PERMIT NO. MI0022802

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,

City of Detroit Water and Sewerage Department
735 Randolph Street
Detroit, MI 48226

and

Great Lakes Water Authority
735 Randolph Street
Suite 1900
Detroit, MI 48226

are authorized to discharge from the **Great Lakes Water Authority Water Resource Recovery Facility** located at

9300 West Jefferson Avenue
Detroit, MI 48209

designated as **GLWA WRRF**

to the receiving waters named the Detroit River and the Rouge River, and from combined sewer overflow facilities to the receiving waters named the Detroit River, the Rouge River, and Conner Creek in accordance with effluent limitations, monitoring requirements, and other conditions set forth in this permit.

This permit is based on an application received on April 4, 2022, and completed on October 13, 2022.

This permit takes effect on October 1, 2026. 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. MI0022802 (expiring October 1, 2022).

This permit and the authorization to discharge shall expire at midnight on **October 1, 2027**. In order to receive authorization to discharge beyond the date of expiration, the permittees 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 **April 4, 2027**.

Issued: September 30, 2026.

Original signed by Andrea Munoz-Hernandez
Andrea Munoz-Hernandez, Manager
Permits Section
Water Resources Division

PERMIT FEE REQUIREMENTS

In accordance with Section 324.3120 of the NREPA, the permittees 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 permittees 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: Municipal Major, 500 MGD or greater (Individual Permit)

In accordance with Section 324.3132 of the NREPA, the permittees shall make payment of an annual biosolids land application fee to the Department if the permittee land applies biosolids. The permittees 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 no later than January 31 of each year for notices mailed by December 15. Payment shall be submitted or postmarked no later than 45 days after receiving the notice for notices mailed after December 15.

PERMIT TERMINATION REQUEST

The permittees may request termination of the discharge authorization under this permit by submitting to the Department the appropriate Notice of Termination form via MiEnviro Portal. Payment of the annual permit fee will be required if the Notice of Termination form is not submitted to the Department by September 1 or if the Department does not approve the termination.

CONTACT INFORMATION

Unless specified otherwise, all contact with the Department required by this permit shall be made to the District Office of the Water Resources Division. The Warren District Office is located at 27700 Donald Court, Warren, MI 48092-2793, Telephone: 586-753-3700, Fax: 586-751-4690.

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.

CYBERSECURITY INFORMATION

Cybersecurity is becoming increasingly important as cyberattacks present an imminent and substantial risk to wastewater systems. Many wastewater systems have gaps in their existing cybersecurity practices that leave them vulnerable to potentially disabling attacks. The Department encourages the permittees to identify cybersecurity gaps in their wastewater system (e.g., changing default passwords in operational technology) and eliminate those vulnerabilities. The United States Environmental Protection Agency, the Cybersecurity and Infrastructure Security Agency, and the state of Michigan offer guidance and technical assistance for conducting cybersecurity risk assessments, developing and implementing a risk mitigation plan, and implementing cybersecurity controls. Applicable resources can be located at https://www.epa.gov/waterresilience/epa-cybersecurity-water-sector, https://www.cisa.gov/resources-tools/resources/top-cyber-actions-securing-water-systems, and https://www.michigan.gov/dtmb/services/cybersecurity.

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Section A. Limitations and Monitoring Requirements

1. Final Effluent Limitations, Monitoring Point 049F

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittees are authorized to discharge treated municipal wastewater from Monitoring Point 049F through Outfall 049 (Detroit River Outfall (DRO)). Outfall 049 (DRO) discharges to the Detroit River at Latitude 42.2764, Longitude -83.1072. Such discharge shall be limited and monitored by the permittees as specified below.

This discharge shall consist of secondary treated municipal wastewater typically but will consist of primary treated municipal wastewater and additional secondary treated municipal wastewater up to the hydraulic capacity of Outfall 049 (DRO) during wet weather events. During such wet weather events, the permittees are authorized to discharge primary treated municipal wastewater from Monitoring Point 049A through Outfall 049 (DRO).

Whenever Outfall 049 (DRO) is out of service for repairs, the permittees may discharge all effluent authorized for discharge from Outfall 049 (DRO) through Outfall 050 (Rouge River Outfall (RRO)). Monitoring, limitations, and other requirements specified below shall apply to the discharge through Outfall 050 (RRO), unless otherwise specified. Outfall 050 (RRO) discharges to the Rouge River at Latitude 42.2811, Longitude -83.1289. **At least 10 days** in advance of scheduled maintenance and **within 24-hours** after initiation of diversion due to emergency conditions, the permittees shall notify the Department of the reason for the diversion and the expected duration of the diversion.

	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring	Sample
Parameter	Monthly	7-Day	Daily	Units	Monthly	7-Day	Daily	Units	Frequency	Type
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Carbonaceous Biochemical Oxygen Demand (CBOD5)	---	---	---	---	---	---	(report)	mg/l	Daily	24-Hr Composite
Ammonia Nitrogen (as N)	---	---	---	---	---	---	(report)	mg/l	Daily	24-Hr Composite
Total Copper	---	---	310	lbs/day	---	---	40	ug/l	Weekly	24-Hr Composite
Total Selenium	470	---	(report)	lbs/day	61	---	(report)	ug/l	Monthly	24-Hr Composite
Chloride	---	---	---	---	---	---	(report)	mg/l	Monthly	24-Hr Composite
Sulfate	---	---	---	---	---	---	(report)	mg/l	Monthly	24-Hr Composite
Total Polychlorinated Biphenyls (PCBs)										
PCB Aroclor 1016	---	---	---	---	---	---	(report)	ug/l	Weekly	24-Hr Composite
PCB Aroclor 1221	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1232	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1242	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1248	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1254	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1260	---	---	---	---	---	---	(report)	ug/l	Weekly	
					Maximum PCB Aroclor					
PCB Aroclor – See f. below	---	---	---	---	<0.1	---	---	ug/l	Monthly	See f. below

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Section A. Limitations and Monitoring Requirements

Parameter	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring Frequency	Sample Type
	Monthly	7-Day	Daily	Units	Monthly	7-Day	Daily	Units		
Acute Toxicity – *C. dubia*	---	---	---	---	---	---	(report)	TU_A	Quarterly	24-Hr Composite
Fecal Coliform Bacteria	---	---	---	---	200	400	(report)	cts/ 100 ml	Daily	Grab
Total Residual Chlorine (TRC)	---	---	---	---	---	---	0.11	mg/l	Daily	Grab
Oil & Grease	---	---	---	---	---	15	(report)	mg/l	Daily	Grab
Available Cyanide	---	---	---	---	---	---	(report)	ug/l	Quarterly	Grab
Perfluorooctanesulfonic Acid (PFOS)										
Through August 31, 2031	---	---	---	---	---	---	(report)	ng/l	Monthly	Grab
Beginning September 1, 2031	0.085	---	(report)	lbs/day	11	---	(report)	ng/l	Monthly	Grab
					Minimum Daily					
pH	---	---	---	---	6.0	---	9.0	S.U.	Daily	Grab
Dissolved Oxygen	---	---	---	---	(report)	---	---	mg/l	Daily	Grab

The following design flow was used in determining the above limitations, but is not to be considered a limitation or actual capacity: a combined 930 MGD of secondary treated effluent.

a. Sampling Locations
All samples shall be representative of the effluent and consistent with the locations approved by the Department. The Department may approve alternate sampling locations that are demonstrated by the permittees to be representative of the effluent.

b. Quarterly Monitoring
Quarterly samples shall be taken during the months of January, April, July, and October. If the facility does not discharge during these months, the permittees 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 permittees shall enter "*G" on the Discharge Monitoring Report (DMR). (For purposes of reporting on the Daily tab of the DMR, the permittees shall enter “*G” on the first day of the month only).

c. Total Residual Chlorine (TRC)
Compliance with the TRC limit shall be determined on the basis of one (1) or more grab samples. If more than one (1) sample per day is taken, the additional samples shall be collected in near equal intervals over at least eight (8) hours. The samples shall be analyzed immediately upon collection and the average reported as the daily concentration. Samples shall be analyzed in accordance with Part II.B.2. of this permit.

d. Monitoring Frequency Reduction for Total Copper and/or Total Selenium
After the submittal of 12 months of data, the permittees may request, in writing, Department approval for a reduction in monitoring frequency for Total Copper and/or Total Selenium. 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 permittees may reduce the monitoring frequency indicated in Part I.A.1. of this permit. The monitoring frequency for Total Copper and/or Total Selenium shall not be reduced to less than annually. The Department may revoke the approval for reduced monitoring at any time upon notification to the permittees.

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e. Monitoring Frequency Reduction for Perfluorooctanesulfonic Acid (PFOS)
After the submittal of at least 10 equally spaced sample results obtained over a minimum of three (3) months, the permittees may request, in writing, Department approval of a reduction in monitoring frequency for PFOS. 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 permittees may reduce the monitoring frequency indicated in Part I.A.1. of this permit. The monitoring frequency for PFOS shall not be reduced to less than annually. The Department may revoke the approval for reduced monitoring at any time upon notification to the permittees.

f. Limits Below the Quantification Level – Total Polychlorinated Biphenyls (PCBs)
The sampling procedures, preservation and handling, and analytical protocol for compliance monitoring for PCBs shall be in accordance with EPA Method 608. Upon approval from the Department, the permittees 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 quantification level shall be 0.1 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.

The water quality-based effluent limitation for Total PCBs is 0.000026 ug/l (0.0002 lbs/day) as a maximum monthly average. This is less than the quantification level. Control requirements are therefore established consistent with R 323.1213. **The discharge of any individual aroclor at or above the quantification level of 0.1 ug/l is a specific violation of this permit**. If concentrations of all aroclors representing a monitoring period are less than their quantification levels, the permittee will be considered to be in compliance with the permit for the monitoring period that the analyses represent, provided that the permittees are also in full compliance with the Pollutant Minimization Program for Total PCBs set forth in Part I.A.9. of this permit. For the purpose of reporting on the Daily tab of the DMR, individual aroclor results less than the quantification level shall be reported as "<0.1." For the purpose of reporting on the Summary tab of the DMR, the value reported under PCB Aroclor shall be the highest individual aroclor concentration observed during the monitoring period. This permit condition does not authorize the discharge of PCBs 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.

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g. Acute Toxicity Requirements

Test species shall include *Ceriodaphnia dubia*. Testing and reporting procedures shall follow 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). When the effluent ammonia nitrogen (as N) concentration is greater than 5 mg/l, the pH of the toxicity test shall be maintained at the pH of the effluent at the time of sample collection. The acute toxic unit (TU_A) value for **each species tested** shall be reported on the DMR. For **each species not tested**, the permittees shall enter **"*W"** on the DMR. (For purposes of reporting on the Daily tab of the DMR, the permittees shall enter “*W” on the first day of the month only). Completed toxicity test reports for each test conducted shall be retained by the permittees in accordance with the requirements of Part II.B.5. of this permit and shall be available for review by the Department upon request. Toxicity test data acceptability is contingent upon the validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request.

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

1) If the data indicate persistent exceedance of the acute or chronic toxicity requirements of R 323.1219, then **within 90 days** of receipt of written notification from the Department, the following conditions apply: The permittees shall implement a Toxicity Reduction Evaluation (TRE), the objective of which shall be to reduce the toxicity of the final effluent from Monitoring Point 049F to <1.0 TU_A **within three (3) years** of notification. The following documents are available as guidance to reduce toxicity to acceptable levels: Phase I, EPA/600/6-91/003; Phase II, EPA/600/R-92/080; Phase III, EPA/600/R-92/081; and Publicly Owned Treatment Works, EPA/833B-99/002. The TRE shall include monthly acute toxicity tests of the discharge from Monitoring Point 049F for the duration of the TRE. The tests shall be conducted and reported as specified above. Upon approval from the Department, the acute toxicity tests may be performed using the more sensitive species identified in the acute toxicity results collected to date. If a more sensitive species cannot be identified, the acute toxicity tests shall be performed with both species. Annual progress reports shall be submitted to the Department **within 30 days** of the completion of the last test of each annual cycle.

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

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2. Effluent Limitations, Monitoring Point 049A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittees are authorized to discharge treated municipal wastewater and treated stormwater runoff from Monitoring Point 049A through Outfall 049 (DRO), or through Outfall 050 (RRO) when the hydraulic capacity of Outfall 049 (DRO) is not sufficient to meet the approved GLWA Wet Weather Operational Plan (see Part I.A.14.). Outfall 049 (DRO) discharges to the Detroit River at Latitude 42.2764, Longitude -83.1072. Outfall 050 (RRO) discharges to the Rouge River at Latitude 42.2811, Longitude -83.1289. Such discharge shall be limited and monitored by the permittees as specified below.

Monitoring Point 049A is a primary treated effluent conduit. There shall be no discharge from Monitoring Point 049A directly to the Detroit River through Outfall 049 (DRO) unless the discharge from Monitoring Point 049B exceeds a peak hourly flow of 930 MGD (which includes recycle) or in accordance with an approved GLWA Wet Weather Operational Plan.

	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring	Sample
Parameter	Monthly	7-Day	Daily	Units	Monthly	7-Day	Daily	Units	Frequency	Type
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Carbonaceous Biochemical Oxygen Demand (CBOD5)	---	---	---	---	40	---	(report)	mg/l	Daily	24-Hr Composite
Total Suspended Solids (TSS)	---	---	---	---	70	---	(report)	mg/l	Daily	24-Hr Composite
Total Phosphorus (as P)	---	---	---	---	1.5	---	(report)	mg/l	Daily	24-Hr Composite
Ammonia Nitrogen (as N)	---	---	---	---	---	---	(report)	mg/l	Daily	24-Hr Composite
Total Mercury										
Corrected	(report)	---	(report)	lbs/day	(report)	---	(report)	ng/l	2x Monthly	Calculation
Uncorrected	---	---	---	---	---	---	(report)	ng/l	2x Monthly	Grab
Field Duplicate	---	---	---	---	---	---	(report)	ng/l	2x Monthly	Grab
Field Blank	---	---	---	---	---	---	(report)	ng/l	2x Monthly	Preparation
Laboratory Method Blank	---	---	---	---	---	---	(report)	ng/l	2x Monthly	Preparation
	12-Month Rolling Avg				12-Month Rolling Avg					
Total Mercury	0.16	---	---	lbs/day	25	---	---	ng/l	Monthly	Calculation

The following design flow was used in determining the above limitations, but is not to be considered a limitation or actual capacity: 770 MGD.

a. Sampling Locations
All samples shall be representative of the effluent and consistent with the locations approved by the Department. Samples for CBOD5, TSS, Total Phosphorus, Ammonia Nitrogen, and Total Mercury shall be taken prior to mixing with other waste streams. The Department may approve alternate sampling locations that are demonstrated by the permittees to be representative of the effluent.

b. Sampling of Short-Term Wet Weather Events
If the first calendar day of the discharge event from Monitoring Point 049A includes less than three hours of flow but continues into the next calendar day, the sampling can be included as a part of the subsequent event the following day.

