submit self-monitoring data via the Department's MiEnviro Portal system.

The permittee shall utilize the information provided on the MiEnviro Portal website, located at https://mienviro.michigan.gov/ncore/, to access and submit the electronic forms. Both monthly summary and daily data shall be submitted to the Department no later than the <u>20th day of the month</u> following each month of the authorized discharge period(s). The permittee may be allowed to submit the electronic forms after this date if the Department has granted an extension to the submittal date.

3. Retained Self-Monitoring Requirements

If instructed on the effluent limits page (or otherwise authorized by the Department in accordance with the provisions of this permit) to conduct retained self-monitoring, the permittee shall maintain a year-to-date log of retained self-monitoring results and, upon request, provide such log for inspection to the staff of the Department. Retained self-monitoring results are public information and shall be promptly provided to the public upon request.

Section C. Reporting Requirements

The permittee shall certify, in writing, to the Department, on or before <u>January 10 (April 1 for animal feeding operation facilities) of each year</u>, that: 1) all retained self-monitoring requirements have been complied with and a year-to-date log has been maintained; and 2) the application on which this permit is based still accurately describes the discharge. With this annual certification, the permittee shall submit a summary of the previous year's monitoring data. The summary shall include maximum values for samples to be reported as daily maximums and/or monthly maximums and minimum values for any daily minimum samples.

Retained self-monitoring may be denied to a permittee by notification in writing from the Department. In such cases, the permittee shall submit self-monitoring data in accordance with Part II.C.2., above. Such a denial may be rescinded by the Department upon written notification to the permittee. Reissuance or modification of this permit or reissuance or modification of an individual permittee's authorization to discharge shall not affect previous approval or denial for retained self-monitoring unless the Department provides notification in writing to the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

Monitoring required pursuant to Part 41 of the NREPA or Rule 35 of the Mobile Home Park Commission Act, 1987 PA 96, as amended, for assurance of proper facility operation, shall be submitted as required by the Department.

5. Compliance Dates Notification

<u>Within 14 days</u> of every compliance date specified in this permit, the permittee shall submit a written notification to the Department via MiEnviro Portal (https://mienviro.michigan.gov/ncore/) indicating whether or not the particular requirement was accomplished. If the requirement was not accomplished, the notification shall include an explanation of the failure to accomplish the requirement, actions taken or planned by the permittee to correct the situation, and an estimate of when the requirement will be accomplished. If a written report is required to be submitted by a specified date and the permittee accomplishes this, a separate written notification is not required.

6. Noncompliance Notification

Compliance with all applicable requirements set forth in the Clean Water Act, Parts 31 and 41 of the NREPA, and related regulations and rules is required. All instances of noncompliance shall be reported as follows:

a. 24-Hour Reporting

Any noncompliance which may endanger health or the environment (including maximum and/or minimum daily concentration discharge limitation exceedances) shall be reported, verbally, <u>within 24 hours</u> from the time the permittee becomes aware of the noncompliance by calling the Department at the number indicated on the second page of this permit (or, if this is a general permit, on the COC). A written submission shall also be provided via MiEnviro Portal (https://mienviro.michigan.gov/ncore/) within five (5) days.

b. Other Reporting

The permittee shall report, in writing via MiEnviro Portal (https://mienviro.michigan.gov/ncore/), all other instances of noncompliance not described in a. above <u>at the time monitoring reports are submitted</u>; or, in the case of retained self-monitoring, <u>within five (5) days</u> from the time the permittee becomes aware of the noncompliance.

Section C. Reporting Requirements

Reporting shall include: 1) a description of the discharge and cause of noncompliance; and 2) the period of noncompliance, including exact dates and times, or, if not yet corrected, the anticipated time the noncompliance is expected to continue, and the steps taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.

7. Spill Notification

The permittee shall immediately report any release of any polluting material which occurs to the surface waters or groundwaters of the state, unless the permittee has determined that the release is not in excess of the threshold reporting quantities specified in the Part 5 Rules (R 324.2001 through R 324.2009 of the Michigan Administrative Code), by calling the Department at the number indicated on the second page of this permit (or, if this is a general permit, on the COC); or, if the notice is provided after regular working hours, by calling the Department's 24-hour Pollution Emergency Alerting System telephone number, 1-800-292-4706.

<u>Within 10 days</u> of the release, the permittee shall submit to the Department via MiEnviro Portal (https://mienviro.michigan.gov/ncore/) a full written explanation as to the cause of the release, the discovery of the release, response measures (clean-up and/or recovery) taken, and preventive measures taken or a schedule for completion of measures to be taken to prevent reoccurrence of similar releases.

8. Upset Noncompliance Notification

If a process "upset" (defined as an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee) has occurred, the permittee who wishes to establish the affirmative defense of upset shall notify the Department by telephone within 24 hours of becoming aware of such conditions; and within five (5) days, provide in writing, the following information:

- a. that an upset occurred and that the permittee can identify the specific cause(s) of the upset;
- b. that the permitted wastewater treatment facility was, at the time, being properly operated and maintained (note that an upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation); and
- c. that the permittee has specified and taken action on all responsible steps to minimize or correct any adverse impact in the environment resulting from noncompliance with this permit.

No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

In any enforcement proceedings, the permittee, seeking to establish the occurrence of an upset, has the burden of proof.

9. Bypass Prohibition and Notification

a. Bypass Prohibition

Bypass is prohibited, and the Department may take an enforcement action, unless:

1) bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass; and

Section C. Reporting Requirements

3) the permittee submitted notices as required under 9.b. or 9.c. below.

b. Notice of Anticipated Bypass

If the permittee knows in advance of the need for a bypass, the permittee shall submit written notification to the Department before the anticipated date of the bypass. This notification shall be submitted <u>at least 10 days before</u> the date of the bypass; however, the Department will accept fewer than 10 days advance notice if adequate explanation for this is provided. The notification shall provide information about the anticipated bypass as required by the Department. The Department may approve an anticipated bypass, after considering its adverse effects, if it will meet the three (3) conditions specified in a. above.

c. Notice of Unanticipated Bypass

As soon as possible but no later than 24 hours from the time the permittee becomes aware of the unanticipated bypass, the permittee shall notify the Department by calling the number indicated on the second page of this permit (or, if this is a general permit, on the COC); or, if notification is provided after regular working hours, call the Department's 24-hour Pollution Emergency Alerting System telephone number, 1-800-292-4706.

d. Written Report of Bypass

A written submission shall be provided within five (5) working days of commencing any bypass to the Department, and at additional times as directed by the Department. The written submission shall contain a description of the bypass and its cause; the period of bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass; and other information as required by the Department.

e. Bypass Not Exceeding Limitations

The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of 9.a., 9.b., 9.c., and 9.d., above. This provision does not relieve the permittee of any notification responsibilities under Part II.C.11. of this permit.

- f. Definitions
 - 1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.

2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

10. Bioaccumulative Chemicals of Concern (BCC)

Consistent with the requirements of R 323.1098 and R 323.1215 of the Michigan Administrative Code, the permittee is prohibited from undertaking any action that would result in a lowering of water quality from an increased loading of a BCC unless an increased use request and antidegradation demonstration have been submitted and approved by the Department.

Section C. Reporting Requirements

11. Notification of Changes in Discharge

The permittee shall notify the Department via MiEnviro Portal (https://mienviro.michigan.gov/ncore/), as soon as possible but <u>within no more than 10 days</u> of knowing, or having reason to believe, that any activity or change has occurred or will occur which would result in the discharge of: 1) detectable levels of chemicals on the current Michigan Critical Materials Register, priority pollutants or hazardous substances set forth in 40 CFR 122.21, Appendix D, or the Pollutants of Initial Focus in the Great Lakes Water Quality Initiative specified in 40 CFR 132.6, Table 6, which were not acknowledged in the application or listed in the application at less than detectable levels; 2) detectable levels of any other chemical not listed in the application or listed at less than five times the average level reported in the complete application (see the first page of this permit, for the date(s) the complete application was submitted). Any other monitoring results obtained as a requirement of this permit shall be reported in accordance with the compliance schedules.

12. Changes in Facility Operations

Any anticipated action or activity, including but not limited to facility expansion, production increases, or process modification, which will result in new or increased loadings of pollutants to the receiving waters must be reported to the Department by a) submission of an increased use request (application) and all information required under R 323.1098 (Antidegradation) of the Water Quality Standards or b) by written notice if the following conditions are met: 1) the action or activity will not result in a change in the types of wastewater discharged or result in a greater quantity of wastewater than currently authorized by this permit; 2) the action or activity will not result in violations of the effluent limitations specified in this permit; 3) the action or activity is not prohibited by the requirements of Part II.C.10.; and 4) the action or activity will not require notification pursuant to Part II.C.11. Following such written notice, the permit or, if applicable, the facility's COC, may be modified according to applicable laws and rules to specify and limit any pollutant not previously limited.