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c. Final Effluent Limitation for Total Mercury

The final limit for total mercury is the Discharge Specific Level Currently Achievable (LCA) based on a multiple discharger variance from the WQBEL of 1.3 ng/l, pursuant to Rule 1103(9) of the Water Quality Standards. Compliance with the LCA shall be determined as a 12-month rolling average, the calculation of which may be done using blank-corrected sample results. The 12-month rolling average shall be determined by adding the present monthly average result to the preceding 11 monthly average results then dividing the sum by 12. For facilities with quarterly monitoring requirements for total mercury, quarterly monitoring shall be equivalent to three (3) months of monitoring in calculating the 12-month rolling average. Facilities that monitor more frequently than monthly for total mercury must determine the monthly average result, which is the sum of the results of all data obtained in a given month divided by the total number of samples taken, in order to calculate the 12-month rolling average. If the 12-month rolling average for any month is less than or equal to the LCA, the permittees will be considered to be in compliance for total mercury for that month, provided the permittees are also in full compliance with the Pollutant Minimization Program for Total Mercury, set forth in Part I.A.9. of this permit.

d. 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 permittees can demonstrate to the Department that an alternate sampling procedure is representative of the discharge. Guidance for clean technique sampling is contained in EPA Method 1669, “Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels (Sampling Guidance),” EPA-821-R96-001, July 1996. Information and data documenting the permittees’ 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 permittees 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 permittees 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 permittees 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 permittees shall report under "Total Mercury – Corrected" the same value reported under "Total Mercury – Uncorrected." The field duplicate is for quality control purposes only; its analytical result shall not be averaged with the sample result.

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3. Effluent Limitations, Monitoring Point 049B

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittees are authorized to discharge treated municipal wastewater from Monitoring Point 049B through Outfall 049 (DRO), or through Outfall 050 (RRO) when there is reduced hydraulic capacity through Outfall 049 (DRO) or during wet weather. Outfall 049 (DRO) discharges to the Detroit River at Latitude 42.2764, Longitude -83.1072. Outfall 050 (RRO) discharges to the Rouge River at Latitude 42.2811, Longitude -83.1289. Such discharge shall be limited and monitored by the permittees as specified below.

Monitoring Point 049B is the combined secondary treated effluent conduit for all dry weather flows and all wet weather flows up to and including a peak hourly flow of 930 MGD (which includes recycle).

	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring	Sample
Parameter	**Monthly**	**7-Day**	**Daily**	**Units**	**Monthly**	**7-Day**	**Daily**	**Units**	**Frequency**	**Type**
Flow (This flow measurement is all secondary flow minus recycle and buffer flows)										
	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Recycled Flow (Screened Final Effluent (SFE))	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily SFE Flow
Buffer Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Carbonaceous Biochemical Oxygen Demand (CBOD5)	194,000	310,000	(report)	lbs/day	25	40	(report)	mg/l	Daily	24-Hr Composite
Total Suspended Solids (TSS)	233,000	349,000	(report)	lbs/day	30	45	(report)	mg/l	Daily	24-Hr Composite
Ammonia Nitrogen (as N)	---	---	---	---	---	---	(report)	mg/l	Daily	24-Hr Composite
Total Phosphorus (as P)	5,400	---	(report)	lbs/day	0.7	---	(report)	mg/l	Daily	24-Hr Composite
	Six-Month Average				**Six-Month Average**					
April – September	4,600	---	---	lbs/day	0.6	---	---	mg/l	See d. below	Calculation
	Maximum Monthly				**Maximum Monthly**					
Total Mercury										
Corrected	(report)	---	(report)	lbs/day	(report)	---	(report)	ng/l	Quarterly	Calculation
Uncorrected	---	---	---	---	---	---	(report)	ng/l	Quarterly	Grab
Field Duplicate	---	---	---	---	---	---	(report)	ng/l	Quarterly	Grab
Field Blank	---	---	---	---	---	---	(report)	ng/l	Quarterly	Preparation
Laboratory Method Blank	---	---	---	---	---	---	(report)	ng/l	Quarterly	Preparation
	12-Month Rolling Avg				**12-Month Rolling Avg**					
Total Mercury	0.023	---	---	lbs/day	3.0	---	---	ng/l	Quarterly	Calculation

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Parameter	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring Frequency	Sample Type
	Monthly	7-Day	Daily	Units	Monthly	7-Day	Daily	Units		
					Minimum % Monthly		Minimum % Daily			
CBOD5 Minimum % Removal	---	---	---	---	85	---	(report)	%	Monthly	Calculation
TSS Minimum % Removal	---	---	---	---	85	---	(report)	%	Monthly	Calculation
					Minimum Daily		Maximum Daily			
pH	---	---	---	---	6.0	---	9.0	S.U.	Daily	Grab

The following design flow was used in determining the above limitations, but is not to be considered a limitation or actual capacity: a combined 930 MGD of secondary treated effluent.

a. Sampling Locations
Samples for CBOD5, TSS, Ammonia Nitrogen, Total Phosphorus, Total Mercury, and pH shall be taken prior to mixing with other waste streams. Samples for pH shall be collected only during periods of discharge from Monitoring Point 049A through Outfall 049 (DRO). The Department may approve alternate sampling locations that are demonstrated by the permittees to be representative of the effluent.

b. Quarterly Monitoring
Quarterly samples shall be taken during the months of January, April, July, and October. If the facility does not discharge during these months, the permittees 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 permittees shall enter "*G" on the Discharge Monitoring Report (DMR). (For purposes of reporting on the Daily tab of the DMR, the permittees shall enter “*G” on the first day of the month only).

c. Percent Removal Requirements
Monthly percent removal shall be calculated based on the monthly average effluent CBOD5 and TSS concentrations and the monthly average influent concentrations for approximately the same period. Daily percent removal shall be calculated based on the daily effluent CBOD5 and TSS concentrations and the daily influent concentrations for the same day. Reporting of Daily percent removal is only required on days on which an influent sample is obtained. The calculation shall be made as follows for each parameter: Percent removal = (influent concentration - effluent concentration) / influent concentration x 100.

d. Total Phosphorus Six-Month Average Limit (April – September)
The six-month average shall be determined by adding the six monthly average results from April through September and dividing the sum by six. The permittees shall calculate and report the Six-Month Average on the October Discharge Monitoring Report.

e. Final Effluent Limitation for Total Mercury
The final limit for total mercury is the Discharge Specific Level Currently Achievable (LCA) based on a multiple discharger variance from the WQBEL of 1.3 ng/l, pursuant to Rule 1103(9) of the Water Quality Standards. Compliance with the LCA shall be determined as a 12-month rolling average, the calculation of which may be done using blank-corrected sample results. The 12-month rolling average shall be determined by adding the present monthly average result to the preceding 11 monthly average results then dividing the sum by 12. For facilities with quarterly monitoring requirements for total mercury, quarterly monitoring shall be equivalent to three (3) months of monitoring in calculating the 12-month rolling average. Facilities that monitor more frequently than monthly for total mercury must determine the monthly average result, which is the sum of the results of all data obtained in a given

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month divided by the total number of samples taken, in order to calculate the 12-month rolling average. If the 12-month rolling average for any quarter is less than or equal to the LCA, the permittees will be considered to be in compliance for total mercury for that quarter, provided the permittees are also in full compliance with the Pollutant Minimization Program for Total Mercury, set forth in Part I.A.9. of this permit.

f. 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 permittees can demonstrate to the Department that an alternate sampling procedure is representative of the discharge. Guidance for clean technique sampling is contained in EPA Method 1669, “Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels (Sampling Guidance),” EPA-821-R96-001, July 1996. Information and data documenting the permittees’ 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 permittees 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 permittees 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 permittees 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 permittees shall report under "Total Mercury – Corrected" the same value reported under "Total Mercury – Uncorrected." The field duplicate is for quality control purposes only; its analytical result shall not be averaged with the sample result.

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4. Final Effluent Limitations, Monitoring Point 050A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittees are authorized to discharge secondary treated municipal wastewater and primary treated municipal wastewater when hydraulically necessary from Monitoring Point 050A through Outfall 050 (RRO). Outfall 050 (RRO) discharges to the Rouge River at Latitude 42.2811, Longitude -83.1289. Discharge through Outfall 050 (RRO) is authorized when the hydraulic capacity of Outfall 049 (DRO) is not sufficient to meet the approved GLWA Wet Weather Operational Plan (see Part I.A.14.). Such discharge shall be limited and monitored by the permittees as specified below.

	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring	Sample
Parameter	**Monthly**	**7-Day**	**Daily**	**Units**	**Monthly**	**7-Day**	**Daily**	**Units**	**Frequency**	**Type**
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Total Copper	---	---	---	---	---	---	(report)	ug/l	Quarterly	24-Hr Composite
Chloride	---	---	---	---	---	---	(report)	mg/l	Monthly	24-Hr Composite
Sulfate	---	---	---	---	---	---	(report)	mg/l	Monthly	24-Hr Composite
Acute Toxicity – Fathead Minnow	---	---	---	---	---	---	1.0	TU_A	Monthly	24-Hr Composite
Acute Toxicity – *C. dubia*	---	---	---	---	---	---	1.0	TU_A	Monthly	24-Hr Composite
							Individual Chronic Value			
Chronic Toxicity – Fathead Minnow	---	---	---	---	1.2	---	(report)	TU_C	Monthly	24-Hr Composite
Chronic Toxicity – *C. dubia*	---	---	---	---	1.2	---	(report)	TU_C	Monthly	24-Hr Composite
							Maximum Daily			
Total Polychlorinated Biphenyls (PCBs)										
PCB Aroclor 1016	---	---	---	---	---	---	(report)	ug/l	Weekly	24-Hr Composite
PCB Aroclor 1221	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1232	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1242	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1248	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1254	---	---	---	---	---	---	(report)	ug/l	Weekly	
PCB Aroclor 1260	---	---	---	---	---	---	(report)	ug/l	Weekly	
					Maximum PCB Aroclor					
PCB Aroclor – See f. below	---	---	---	---	<0.1	---	---	ug/l	Monthly	See f. below

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Parameter	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring Frequency	Sample Type
	Monthly	7-Day	Daily	Units	Monthly	7-Day	Daily	Units		
Available Cyanide	---	---	---	---	---	---	(report)	ug/l	Monthly	Grab
Total Antimony	15	---	(report)	lbs/day	2.1	---	(report)	ug/l	Monthly	Grab
Total Cadmium	21	---	(report)	lbs/day	3.1	---	(report)	ug/l	Monthly	Grab
Bromomethane	35	---	(report)	lbs/day	5.1	---	(report)	ug/l	Monthly	Grab
Fecal Coliform Bacteria	---	---	---	---	200	400	(report)	cts/ 100 ml	Daily	Grab
Total Residual Chlorine	---	---	---	---	---	---	38	ug/l	Daily	Grab
Oil & Grease	---	---	---	---	---	15	(report)	mg/l	Daily	Grab
					Minimum Daily					
pH	---	---	---	---	6.0	---	9.0	S.U.	Daily	Grab
Dissolved Oxygen	---	---	---	---	3.0	---	---	mg/l	Daily	Grab

The following design flow was used in determining the above limitations, but is not to be considered a limitation or actual capacity: 830 MGD.

a. Sampling Locations
All samples shall be representative of the effluent and consistent with the locations approved by the Department. The Department may approve alternate sampling locations that are demonstrated by the permittees to be representative of the effluent.

b. Sampling of Short-Term Wet Weather Events
If the first calendar day of the discharge event from Monitoring Point 050A includes less than three hours of flow but continues into the next calendar day, the sampling can be included as a part of the subsequent event the following day.

c. Quarterly Monitoring
Quarterly samples shall be taken during the months of January, April, July, and October. If the facility does not discharge during these months, the permittees 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 permittees shall enter "*G" on the Discharge Monitoring Report (DMR). (For purposes of reporting on the Daily tab of the DMR, the permittees shall enter “*G” on the first day of the month only).

d. Total Residual Chlorine (TRC)
Compliance with the TRC limit shall be determined on the basis of one (1) or more grab samples. If more than one (1) sample per day is taken, the additional samples shall be collected in near equal intervals over at least eight (8) hours. The samples shall be analyzed immediately upon collection and the average reported as the daily concentration. Samples shall be analyzed in accordance with Part II.B.2. of this permit.

e. Monitoring Frequency Reduction for Total Antimony, Total Cadmium, and/or Bromomethane
After the submittal of 12 months of data, the permittees may request, in writing, Department approval for a reduction in monitoring frequency for Total Antimony, Total Cadmium, and/or Total Bromomethane. 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 permittees may reduce the monitoring frequency indicated in Part I.A.4. of this permit. The monitoring frequency for Total Antimony, Total Cadmium, and/or Total Bromomethane shall not be reduced to less than annually. The Department may revoke the approval for reduced monitoring at any time upon notification to the permittees.

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f. Limits Below the Quantification Level – Total Polychlorinated Biphenyls (PCBs)
The sampling procedures, preservation and handling, and analytical protocol for compliance monitoring for PCBs shall be in accordance with EPA Method 608. Upon approval from the Department, the permittees 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 quantification level shall be 0.1 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.

The water quality-based effluent limitation for Total PCBs is 0.000026 ug/l (0.00018 lbs/day) as a maximum monthly average. This is less than the quantification level. Control requirements are therefore established consistent with R 323.1213. **The discharge of any individual aroclor at or above the quantification level of 0.1 ug/l is a specific violation of this permit**. If concentrations of all aroclors representing a monitoring period are less than their quantification levels, the permittees will be considered to be in compliance with the permit for the monitoring period that the analyses represent, provided that the permittees are also in full compliance with the Pollutant Minimization Program for Total PCBs set forth in Part I.A.9 of this permit. For the purpose of reporting on the Daily tab of the DMR, individual aroclor results less than the quantification level shall be reported as "<0.1." For the purpose of reporting on the Summary tab of the DMR, the value reported under PCB Aroclor shall be the highest individual aroclor concentration observed during the monitoring period. This permit condition does not authorize the discharge of PCBs 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.

g. Whole Effluent Toxicity Final Requirements
Test species shall include fathead minnow **and** *Ceriodaphnia dubia*. Testing and reporting procedures shall follow procedures contained in EPA-821-R-02-013, “Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms” (Fourth Edition). When the effluent ammonia nitrogen (as N) concentration is greater than 3 mg/l, the pH of the toxicity test shall be maintained at a pH of 8 Standard Units. The acute toxic unit (TU_A) value and chronic toxic unit (TU_C) value for **each species tested** shall be reported on the DMR. If multiple chronic toxicity tests for the same species are performed during the month, the maximum TU_A value and monthly average TU_C value for the species shall be reported. For **each species not tested**, the permittees shall enter **"*W"** on the DMR. (For purposes of reporting on the Daily tab of the DMR, the permittees shall enter “*W” on the first day of the month only). Completed toxicity test reports for each test conducted shall be retained by the permittees in accordance with the requirements of Part II.B.5. of this permit and shall be available for review by the Department upon request. **After 12 months** of toxicity testing and upon approval from the Department, the monitoring frequency may be reduced to no less than annually if the test data indicate that the toxicity requirements of R 323.1219 of the Michigan Administrative Code are consistently being met. After one (1) year of toxicity testing and upon approval from the Department, the chronic toxicity tests may be performed using the more sensitive species identified in the chronic toxicity results collected to date. If a more sensitive species cannot be identified, the chronic toxicity tests shall be performed with both species. Toxicity test data acceptability is contingent upon validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request.

Discharge from Monitoring Point 050A through Outfall 050 (RRO) is intermittent; occurring when the hydraulic capacity of Outfall 049 (DRO) is not sufficient to meet the approved GLWA Wet Weather Operational Plan or when the DRO is out of service for repairs. If the facility does not discharge from Monitoring Point 050A through Outfall 050 during a month, or there was not a sufficient amount of discharge during a month to perform the required toxicity test, the toxicity test is not required for that month. For any month in which a sample is not taken, the permittees shall enter "*B" on the DMR. (For purposes of reporting on the Daily tab of the DMR, the permittees shall enter “*B” on the first day of the month only).

1) When monitoring shows persistent exceedance of the 1.0 TU_A limit or the 1.2 TU_C limit for effluent toxicity, the Department will determine whether the permittees must implement the toxicity control program requirements specified in 2), below.

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2) **Within 90 days** of receipt of written notification from the Department, the following conditions apply: The permittees shall implement a Toxicity Reduction Evaluation (TRE), the objective of which shall be to reduce the toxicity of the final effluent from Monitoring Point 050A to <1.0 TU_A and <1.2 TU_C. The following documents are available as guidance to reduce toxicity to acceptable levels: Phase I, EPA/600/6-91/005F (chronic), EPA/600/6-91/003 (acute); Phase II, EPA/600/R-92/080 (acute and chronic); Phase III, EPA/600/R-92/081 (acute and chronic); and Publicly Owned Treatment Works (POTWs), EPA/833B-99/002. Annual reports shall be submitted to the Department **within 30 days** of the completion of the last test of each annual cycle.

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5. Combined Sewer Overflow Retention Treatment Basin (RTB) Discharge Authorization, Monitoring Points 101A, 102A, 103A, 104A, 108A, and 109A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittees are authorized to discharge treated combined sewage from the Hubbell/Southfield Combined Sewer Overflow (CSO) Retention Treatment Basin (RTB), Monitoring Point 101A, through Outfall 101; from the Puritan/Fenkell CSO RTB, Monitoring Point 102A, through Outfall 102; from the Seven Mile CSO RTB, Monitoring Point 103A, through Outfall 103; from the Conner Creek CSO RTB, Monitoring Point 104A, through Outfall 104; from the Belle Isle RTB, Monitoring Point 108A, through Outfall 108; and from the Oakwood RTB, Monitoring Point 109A, through Outfall 109 when the basins are full and wastewater flows exceed downstream interceptor capacity. Outfall 101, Outfall 102, Outfall 103, and Outfall 109 discharge to the Rouge River. Outfall 104 discharges to Conner Creek. Outfall 108 discharges to the Detroit River. The outfalls discharge at the following locations.

Outfall 101: Latitude 42.3081, Longitude -83.2067
Outfall 102: Latitude 42.3997, Longitude -83.2719
Outfall 103: Latitude 42.4289, Longitude -83.2692
Outfall 104: Latitude 42.3628, Longitude -82.9585
Outfall 108: Latitude 42.3425, Longitude -82.9981
Outfall 109: Latitude 42.2836, Longitude -83.1419

Such discharge shall be limited and monitored by the permittees as specified below.

	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring	Sample
Parameter	Monthly	7-Day	Daily	Units	Monthly	7-Day	Event	Units	Frequency	Type
Influent Characteristics										
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Effluent Characteristics										
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Carbonaceous Biochemical Oxygen Demand (CBOD5)	---	---	---	---	---	---	(report)	mg/l	Event	See a. below
Total Suspended Solids (TSS)	---	---	---	---	---	---	(report)	mg/l	Event	See a. below
Ammonia Nitrogen (as N)	---	---	---	---	---	---	(report)	mg/l	Event	See a. below
Total Phosphorus (as P)	---	---	---	---	---	---	(report)	mg/l	Event	See a. below
Fecal Coliform Bacteria										
May – October	---	---	---	---	---	---	400	cts/ 100 ml	See a. below	Grab
November – April	---	---	---	---	---	---	1,000	cts/ 100 ml	See a. below	Grab
Oil & Grease (Monitoring Point 109A only)	---	---	---	---	---	---	(report)	mg/l	Daily	Grab

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Parameter	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring Frequency	Sample Type
	Monthly	7-Day	Daily	Units	Monthly	7-Day	Event	Units		
					Event Average					
Total Residual Chlorine (TRC)	---	---	---	---	(report)	---	(report)	mg/l	See a. below	Grab
					Event Minimum					
pH	---	---	---	---	(report)	---	(report)	S.U.	Daily	Grab
Dissolved Oxygen	---	---	---	---	(report)	---	---	mg/l	Daily	Grab

a. RTB Monitoring and Reporting
The permittees shall conduct RTB monitoring and reporting consistent with the requirements of Part II.C.2. of this permit. The permittees shall supply the results of each sample taken during each discharge period.

An **Event** is defined as commencing when combined sewage is discharged into the facility and ending when effluent flow (if any) ceases and does not resume within 24 hours.

Influent flow shall be reported for all wet-weather events where combined sewage is discharged to the facility. Influent flow reporting shall also indicate the component of the total influent flow that is dewatered to the interceptor from the facility during an event and shall be reported in the comment section on the Summary tab of the Discharge Monitoring Reports (DMR). Alternate procedures may be approved by the Department.

Effluent flow shall be reported for all events that cause discharge from the facility to the receiving waters.

Effluent sampling for CBOD5, TSS, ammonia nitrogen (as N), and total phosphorus (as P) shall be by flow-proportioned composite sampling over the entire event. Alternate procedures for determining an event composite may be approved by the Department if existing equipment cannot reliably obtain a flow-proportioned composite sample. For purposes of reporting for a discharge event that occurs on multiple calendar days, the composite sample concentrations for the event shall be reported on the day the discharge event ended. The analytical results of each event composite sample obtained during a reporting month shall be reported on the Daily tab of the DMRs. The highest event composite sample concentrations observed during a reporting period shall be reported on the Summary tab of the DMRs.

For **effluent pH,** report the maximum value of any individual sample taken during the month in the "Maximum" column under "Quality or Concentration" on the Summary tab of the DMRs and the minimum value of any individual sample taken during the month in the "Minimum" column under "Quality or Concentration" on the Summary tab of the DMRs. The individual values taken during the month shall be reported on the Daily tab of the DMRs.

For **effluent dissolved oxygen**, report the minimum concentration of any individual sample taken during the month in the "Minimum" column under the "Quality or Concentration" on the Summary tab of the DMRs. The individual values taken during the month shall be reported on the Daily tab of the DMRs.

For **effluent fecal coliform bacteria and TRC,** grab samples shall be collected every two (2) hours for the first six (6) hours of the discharge and every four (4) hours thereafter for the duration of the discharge. The first sample shall be collected as soon as practical after the discharge begins. The goal of the effluent sampling program is to collect at least three (3) samples during each discharge event, and samples shall be collected at shorter intervals at the onset of the event if the permittees estimate

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that the event duration may be less than six (6) hours. For purposes of reporting for a discharge event that occurs on multiple calendar days, the pollutant concentrations for the event shall be reported on the day the discharge event ended.

For **fecal coliform bacteria**, the geometric mean of all samples taken during an event shall be reported as the “Event Maximum” on the Daily tab of the DMRs, provided that three (3) or more samples were collected. The highest event geometric mean reported during the month shall be reported in the "Maximum" column under "Quality or Concentration" on the Summary tab of the DMRs.

For **TRC**, the highest value of all samples taken during an event shall be reported as the “Event Maximum” on the Daily tab of the DMRs. The average of all samples in an event shall be reported as the "Event Average" on the Daily tab of the DMRs. The highest Event Maximum reported during the month shall be reported in the "Maximum" column under "Quality or Concentration" on the Summary tab of the DMRs. The highest Event Average reported during the month shall be reported in the "Average" column under "Quality or Concentration" on the Summary tab of the DMRs.

b. RTB Dewatering

The RTB shall be promptly dewatered as in accordance with the Department approved Consolidated Annual Report following the need to divert flow to the basin and shall be maintained in readiness for use. The discharge of sludge or residual accumulations from the basin to the surface waters is prohibited. These sludges shall be promptly removed and disposed in accordance with procedures approved by the Department.

For this permit, if up to 930 MGD (including recycle) is being processed with secondary treatment at the WRRF and no primary flow is being discharged, then tributary combined or sanitary storage basins in the GLWA system may be dewatered. Such dewatering will not be considered a violation of this permit, even if contrary to the “wet weather event” definition (see Part II.A.). Once a Regional Operation Plan is developed, it may be implemented once reviewed and approved by the Department.

c. Operation and Maintenance Plan

The permittees shall ensure that discharges only occur in response to rainfall or snowmelt events and cease soon thereafter. Any rehabilitation and maintenance needs shall be addressed to ensure adequate sewer capacity and functionality. This may be accomplished through continued implementation of the approved Operation and Maintenance Plan.

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6. Combined Sewer Overflow Screening and Disinfection Facilities Discharge Authorization, Monitoring Points 105A, 106A and 107A

During the period beginning on the effective date of this permit and lasting until the expiration date of this permit, the permittees are authorized to discharge treated combined sewage from the Leib Combined Sewer Overflow (CSO) Screening and Disinfection Facility, Monitoring Point 105A, through Outfall 105; from the St. Aubin CSO Screening and Disinfection Facility, Monitoring Point 106A, through Outfall 106; and from the Baby Creek CSO Screening and Disinfection Facility, Monitoring Point 107A, through Outfall 107 when the wastewater flows exceed downstream interceptor capacities. Outfall 105 and Outfall 106 discharge to the Detroit River. Outfall 107 discharges to the Rouge River. The outfalls discharge at the following locations.

Outfall 105: Latitude 42.3392, Longitude -83.0089
Outfall 106: Latitude 42.3317, Longitude -83.0267
Outfall 107: Latitude 42.2947, Longitude -83.1419

Such discharge shall be limited and monitored by the permittees as specified below.

	Maximum Limits for Quantity or Loading				Maximum Limits for Quality or Concentration				Monitoring	Sample
Parameter	**Monthly**	**7-Day**	**Daily**	**Units**	**Monthly**	**7-Day**	**Daily**	**Units**	**Frequency**	**Type**
Flow	(report)	---	(report)	MGD	---	---	---	---	Daily	Report Total Daily Flow
Carbonaceous Biochemical Oxygen Demand (CBOD5)	---	---	---	---	---	---	(report)	mg/l	Quarterly	Grab
Total Suspended Solids (TSS)	---	---	---	---	---	---	(report)	mg/l	Quarterly	Grab
Ammonia Nitrogen (as N)	---	---	---	---	---	---	(report)	mg/l	Quarterly	Grab
Total Phosphorus (as P)	---	---	---	---	---	---	(report)	mg/l	Quarterly	Grab
Oil & Grease (Baby Creek CSO Screening & Disinfection Facility only)	---	---	---	---	---	---	(report)	mg/l	Daily	Grab
					Event Average		**Event Maximum**			
Fecal Coliform Bacteria										
May – October	---	---	---	---	---	---	400	cts/ 100 ml	See a. below	Grab
November – April	---	---	---	---	---	---	1,000	cts/ 100 ml	See a. below	Grab
Total Residual Chlorine (TRC)	---	---	---	---	(report)	---	(report)	mg/l	See a. below	Grab
					Event Minimum					
pH	---	---	---	---	(report)	---	(report)	S.U.	Daily	Grab
Dissolved Oxygen	---	---	---	---	(report)	---	---	mg/l	Daily	Grab

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a. Screening and Disinfection Facilities Monitoring and Reporting
The permittees shall monitor screening and disinfection facilities performance and report the monitoring consistent with the requirements of Part II.C.2. of this permit. The permittees shall supply the results of each sample taken during each discharge period.

Effluent flow shall be reported for all events that cause discharge from the facility to the receiving waters.

For **effluent pH,** report the maximum value of any individual sample taken during the month in the "Maximum" column under "Quality or Concentration" on the Summary tab of the DMRs and the minimum value of any individual sample taken during the month in the "Minimum" column under "Quality or Concentration" on the Summary tab of the DMRs. The individual values taken during the month shall be reported on the Daily tab of the DMRs.

For **effluent dissolved oxygen**, report the minimum concentration of any individual sample taken during the month in the "Minimum" column under the "Quality or Concentration" on the Summary tab of the DMRs. The individual values taken during the month shall be reported on the Daily tab of the DMRs.

For **effluent fecal coliform bacteria and TRC,** grab samples shall be collected every two (2) hours for the first six (6) hours of the discharge and every four (4) hours thereafter for the duration of the discharge. The first sample shall be collected as soon as practical after the discharge begins. The goal of the effluent sampling program is to collect at least three (3) samples during each discharge event, and samples shall be collected at shorter intervals at the onset of the event if the permittees estimate that the event duration may be less than six (6) hours. For purposes of reporting for a discharge event that occurs on multiple calendar days, the pollutant concentrations for the event shall be reported on the day the discharge event ended.

For **fecal coliform bacteria**, the geometric mean of all samples taken during an event shall be reported as the “Event Maximum” on the Daily tab of the DMRs, provided that three (3) or more samples were collected. The highest event geometric mean reported during the month shall be reported in the "Maximum" column under "Quality or Concentration" on the Summary tab of the DMRs.

For **TRC**, the highest value of all samples taken during an event shall be reported as the “Event Maximum” on the Daily tab of the DMRs. The average of all samples in an event shall be reported as the "Event Average" on the Daily tab of the DMRs. The highest Event Maximum reported during the month shall be reported in the "Maximum" column under "Quality or Concentration" on the Summary tab of the DMRs. The highest Event Average reported during the month shall be reported in the "Average" column under "Quality or Concentration" on the Summary tab of the DMRs.

b. Sampling Locations
Sampling locations shall be representative of the effluent and consistent with the locations approved by the Department.

c. Operation and Maintenance Plan
The permittees shall ensure that discharges only occur in response to rainfall or snowmelt events and cease soon thereafter. Any rehabilitation and maintenance needs shall be addressed to ensure adequate sewer capacity and functionality. This may be accomplished through continued implementation of the approved Operation and Maintenance Plan.

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d. Treatment Facility Dewatering

The treatment facility shall be promptly dewatered (if applicable) in accordance with the Department approved Consolidated Annual Report following the need to divert flow to the facility and shall be maintained in readiness for use. The discharge of sludge or residual accumulations from the facility to the surface waters is prohibited.

For this permit, if up to 930 MGD (including recycle) is being processed with secondary treatment at the WRRF and no primary flow is being discharged, then tributary combined or sanitary storage basins in the GLWA system may be dewatered. Such dewatering will not be considered a violation of this permit, even if contrary to the "wet weather event" definition (see Part II.A.). Once a Regional Operation Plan is developed, it may be implemented once reviewed and approved by the Department.

e. Quarterly Monitoring

Quarterly samples shall be taken during the months of January, April, July, and October. If the facility does not discharge during these months, the permittees 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 permittees shall enter "*G" on the Discharge Monitoring Report (DMR). (For purposes of reporting on the Daily tab of the DMR, the permittees shall enter "*G" on the first day of the month only).

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7. 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	10	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	
Dieldrin	0.01	ug/l	

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Parameter	QL	Units	Analytical Method
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	
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	
Perfluorooctanesulfonic acid (PFOS)	2.0	ng/l	Analyses may be performed using EPA Method 1633A, ASTM D7979, ASTM D8421-24, or another isotope dilution method (sometimes referred to as Method 537 modified) until one or more analytical methods are promulgated at which time only promulgated methods may be used.
Perfluorooctanoic acid (PFOA)			
Perfluorobutanesulfonic acid (PFBS)			
Perfluorononanoic acid (PFNA)			
Perfluorohexanesulfonic acid (PFHxS)			
Phenanthrene	1.0	ug/l	
Selenium, Total	1.0	ug/l	
Silver, Total	0.5	ug/l	
Strontium, Total	1000	ug/l	
Sulfate	10	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	

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8. Additional Monitoring Requirements

As a condition of this permit, the permittees shall monitor the discharge from monitoring points 049F and 050A for the constituents identified below. This monitoring is an application requirement of 40 CFR 122.21(j), effective December 2, 1999. The permittees shall provide the results of a minimum of four (4) whole effluent toxicity tests and the results of a minimum of three (3) samples taken for all other parameters with the application for reissuance (see the cover page of this permit for the application due date). Samples must be representative of the seasonal variation in the discharge from each outfall. Grab samples shall be collected for total mercury, total phenols, and the Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) and Volatile Organic Compounds identified below. For all other parameters, 24-hour composite samples shall be collected.