13. Transfer of Ownership or Control

In the event of any change in ownership or control of facilities from which the authorized discharge emanates, the following requirements apply: Not less than <u>30 days prior</u> to the actual transfer of ownership or control – for non-CAFOs, or <u>within 30 days</u> of the actual transfer of ownership or control – for CAFOs, the permittee shall submit to the Department via MiEnviro Portal (https://mienviro.michigan.gov/ncore/) a written agreement between the current permittee and the new permittee containing: 1) the legal name and address of the new owner; 2) a specific date for the effective transfer of permit responsibility, coverage and liability; and 3) a certification of the continuity of or any changes in operations, wastewater discharge, or wastewater treatment.

If the new permittee is proposing changes in operations, wastewater discharge, or wastewater treatment, the Department may propose modification of this permit in accordance with applicable laws and rules.

14. Operations and Maintenance Manual

For wastewater treatment facilities that serve the public (and are thus subject to Part 41 of the NREPA), Section 4104 of Part 41 and associated Rule 2957 of the Michigan Administrative Code allow the Department to require an Operations and Maintenance (O&M) Manual from the facility. An up-to-date copy of the O&M Manual shall be kept at the facility and shall be provided to the Department upon request. The Department may review the O&M Manual in whole or in part at its discretion and require modifications to it if portions are determined to be inadequate.

At a minimum, the O&M Manual shall include the following information: permit standards; descriptions and operation information for all equipment; staffing information; laboratory requirements; record keeping requirements; a maintenance plan for equipment; an emergency operating plan; safety program information; and copies of all pertinent forms, as-built plans, and manufacturer's manuals.

Section C. Reporting Requirements

Certification of the existence and accuracy of the O&M Manual shall be submitted to the Department at least sixty days prior to start-up of a new wastewater treatment facility. Recertification shall be submitted <u>sixty days prior to start-up</u> of any substantial improvements or modifications made to an existing wastewater treatment facility.

15. Signatory Requirements

All applications, reports, or information submitted to the Department in accordance with the conditions of this permit and that require a signature shall be signed and certified as described in the Clean Water Act and the NREPA.

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

The NREPA (Section 3115(2)) provides that a person who at the time of the violation knew or should have known that he or she discharged a substance contrary to this part, or contrary to a permit, COC, or order issued or rule promulgated under this part, or who intentionally makes a false statement, representation, or certification in an application for or form pertaining to a permit or COC or in a notice or report required by the terms and conditions of an issued permit or COC, or who intentionally renders inaccurate a monitoring device or record required to be maintained by the Department, is guilty of a felony and shall be fined not less than \$2,500.00 or more than \$25,000.00 for each violation. The court may impose an additional fine of not more than \$25,000.00 for each day during which the unlawful discharge occurred. If the conviction is for a violation committed after a first conviction of the person under this subsection, the court shall impose a fine of not less than \$25,000.00 per day and not more than \$50,000.00 per day of violation. Upon conviction, in addition to a fine, the court in its discretion may sentence the defendant to imprisonment for not more than 2 years or impose probation upon a person for a violation of this part. With the exception of the issuance of criminal complaints, issuance of warrants, and the holding of an arraignment, the circuit court for the county in which the violation occurred has exclusive jurisdiction. However, the person shall not be subject to the penalties of this subsection if the discharge of the effluent is in conformance with and obedient to a rule, order, permit, or COC of the Department. In addition to a fine, the attorney general may file a civil suit in a court of competent jurisdiction to recover the full value of the injuries done to the natural resources of the state and the costs of surveillance and enforcement by the state resulting from the violation.

16. Electronic Reporting

Upon notice by the Department that electronic reporting tools are available for specific reports or notifications, the permittee shall submit electronically via MiEnviro Portal (https://mienviro.michigan.gov/ncore/) all such reports or notifications as required by this permit, on forms provided by the Department.

Section D. Management Responsibilities

1. Duty to Comply

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit, more frequently than, or at a level in excess of, that authorized, shall constitute a violation of the permit.