Test species for whole effluent toxicity monitoring shall include fathead minnow **and** *Ceriodaphnia dubia,* for a total of four (4) tests on each species. Testing and reporting procedures shall follow procedures contained in EPA-821-R-02-013, "Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms" (Fourth Edition). When the effluent ammonia nitrogen (as N) concentration is greater than 3 mg/l, the pH of the toxicity test shall be maintained at a pH of 8 Standard Units. Acute and chronic toxicity data shall be included in the reporting for the toxicity test results. Toxicity test data acceptability is contingent upon the validation of the test method by the testing laboratory. Such validation shall be submitted to the Department upon request. The permittees shall report to the Department any whole effluent toxicity test results greater than 1.0 TU_A or 12 TU_C **within five (5) days** of becoming aware of the result.

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

The permittees shall notify the Department **within 14 days** of completing the required monitoring in accordance with Part II.C.5. Additional reporting requirements are specified in Part II.C.11. If, upon review of the analysis, it is determined that additional requirements are needed to protect the receiving waters in accordance with applicable water quality standards, the permit may then be modified by the Department in accordance with applicable laws and rules.

Testing in accordance with this condition is only required at either monitoring point 049F or monitoring point 050A for certain parameters. For these parameters, the monitoring point at which testing is required is identified in parentheses below.

Whole Effluent Toxicity
chronic toxicity (049F)

Hardness
calcium carbonate

Perfluoroalkyl and Polyfluoroalkyl Substances (050A only)

Perfluorooctanesulfonic acid (PFOS)	Perfluorooctanoic acid (PFOA)
Perfluorobutanesulfonic acid (PFBS)	Perfluorohexanesulfonate (PFHxS)
Perfluorononanonic acid (PFNA)	

Metals (Total Recoverable) and Total Phenols

antimony (049F)	arsenic	beryllium	cadmium (049F)
chromium	lead	mercury	nickel
thallium	selenium (050A)	silver	total phenols
zinc			

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Volatile Organic Compounds

acrolein	acrylonitrile	benzene	bromoform
carbon tetrachloride	chlorobenzene	chlorodibromomethane	chloroethane
2-chloroethylvinyl ether	chloroform	dichlorobromomethane	1,1-dichloroethane
1,2-dichloroethane	trans-1,2-dichloroethylene	1,1-dichloroethylene	1,2-dichloropropane
1,3-dichloropropylene	ethylbenzene	methyl bromide (049F)	methyl chloride
methylene chloride	1,1,2,2-tetrachloroethane	tetrachloroethylene	toluene
1,1,1-trichloroethane	1,1,2-trichloroethane	trichloroethylene	vinyl chloride

Acid-Extractable Compounds

4-chloro-3-methylphenol	2-chlorophenol	2,4-dichlorophenol	2,4-dimethylphenol
4,6-dinitro-o-cresol	2,4-dinitrophenol	2-nitrophenol	4-nitrophenol
pentachlorophenol	phenol	2,4,6-trichlorophenol	

Base/Neutral Compounds

acenaphthene	acenaphthylene	anthracene	benzidine
benzo(a)anthracene	benzo(a)pyrene	3,4-benzofluoranthene	benzo(ghi)perylene
benzo(k)fluoranthene	bis(2-chloroethoxy)methane	bis(2-chloroethyl)ether	bis(2-chloroisopropyl)ether
bis(2-ethylhexyl)phthalate	4-bromophenyl phenyl ether	butylbenzyl phthalate	2-chloronaphthalene
4-chlorophenyl phenyl ether	chrysene	di-n-butyl phthalate	di-n-octyl phthalate
dibenzo(a,h)anthracene	1,2-dichlorobenzene	1,3-dichlorobenzene	1,4-dichlorobenzene
3,3'-dichlorobenzidine	diethyl phthalate	dimethyl phthalate	2,4-dinitrotoluene
2,6-dinitrotoluene	1,2-diphenylhydrazine	fluoranthene	fluorene
hexachlorobenzene	hexachlorobutadiene	hexachlorocyclopentadiene	hexachloroethane
indeno(1,2,3-cd)pyrene	isophorone	naphthalene	nitrobenzene
n-nitrosodi-n-propylamine	n-nitrosodimethylamine	n-nitrosodiphenylamine	phenanthrene
pyrene	1,2,4-trichlorobenzene		

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9. Pollutant Minimization Program for Total Mercury and Total PCBs

The goal of the Pollutant Minimization Program is to maintain the effluent concentration of total mercury at or below 1.3 ng/l and Total PCBs at or below the water quality-based effluent limitations set forth in Part I.A.1. and Part I.A.4. The permittees shall continue to implement the Pollutant Minimization Program approved on November 9, 1995, and modifications thereto, to proceed toward the goal. The Pollutant Minimization Program includes the following:

a. an annual review and semi-annual monitoring of potential sources of mercury and PCBs entering the wastewater collection system, including wet weather sources such as runoff or contributions from contaminated sites in the collection area;

b. a program for quarterly monitoring of influent and periodic monitoring of sludge for mercury and PCBs; and

c. implementation of reasonable cost-effective control measures when sources of mercury and/or PCBs are discovered. Factors to be considered include significance of sources, economic considerations, and technical and treatability considerations.

On or before **October 1 of each year**, the permittees shall submit a status report to the Department for the previous calendar year that includes 1) the monitoring results for the previous year, 2) an updated list of potential mercury and PCB sources, and 3) a summary of all actions taken to reduce or eliminate identified sources of mercury and PCBs.

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 to 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), including a reduction in the frequency of the requirements under items a. and b. above.

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

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10. Compliance Schedule for Final Effluent Limits for Perfluorooctanesulfonic Acid (PFOS)

The permittees shall complete the following schedule of compliance to achieve the effluent limits for PFOS specified in Part I.A.1. of this permit. The schedule requires continued work to reduce or eliminate PFOS from indirect discharges to the facility that cause interference or pass through by developing and implementing a local limit for PFOS. If unable to comply with final effluent limits for PFOS effective September 1, 2031, as set forth in Part I.A.1, then a corrective action plan (CAP) shall be submitted as specified herein.

a. On or before **April 1, 2027**, the permittees shall submit an evaluation of whether existing local limits need to be revised and the approvable proposed local limits, if necessary. The local limit evaluation shall include any PFAS with water quality values. Local limits shall be based on protection of facility operations, eliminating pass-through, achieving the final effluent limitations, and preventing restrictions of the permittees' management of biosolids, as currently defined in the Department's "Interim Strategy – Land Application of Biosolids Containing PFAS." Proposed local limits and local limit evaluations shall be submitted in MiEnviro Portal via the "Local Limit Submission for PFAS" schedule. The permittees shall implement local limits upon approval by the Department.

b. On or before **November 1, 2026** the permittees shall submit the first semi-annual status report that documents progress made in control of PFOS source discharges. Semi-annual status reports are due by **November 1 of each year** for the reporting period from January through June and **May 1 of each year** for the reporting period from July through December. The status report shall include all industrial and collection system monitoring from the reporting period. This status report shall also include additional source reduction, pretreatment, and/or prevention of PFOS from entering the collection system and the facility. Monitoring of sources shall occur quarterly at a minimum or more frequently if required by the permittees. Status reports shall be submitted in MiEnviro Portal via the "Ongoing IPP PFAS Status Report."

c. On or before **February 1, 2031**, the permittees shall submit to the Department for review and approval written certification that the facility will be able to meet the final effluent limits for PFOS effective September 1, 2031, as set forth in Part I.A.1. The submittal shall include all effluent data and describe all efforts taken to date to reduce sources of PFOS from entering the collection system and facility. If the permittees are unable to certify that it will be able to meet the PFOS limits effective September 1, 2031, then by the date specified herein, the permittees shall submit a negative certification including a supporting evaluation. Following Department review of that evaluation, this permit may be modified by the Department in accordance with applicable laws and rules. Certification shall be submitted in MiEnviro Portal via the "PFAS Effluent Limit Certification" schedule.

d. If the permittees are unable to consistently comply with those limits, then by **December 1, 2031**, the permittees shall submit a CAP to the Department for review and approval. The CAP shall become an enforceable part of this permit immediately upon its approval by the Department.

   The CAP shall have the following constraints in addition to Industrial Pretreatment Program (IPP) implementation. If effluent concentrations of PFOS are consistently less than 30 ng/l, then continued implementation of the local limit and other source reduction efforts through the IPP may constitute an approvable CAP and the schedule for such CAP shall not exceed two (2) years from September 1, 2031. If effluent concentrations of PFOS are consistently greater than 30 ng/l, then an approvable CAP shall include a) facility and/or collection system cleaning, as appropriate, and/or b) a construction schedule for corrections at the facility, and the schedule for such CAP shall not exceed three (3) years from September 1, 2031. Corrections can include treatment of dewatering water from biosolids storage back to the head of the facility, or treatment (e.g., Powdered Activated Carbon, Granular Activated Carbon, etc.) for PFOS of the entire flow at the facility.

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11. PFAS Data Reporting Requirements

On or before **the 20th day of the month** following each month in which PFAS sampling is required, the permittees shall submit the complete laboratory analysis of each PFAS sample. This may be in addition to required DMR reporting. Submittals shall be made via MiEnviro Portal using the PFAS POTW Effluent Monitoring Report form. Until one or more analytical methods for PFAS are promulgated by EPA, the complete laboratory analysis of each PFAS sample shall constitute the first 28 analytes identified on the PFAS POTW Effluent Monitoring Report form. Following promulgation of one or more analytical methods for PFAS, the complete laboratory analysis of each PFAS sample shall constitute all analytes targeted by the method.

12. Total Residual Chlorine Minimization Program

The goal of the Total Residual Chlorine (TRC) Minimization Program is operate the CSO RTBs and the CSO screening and disinfection facilities in a manner that will provide consistent, effective disinfection while minimizing the discharge of TRC, recognizing the overall goal is compliance with the TRC Final Acute Value of 0.038 mg/l at any point in the receiving stream, unless it is determined by the Department by a permit action that a higher level is acceptable.

In addition, the Operational Goals for this facility are 1.5 mg/l TRC as an event average value and 2.0 mg/l (November – April) or 3.0 mg/l (May – October) TRC as an event instantaneous maximum value.

a. TRC Minimization Assessment (Assessment) (submitted)
The permittees shall prepare and conduct a program to assess the capability of each of the 5 CSO RTBs and screening and disinfection facilities as agreed to (a subset of those listed in Part I.A.6. and Part I.A.7.), to minimize the discharge of TRC. Each Assessment shall be conducted according to a schedule acceptable to the Department. Compliance with the Fecal Coliform Bacteria effluent limits set forth in Part I.A.6. and Part I.A.7. of this permit shall be maintained during each Assessment. Each Assessment shall include an evaluation of various operational practices under a variety of wet weather events to identify measures which can be taken to reduce TRC discharge concentrations. Upon notification by the Department, the permittees shall begin conducting each Assessment over an 18-month period and shall submit a report summarizing the results to the Department within 60 days of completion. An extension of an Assessment period beyond 18 months may be requested by the permittees for approval by the Department in the event that a sufficient number of CSO discharge events have not occurred to allow for an adequate assessment of operational procedures.

Each Assessment report shall include the expected achievable TRC discharge concentrations, recommendations as to specific protocols to be used to manage sodium hypochlorite (NaOCl) dosage rates under various conditions to achieve the Operational Goals, and recommended facility modifications to enhance the ability to control TRC levels while maintaining compliance with the Fecal Coliform Bacteria limits. Specific procedures for adjustment of NaOCl feed rates to minimize the discharge of TRC shall be submitted as part of the Operational Plan (and revised as appropriate in annual updates), as required by Part I.A.18.d. of this permit. The TRC minimization procedures, developed as part of each Assessment, shall be implemented upon approval by the Department.

b. Operational Goals
Upon completion of each Assessment, the permittees shall operate the facility with a goal of 1.5 mg/l TRC as an event average value and a goal of 2.0 mg/l (November – April) or 3.0 mg/l (May – October) TRC as an event instantaneous maximum value. If upon completion of an Assessment, the permittees determine the facility can achieve lower TRC goals than those specified above, then the permittees shall operate the facility to achieve the lower TRC levels. If either TRC goal is exceeded for a CSO discharge event, the permittees shall submit a written report to the Department within seven (7) days explaining the cause of the exceedance and describing the corrective measures that will be undertaken to prevent a future recurrence.

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c. In-Stream TRC Effluent Plume Evaluation (submitted)
The permittees shall conduct an evaluation of the in-stream TRC effluent plume attributable to each of the agreed-to 5 CSO RTBs screening and disinfection facility discharges. The evaluation shall identify the location and size of the TRC effluent plume during and after CSO discharge events and identify the maximum TRC concentrations in-stream at various downstream locations. Upon notification by the Department to begin conducting each Assessment (Part I.A.8.a.), the permittees shall have 60 days to submit a TRC effluent plume work plan describing the proposed evaluation including sampling locations and a proposed implementation schedule such that the In-Stream TRC Effluent Plume Evaluation shall occur after completion of each Assessment and when the operational goals begin. The permittees shall implement the In-Stream TRC Effluent Plume Evaluation following the schedule upon Department approval of the TRC effluent plume work plan. The permittees shall submit a report documenting the results of the TRC Effluent Plume Evaluation **within 90 days** after completion of the field work.

d. Permit Re-Opener Clause
Upon completion of each TRC Minimization Assessment and each In-Stream TRC Effluent Plume Evaluation, the Department may reevaluate the need for TRC effluent limitations. This permit may be modified in accordance with applicable laws and rules to incorporate such revisions as may be necessary to comply with Water Quality Standards at the time of discharge.

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13. Total Phosphorus Evaluation

The permittees will be required to meet a total phosphorus limit of 0.5 mg/l as a growing season average from April through September after identified lead service lines in the permittees' service area are removed and orthophosphate levels in the drinking water distribution system are sufficiently reduced. Upon reduction of orthophosphate levels in the drinking water distribution system, the permittees shall complete an approvable report regarding their ability to effectively meet a total phosphorus limit of 0.5 mg/l as a growing season average from April through September. The report shall be completed in accordance with the following schedule:

a. On or before **one (1) year of receipt of written notification from the Department** that lead service line removal within the permittees' service area has been substantially completed, the permittees shall submit to the Department for review and approval a work plan to complete the report. The work plan shall address the following conditions:

1) A determination as to whether the WRRF can achieve consistent compliance with the Total Phosphorus limit of 0.5 mg/l as a growing season average from April through September;

2) The identification of low-cost capital expenditures that may be necessary to achieve this limit. Low-cost capital expenditures are broadly defined as including no new treatment or expansion of existing processes but can include upgraded treatment units;

3) The identification of low-cost changes to operational controls necessary to achieve this limit, which may include operational adjustments of existing chemical addition systems for increased precipitation of Total Phosphorus or implementation of biological nutrient removal;

4) The identification of any other regulatory responsibilities to protect the public health of the permittee's drinking water customers;

5) A proposed schedule for completion of the report which, once approved, shall become an enforceable requirement of the permit.

b. In accordance with the approved work plan, the permittees shall complete and submit the report to the Department for review and approval. The report shall identify process requirements, operational changes, and other condition(s) needed to meet a total phosphorus limit of 0.5 mg/l as a growing season average from April through September. The report shall also contain a proposed schedule for achieving compliance with the total phosphorus limit which, once approved, shall become an enforceable requirement of the permit. The proposed schedule may consider the federal integrated planning statute contained in Section 402(s) of the Clean Water Act.

If the evaluation shows the permittees are incapable of achieving the total phosphorus limit of 0.5 mg/l as a growing season average from April through September based on the limitations outlined above, the report shall include a rationale based on conditions 1) - 4) required to be addressed in the work plan above and propose the lowest growing season average concentration that can be consistently achieved. Discussions of additional steps that may be required of the permittee due to not meeting a 0.5 mg/l limit as a growing season average from April through September will take place during future permit reissuance cycles.

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14. Water Resource Recovery Facility (WRRF) Wet Weather Operational Plan

The approved WRRF Wet Weather Operational Plan provides the protocol for operations during the interim period before completion of the Long-Term CSO Control Plan. The WRRF Wet Weather Operational Plan details the necessary requirements to maximize wet weather treatment at the WRRF, while complying with effluent limits and all other conditions of this permit, and minimizing untreated combined sewage discharges in the tributary collection system.

The GLWA WRRF Wet Weather Operational Plan shall be coordinated with the Collection System and CSO Treatment Facilities Operational Plan that is required in accordance with Part I.A.18.d. of this permit. On or before **April 1 of each year**, the permittees shall submit to the Department for review and approval an update of the WRRF Wet Weather Operational Plan in conjunction with the Collection System and CSO Treatment Facilities Operational Plan update as part of the Consolidated Annual Report.

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15. Facilities Improvement Program

The permittees shall continue to meet the sludge dewatering, conveyance, and final disposal requirements; continue progress on the long-term solids strategy outlined in the Master Plan; submit the WRRF shutdown schedules; and develop and implement the asset management program as detailed below.

a. WRRF Solids Processing Requirements

1) Capacity for sludge dewatering, conveyance, and final disposal; and required maximum solids inventory loads.

The permittees shall ensure that sludge dewatering equipment, sludge conveyance equipment, and final sludge disposal capability is available at the WRRF as follows:

a) Ensure that the WRRF sludge dewatering equipment, sludge conveyance equipment, and final sludge disposal capability are maintained for use, and in good operational working order to meet the following requirements:

(1) Average capacity of 500 dry tons per day (dtpd), calculated as a calendar monthly average.

(2) The permittees shall notify the Department of any permanent changes to sludge dewatering equipment of sludge disposal equipment that impacts the firm capacity of sludge processing at the WRRF.

b) Ensure that solids are not recycled from the gravity thickeners to the head of the WRRF for more than 72 hours. Recycled solids are defined as total suspended solids (TSS) overflow concentration of 1,000 mg/L or greater from Complex A thickeners.

c) Maintain a calendar quarterly average solids inventory not to exceed 1,000 dtpd. Solids inventory is defined as the total solids in gravity thickener complexes A and B, determined daily in dtpd.

The permittees may submit to the Department for review and approval a request to modify the numerical levels specified above in Part I.A.15.a.1) of this permit. This modification request shall include supporting rationale for the revised numerical levels.

2) Notification Requirements

If the requirements in 1) above are not met, the permittee shall notify the Department **within one (1) business day** identifying which of the requirements were not met and when it occurred. A summary report shall then be provided to the Department **within five (5) business days**, which shall include:

a) An explanation of what caused the requirements above not to be met;

b) Mitigation actions to reduce the impact or correct the reason why the requirements above were not met; and

c) Either a plan or the result of the investigations into the root cause of the reason why the requirements were not met.

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3) Long-Term Solids Disposal Plan

On June 2020, GLWA completed its Master Plan for the regional system that included Technical Memorandum (TM) 5B for the WRRF Sludge and Biosolids Processes. The TM 5B outlines the long-term alternatives for solids management for the WRRF. The permittees shall continue evaluating alternatives recommended by the TM 5B. The GLWA shall at minimum update the technical memorandum concurrent with the update to the Regional Wastewater Master Plan.

The GLWA is advised that implementation or modification of individual elements of the solids processes may require Part 41 wastewater construction permits or may require other Department approvals.

4) Alum Sludge

The discharge of alum sludge to the collection system has ceased. If a discharge of alum sludge becomes necessary, notification to the Department is required **within 10 business days** before changes to operations at a GLWA water treatment plant is expected to cause alum sludge discharge(s) into the collection system. This shall include the duration of the change in operations, the expected rate, the total volume of alum sludge to be discharged, and actions planned or completed at the WRRF to manage the alum sludge discharge(s).

b. Quarterly Capacity Planning Schedules

On or before December 1, March 1, June 1, and September 1, the permittees shall submit quarterly capacity planning schedules. Consistent with the quarterly dates indicated above, these schedules shall be submitted to the Department in a mutually agreeable format one (1) month prior to the start of each calendar quarter for review and approval. Each quarterly schedule shall detail the Freud, Fairview, and Conner pump station capacities, primary treatment capacity, secondary treatment capacity, and sludge processing capacity that is planned to be available during the upcoming quarter, considering coordinated shutdowns necessary to complete all rehabilitation and other projects. The shutdown schedules shall be proposed to minimize environmental impact and maximize available treatment during construction of all projects, consistent with the requirements of the rules associated with Act 451, Part 41, being 299.2943 and 299.2955(1) and (3).

c. Operation, Maintenance & Replacement/Asset Management

The permittees shall at all times properly operate and maintain all facilities (i.e., sewer system, treatment works, as defined in Part 41 of Act 451, 1994 as amended, and control systems) that are installed or used by the permittees to operate the treatment works and sewer system and achieve and maintain compliance with the conditions of this permit. The requirements of an asset management program contain goals of effective performance, adequate funding, and adequate operator staffing and training. Asset management is a planning process focused on gaining optimum value for each asset and providing the financial resources to rehabilitate and replace them when necessary; Asset management is centered on a framework of five (5) core elements: the current state of the assets, the required sustainable level of service, the assets critical to sustained performance, the best-value life-cycle costs, and the best long-term funding strategy.

1) The permittees shall continue to implement the Asset Management Program submitted on January 1, 2014, approved on January 14, 2014, and substantially revised on September 29, 2017, that addresses the following items:

a) A comprehensive fixed asset inventory that is maintained, managed, and updated within a computerized maintenance management system (CMMS),

b) A comprehensive inventory of the collection system fixed assets and collection system map,

c) A Preventive Maintenance Program that may include predictive and reliability centered maintenance,

d) An assessment of asset criticality and risk management,

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e) A capital planning process,

f) A Scheduled Replacement Program (SRP) for assets,

g) Management oversight of system performance.

2) An Annual Report covering implementation of the Asset Management Program during the prior Fiscal Year (July 1 – June 30) shall be prepared by the permittees and submitted to the Department **on or before October 1 of each year**. The Annual Report shall include:

a) A chart/table showing monthly data for the reporting period for each category listed below for each listed data set.

(1) Categories

(a) Each main subset (as defined in the asset management annual summary report) of the treatment process at the WRRF

(b) Each CSO Facility

(c) Each Collection System Pump Station

(d) Overall Collection System/Interceptors

(2) Data sets

(a) Preventative maintenance actions completed as a percentage of preventative maintenance actions planned

(b) Hours spent on corrective actions as a ratio to hours spent on preventative maintenance actions

b) A summary of the Capital Improvement Plan (CIP) work that started, progressed, or was completed during the current reporting period; a summary of the CIP work that is expected to start or complete during the next reporting period; a summary of any CIP work that has been delayed or cancelled and a brief explanation of the reason for that decision.

c) A summary of the budgeted funds for maintenance activities, construction activities, and related support activities, excluding design and engineering costs planned for the current reporting period and the next reporting period.

d) A summary of expenditures made during the current reporting period compared to the planned budget.

d. Staffing Plan
The GLWA shall provide adequate staffing to maintain compliance within its asset management plan and this permit.

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e. Key Performance Indicator Monthly Report

The GLWA shall update the Key Performance Indicator (KPI) report monthly. The KPI report shall be submitted to the Department **by the last day of each month**. The KPI report shall contain up-to-date monthly information for the 12 previous months.

The KPI Monthly report shall contain the following information. The GLWA in coordination with the Department may request modification to the KPI reporting as agreed by both parties.

1) Staffing Total

2) Overtime Budget and Expenditures, and Overtime Hours

3) Available Capacity of Liquids and Solids Treatment and Disposal Processes

4) Daily Average Influent Flow and Solids Inventory

5) Biosolids Production, Capacity, and Disposal

6) Preventative Maintenance and Preventative to Corrective Maintenance Ratio

7) Wastewater Operations Group Training Hours

8) WRRF Main Plant Influent Total Suspended Solids

9) Secondary Clarifier Sludge Depth

f. Public Participation

The permittees will participate in Department initiated public outreach meetings during the term of this permit as resources allow provided there is adequate notification by the Department.

g. Reliability and Resilience

On or before December 1, 2027, the permittees shall develop in coordination with the Department a confidential plan that outlines how the facility will operate given a utility failure and/or chemical supply failure lasting two weeks, during normal flow conditions. The confidential plan shall be maintained at the WRRF and shall be made available on-site to the Department for its review and inspection.

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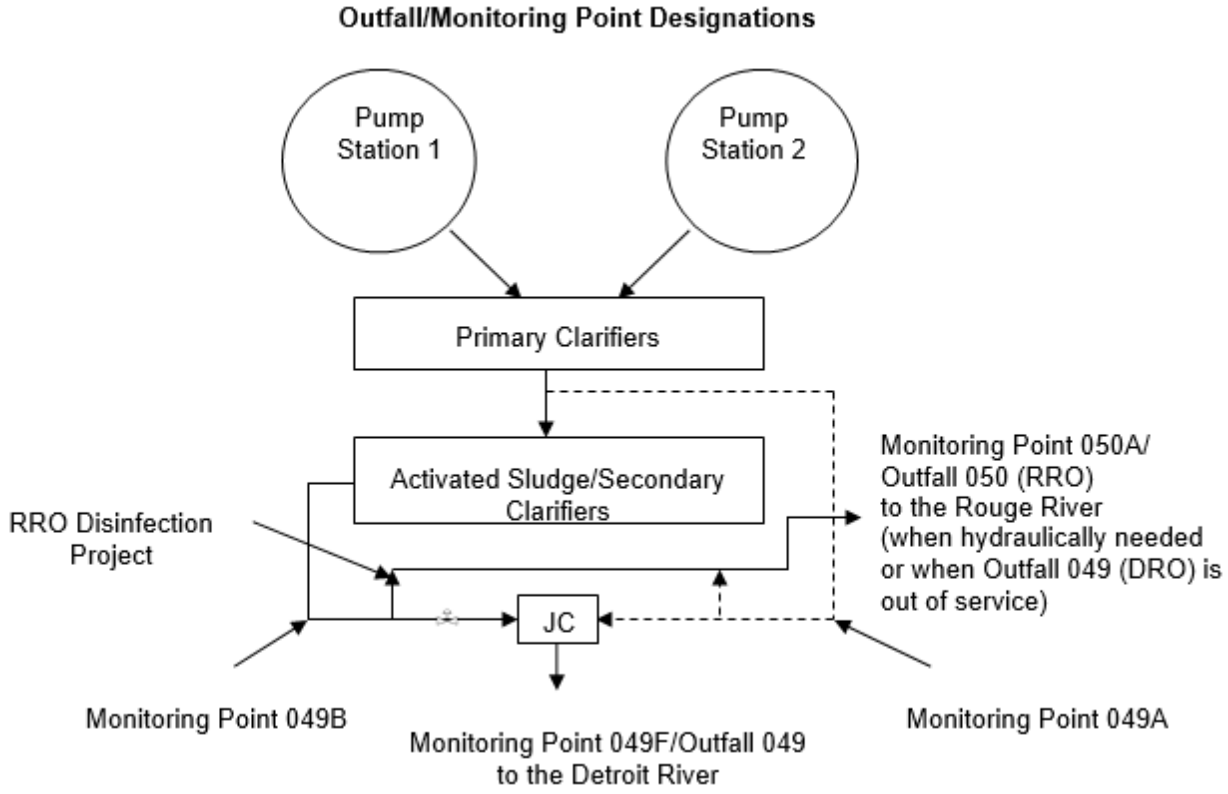
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16. Reopener for Primary and Secondary Treatment Capacity

The permittees are required to maintain a wet weather primary treatment capacity of 1,700 MGD (raw) and wet weather secondary treatment capacity of 930 MGD (which includes recycle). When the elevation of the influent wet well is greater than 85 feet and the facility is not pumping at 1,700 MGD (raw), the discharge from untreated combined sewage overflows (CSOs) upstream of the facility are not authorized, unless caused by localized storm conditions.

These required wet weather treatment capacities may be revised if new/altered wet weather conditions (such as initiation of operation of upstream CSO facilities, etc.) indicate that either less or more flow can be effectively processed. The criteria used to determine whether the required wet weather primary treatment capacities should be revised must include additional plant evaluation under the updated conditions, using testing procedures approved by the Department.

For reference, outfall/monitoring point designations are shown on the following diagram:



POTWs are required to meet secondary categorical treatment requirements. For this combined system, the Department requires all dry weather flows and a portion of wet weather flows are treated to secondary treatment standards. The WRRF operates to the capacities listed above in accordance with their permit and approved operational plan.

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17. Outfalls Prohibited from Discharge to Combined Sewer System

The following Outfalls are prohibited from discharge except as provided for in Part II.C.9.:

OUTFALL	LOCATION	LAT/LONG	RECEIVING STREAM
004	Fairview (DWF) Pump Station (P28 through P31) Parkview & Detroit River - **Emergency only**	42°21'20" 082°58'01"	Discharge to Detroit River (Stop-logged)
014	Dubois (B12) Dubois & Detroit River	42°20'01" 083°01'19"	Detroit River
051	Carbon (B46) Carbon & Rouge River	42°17'07" 083°08'17"	Rouge River
054	Fort Street (DWSD Northwest Interceptor) (B50) South Fort Street & Rouge River (West Shore)	42°17'25" 083°08'35"	Rouge River
056	Fort Street (Oakwood District) (B49) South Fort Street & Rouge River (West Shore)	42°17'27" 083°08'33"	Rouge River
080	Fox Creek Backwater Gates (B01) East Jefferson & Fox Creek	42°22'28" 082°56'27"	Fox Creek to Detroit River

The permittees shall provide for ongoing monitoring (Flow, Duration) for these outfalls should they discharge. This monitoring shall be used to comply with the requirements of Section 324.3112(a) of The Michigan Act (see Part I.A.20.).

The permittees shall maintain and test the monitoring and operating equipment at these outfalls at a frequency determined by the asset management plan to ensure that equipment is operating correctly and any discharge from the outfall is identified. Any testing of gate actuators shall be performed during dry weather conditions to ensure no discharge during testing.

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18. Discharges from Combined Sewer System

a. Limited Discharge Authorization

The permittees are required to utilize, to the maximum extent practicable, available sewerage system transportation capabilities for the delivery of combined sewage to treatment facilities. For an interim period during which the amended Long-Term CSO Control Plan is to be implemented, the permittees are authorized to discharge during wet weather events (see Part II.A.) combined sewage from the outfalls and locations listed below in accordance with the following conditions:

1) a flow rate equivalent to the peak dry weather flow rate has been conveyed to the secondary treatment facilities for treatment without bypass,

2) the total sewerage system storage and transportation capacity for conveyance of wet weather flows to the treatment facilities for treatment has been utilized within the hydraulic design constraints of the system,

3) all primary treatment plant capacity and secondary treatment plant capacity has been utilized in accordance with the approved WRRF Wet Weather Operation Plan (Part I.A.14.), unless a storm event is localized to the extent that the hydraulic capacity of a portion of the collection system (considering storage) is exceeded prior to reaching plant capacities, and

4) the permittees are in full compliance with all requirements as set forth in Part I.A.19.