It is the duty of the permittee to comply with all the terms and conditions of this permit. Any noncompliance with the Effluent Limitations, Special Conditions, or terms of this permit constitutes a violation of the NREPA and/or the Clean Water Act and constitutes grounds for enforcement action; for permit or COC termination, revocation and reissuance, or modification; or denial of an application for permit or COC renewal.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

2. Operator Certification

The permittee shall have the waste treatment facilities under direct supervision of an operator certified at the appropriate level for the facility certification by the Department, as required by Sections 3110 and 4104 of the NREPA. Permittees authorized to discharge storm water shall have the storm water treatment and/or control measures under direct supervision of a storm water operator certified by the Department, as required by Section 3110 of the NREPA.

3. Facilities Operation

The permittee shall, at all times, properly operate and maintain all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes adequate laboratory controls and appropriate quality assurance procedures.

4. Power Failures

In order to maintain compliance with the effluent limitations of this permit and prevent unauthorized discharges, the permittee shall either:

- a. provide an alternative power source sufficient to operate facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit; or
- b. upon the reduction, loss, or failure of one or more of the primary sources of power to facilities utilized by the permittee to maintain compliance with the effluent limitations and conditions of this permit, the permittee shall halt, reduce or otherwise control production and/or all discharge in order to maintain compliance with the effluent limitations and conditions of this permit.

5. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any adverse impact to the surface waters or groundwaters of the state resulting from noncompliance with any effluent limitation specified in this permit including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the discharge in noncompliance.

6. Containment Facilities

The permittee shall provide facilities for containment of any accidental losses of polluting materials in accordance with the requirements of the Part 5 Rules (R 324.2001 through R 324.2009 of the Michigan Administrative Code). For a POTW, these facilities shall be approved under Part 41 of the NREPA.

Section D. Management Responsibilities

7. Waste Treatment Residues

Residuals (i.e., solids, sludges, biosolids, filter backwash, scrubber water, ash, grit, or other pollutants or wastes) removed from or resulting from treatment or control of wastewaters, including those that are generated during treatment or left over after treatment or control has ceased, shall be disposed of in an environmentally compatible manner and according to applicable laws and rules. These laws may include, but are not limited to, the NREPA, Part 31 for protection of water resources, Part 55 for air pollution control, Part 111 for hazardous waste management, Part 115 for solid waste management, Part 121 for liquid industrial wastes, Part 301 for protection of inland lakes and streams, and Part 303 for wetlands protection. Such disposal shall not result in any unlawful pollution of the air, surface waters or groundwaters of the state.

8. Right of Entry

The permittee shall allow the Department, any agent appointed by the Department, or the Regional Administrator, upon the presentation of credentials and, for animal feeding operation facilities, following appropriate biosecurity protocols:

- a. to enter upon the permittee's premises where an effluent source is located or any place in which records are required to be kept under the terms and conditions of this permit; and
- b. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect process facilities, treatment works, monitoring methods and equipment regulated or required under this permit; and to sample any discharge of pollutants.

9. Availability of Reports

Except for data determined to be confidential under Section 308 of the Clean Water Act and Rule 2128 (R 323.2128 of the Michigan Administrative Code), all reports prepared in accordance with the terms of this permit and required to be submitted to the Department shall be available for public inspection via MiEnviro Portal (https://mienviro.michigan.gov/ncore/). As required by the Clean Water Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Clean Water Act and Sections 3112, 3115, 4106 and 4110 of the NREPA.

10. Duty to Provide Information

The permittee shall furnish to the Department via MiEnviro Portal (https://mienviro.michigan.gov/ncore/), <u>within a</u> <u>reasonable time</u>, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or the facility's COC, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

Section E. Activities Not Authorized by This Permit

1. Discharge to the Groundwaters

This permit does not authorize any discharge to the groundwaters. Such discharge may be authorized by a groundwater discharge permit issued pursuant to the NREPA.

2. **POTW Construction**

This permit does not authorize or approve the construction or modification of any physical structures or facilities at a POTW. Approval for the construction or modification of any physical structures or facilities at a POTW shall be by permit issued under Part 41 of the NREPA.

3. Civil and Criminal Liability

Except as provided in permit conditions on "Bypass" (Part II.C.9. pursuant to 40 CFR 122.41(m)), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance, whether or not such noncompliance is due to factors beyond the permittee's control, such as accidents, equipment breakdowns, or labor disputes.

4. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee may be subject under Section 311 of the Clean Water Act except as are exempted by federal regulations.

5. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

6. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize violation of any federal, state or local laws or regulations, nor does it obviate the necessity of obtaining such permits, including any other Department of Environment, Great Lakes, and Energy permits, or approvals from other units of government as may be required by law.