Combined Sewer Overflow discharges to the Rouge River, the Detroit River, and the Old Channel of the Rouge River are authorized until prohibited, eliminated, or adequately treated to meet water quality standards at times of discharge in accordance with the requirements below, and as specified in Part I.A.18.f. and g.

5) the outfalls that immediately follow this paragraph are included in the Limited Discharge Authorization. There are some untreated CSO outfalls that appear to discharge only during extreme events. Extreme is defined as; (a) no more than one untreated discharge in ten years from a CSO outfall during the April 1 through October 31 growth period, (b) modeled to not discharge at the 25 year – 24 hour event (during growth period, with normal soil moisture, rainfall distributed to a SCS Type II distribution), or (c) monitored to occur only at rainfalls greater than 4 inches in a 24 hour period. The Department does not intend to require construction of treatment facilities at the following outfalls should they continue to only discharge at the extreme event. This addresses CSO outfalls consistently with SSO outfalls according to the 2002 SSO Policy and 2003 Clarification Statement. The list of untreated CSO outfalls that only discharge at the extreme event is flexible and may be adjusted with the adaptive management CSO correction program.

OUTFALL	LOCATION	LAT/LONG	RECEIVING STREAM
029	Rosa Parks (B27) Rosa Parks & Detroit River	42°19'13" 083°03'56"	Detroit River
030	Vermont (B28) Vermont (extended) & Detroit River	42°19'06" 083°04'09"	Detroit River
035	Swain (B33) Swain & Detroit River	42°18'35" 083°04'56"	Detroit River
036	Scotten (B34) Scotten & Detroit River	42°18'31" 083°05'02"	Detroit River
037	McKinstry (B35) McKinstry & Detroit River	42°18'19" 083°05'13"	Detroit River
048	Pulaski (B59A &B) Pulaski & Rouge River	42°17'21" 083°07'11"	Old Channel Rouge River

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6) the outfalls that immediately follow this paragraph are also included in the Limited Discharge Authorization. There are some untreated CSOs that appear to discharge at a minimal frequency and volume. Minimal discharge is defined as actual monitoring of a volume less than 0.3 MG of discharge over a five year period. The Department does not intend to require construction of treatment facilities at the following outfalls should they continue to only discharge at this minimal frequency and volume. The list of untreated CSO outfalls that only discharge at a minimal frequency and volume is flexible and may be adjusted with the adaptive management CSO correction program.

OUTFALL	LOCATION	LAT/LONG	RECEIVING STREAM
018	Riopelle (B16) Riopelle & Detroit River	42°19'52" 083°01'42"	Detroit River
024	Griswold (B22) Griswold & Detroit River	42°19'35" 083°02'28"	Detroit River
028	Eleventh Street (B26) Eleventh Street & Detroit River	42°19'17" 083°03'46"	Detroit River
032	Twenty-First Street (B30) Twenty-First Street & Detroit River	42°18'53" 083°04'31"	Detroit River
034	West Grand Boulevard (B32) West Grand Boulevard & Detroit River	42°18'41" 083°04'50"	Detroit River
039	Ferdinand (B37) Ferdinand & Detroit River	42°18'13" 083°05'19"	Detroit River
041	Junction (B39) Junction & Detroit River	42°18'07" 083°05'25"	Detroit River
042	Campbell (B40) Campbell & Detroit River	42°18'01" 083°05'30"	Detroit River
047	Dearborn Street (B45) Dearborn Street & Rouge River	42°17'26" 083°06'59"	Old Channel Rouge River
073	Riverdale (B79) Florence & Rouge River	42°24'36" 083°16'13"	Rouge River

7) the outfalls that immediately follow this paragraph are also included in the Limited Discharge Authorization. These are untreated CSOs that represent the remaining non-core outfalls that will be required to be addressed under the adaptive management CSO correction program. They include the high-priority non-core CSOs. Note that the list of untreated CSO outfalls is flexible and may be adjusted with the adaptive management CSO correction program.

OUTFALL	LOCATION	LAT/LONG	RECEIVING STREAM
005	McClellan (B03) McClellan (extended) & Detroit River	42°21'20" 082°58'02"	Detroit River
006	Fischer (B04) Fischer & Detroit River	42°21'16" 082°59'15"	Detroit River
007	Iroquois (B05) Iroquois & Detroit River	42°21'14" 082°59'21"	Detroit River

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OUTFALL	LOCATION	LAT/LONG	RECEIVING STREAM
008	Helen (B06) Helen & Detroit River	42°20'40" 083°00'06"	Detroit River
009	Mt. Elliott (B07) Mt. Elliott & Detroit River	42°20'24" 083°00'28"	Detroit River
011	Adair (B09) Adair & Detroit River	42°20'16" 083°00'41"	Detroit River
012	Joseph Campau (B10) Joseph Campau & Detroit River	42°10'08" 083°01'02"	Detroit River
016	Orleans Relief (B15) Orleans (Eastside of) & Detroit River	42°19'54" 083°01'36"	Detroit River
017	Orleans (B14) Orleans (Westside of) & Detroit River	42°19'53" 083°01'37"	Detroit River
019	Rivard (B17) Rivard & Detroit River	42°19'48" 083°01'55"	Detroit River
020	Hastings (B18) Schweizer Place & Detroit River	42°19'46" 083°02'03"	Detroit River
021	Randolph (B19) Randolph & Detroit River	42°19'29" 083°02'26"	Detroit River
022	Bates (B20) Bates & Detroit River	42°19'38" 083°02'32"	Detroit River
023	Woodward (B21) Woodward & Detroit River	42°19'37" 083°02'35"	Detroit River
025	First-Hamilton (B23) First (extended) & Detroit River	42°19'30" 083°02'57"	Detroit River
026	Third Street (B24) Third Street & Detroit River	42°19'28" 083°03'07"	Detroit River

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OUTFALL	LOCATION	LAT/LONG	RECEIVING STREAM
031	Eighteenth Street (B29) Eighteenth Street & Detroit River	42°18'57" 083°04'31"	Detroit River
033	Twenty-Fourth Street (B31) Twenty-Fourth Street & Detroit River	42°18'47" 083°04'42"	Detroit River
038	Summit-Clark (B36) Summit & Detroit River	42°18'14" 083°05'18"	Detroit River
040	Morrell (B38) Morrell & Detroit River	42°18'10" 083°05'22"	Detroit River
043	Dragoon (Livernois Relief) (B41) Dragoon (extended) & Detroit River	42°17'49" 083°05'41"	Detroit River
044	Schroeder (B42) Schroeder & West Jefferson	42°17'32" 083°06'00"	Detroit River
046	Cary (B44) Cary & Rouge River	42°17'29" 083°06'47"	Old Channel Rouge River
059	Warren (B54) West Warren & Rouge River	42°20'34" 083°14'57"	Rouge River
060	Tireman (B56, 57 & 58) Tireman & Rouge River	42°20'59" 083°14'51"	Rouge River
061	West Chicago (B60, 61 & 62) West Chicago & Rouge River (East Shore)	42°21'46" 083°14'56"	Rouge River
062	West Chicago (B63) West Chicago & Rouge River (West Shore)	42°21'52" 083°15'18"	Rouge River
063	Plymouth (B64) Plymouth & Rouge River	42°22'18" 083°15'21"	Rouge River
064	Glendale Relief (B65) Rouge Park Golf Course	42°22'33" 083°14'52"	Rouge River
065	Lahser (Dolson) (B67 & 68) Lahser & Rouge River	42°22'52" 083°15'23"	Rouge River
066	Schoolcraft (B70) Jeffries Freeway, I-96 & Rouge River	42°23'07" 083°16'02"	Rouge River

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OUTFALL	LOCATION	LAT/LONG	RECEIVING STREAM
067	West Parkway (B69) Jeffries Freeway, I-96 & Rouge River	42°23'07" 083°16'02"	Rouge River
068	Brammel (B71) Ray & Rouge River	42°23'30" 083°15'56"	Rouge River
069	Lyndon (B72) Lyndon & Rouge River	42°23'35" 083°15'57"	Rouge River
072	Puritan (B77) Puritan & Rouge River (East Shore)	42°24'28" 083°16'14"	Rouge River
074	McNichols (B80 & 81) West McNichols & Rouge River	42°24'52" 083°15'59"	Rouge River
075	Glenhurst (B82) Glenhurst & Rouge River	42°25'32" 083°16'19"	Rouge River
077	Seven Mile (B85) West Seven Mile & Rouge River (East Shore)	42°25'44" 083°16'09"	Rouge River
079	Pembroke (B87) Frisbee & East Shore Rouge River	42°26'02" 083°16'24"	Rouge River

Nothing in this section of the permit shall be construed to limit the State of Michigan's ability to pursue remedies under the Michigan Act.

b. Qualified Operations and Maintenance Manager for CSO Discharges
The permittees shall place the wastewater collection system under the supervision of a qualified Operations and Maintenance Manager who shall serve as the contact person for the Department regarding combined sewer discharges. The permittees may replace the manager at any time and shall notify the Department within ten days after the replacement.

c. Disconnection of Eaves Troughs and Roof Downspouts
Direct connections of eaves troughs and roof downspouts to the sewer system are prohibited throughout the service area tributary to the combined sewer overflow outfalls. This requirement does not apply if the permittees have demonstrated that the disconnection of eaves troughs and roof downspouts is not a cost-effective means of reducing the frequency or duration of overflows or of maintaining compliance with this permit. Such a demonstration and supporting documentation shall be submitted to the Department for approval.

d. Collection System and CSO Treatment Facilities Operational Plan
The permittees shall continue implementation of the approved Collection System and CSO Treatment Facilities Operational Plan (Operational Plan). The implementation of the Operational Plan shall be coordinated with the WRRF Wet Weather Operational Plan that is required for development and implementation in accordance with Part I.A.14. of this permit.

On or before **April 1 of each year**, the permittees shall submit a revised Operational Plan for Department review and approval, which incorporates all changes made to the plan during the last calendar year (items 1-12 below), and supplies the annual discharge documentation (item 13 below). Any changes to the Operational Plan that affect the rate, volume, or characteristics of the discharge, or the system storage and transportation for conveyance of wet weather flows, shall be submitted to the Department and approved prior to implementation. The operational plan shall define the hydraulic design constraints of the system during both dry and wet weather operation.

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The plan shall include:

1) the procedures utilized at the permittees' CSO RTBs and Screening & Disinfection Facilities for adjustment of NaOCl disinfectant feed rates to minimize the discharge of total residual chlorine,

2) the procedures and schedule for sampling/monitoring the stored NaOCl disinfectant at the permittees' CSO RTBs and Screening & Disinfection Facilities to determine the concentration of available chlorine and assure that the stored NaOCl is of sufficient strength to provide effective disinfection,

3) the procedures for sampling/monitoring the available chlorine concentration of each load of NaOCl delivered to the permittees' CSO RTBs and Screening & Disinfection Facilities,

4) if applicable, the procedures utilized at the permittees' CSO RTBs and Screening & Disinfection Facilities for adjustment of dehalogenating reagent feed rates to minimize the discharge of excess reagent,

5) the procedures to ensure that the collection and treatment systems are operated to maximize treatment,

6) the procedures to ensure that all dry weather flows are conveyed to the treatment facilities for treatment without bypass,

7) the hydraulic profile and hydraulic operational elevations for system pump stations, regulators, diversion devices, gates, level sensors, interceptors, etc., to ensure the conveyance of all dry weather flows to the treatment facilities for treatment without bypass,

8) the procedures to ensure that the sewerage system hydraulic and storage capacity is identified and fully utilized during wet weather events with eventual treatment of stored flows,

9) the procedures to ensure that the greatest quantity of wet weather flow is conveyed to the treatment facilities for treatment to minimize untreated wastewater discharges within the region tributary to the GLWA WRRF,

10) the hydraulic profile and hydraulic operational elevations for system pump stations, regulators, diversion devices, gates, level sensors, interceptors, etc., to ensure that the greatest quantity of wet weather flow is conveyed to the treatment facilities for treatment to minimize combined sewage discharges,

11) the procedures for ongoing inspection of the sewer system within the permittees' jurisdiction for excessive inflow and infiltration and, where necessary, reduction of the excessive infiltration and inflow sources, and the elimination of unauthorized sewer system connections, and

12) identification of the location of the rain gauges.

13) The permittees shall submit annual reports that supply the documentation of rainfall and the frequency, duration, and volume of all discharge events during the previous 12-month period (from January 1 through December 31 of the previous year).

The permittees shall continue to pursue the coordination of operational plans (Regional Operational Plan) with tributary communities with the intent of maximizing flow conveyance to the GLWA system and minimizing regional CSOs. Once the Regional Operational Plan is approved by the Department, it shall be implemented.

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e. New Wastewater Flows

Increased levels of discharge of sanitary sewage from the combined sewer overflow outfalls listed in Part I.A.18.a. of this permit, the CSO RTBs (see Part I.A.5. of this permit), and the CSO Screening and Disinfection Facilities (see Part I.A.6. of this permit) are prohibited unless:

1) the increased discharges are the result of new sanitary wastewater flows which, on the basis of sound professional judgment, are within design peak dry weather transportation capacity, or

2) the permittees have officially adopted and are timely implementing a definite program, satisfactory to the Department, leading to the construction and operation of necessary collection, transportation, or treatment devices.

f. CSO Control Projects

1) Pertinent CSO Program History

The permittees are continuing to implement CSO Control Programs for the various CSO outfalls that discharge to the Rouge River and the Detroit River. Depending upon the particular CSO Control Program and outfall, the permittees are required to provide for the prohibition, elimination, or adequate treatment of combined sewage discharges containing raw sewage, to comply with the Water Quality Standards at times of discharge.

The implementation and completion of the CSO Control Program indicated in Part I.A.18.f. and g. are a necessary and essential requirement of this permit.

2) CSO Correction Program Moving Forward

The permittees shall control remaining combined sewer discharges, that are not classified as either extreme or minimal (see Part I.A.18.a.5) & 6)), to eliminate the discharges or provide adequate treatment of the combined sewage discharges to comply with Water Quality Standards at times of discharge. Additional CSO control measures are needed to fully comply with Michigan's Water Quality Standards and it is appropriate to plan and schedule the remaining control measures, taking into account what has been put in place to date and lessons learned, the unique technical and financial situation of the city of Detroit, and the nature of the remaining CSO challenges. Additionally, the Permittees shall consider the most recent Wastewater Master Plan dated June 2020 and any subsequent updated Wastewater Master Plans when developing elements for the CSO Correction Program.

The permittees shall proceed with remaining CSO corrections using an adaptive management approach. This means that as new information is gained from: (1) evaluation of existing CSO projects and new treatment technologies, (2) evaluation of real-time collection system controls, (3) more accurate and complete data on CSO discharge frequency and volume, (4) benefits of less flow to the collection system from green stormwater infrastructure (GSI), (5) benefits of less flow to the collection system due to the City's drainage charge program and new stormwater ordinance, (6) benefits of less flow to the collection system as the City continues its sewer rehabilitation program, and (7) any other pertinent information, future CSO controls can be adapted to best provide cost-effective elimination of discharges, adequate treatment of discharges, or classification of discharges as minimal or extreme.

The permittees shall propose the non-core CSO correction projects to be designed, constructed, and operated to provide CSO elimination or adequate treatment during the subsequent five-year permit cycle, with each permit reapplication beginning in April 2022. High priority non-core outfalls should generally be addressed first, and outfalls thought of as high priority can change at any time due to implementation of the adaptive management approach. City of Detroit residents within the City of Detroit Water and Sewerage Department (DWSD) service area are "high burden" status based on sewer fees paid as a percentage of median annual household income. Planning of CSO control measures may reflect the permittees' financial capacity for City of Detroit residents determined in the Financial Capability Evaluation that is submitted with each permit reapplication. At each application submittal through the duration of the CSO correction program, the projects proposed shall include an updated

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Financial Capability Evaluation that may also include other financial factors as appropriate. Reissued permits will then be drafted and issued with schedules for approved CSO correction projects that provide continuing progress toward meeting water quality standards. The permittees shall prepare an evaluation of Financial Capability, consistent with state and federal guidance, and shall submit the evaluation with the applications for reissuance of this permit (see the cover page of this permit for the next application due date). The Financial Capability Report shall be in the form of previous reports utilizing the EPA Financial Capability Guidance Document (USEPA 832-B-97-004; February, 1997), and updated with information as may be available in order to assess the permittees' ability to undertake future capital improvement projects related to the Long-Term CSO Control Program. This permit may be modified in accordance with applicable law and rules to incorporate revisions to conform to pertinent laws or rules, or as necessary to address prevailing situations.

Based on information currently available, the following are lists by water body that are high priority CSOs that require control. These outfalls can be revised at any time by the permittees or the Department, reflecting adaptive management considerations. While either the permittees or Department can propose changes at any time, an agreement between the two parties is required and shall be made in writing. The goal will be to complete projects fully addressing all high priority outfalls before October 1, 2037.

Rouge River non-core CSOs (these can be changed by mutual agreement between the permittees and the Department)

High Priority Outfalls
059, 061, 064, 065, 074

Detroit River non-core CSOs (these can be changed by mutual agreement between the permittees and the Department)

High Priority Outfalls
005, 007, 009, 012, 022, 025, 031, 038

3) Adaptive Management Program for this Permit

The adaptive management approach for this permit looks at the (1) evaluation of existing CSO projects and new treatment technologies, (2) evaluation of real-time collection system controls, (3) more accurate and complete data on CSO discharge frequency and volume, (4) benefits of less flow to the collection system from green stormwater infrastructure (GSI), (5) benefits of less flow to the collection system due to the City's drainage charge program and new stormwater ordinance, (6) benefits of less flow to the collection system as the City continues its sewer rehabilitation program, and (7) any other pertinent information. The permittees shall use the above measures, as appropriate, to further reduce untreated CSO discharges on an ongoing basis from the collection system to inform projects planned for the Phase II LTCP.

On or before **April 1 of each year**, the permittees shall prepare a Progress Report that summarizes significant real time controls that occurred during the previous calendar year. The report shall summarize the total benefits from all programs by including: a) an updated estimate of the annual volume of wet weather flow that has been removed from the combined sewer system; b) the resulting frequency, volume, and duration of CSO discharges (based on actual monitoring); and c) the predicted change modeled continuously and at design events to frequency, volume, and duration of CSO discharges based on the calibrated hydraulic model developed in the Master Plan effort. The report shall reference the CSO discharge report submitted under Part I.A.18.d.13) of this permit and include the pertinent data as a reference.

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A more complete description of the adaptive management approach includes:

a) Real-time Control
The GLWA is in the process of determining if real-time control can be used to help further minimize or even eliminate some untreated CSO discharges. One real-time control mechanism currently in place is the Interim Wet Weather Operations Plan (IWOP). The operational changes agreed to between the permittees and the Department in the IWOP will be reported in the Operational Plan Annual Update (Part I.A.18.d.). The IWOP identifies critical system regulators, gates, pumps, etc., that can be adjusted to allow for more treated CSO, and less untreated CSO from the remaining untreated CSO outfalls. Approved adjustments will be at least acceptable until completion of all non-core CSO correction projects and shall be included in Operational Plan Annual Updates. The evaluation shall include all necessary supporting documentation, including hydraulic model runs if appropriate.

b) Green Stormwater Infrastructure (GSI)
GSI project implementation shall be planned to capture, reduce, or otherwise control wet weather flows that would otherwise flow into the sewer system and contribute to CSOs.

DWSD has invested over $50 million dollars in GSI projects in the Detroit collection system from 2009 to the present. The requirement for expending an average of $3 million dollars per fiscal year for the ten-year period ending 2019 (for a total of $30 million), and an average of $2 million dollars per year for the following 10 years (for a total of $20 million) on GSI projects has been achieved ahead of the required timeframe.

The GSI program shall meet the following requirements:

(1) The permittees shall complete any GSI projects currently being constructed.

(2) The permittees shall maintain the GSI projects constructed under the NPDES permit to ensure the continued performance of GSI projects.

(3) The permittees shall identify opportunities to implement new GSI projects that align with the Wastewater Master Plan and/or the approved LTCP for the Detroit collection system and consider construction of GSI projects that are determined to be cost effective and as funding allows.

The permittees shall provide an annual report on or before **October 1 of each year** that identifies the progress and current status of the above three requirements, including any new projects being proposed for design or construction within the next fiscal year.

c) Stormwater Control

(1) In November of 2018, the permittees created and enacted the Post Construction Stormwater Ordinance for the City of Detroit. DWSD developed and published the Stormwater Management Design Manual in conjunction with the ordinance being enacted. This ordinance applies to all areas of the City of Detroit.

(2) Stormwater runoff from new development and redevelopment that will be conveyed through storm sewers to DWSD's combined sewers will require control to help further reduce volume and frequency of untreated CSO discharges. These are projects that will require construction plan review by the permittees, and a Part 41 construction permit issued by the Department. Please note that in most cases, new combined sewers will no longer be permitted under Part 41 (except for combined sewer relocation projects). Note that this is not a requirement for storm sewers subject to Permit No. MIS040000 issued to the City of Detroit, as the storm sewers under MIS040000 discharge directly to surface waters and are not owned by the DWSD.

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(3) Projects that seek to control, minimize or eliminate CSOs by reducing the wet weather flow to or from the combined sewer system (including any projects employing GSI) are undertaken expressly to comply with the requirements of Part I.A.18.f of this permit. These projects are deemed elements of the permittees' CSO control program given their ultimate purpose and intent in reducing CSOs and improving the functionality of the combined sewer system. As part of their operational obligations under this permit, the permittees shall, for any newly identified or constructed permittee-owned or -operated separated outfall or point of discharge utilized by such projects, obtain an MS4 permit, or otherwise seek authorization from the Department under the provisions of an existing MS4 permit, to discharge stormwater to a surface water of the state. As part of seeking authorization from the Department under an MS4 permit, the permittees shall certify that the discharge from the newly identified or constructed permittee-owned or -operated separated outfall or point of discharge has been treated to meet the Water Quality Performance Standard identified in the Permittees' Post-Construction Stormwater Ordinance.

d) City Sewer Rehabilitation
DWSD shall continue work on an annual program to remove infiltration/inflow (I/I) from its combined collection system.

g. Long Term Control Plan and Combined Sewer Overflow Control Program Schedules

1) Phase I CSO Control Plan
The permittees submitted a Phase I CSO Control Plan (Phase I LTCP) on October 15, 2023 (conditionally approved July 17, 2024). The recommended Phase I LTCP focuses on water quality improvements to the Rouge River, with a future Phase II submission that controls the remaining non-core outfalls expected in the next reissued permit. As described in the Phase I LTCP, the permittees shall implement construction of in-line storage facilities at CSO Outfalls 064 (B065) and 074 (B080 and B081) in accordance with the following schedule:

a) On or before **January 1, 2029**, the permittees shall submit to the Department for review and approval a basis of design report for the proposed projects.

b) On or before **January 1, 2030**, the permittees shall submit to the Department for review and approval complete plans and specifications for the proposed projects.

c) On or before **March 1, 2031**, the permittees shall commence construction of the proposed projects consistent with the approved plan and specifications.

2) Phase I CSO Control Plan Project Performance Certification Program
The permittees shall conduct a Project Performance Certification (PPC) Program to certify that CSO discharges from Outfalls 064 (B065) and 074 (B080 and B081) were corrected in accordance with the approved Basis of Design criteria, constructed consistent with the approved plans and specifications, and meet the CSO volume reduction goals specified in the conditionally approved Phase I LTCP. The PPC Program shall be completed in accordance with the following schedule:

a) At least **90 days prior to** completion of construction of the proposed projects, the permittees shall submit to the Department for review and approval a PPC Work Plan for conducting the PPC Program.

b) **Within 60 days** of completion of construction of the proposed projects or approval of the PPC Work Plan, whichever occurs last, and in accordance with the approved PPC Work Plan, the permittees shall implement the PPC Program.

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c) **Within one (1) year** of implementing the PPC Program, the permittees shall submit to the Department for review a PPC Evaluation Report. The PPC Evaluation Report shall demonstrate that the CSO outfalls listed above were corrected in accordance with the approved Basis of Design criteria, constructed consistent with the approved plans and specifications, and meet the CSO volume reduction goals specified in the conditionally approved Phase I LTCP.

If the permittees are unable to certify the projects meet the performance requirements as identified in the approved PPC Work Plan, then the permittees shall identify the corrective actions necessary to bring the projects into compliance as part of the Phase II CSO Control Plan required in Part I.A.18.g.3) of this permit.

3) Phase II CSO Control Plan

On or before **January 1, 2032**, a Phase II CSO Control Plan (Phase II LTCP) shall be submitted to the Department for review and approval. The Phase II LTCP shall focus on the requirements for both water quality protection and immediate public health protection from basement backups; consider any analyses performed for the regional collection systems, local City of Detroit collection system, or watershed study through the United States Army Corps of Engineers (USACE) regional flood mitigation study; and be expected to meet the required CSO outfall corrections as identified above. Any request for modification of the approved Phase II LTCP shall be submitted in writing to the Department for review and approval via MiEnviro Portal. Modification requests shall explain the nature of the modification, provide adequate rationale for the modification, and include all necessary supporting documentation to enable a full review of the proposed modification. Upon written approval from the Department, the modification shall become an enforceable requirement under this permit.

The USACE has begun preliminary work on a study of regional flood mitigation. It is anticipated that the results or partial results of the study will be utilized in support of and aligned with the Phase II LTCP. On or before **April 1 and October 1 of each year** until the study is completed, the permittees shall provide a status report to the Department summarizing the progress of the study.

4) Pilot Netting and Disinfection Facilities

The permittees have initiated planning for the feasibility and design of a pilot study of Netting and Disinfection Facilities (NDFs) to provide correction through treatment for Outfall 005 (B03 McClellan), Outfall 006 (B04 Fischer), and Outfall 007 (B05 Iroquois). If constructed, these NDFs shall be designated Outfall 110, Outfall 111, and Outfall 112, respectively, and are required to meet the discharge limits identified in Part I.A.6.

On or before **June 30, 2027**, the permittees shall submit to the Department for review and approval a feasibility study report. The report shall identify whether construction of the NDFs would meet the required discharge limits and CSO correction requirements while considering the technical, financial, and operational constraints for each outfall targeted above. If construction of the NDFs is determined to be infeasible, the report shall include a supporting evaluation and data. If construction of the NDFs is determined to be feasible, the report shall include a proposed schedule for design and construction of the NDFs for each identified outfall.

5) West Chicago South CWSRF project

The Clean Water State Revolving Fund (CWSRF) project number 5980-01 for the West Chicago South project plans and specifications were approved effective May 24, 2024. The permittees shall complete construction of the permitted project and notify the Department **within 30 days** of achieving substantial completeness.

Following implementation of any phase of any approved Control Programs contained in Part I.A.18.f. and g. of this permit or following completion of analyses performed for the local or regional collection systems, the Control Program(s) may be reevaluated by the permittees or the Department. Future permits may include requirements to conduct water quality evaluations designed to verify that the overall CSO control program provides adequate treatment to meet water quality standards. This permit may be modified in accordance with applicable laws and

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rules, to incorporate revisions necessary to conform to pertinent rules or laws, or as necessary to address prevailing situations, such as technical or financial constraints.

h. Work Group Participation

The permittees shall attend and participate in meetings of the Best Management Practices/Operator Coordination Work Group. The purpose of this Work Group is to allow representatives from CSO facilities in Southeast Michigan to exchange information, share experiences relating to the operation and maintenance of CSO control facilities, and develop Best Management Practices (BMPs) relating to CSO RTB operation including those needed to minimize TRC discharge levels. The permittees shall attend this Work Group quarterly at a minimum. The Work Group shall include representatives from the following CSO facilities, at a minimum: Birmingham CSO RTB, Bloomfield Village CSO RTB, Dearborn CSO, GLWA CSO Facilities, Inkster-Dearborn Heights CSO, Oakland County-Acacia Park (Acacia Park CSO Drainage District, Village of Beverly Hills, City of Birmingham), Redford Township CSO, River Rouge CSO, Wayne County – Dearborn Heights CSO, Wayne County – Inkster CSO, Wayne County – Inkster – Dearborn Heights CSO, and Wayne County – Redford – Livonia CSO.

On or before **March 1 of each year**, the permittees shall submit to the Department the annual joint report of the Work Group. At a minimum the joint report shall summarize the meetings held and the BMPs developed by the Work Group during the previous calendar year.

19. Untreated or Partially Treated Sewage Discharge Reporting and Testing Requirements

In accordance with Section 324.3112a of the NREPA, if untreated or partially treated sewage is directly or indirectly discharged from a sewer system onto land or into the waters of the state, the permittees shall immediately, but not more than 24 hours after the discharge begins, notify local health departments, a daily newspaper of general circulation in the county in which the permittees are located, and a daily newspaper of general circulation in the county or counties in which the municipalities whose waters may be affected by the discharge are located, that the discharge is occurring. The permittees shall also notify the Department via its MiEnviro Portal system on the form entitled “Report of Discharge (CSO/SSO/RTB).” The MiEnviro Portal website is located at https://mienviro.michigan.gov/ncore/. At the conclusion of the discharge, the permittees shall make all such notifications specified in, and in accordance with, Section 324.3112a of the NREPA, and shall notify the Department via its MiEnviro Portal system on the form entitled “Report of Discharge (CSO/SSO/RTB).”

In the event of a combined sewer overflow (CSO) and/or retention treatment basin (RTB) discharge, the permittees shall, in accordance with the public notification plan approved by the Department, notify the Department, the local health departments, a daily newspaper of general circulation in the county in which the permittees are located, and a daily newspaper of general circulation in the county or counties in which the municipalities whose waters may be affected by the discharge are located. Notification that the discharge is occurring shall be made within four (4) hours of becoming aware of the discharge. Within seven (7) days of becoming aware of the conclusion of the discharge, the permittees shall, in accordance with the public notification plan approved by the Department, provide written notification to the above parties of the following:

1) the amount of discharge as measured in accordance with the procedures approved by the Department,

2) the reason for the discharge,

3) the time the discharge began and ended as measured in accordance with the procedures approved by the Department, and

4) verification that the permittees are in compliance with the requirements of this permit. If such verification cannot be made, an explanation shall be provided detailing the reasons why the permittees are not in compliance with the requirements of this permit.

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Section A. Limitations and Monitoring Requirements

On or before **April 4, 2027**, with the application for reissuance, the permittees shall submit to the Department for approval an updated public notification plan.

Permittees authorized to discharge CSOs and/or RTB discharges to the Great Lakes Basin shall provide public notification of these discharges in accordance with 40 CFR 122.38 and the approved public notification plan. Such permittees shall, in accordance with Section 324.3112a of the NREPA, also provide notification to a newspaper of general circulation in the county in which the discharge occurred or is occurring.

The permittees shall also annually contact municipalities, including the superintendent of a public drinking water supply with potentially affected intakes, whose waters may be affected by the permittees' discharge of untreated or partially treated sewage, and if those municipalities wish to be notified in the same manner as specified above, the permittees shall provide such notification.

Additionally, in accordance with Section 324.3112a of the NREPA, each time a discharge of untreated or partially treated sewage occurs, the permittees shall test the affected waters for *Escherichia coli* to assess the risk to the public health as a result of the discharge and shall provide the test results to the affected local county health departments and to the Department. The results of this testing shall be submitted to the Department via MiEnviro Portal as part of the notification specified above, or, if the results are not yet available, submitted as soon as they become available. This testing is not required if it has been waived by the local health department, or if the discharge(s) did not affect surface waters. The testing shall be done at locations specified by each affected local county health department but shall not exceed 10 tests for each separate discharge event. The affected local county health department may waive this testing requirement if it determines that such testing is not needed to assess the risk to the public health as a result of the discharge event.

Permittees accepting sanitary or municipal sewage from other sewage collection systems are encouraged to notify the owners of those systems of the above reporting and testing requirements.

20. Facility Contact

The "Facility Contact" was specified in the application. The permittees may replace the facility contact at any time, and shall notify the Department in writing **within 10 days** 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.

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Section A. Limitations and Monitoring Requirements

21. Monthly Operating Reports

Part 41 of Act 451 of 1994 as amended, specifically Section 324.4106 and associated R 299.2953, requires that the permittees file with the Department, on forms prescribed by the Department, operating reports showing the effectiveness of the treatment facility operation and the quantity and quality of liquid wastes discharged into waters of the state. Applicable forms and guidance are available on the Department's web site at https://www.michigan.gov/egle/about/Organization/Water-Resources/wastewater-construction. The permittees may use alternate forms if they are consistent with the approved treatment facility monitoring program. Unless the Department provides written notification to the permittees that monthly submittal of operating reports is required, operating reports that result from implementation of the approved treatment facility monitoring program shall be maintained on site for a minimum of three (3) years and shall be made available to the Department for review upon request.

Within 30 days of the effective date of this permit, the permittees shall submit to the Department either a revised treatment facility monitoring program to address monitoring requirement changes reflected in this permit, or justification explaining why monitoring requirement changes reflected in this permit do not necessitate revisions to the treatment facility monitoring program. Upon receipt of approval from the Department and consistent with such approval, the permittees shall implement the approved revised treatment facility monitoring program.

22. Discharge Monitoring Report – Quality Assurance Study Program

The permittees 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.

Annually and in accordance with DMR-QA Study Program requirements and submittal due dates, the permittees 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 https://www.epa.gov/compliance/discharge-monitoring-report-quality-assurance-study-program.

23. Continuous Monitoring

If continuous monitoring equipment is used and becomes temporarily inoperable, the permittees 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 permittees 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.

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Section B. Stormwater Pollution Prevention

Section B. Stormwater Pollution Prevention is not required for this permit.

PART I

Section C. Industrial Waste Pretreatment Program

1. Federal Industrial Pretreatment Program

a. The permittee shall continue to implement the Federal Industrial Pretreatment Program (FIPP) approved on February 10, 2023, and any subsequent modifications approved up to the issuance of this permit. Approval of substantial program modifications after the issuance of this permit shall be incorporated into this permit by minor modification in accordance with 40 CFR 122.63.

b. The permittee shall comply with R 323.2301 through R 323.2317 of the Michigan Administrative Code (Part 23 Rules), the General Pretreatment Regulations for Existing and New Sources of Pollution (40 CFR Part 403), and the approved FIPP.

c. The permittee shall have the legal authority and necessary interjurisdictional agreements that provide the basis for the implementation and enforcement of the approved FIPP throughout the service area. The legal authority and necessary interjurisdictional agreements shall include, at a minimum, the authority to carry out the activities specified in R 323.2306(a).

d. The permittee shall develop procedures which describe, in sufficient detail, program commitments which enable implementation of the approved FIPP, 40 CFR Part 403, and the Part 23 Rules in accordance with R 323.2306(c).

e. The permittee shall establish an interjurisdictional agreement (or comparable document) with all tributary governmental jurisdictions. Each interjurisdictional agreement shall contain, at a minimum, the following:

1) identification of the agency responsible for the implementation and enforcement of the approved FIPP within the tributary governmental jurisdiction's boundaries; and

2) the provision of the legal authority which provides the basis for the implementation and enforcement of the approved FIPP within the tributary governmental jurisdiction's boundaries.

f. The permittee shall prohibit discharges that:

1) cause, in whole or in part, the permittee's failure to comply with any condition of this permit or the NREPA;

2) restrict, in whole or in part, the permittee's management of biosolids;

3) cause, in whole or in part, operational problems at the treatment facility or in its collection system;

4) violate any of the general or specific prohibitions identified in R 323.2303(1) and (2);

5) violate categorical standards identified in R 323.2311; and

6) violate local limits established in accordance with R 323.2303(4).

g. The permittee shall maintain a list of its nondomestic users that meet the criteria of a significant industrial user as identified in R 323.2302(cc).

h. The permittee shall develop an enforcement response plan which describes, in sufficient detail, program commitments which will enable the enforcement of the approved FIPP, 40 CFR Part 403, and the Part 23 Rules in accordance with R 323.2306(g).

i. The Department may require modifications to the approved FIPP which are necessary to ensure compliance with 40 CFR Part 403 and the Part 23 Rules in accordance with R 323.2309.

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Section C. Industrial Waste Pretreatment Program

j. The permittee shall not implement changes or modifications to the approved FIPP without notification to the Department. Any substantial modification shall be subject to Department public noticing and approval in accordance with R 323.2309.

k. The permittee shall maintain an adequate revenue structure and staffing level for effective implementation of the approved FIPP.

l. The permittee shall develop and maintain, for a minimum of three (3) years, all records and information necessary to determine nondomestic user compliance with 40 CFR Part 403, Part 23 Rules and the approved FIPP. This period of retention shall be extended during the course of any unresolved enforcement action or litigation regarding a nondomestic user or when requested by the Department or the United States Environmental Protection Agency. All of the aforementioned records and information shall be made available upon request for inspection and copying by the Department and the United States Environmental Protection Agency.

m. The permittee shall evaluate the approved FIPP for compliance with the 40 CFR Part 403, Part 23 Rules and the prohibitions stated in item f. above. Based upon this evaluation, the permittee shall propose to the Department all necessary changes or modifications to the approved FIPP no later than the next Industrial Pretreatment Program Annual Report due date (see item p. below).

n. The permittee shall develop and enforce local limits to implement the prohibitions listed in item f above. Local limits shall be based upon data representative of actual conditions demonstrated in a maximum allowable headworks loading analysis.

o. The permittee is required under this permit and R 323.2303(4) of the Michigan Administrative Code to review and update their local limits when:

1) new pollutants are introduced;

2) new pollutants that were previously unevaluated are identified;

3) new water quality or biosolids standards are established or additional information becomes available about the nature of pollutants, such as removal rates and accumulation in biosolids; or

4) substantial increases of pollutants are proposed as required in the notification of new or increased uses in accordance with the provisions of 40 CFR 122.42.

p. On or before **April 1 of each year**, the permittee shall submit to the Department, as required by R 323.2310(8), an Industrial Pretreatment Program Annual Report on the status of program implementation and enforcement activities. The reporting period shall begin on January 1 and end on December 31. At a minimum, the Industrial Pretreatment Program Annual Report shall include:

1) the Pretreatment Program Reports data identified in Appendix A to 40 CFR Part 127 – NPDES Electronic Reporting;

2) a summary of changes to the approved FIPP that have not been previously reported to the Department;

3) a summary of results of all the sampling and analyses performed of the wastewater treatment plant's influent, effluent, and biosolids conducted in accordance with approved methods during the reporting period. The summary shall include the monthly average, daily maximum, quantification level, and number of samples analyzed for each pollutant. At a minimum, the results of analyses for all locally limited parameters for at least one monitoring event that tests influent, effluent and biosolids during the reporting period shall be submitted with each report, unless otherwise required by the Department. Sample collection shall be at intervals sufficient to provide pollutant removal rates, unless the pollutant is not measurable; and

4) any other relevant information requested by the Department.

PART I

Section D. Residuals Management Program

1. Residuals Management Program for Land Application of Biosolids

The permittees are authorized to land-apply bulk biosolids or prepare bulk biosolids for land application in accordance with the permittees' approved Residuals Management Program (RMP) approved on April 22, 2008, and approved modifications thereto, and the requirements established in R 323.2401 through R 323.2418 of the Michigan Administrative Code (Part 24 Rules). The approved RMP, and any approved modifications thereto, are enforceable requirements of this permit. Incineration, landfilling and other residual disposal activities shall be conducted in accordance with Part II.D.7. of this permit. The Part 24 Rules can be obtained via the internet at https://www.michigan.gov/egle/about/organization/water-resources/biosolids.

a. Annual Report
On or before **October 30 of each year**, the permittees shall submit an annual report to the Department for the previous fiscal year of October 1 through September 30. The report shall be submitted electronically via the Department's MiEnviro Portal system at https://mienviro.michigan.gov/ncore/. At a minimum, the report shall contain:

1) a certification that current residuals management practices are in accordance with the approved RMP, or a proposal for modification to the approved RMP; and

2) a completed Annual Report Form for Reporting Biosolids, available at https://mienviro.michigan.gov/ncore/.

b. Modifications to the Approved RMP
Prior to implementation of modifications to the RMP, the permittees shall submit proposed modifications to the Department for approval. The approved modification shall become effective upon the date of approval. Upon written notification, the Department may impose additional requirements and/or limitations to the approved RMP as necessary to protect public health and the environment from any adverse effect of a pollutant in the biosolids.

c. Record Keeping
Records required by the Part 24 Rules shall be kept for a minimum of five (5) years. However, the records documenting cumulative loading for sites subject to cumulative pollutant loading rates shall be kept as long as the site receives biosolids.

d. Contact Information
RMP-related submittals shall be made to the Department.

PART II

Section A. Definitions

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

Acute toxic unit (TUA) 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 stormwater, to direct the flow of stormwater, or to treat polluted stormwater.

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 stormwater runoff is combined with sanitary wastes.

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.

PART II

Section A. Definitions

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/egle/-/media/Project/Websites/egle/Documents/Programs/WRD/MiEnviro/results-below-quantification.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.

EC_{50} 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.

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.

PART II

Section A. Definitions

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.

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

Illicit connection means a physical connection to a municipal separate storm sewer system that primarily conveys non-stormwater 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 stormwater or uncontaminated groundwater. Illicit discharges include non-stormwater 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-stormwater 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 stormwater or wastewater enters into a closed conveyance system prior to discharge off site or into waters of the state.

PART II

Section A. Definitions

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.

LC_{50} 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 stormwater 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.

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 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-Quantification.pdf.

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.

PART II

Section A. Definitions

Municipal separate storm sewer means a conveyance or system of conveyances designed or used for collecting or conveying stormwater 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, stormwater, 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 means an industry, commercial establishment, or other entity that discharges wastewater to a POTW other than, or in addition to, sanitary sewage.

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

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.

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 stormwater, 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 stormwater is discharged directly into a separate storm sewer system.

PART II

Section A. Definitions

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 stormwater 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 Stormwater Certified Operator to collect the stormwater sample.

Qualifying storm event means a precipitation event that results in a measurable amount of precipitation (i.e., a storm event that results in an actual discharge), and that follows the preceding storm event by at least 72 hours (i.e., three days). The 72-hour storm interval does not apply if documentation is provided showing that less than a 72-hour interval is representative for local storm events.

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.

Sanitary sewage means water-carried wastes from toilet, kitchen, laundry, bathing, or other facilities used for household purposes.

PART II

Section A. Definitions

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 stormwater 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; raw materials used in food processing or production; 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 stormwater 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 stormwater 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 stormwater.

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

Stormwater means stormwater runoff, snowmelt runoff, surface runoff and drainage, and non-stormwater included under the conditions of this permit.

Stormwater discharge point is the location where the point source discharge of stormwater is directed to surface waters of the state or to a separate storm sewer. It includes the location of all point source discharges where stormwater 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 stormwater.

SWPPP means the Stormwater 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.

PART II

Section A. Definitions

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.

Wet weather event is defined as the period when precipitation and/or snow melt is impacting the tributary area of the WRRF and/or CSO facility and the following conditions have been met:

FOR THE WRRF – Begins when the influent flow rate to the WRRF exceeds secondary capacity (930 MGD). Ends when the WRRF has sustained flow rates less than 930 MGD for 24 consecutive hours.

FOR THE CSO FACILITIES – Begins when the tributary area at operable level sensor(s) to a CSO facility reaches 80% of its depth. Ends when the tributary area of a CSO facility is below 80% of its depth at operable level sensor(s) for 24 consecutive hours.

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.

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.

PART II

Section A. Definitions

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.

12-month rolling average
When required by the permit, the 12-month rolling average is determined by adding the present monthly average result to the preceding 11 monthly average results and dividing the sum by 12. If sufficient data needed to calculate the 12-month rolling average is not yet available, enter **"*E"** on the monthly DMR until 12 months, or the equivalent of 12 months, of monthly monitoring data have been obtained, then begin reporting the calculated 12-month rolling average as required. If quarterly monitoring requirements apply, quarterly monitoring shall be equivalent to three (3) months of monitoring in calculating the 12-month rolling average. If monitoring more frequent than monthly applies, determine the monthly average result by summing the results of all data obtained in a given month and dividing that sum by the total number of samples taken in that 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.

PART II

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 Part 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.

PART II

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 **60 days prior** 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 **within 14 days** following the effective date of the COC, and then again **60 days prior** 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 **within 14 days** following the effective date of this permit, and then again **60 days prior** 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 **within 14 days** following the effective date of the COC, and then again **60 days prior** 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 **20th day of the month** 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.

The permittee shall certify, in writing, to the Department, on or before **January 10 (April 1 for animal feeding operation facilities) of each year**, 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.

PART II

Section C. Reporting Requirements

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

Within 14 days 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, **within 24 hours** 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 **at the time monitoring reports are submitted**; or, in the case of retained self-monitoring, **within five (5) days** from the time the permittee becomes aware of the noncompliance.

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.

PART II

Section C. Reporting Requirements

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.

Within 10 days 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

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

PART II

Section C. Reporting Requirements

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 **at least 10 days before** 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.

PART II

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 **within no more than 10 days** 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 detection, for which the application specifically requested information; or 3) any chemical at levels greater 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 a) by 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 **30 days prior** to the actual transfer of ownership or control – for non-CAFOs, or **within 30 days** 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.

Certification of the existence and accuracy of the O&M Manual shall be submitted to the Department at least 60 days prior to start-up of a new wastewater treatment facility. Recertification shall be submitted **60 days prior to start-up** of any substantial improvements or modifications made to an existing wastewater treatment facility.

PART II

Section C. Reporting Requirements

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 six (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 two (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.

PART II

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 stormwater shall have the stormwater treatment and/or control measures under direct supervision of a stormwater 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.

PART II

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/), **within a reasonable time**, 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.

PART II

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.